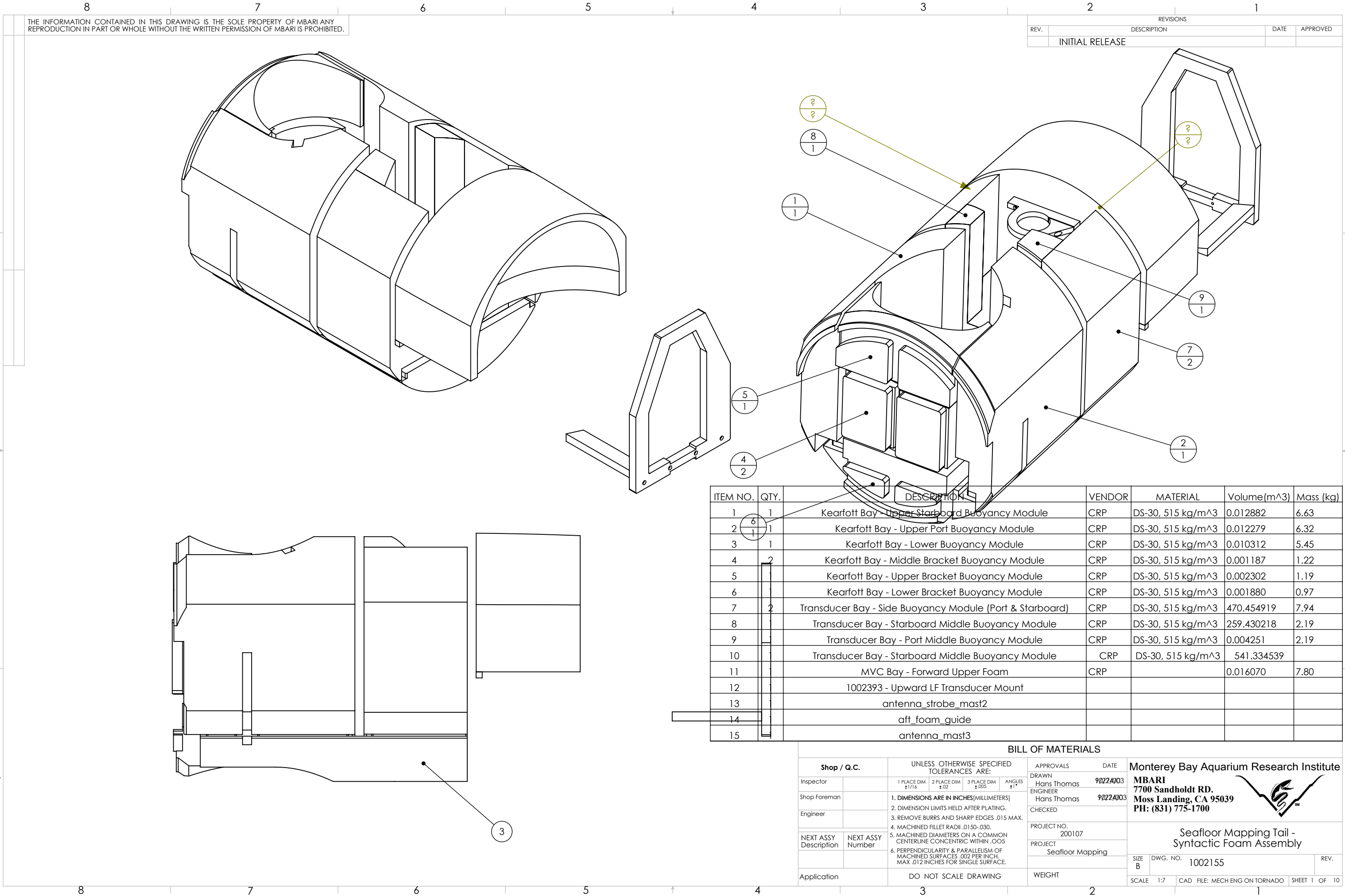




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REV.	DESCRIPTION	DATE	APPROVED
INITIAL RELEASE			

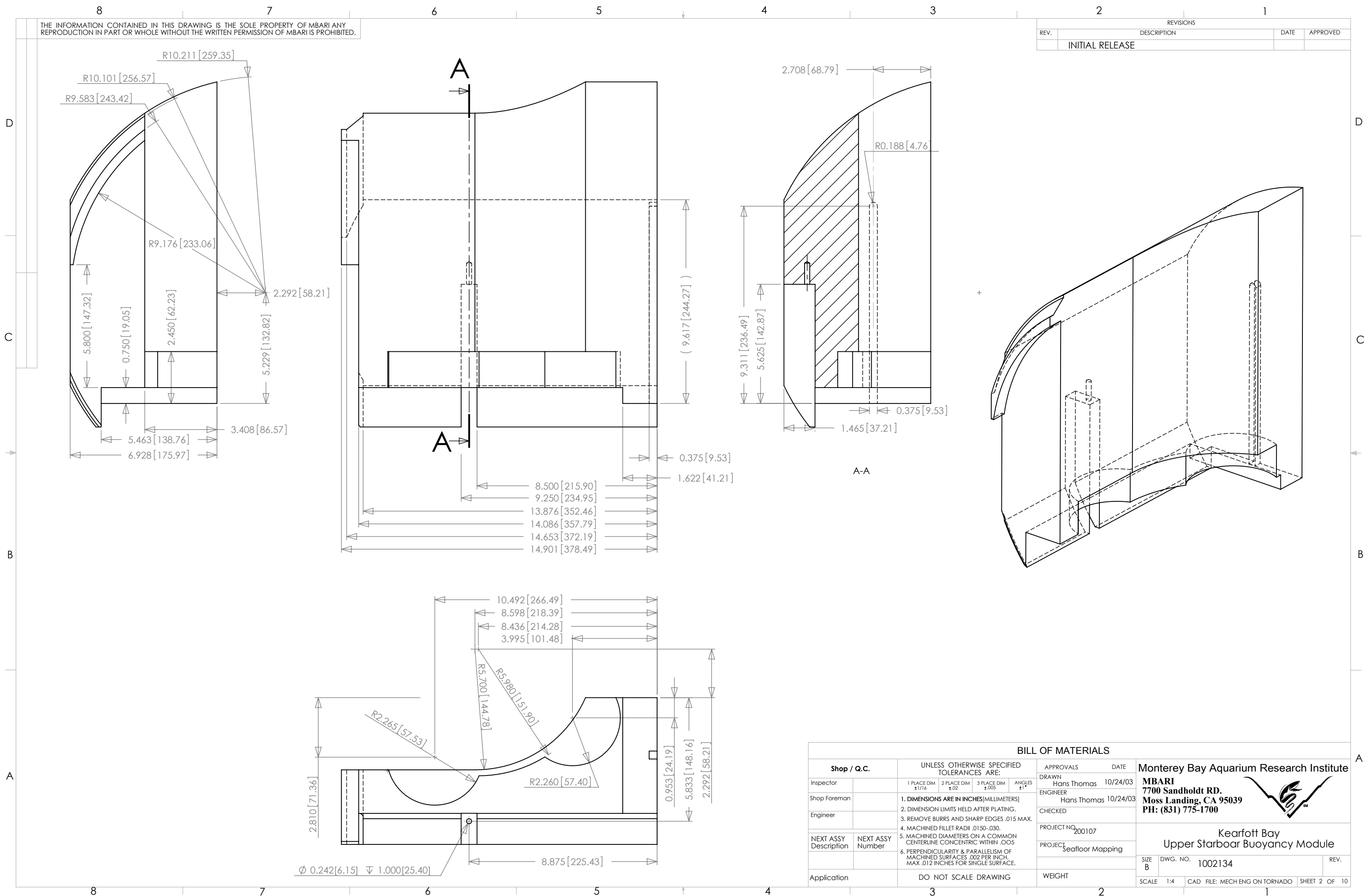
ITEM NO.	QTY.	DESCRIPTION	VENDOR	MATERIAL	Volume(m^3)	Mass (kg)
1	1	Kearfott Bay - Upper Starboard Buoyancy Module	CRP	DS-30, 515 kg/m^3	0.012882	6.63
2	1	Kearfott Bay - Upper Port Buoyancy Module	CRP	DS-30, 515 kg/m^3	0.012279	6.32
3	1	Kearfott Bay - Lower Buoyancy Module	CRP	DS-30, 515 kg/m^3	0.010312	5.45
4	2	Kearfott Bay - Middle Bracket Buoyancy Module	CRP	DS-30, 515 kg/m^3	0.001187	1.22
5	1	Kearfott Bay - Upper Bracket Buoyancy Module	CRP	DS-30, 515 kg/m^3	0.002302	1.19
