

CIV102 Project Team 201

Engineering Assembly

1 Engineering Drawings

2D drawing showing how you plan to cut the matboard

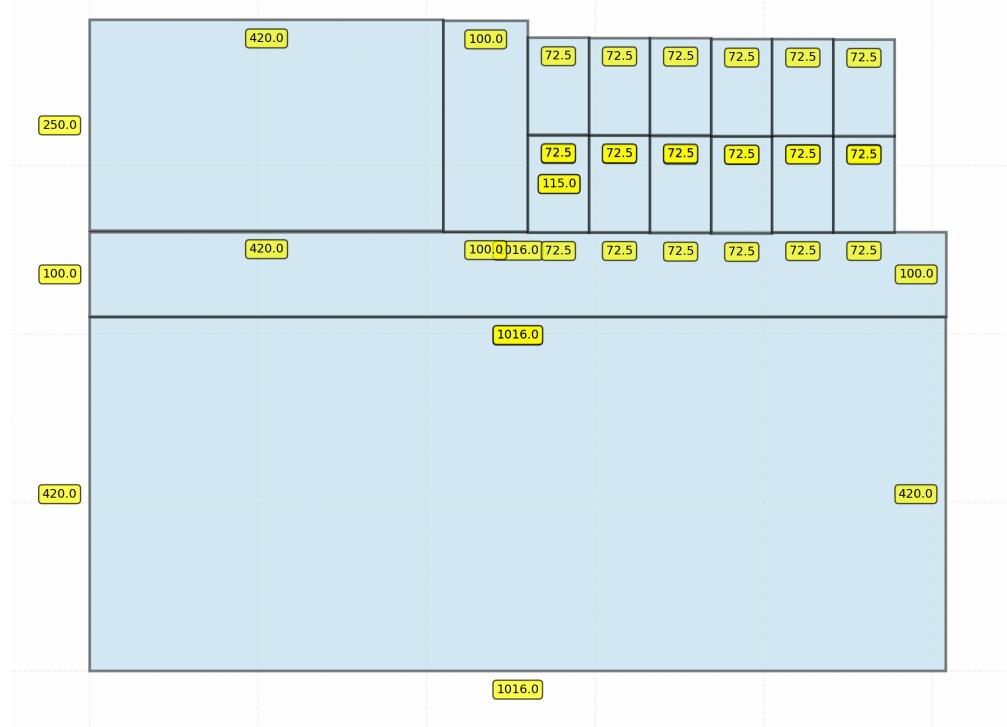


Figure 1: Cutout plan

Bridge elevation, top, bottom, and cross-section views at important locations

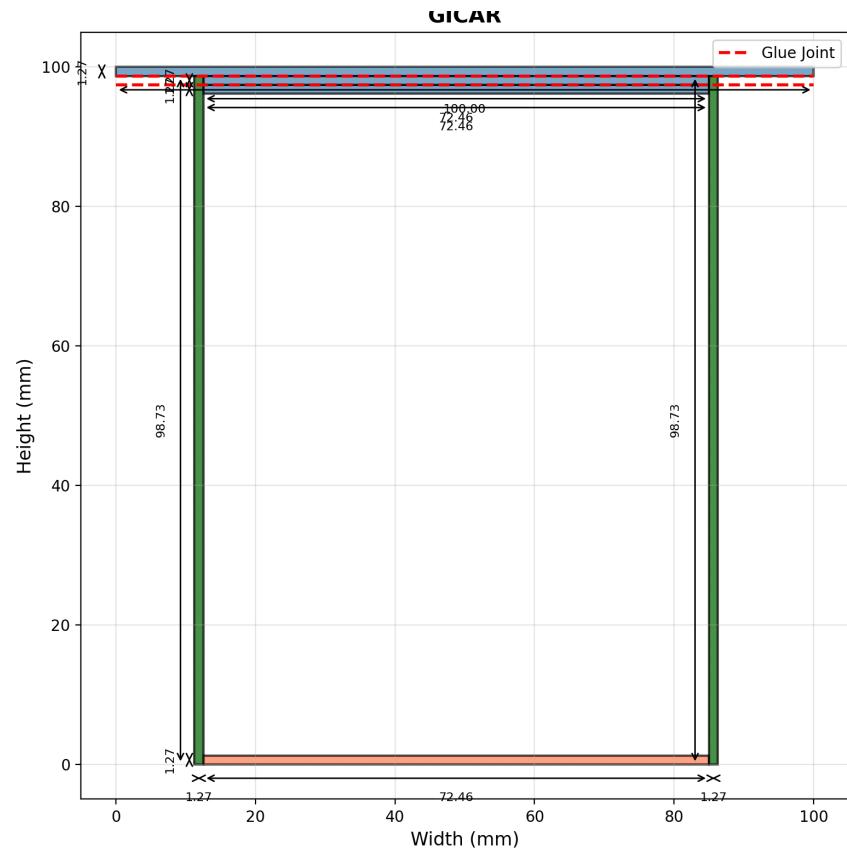


Figure 2: Matplotlib rendering of cross section (note this does not show the 'wrapped' design, but is to scale)

