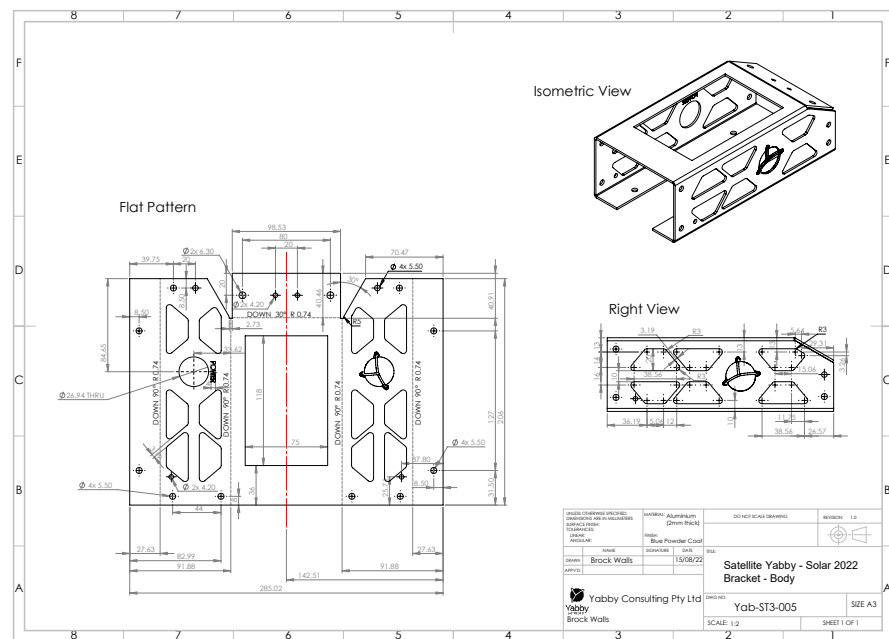


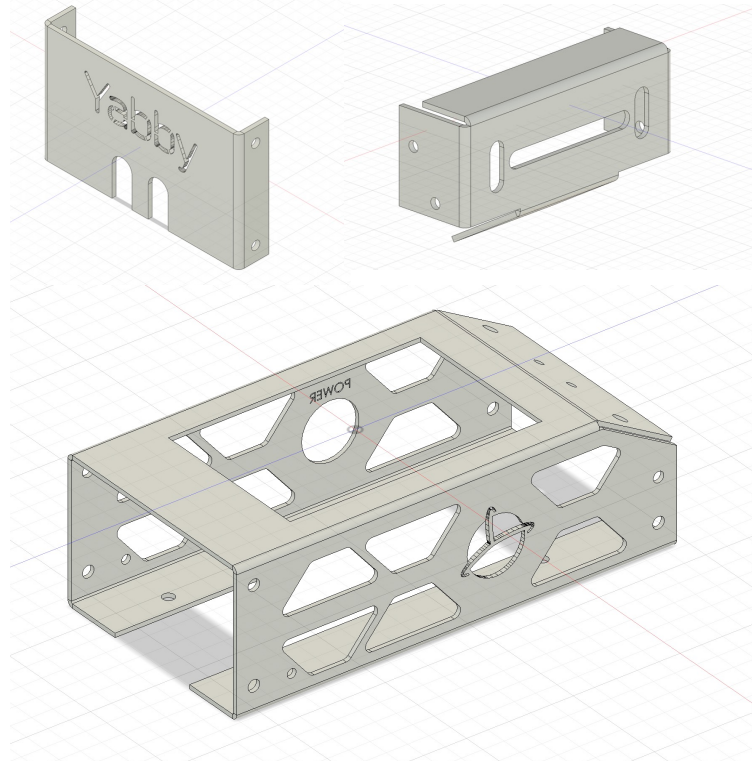
Brock Walls Undergrad. Mechanical Engineer – Portfolio