6	1	Kearfott Bay - Lower Bracket Buoyancy Module	CRP	DS-30, 515 kg/m^3	0.001880	0.97
7	2	Transducer Bay - Side Buoyancy Module (Port & Starboard)	CRP	DS-30, 515 kg/m^3	470.454919	7.94
8	1	Transducer Bay - Starboard Middle Buoyancy Module	CRP	DS-30, 515 kg/m^3	259.430218	2.19
9	1	Transducer Bay - Port Middle Buoyancy Module	CRP	DS-30, 515 kg/m^3	0.004251	2.19
10	1	Transducer Bay - Starboard Middle Buoyancy Module	CRP	DS-30, 515 kg/m^3	541.334539	
11	1	MVC Bay - Forward Upper Foam	CRP		0.016070	7.80
12	1	1002393 - Upward LF Transducer Mount				
13	1	antenna_strobe_mast2				
14	1	aft_foam_guide				
15	1	antenna_mast3				

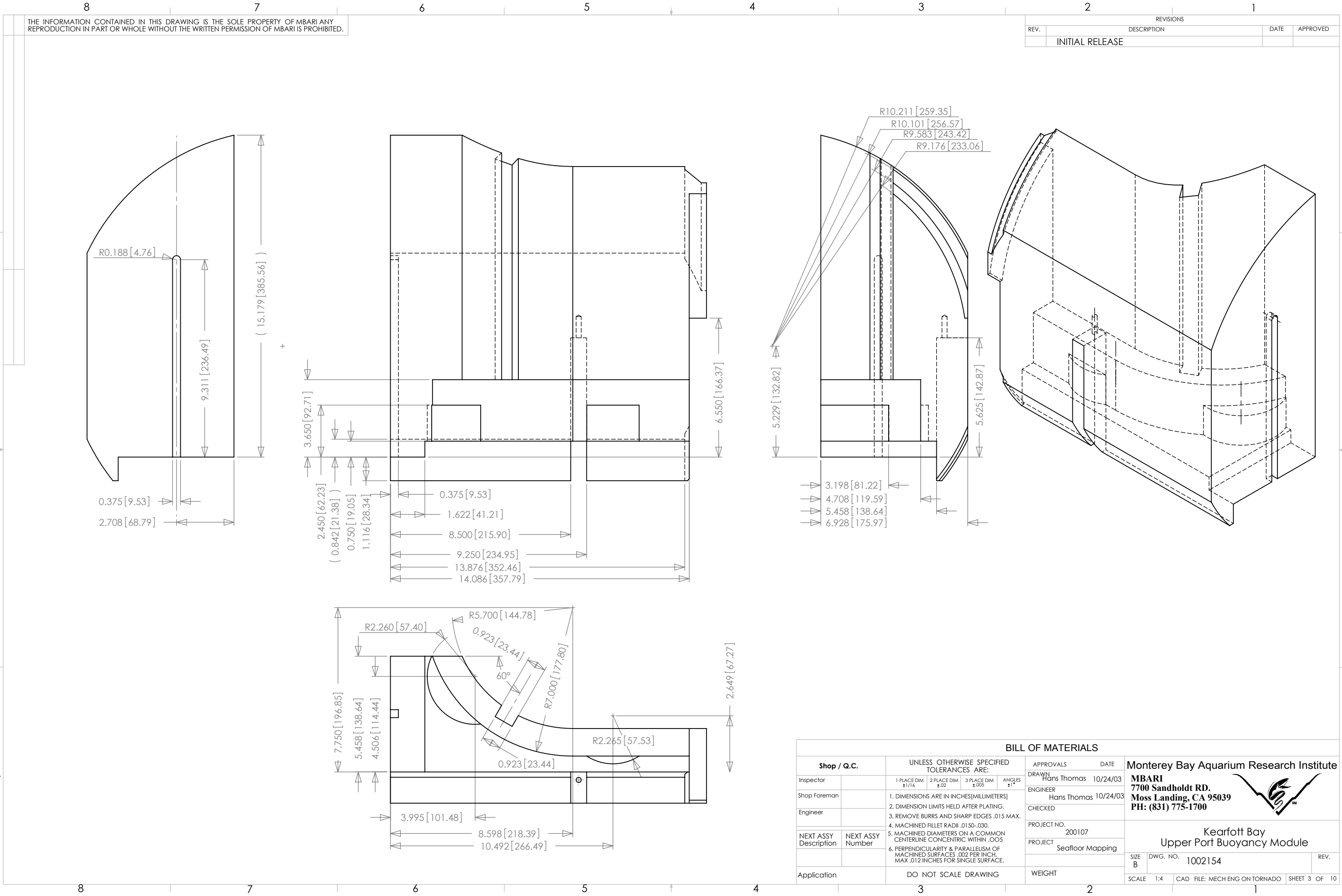
BILL OF MATERIALS

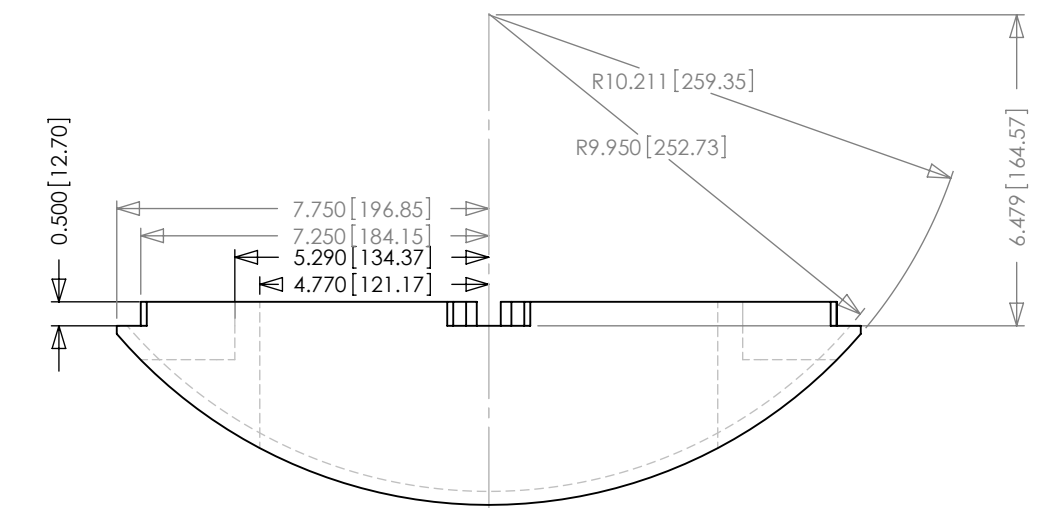
