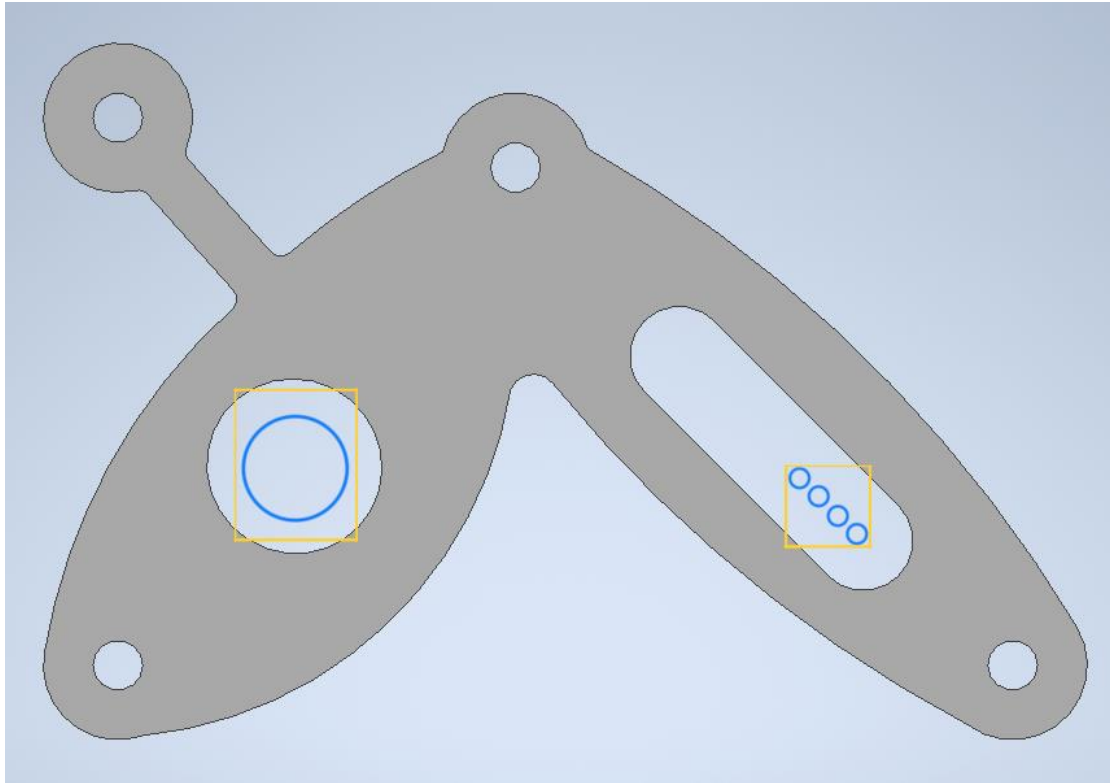


## ***Predicted Performance of Structural Bracket Design***

**by Group 58: Nabeel Azafer & Jawal Trivedi**

**Scale drawing of bracket indicating pipe and cable locations, including the outlines of the two rectangular regions where they could have been placed:**



**Figure 1: 2D Image of Bracket**

Blue annotation is the Pipe and the Wires. Yellow annotation is the rectangular region where they could have been placed

**Prediction of Mass: 136.28g**

### **Predictions of Stiffness:**

Predicted Resistance Force at 1.0mm <b>upwards</b> displacement ( in kN)	Predicted Resistance Force at 1.0mm <b>downwards</b> displacement ( in kN)
<b>3.27 kN</b>	<b>4.1 kN</b>

### **Prediction of Strength:**

Predicted Resistance Force just Prior to Failure ( in kN)
<b>8.38 kN</b>
Describe your predicted mode of failure at the force value provided above
<b>Failure due to yielding will occur at the Force Value calculated above.</b>