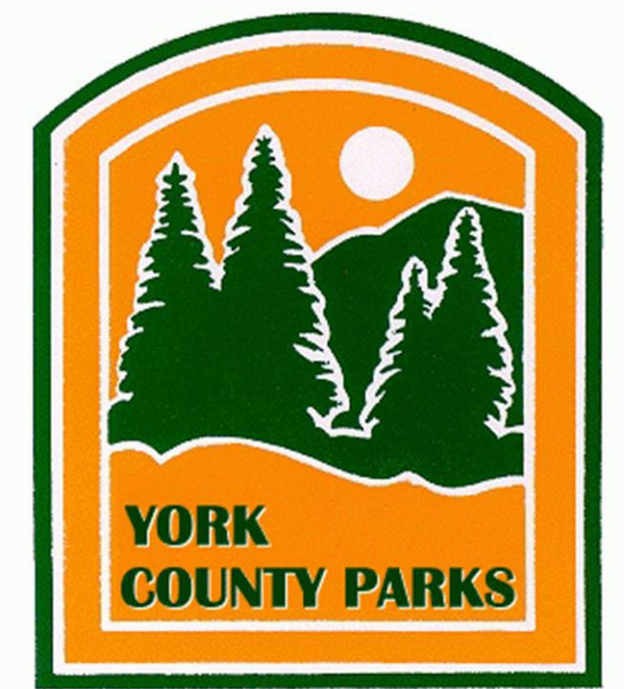




2020 York College Engineering Capstone Project: - Radio Telescope -

Engineering Department, York College of PA
Mentor: Dr. Wilkerson



Marcos Rivera, Jessie Furey, Rich Hopkins

Triangle Connector Design/Manufacturing

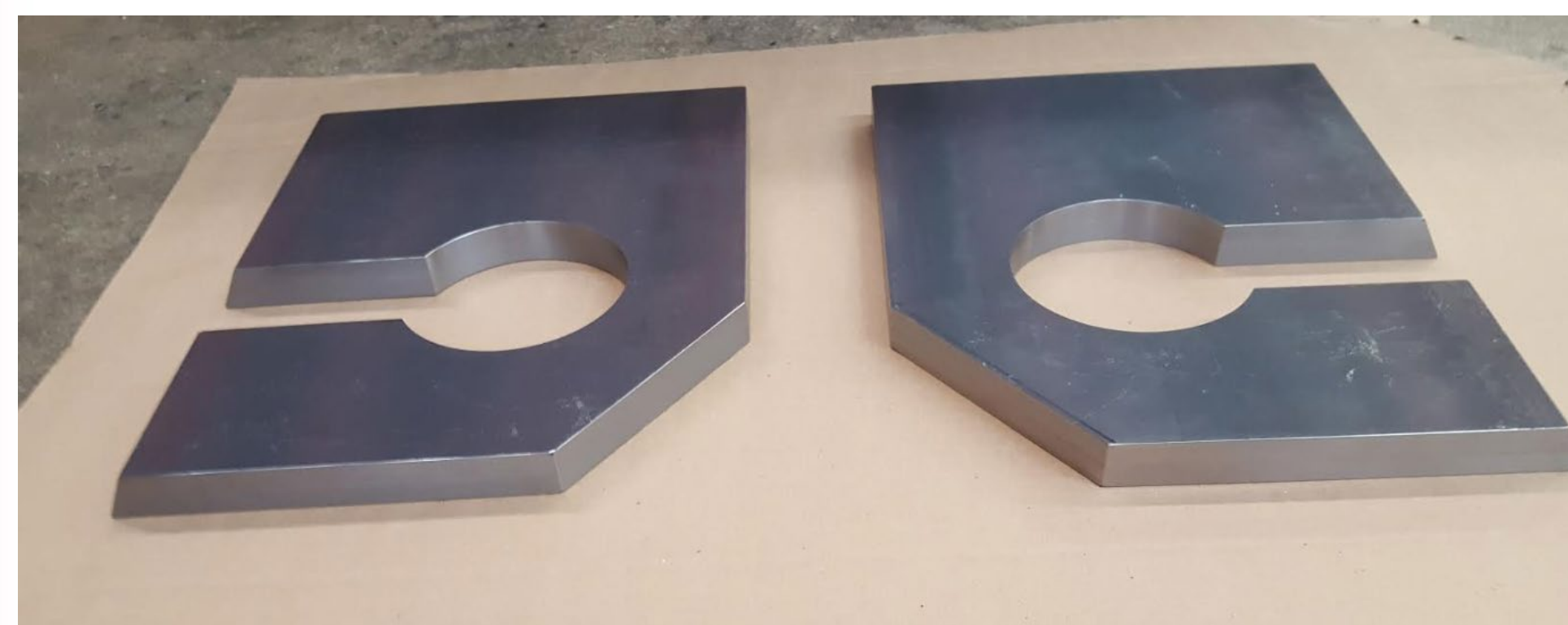
Fabrication