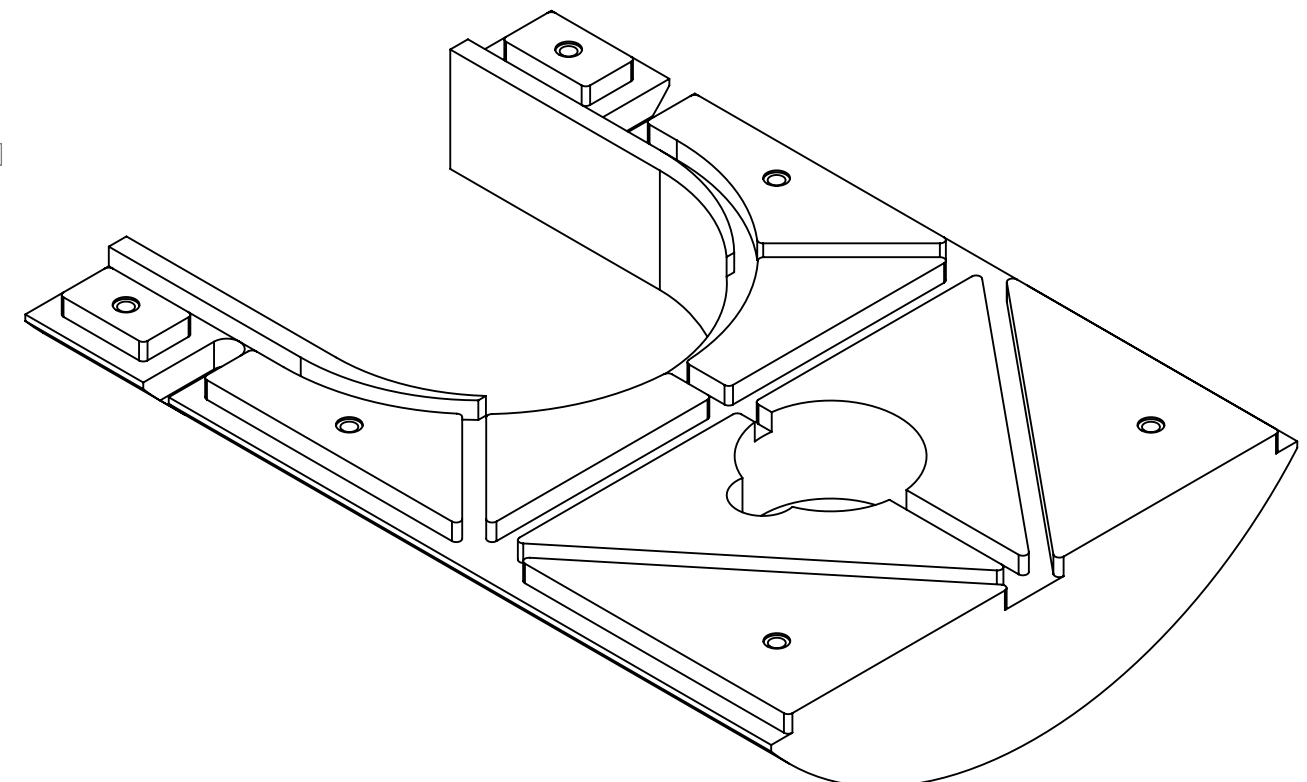
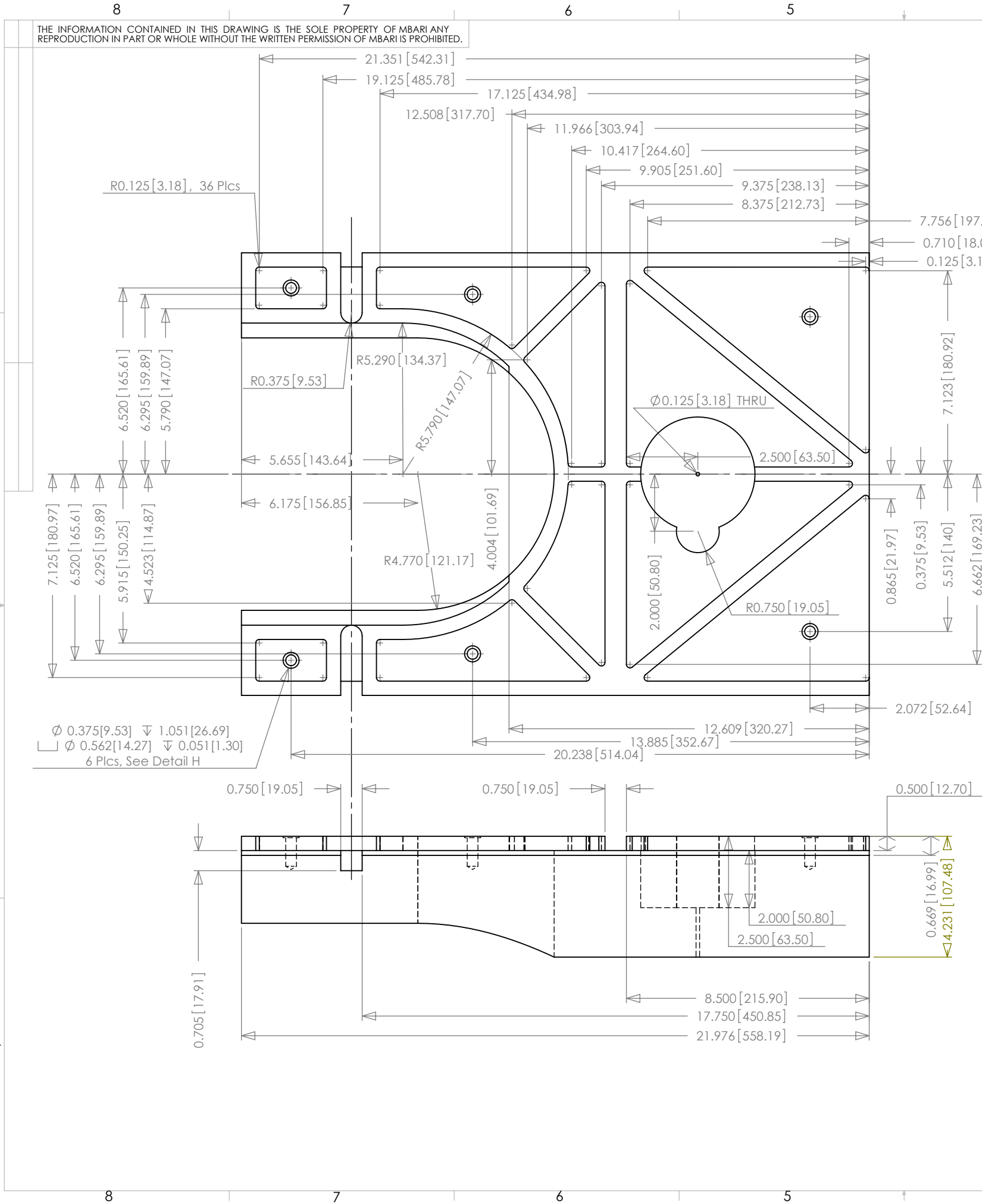
Shop / Q.C.		UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:				APPROVALS	DATE	Monterey Bay Aquarium Research Institute		
Inspector		1 PLACE DIM ±1/16	2 PLACE DIM ±.02	3 PLACE DIM ±.005	ANGLES ±1°	DRAWN Hans Thomas	9/0224/003	MBARI 7700 Sandholdt RD. Moss Landing, CA 95039 PH: (831) 775-1700 		
Shop Foreman		1. DIMENSIONS ARE IN INCHES[MILLIMETERS] 2. DIMENSION LIMITS HELD AFTER PLATING. 3. REMOVE BURRS AND SHARP EDGES .015 MAX. 4. MACHINED FILLET RADII .0150-.030. 5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005 6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .002 PER INCH. MAX .012 INCHES FOR SINGLE SURFACE.				ENGINEER Hans Thomas	9/0224/003			