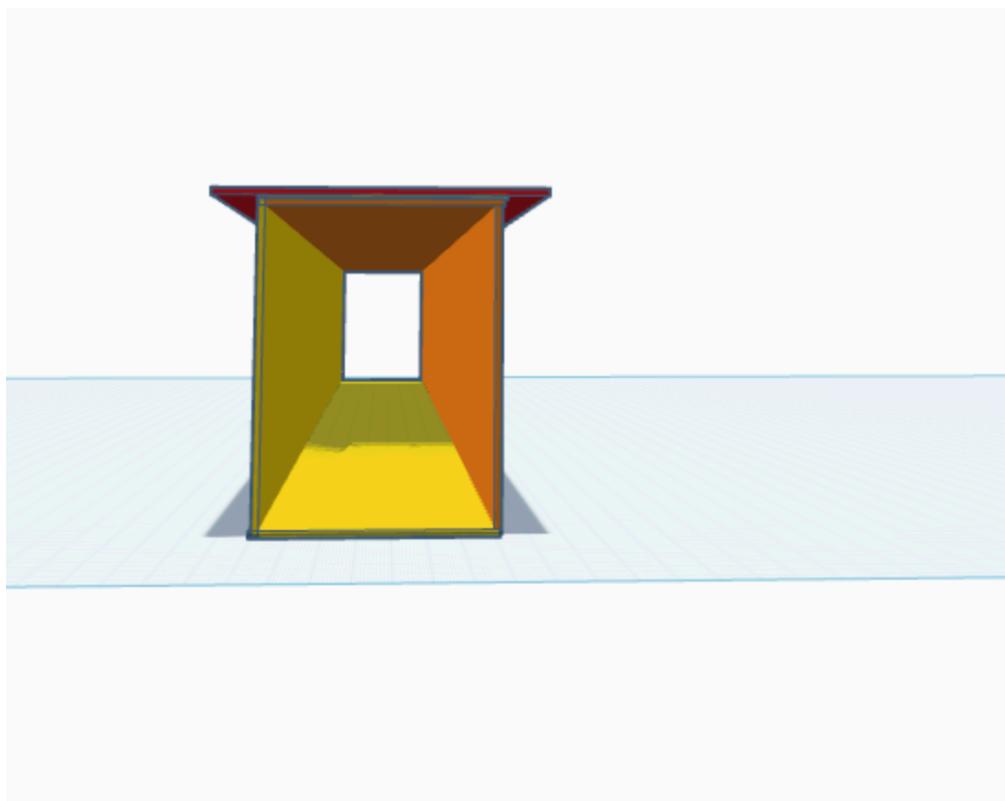


Figure 3: 3D rendering of cross section - shows the wrapped design

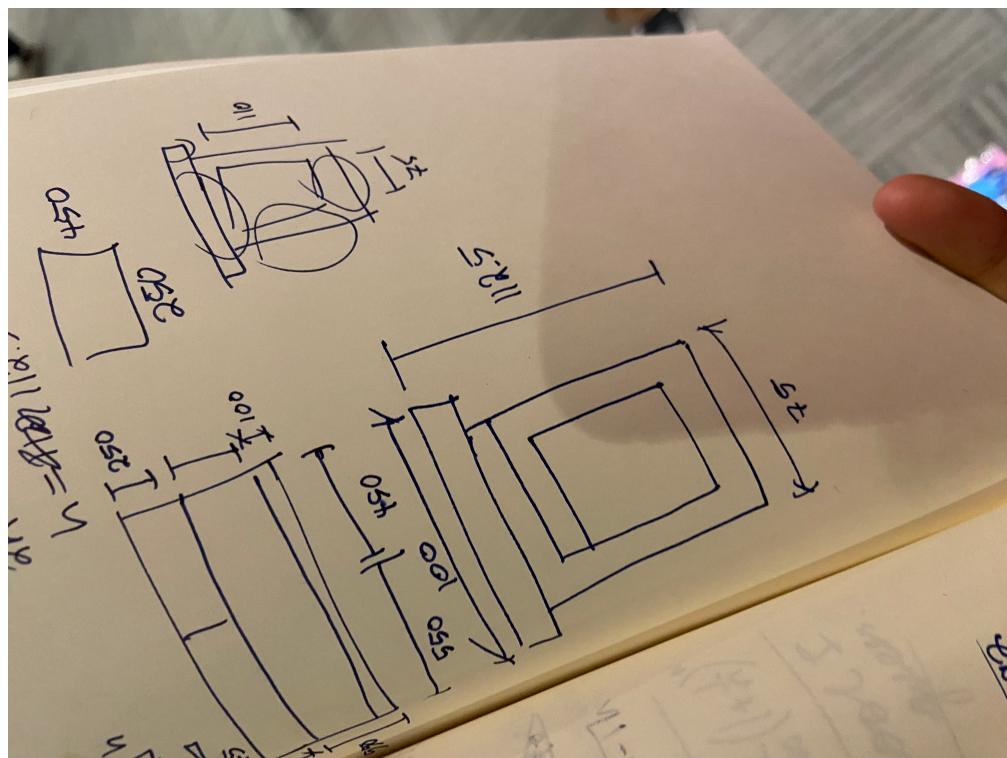


Figure 4: Sketch of cross section - shows the wrapped “cigar” design

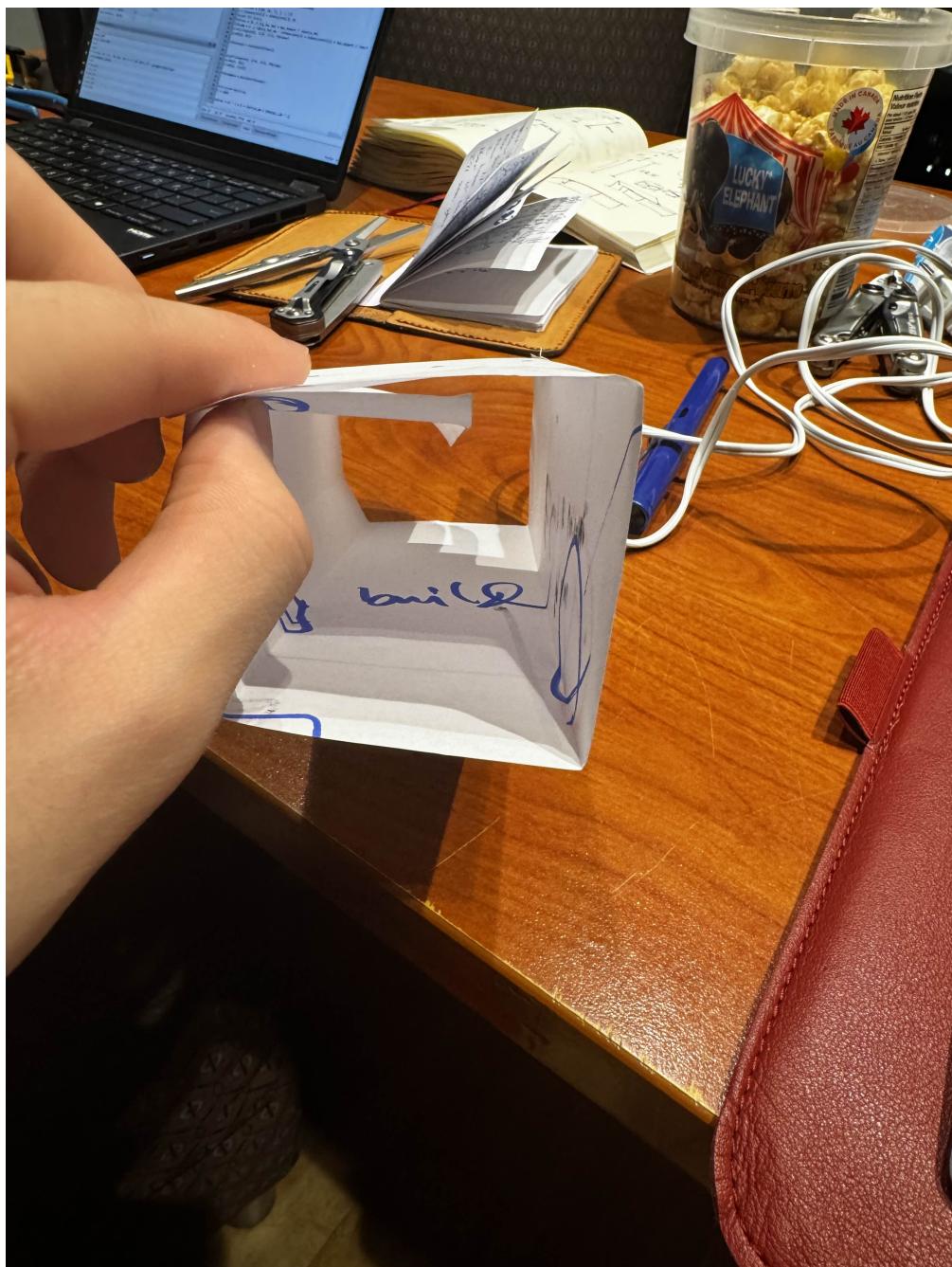


Figure 5: Cross-section prototype