A36 Tubing Machined according to specifications



Gussets to be used for the Triangle Connector



Machined Elevation Bearing Plates



Machined Weight Flats to be used for the counterbalance

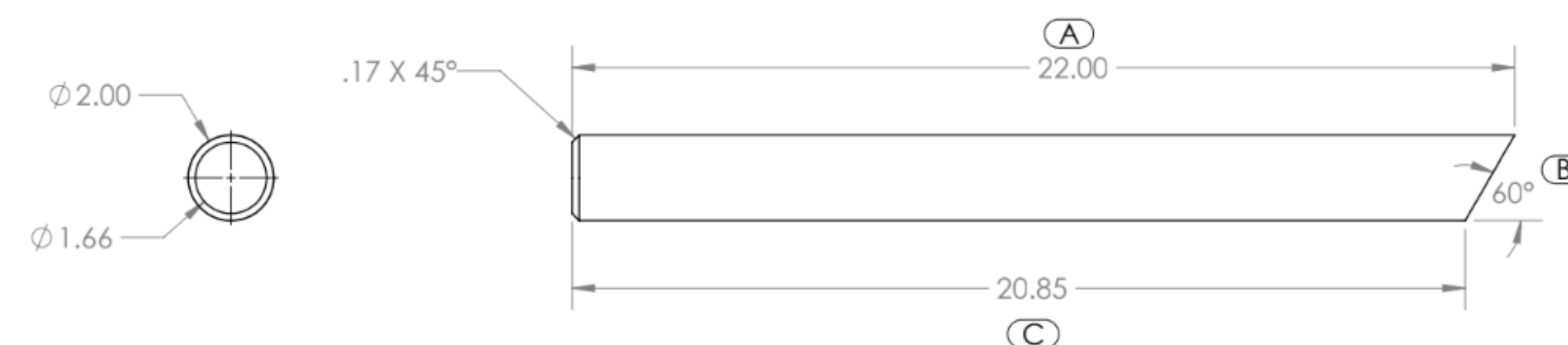


Manufacturing Plan & Process

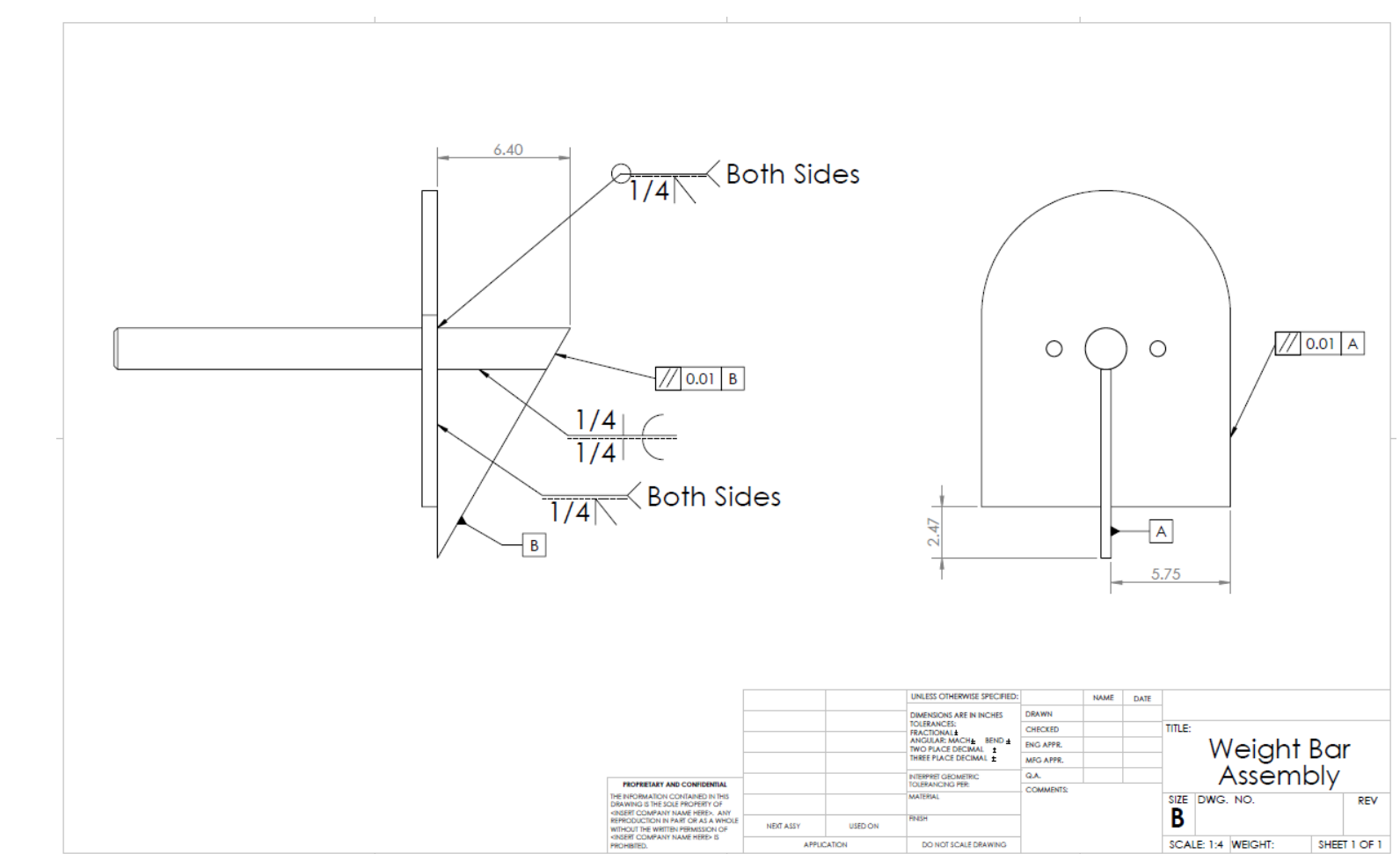
TC Component Inspection

Part #	Nominal Dim A	Tolerance	Measured Dim A	In Spec	Nominal Dim B	Tolerance
TC-1						
TC-2A	66.00 in	±.01 in			-	-
TC-2B	66.00 in	±.01 in			-	-
TC-3A	41.50 in	±.01 in			33.47 in	±.01 in
TC-3B	41.50 in	±.01 in			33.47 in	±.01 in
TC-4A	22.00 in	±.01 in			60°	.5°
TC-4B	22.00 in	±.01 in			60°	.5°