Engineer						PROJECT NO. 200107				
NEXT ASSY Description	NEXT ASSY Number	PROJECT Seafloor Mapping		CHECKED		Seafloor Mapping Tail - Syntactic Foam Assembly				
		WEIGHT								
Application		DO NOT SCALE DRAWING				SIZE B		DWG. NO. 1002155		REV.
						SCALE 1:7		CAD FILE: MECH ENG ON TORNADO		SHEET 1 OF 10

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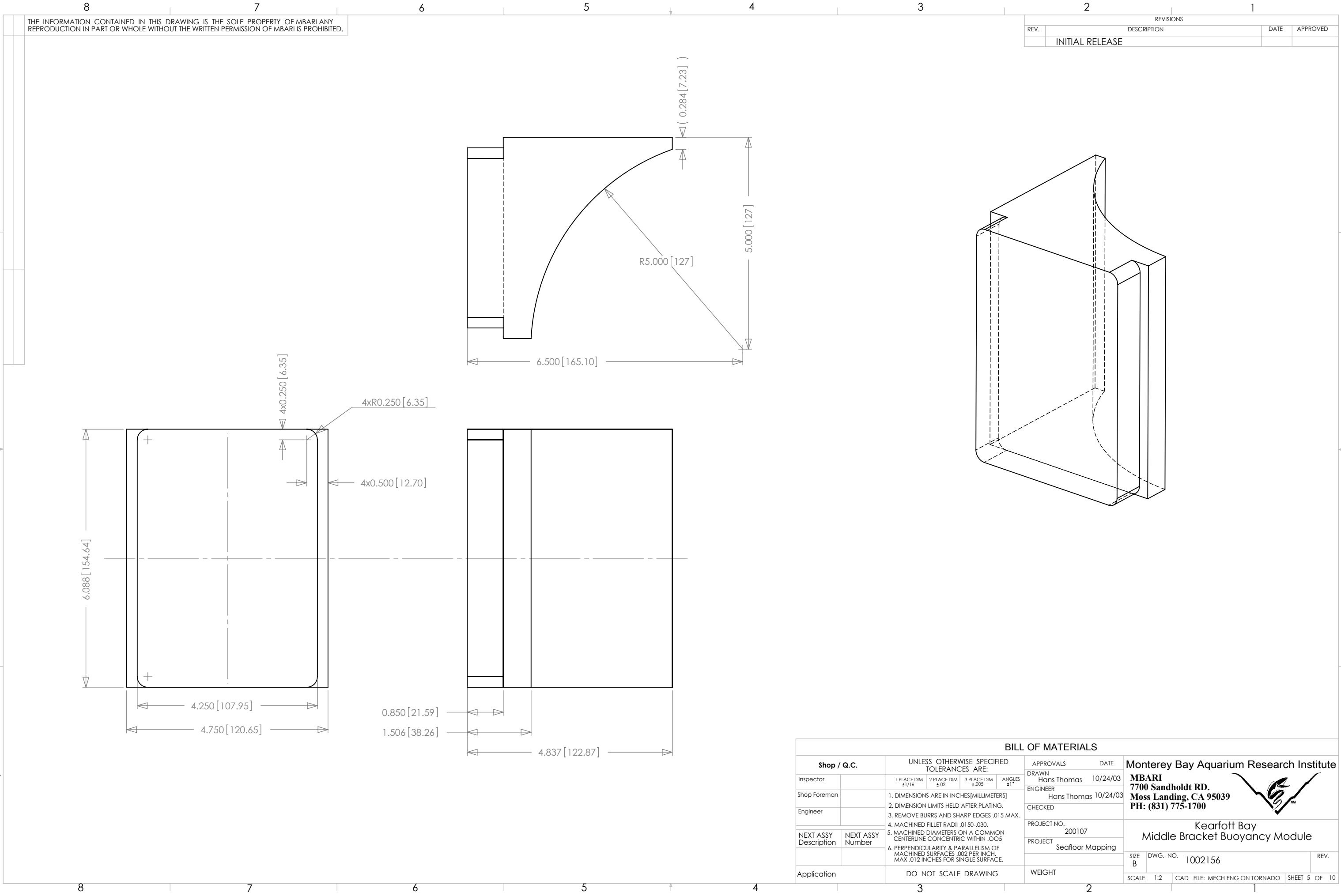
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REV.	DESCRIPTION	DATE	APPROVED
	INITIAL RELEASE		

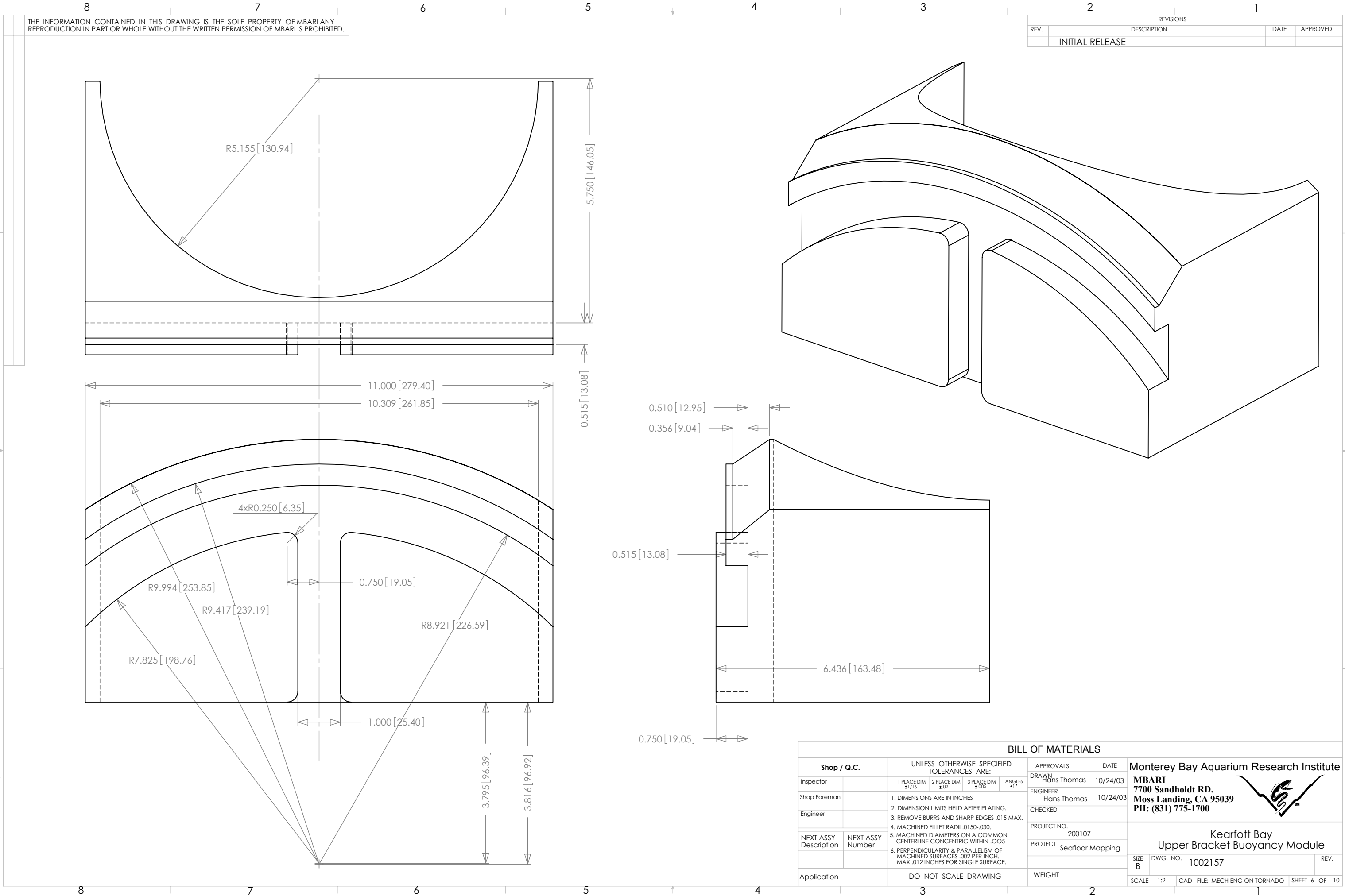


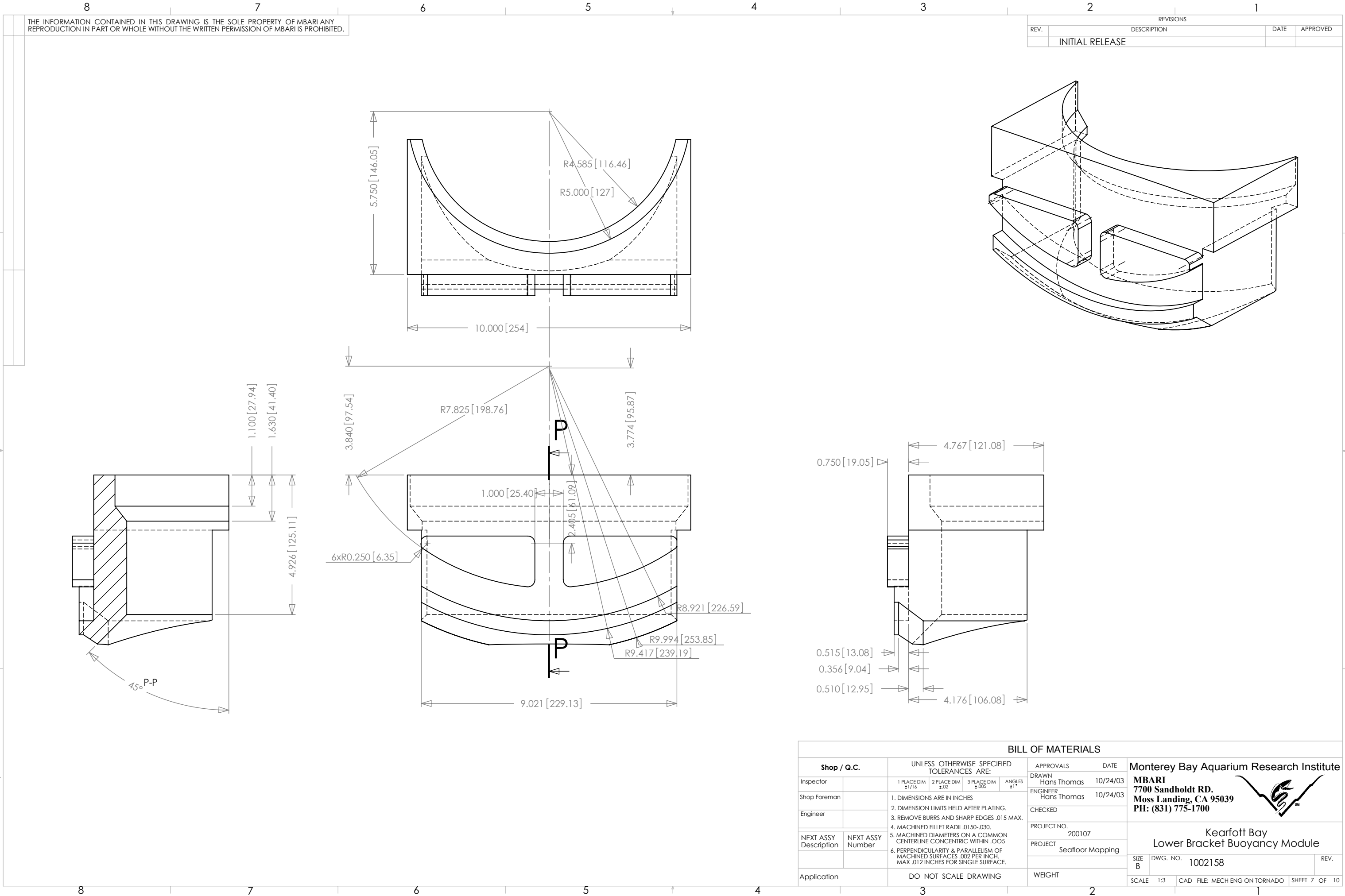