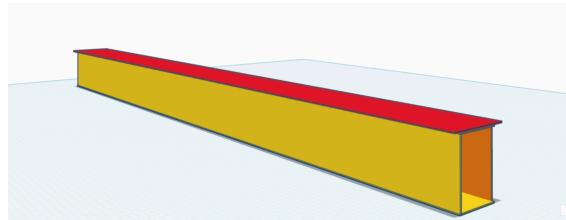
(Put the 4 cross-section images side by side in the PDF)

Splice, diaphragm, and any other connection details

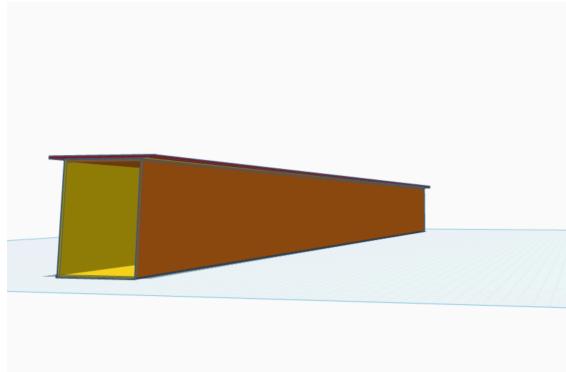


Figure 6: Connection Joint Prototype - Shows splice and diaphragm joining method

Optional: 3D rendering or 3D pencil/pen sketch of the entire bridge



(a) Left profile



(b) Right profile

Figure 7: Bridge profiles

2 Construction Process Documentation

2.1 Prototype Development



Figure 8: **10:05 AM** - Julian with the cardboard



Figure 9: **10:30 AM** - Initial cardboard prototype for testing if our cut out pattern works