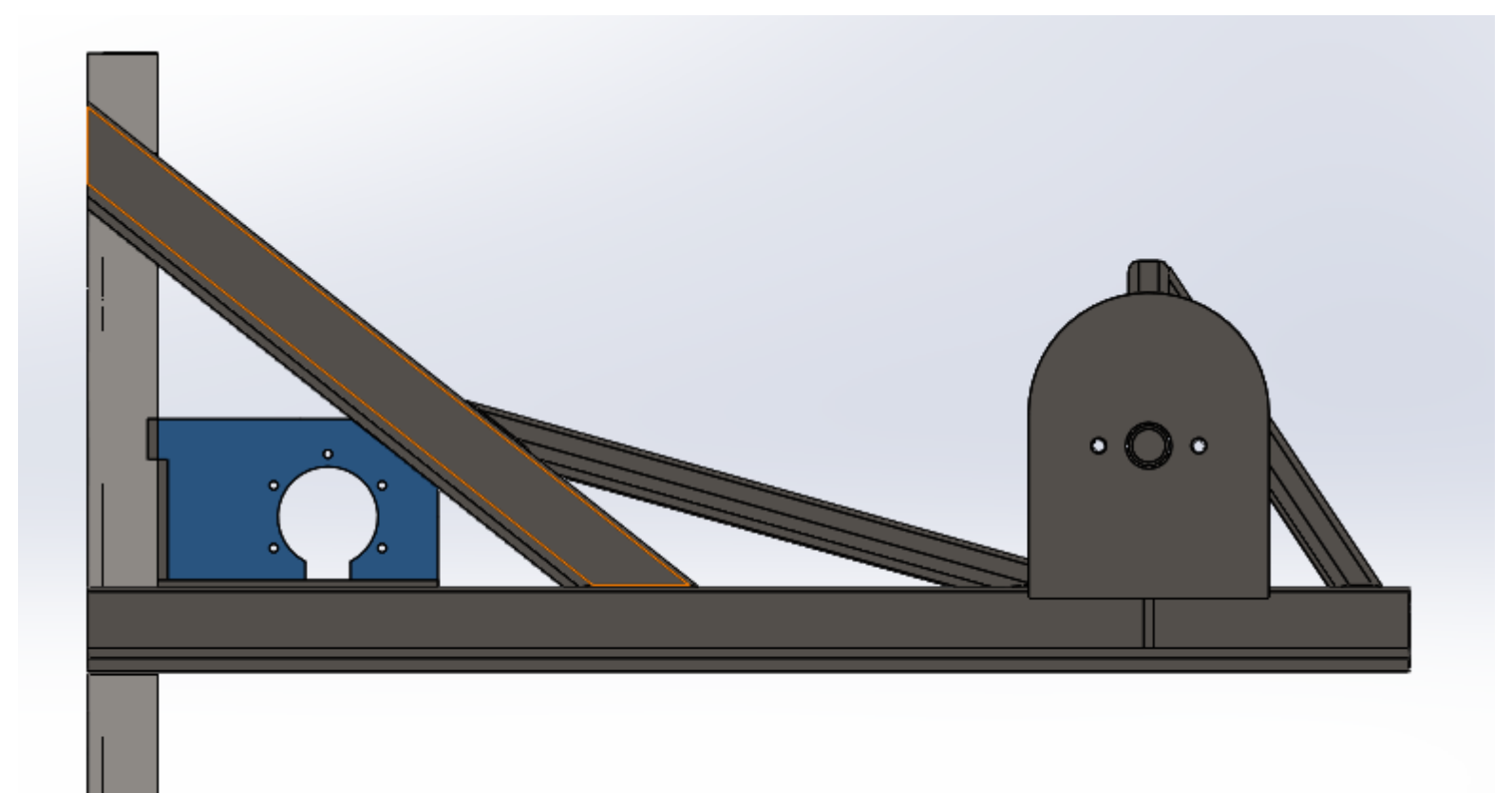
Inspection Drawings and corresponding inspection sheet for all components