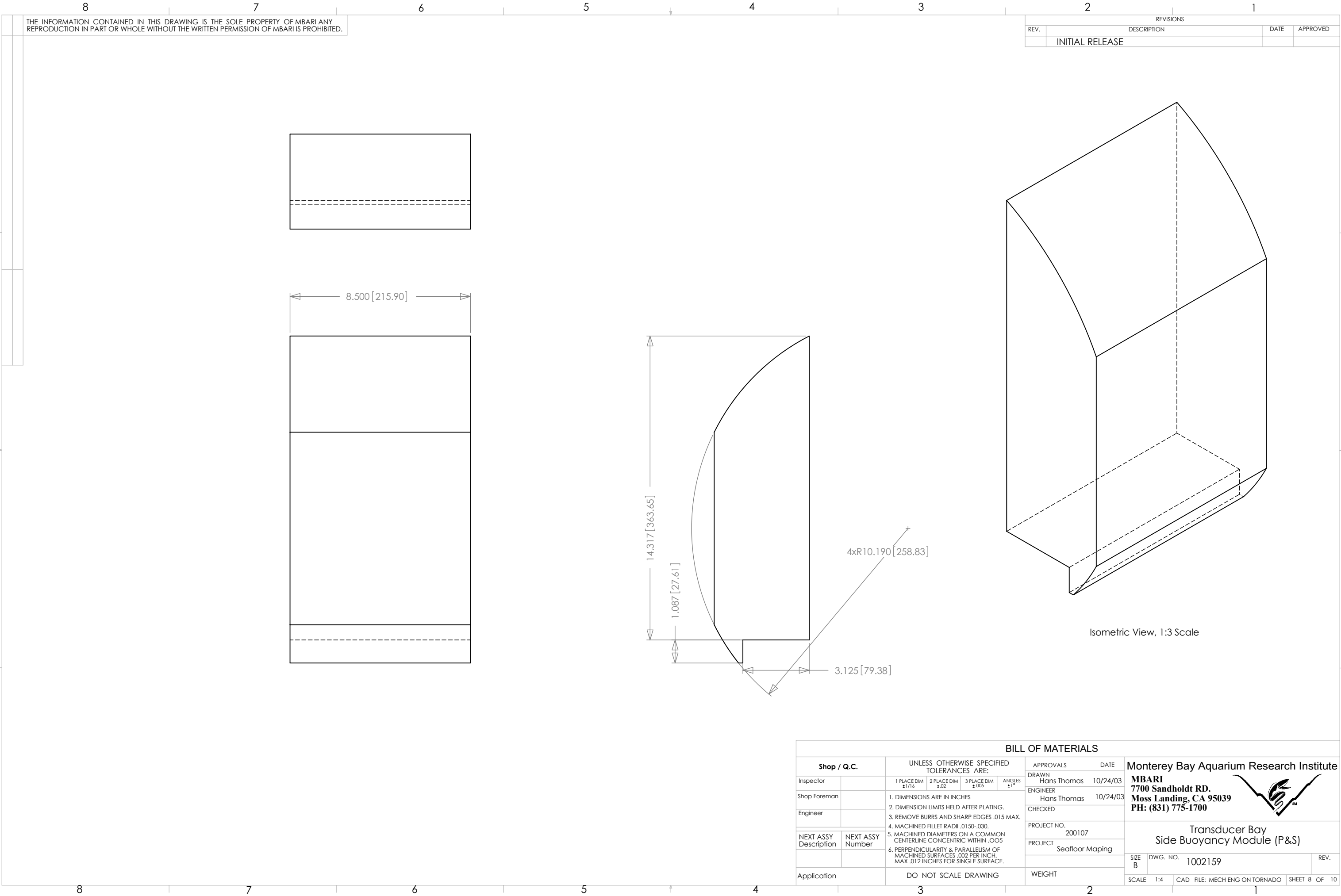


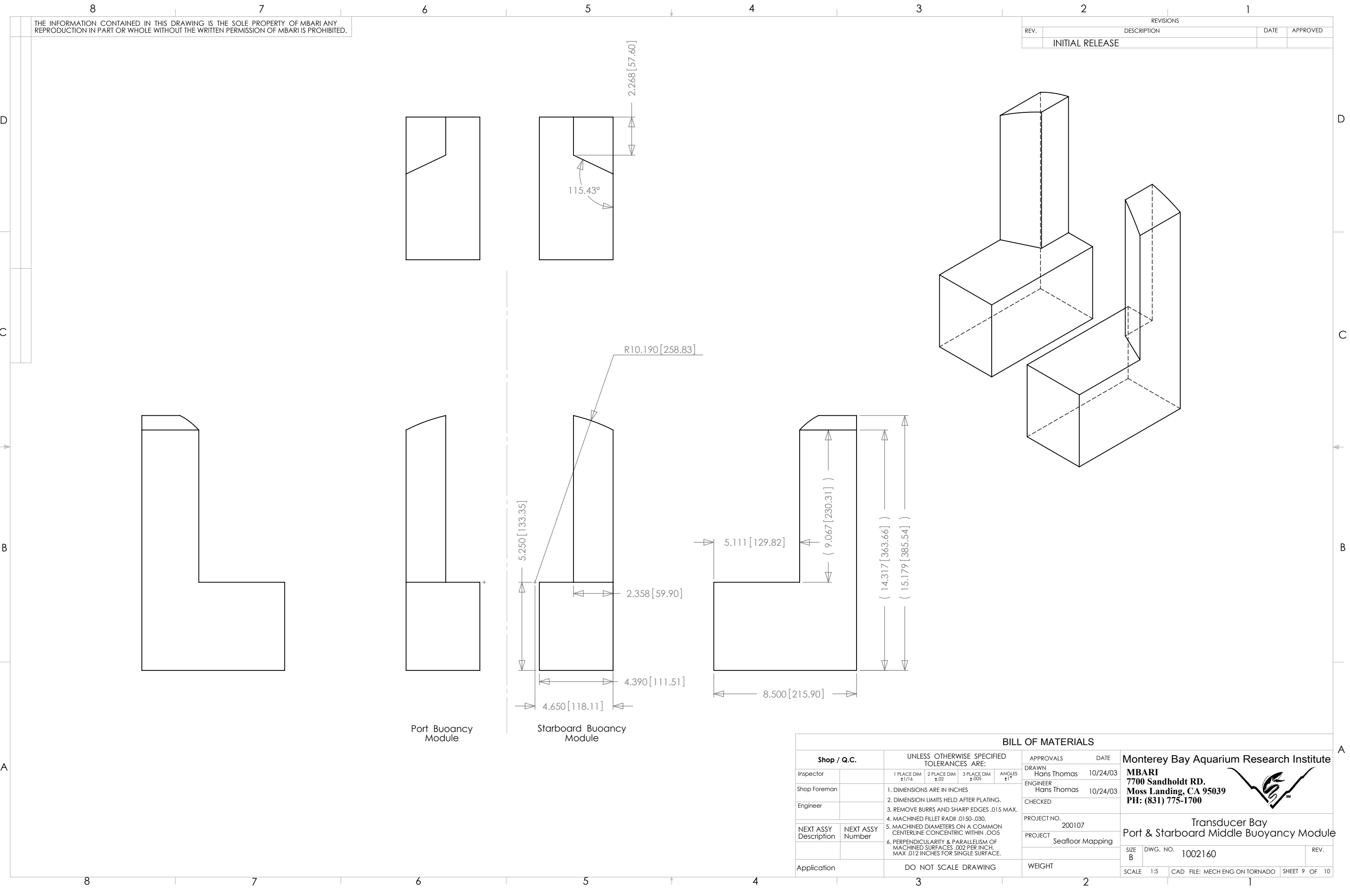
BILL OF MATERIALS										A
Shop / Q.C.		UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:				APPROVALS		DATE		Monterey Bay Aquarium Research Institute MBARI 7700 Sandholdt RD. Moss Landing, CA 95039 PH: (831) 775-1700 
Inspector		1 PLACE DIM ±1/16	2 PLACE DIM ±.02	3 PLACE DIM ±.005	ANGLES ±1°	DRAWN	Thomas	10/20/03		
Shop Foreman		1. DIMENSIONS ARE IN INCHES[MILLIMETERS] 2. DIMENSION LIMITS HELD AFTER PLATING. 3. REMOVE BURRS AND SHARP EDGES .015 MAX. 4. MACHINED FILLET RADII .0150-.030. 5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005 6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .002 PER INCH, MAX .012 INCHES FOR SINGLE SURFACE.				ENGINEER	Thomas	10/20/03		