Sheet Metal Designs for Yabby Sensors – Data Logger enclosure / Bracket

Production Drawing for Body part of Product

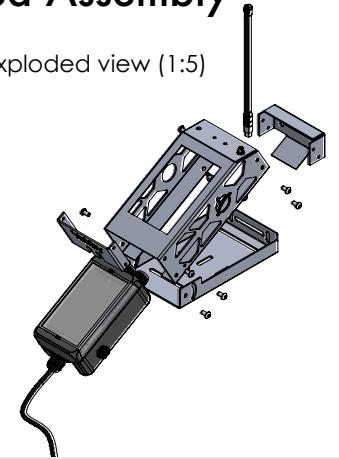


Part Files Produced With Solid Works



Exploded Assembly

Isometric exploded view (1:5)



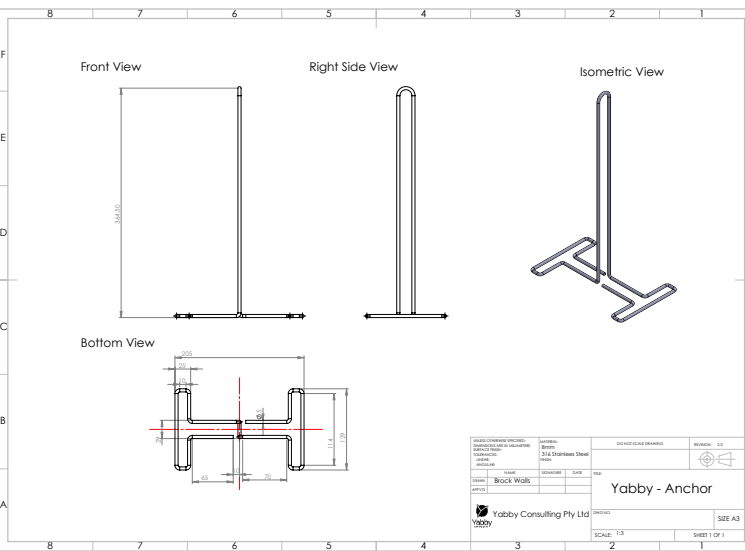
Final Product



Brock Walls Undergrad. Mechanical Engineer – Portfolio

Projects for Yabby Sensors cont.

Stainless Wire Form Anchor



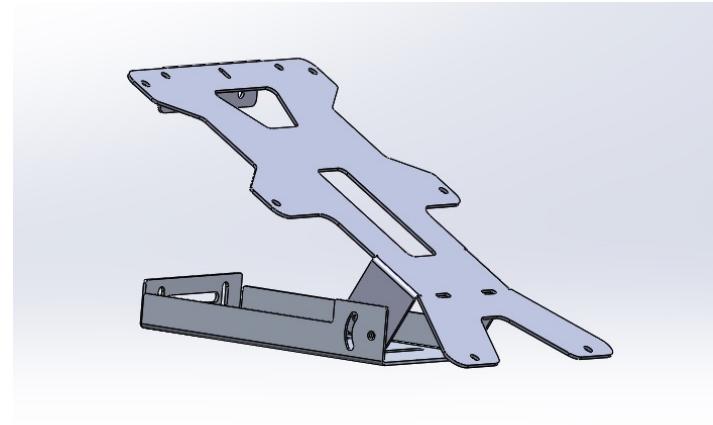
Production Drawing



Manufactured part

Part Application

Solar Panel panel mount - that can be adapted to 2 different sized panels - 2-part assembly.



Brock Walls Undergrad. Mechanical Engineer – Portfolio

Web Design Project for GovHack Hackathon

TransCO2



This app was created for Gov hack 2022 to track and compair Carbon useage on Public transport, ---- Video ---- Project Home

View the Project on GitHub
brockwalls/govhack22

This project is maintained by [brockwalls](#)

Hosted on GitHub Pages — Theme by [orderedlist](#)

Govhack22 Project for Public Transport

This project aims to used both ABS and ACT supplied data to improve sustainable behaviours around the use of public transport in the ACT.

The TransCO2 website does this by addressing the uptake, CO2 output and Pricing of the ACT's public transport usage from two sides. The first being the side of the commuter and the second being the side of the transport planner.