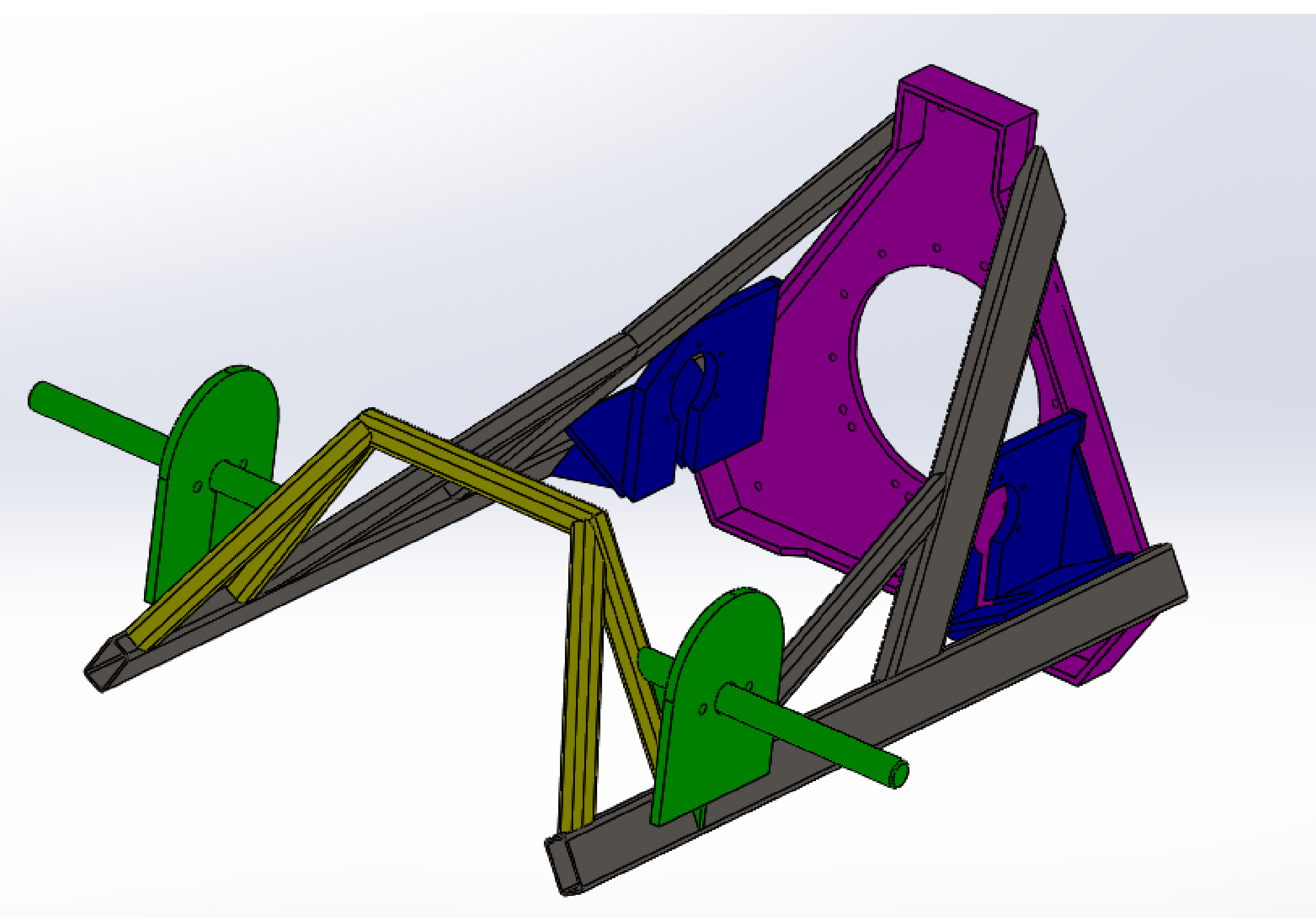
TC-5 Inspection Drawing



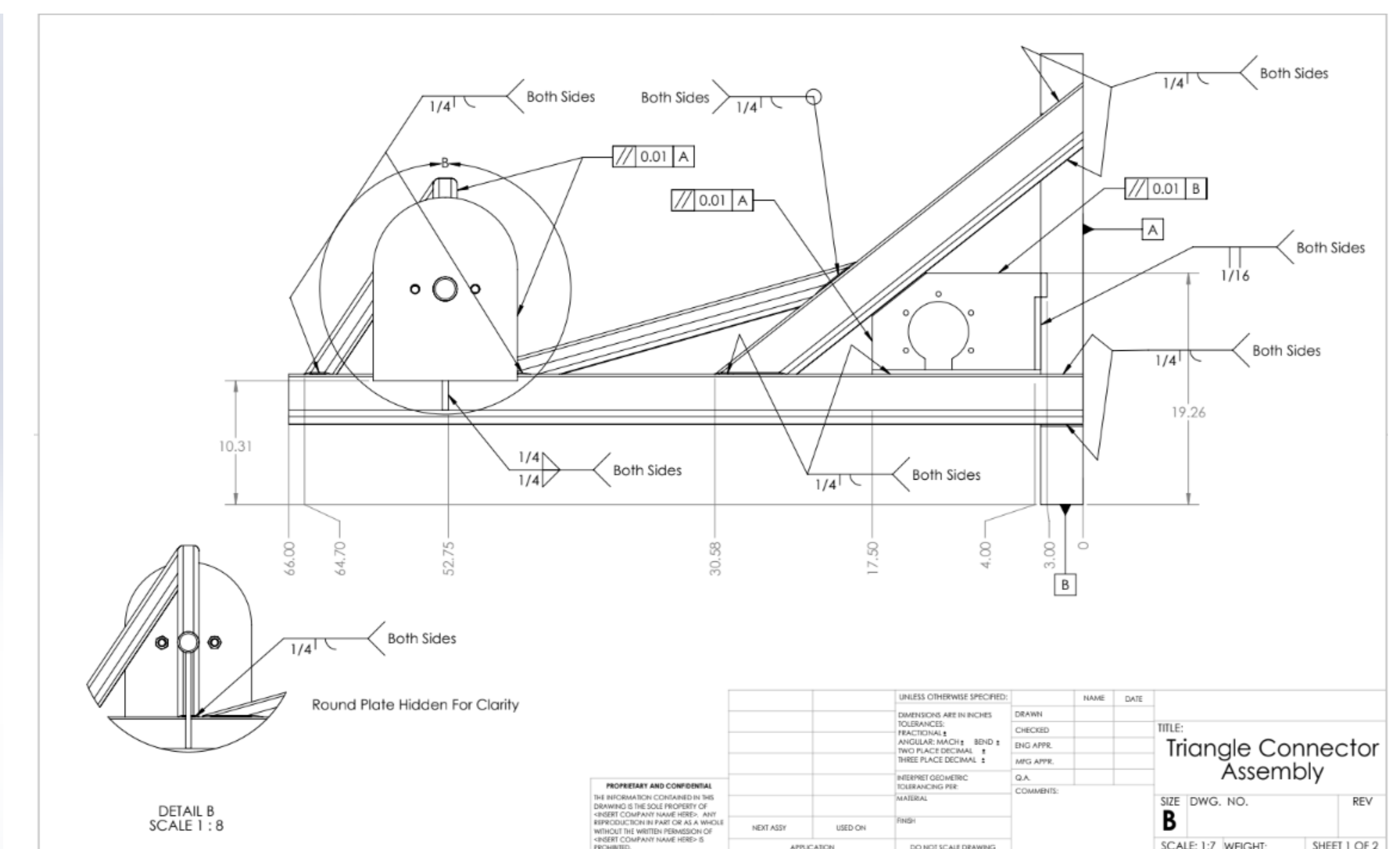
Subassembly Drawing



Triangle Connector Post Machining



4 Weld Subassemblies



Final Weld Assembly
Post Weld Inspection