Engineer						CHECKED				
NEXT ASSY Description	NEXT ASSY Number					PROJECT NO.	200107			
						PROJECT	Seafloor Mapping			
Application		DO NOT SCALE DRAWING				WEIGHT		Kearfott Bay Lower Buoyancy Module		
		3				2				
						SIZE B		DWG. NO. 1002130		REV.
						SCALE 1:4		CAD FILE: MECH ENG ON TORNADO		SHEET 4 OF 10
								1		











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Shop / Q.C.		UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:				APPROVALS		DATE	
Inspector		1 PLACE DIM ±1/16	2 PLACE DIM ±.02	3 PLACE DIM ±.005	ANGLES ±1°	DRAWN Hans Thomas	10/24/03	Monterey Bay Aquarium Research Institute MBARI 7700 Sandholdt RD. Moss Landing, CA 95039 PH: (831) 775-1700 	
Shop Foreman		1. DIMENSIONS ARE IN INCHES 2. DIMENSION LIMITS HELD AFTER PLATING. 3. REMOVE BURRS AND SHARP EDGES .015 MAX. 4. MACHINED FILLET RADII .0150-.030. 5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005 6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .002 PER INCH. MAX .012 INCHES FOR SINGLE SURFACE.				ENGINEER Hans Thomas	10/24/03		
Engineer						CHECKED			
NEXT ASSY Description	NEXT ASSY Number					PROJECT NO. 200107			
						PROJECT Seafloor Mapping	Transducer Bay Port & Starboard Middle Buoyancy Module		
Application		DO NOT SCALE DRAWING				WEIGHT	SIZE B	DWG. NO. 1002160	REV.