2.2 Cutting, Preparation and Being Neat

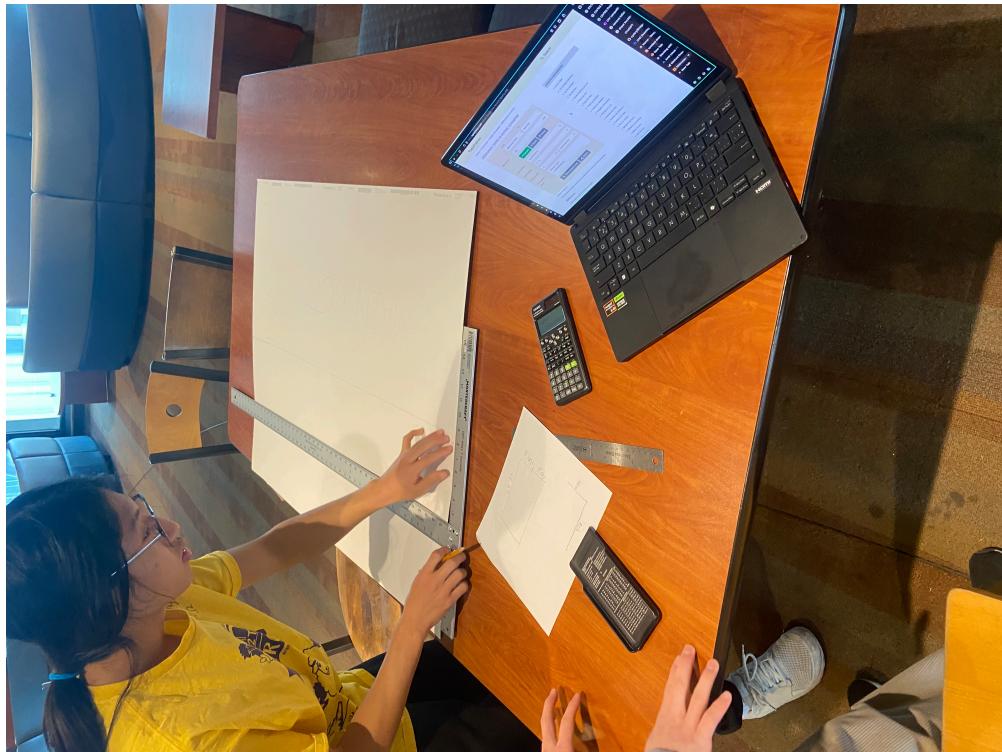


Figure 10: **10:15 AM** - Drawing cut guidelines - team planning cuts on matboard before cutting



(a) Safe setup 1



(b) Safe setup 2

Figure 11: **10:45 AM** - Safe cutting setup on cardboard - shows precautions taken during cutting process

2.3 Cutting and Creasing Done

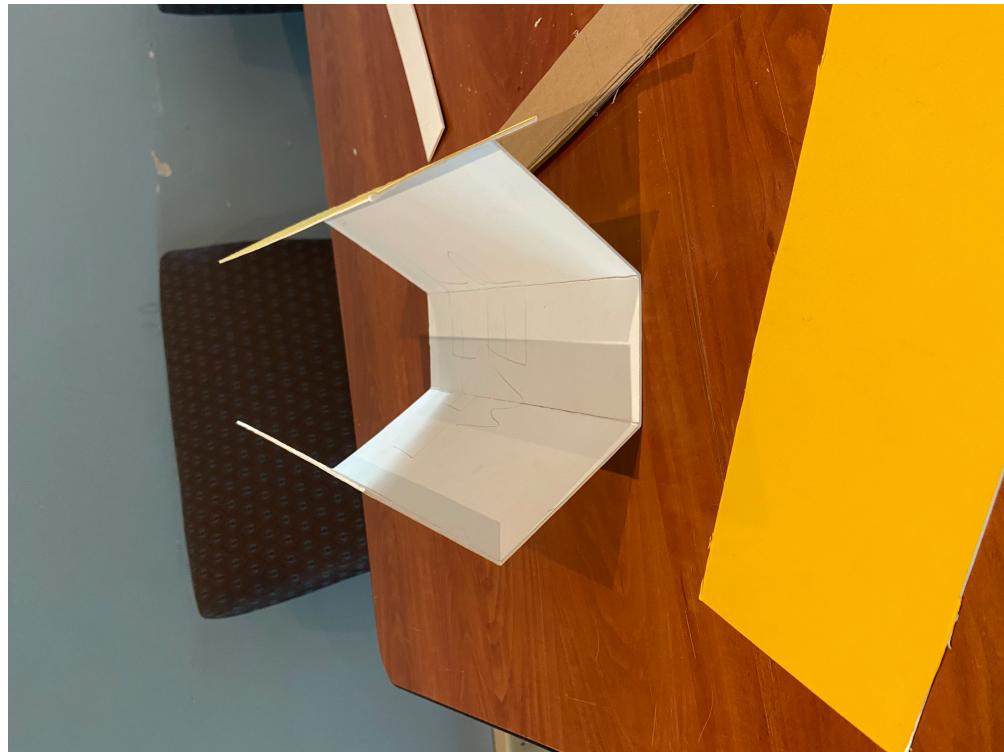


Figure 12: **1:20 PM** - Creased small box section



Figure 13: **2:50 PM** - Completed cigar-shaped sections - both wrapped matboard sections completed and ready for assembly