						SCALE 1:5	CAD FILE: MECH ENG ON TORNADO	SHEET 9 OF 10	

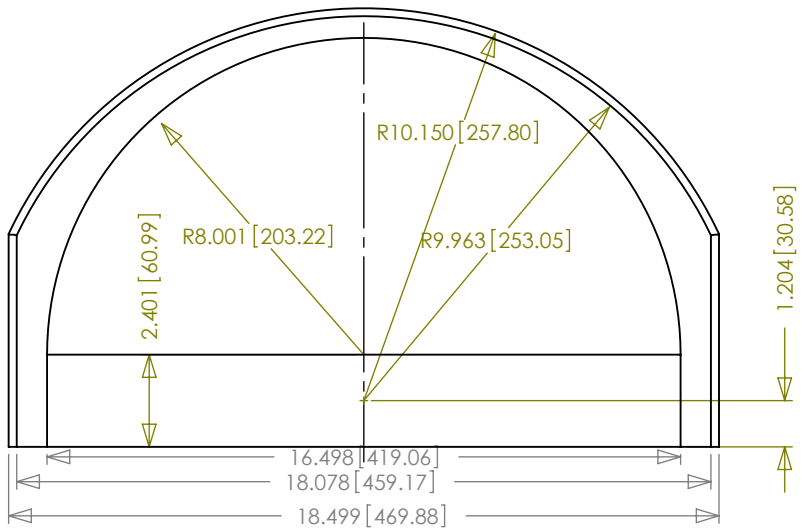
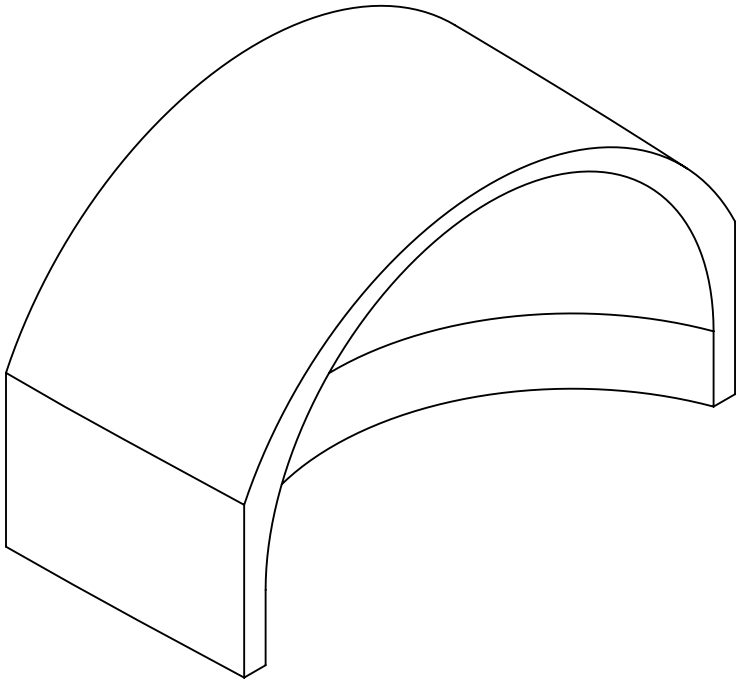
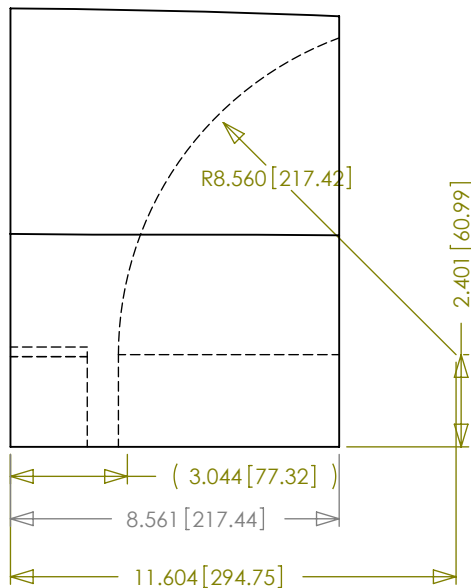
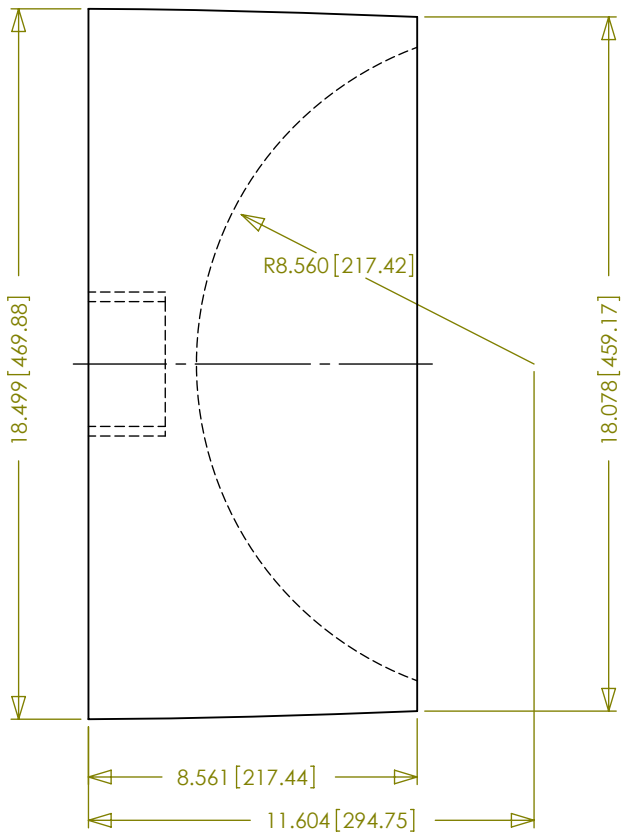
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Moss Landing, CA 95039
PH: (831) 775-1700



Transducer Bay
Port & Starboard Middle Buoyancy Module

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Inspector		1 PLACE DIM ±1/16	2 PLACE DIM ±.02	3 PLACE DIM ±.005	ANGLES ±1°	DRAWN Hans Thomas	10/24/03		
Shop Foreman		1. DIMENSIONS ARE IN INCHES 2. DIMENSION LIMITS HELD AFTER PLATING. 3. REMOVE BURRS AND SHARP EDGES .015 MAX. 4. MACHINED FILLET RADII .0150-.030. 5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITH .005 6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .002 PER INCH MAX .012 INCHES FOR SINGLE SURFACE.				ENGINEER Hans Thomas	10/24/03		
Engineer						CHECKED			
NEXT ASSY Description	NEXT ASSY Number					PROJECT NO. 200107			
						PROJECT Seafloor Mapping			
Application		DO NOT SCALE DRAWING				WEIGHT			
						Monterey Bay Aquarium Research Institute MBARI 7700 Sandholdt RD. Moss Landing, CA 95039 PH: (831) 775-1700			
						MVC Bay Forward Upper Foam			
		SIZE B		DWG. NO. 1002161				REV.	
		SCALE 1:5		CAD FILE: MECH ENG ON TORNADO		SHEET 10 OF		10	