Start using the website

[Commuter Site](#)

[Network Planner Site](#)

Features of the TransCO2 Website

Commuter Side

- Planning your route and seeing how much carbon your choosen Transport produces
- Easy Comparison of route options in terms of both time carbon foot

TransCO2



This app was created for Gov hack 2022 to track and compair Carbon useage on Public transport, ---- Video ---- Project Home

View the Project on GitHub
brockwalls/govhack22

This project is maintained by [brockwalls](#)

Hosted on GitHub Pages — Theme by [orderedlist](#)

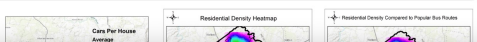
Route ID	Colour
300	Red
200	Orange
005	Yellow

Route Summary Table

Route ID	Revenue per year(Considering OP cost)	Riders per year	Carbon Output (t) per year
300	\$5,963,472	4,018,512	1590
200	\$2,845,683	159,798	1130
005	\$494,973	27,795	1484

Areas to target

Residential heat Map - Residential heat Map overlaid with Existing Routes - Car per house hold map



Screenshots of a Website I created for the GovHack Hackathon Competition.

FEA Analysis Mini Project University of the Sunshine Coast

Exerts from a project I completed during my Computational Mechanics Course – Improving a snow mobile Spindle via stress analysis.

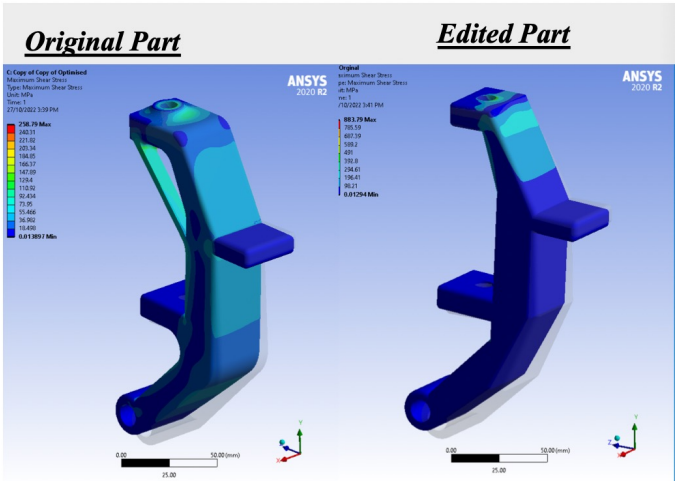


Figure 13: Shear stress in back of part – comparison

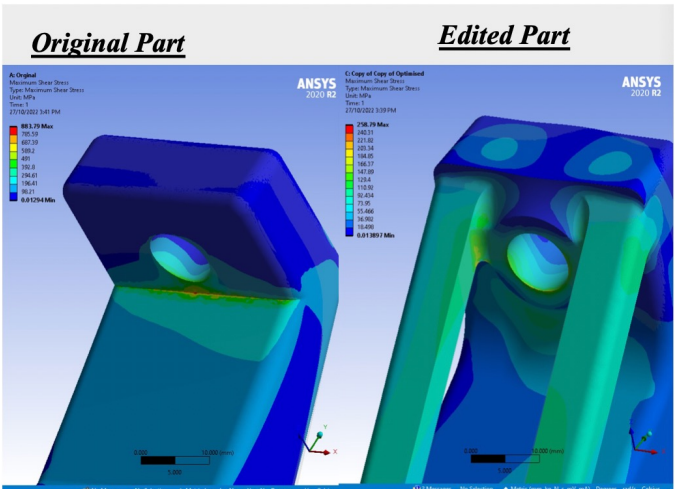


Figure 12: Stress comparison in top region

Brock Walls Undergrad. Mechanical Engineer – Portfolio

Contact Information:

Phone: 0457 706 595

Email: brockwalls05@gmail.com

LinkedIn: <https://www.linkedin.com/in/brock-walls-8957901a4/>

References:

Darcy Oxenford – Personal Reference

HeliMods - IT Support Specialist
0447 982 307

Steve Dudgeon – Professional Reference

Yabby Sensors – Director
0447 982 307

Hugh Allan – Academic Reference

University of the Sunshine Coast – Technical Officer (Engineering)
0419 942 839

Dr Aaron Wiegand – Academic Reference

University of the Sunshine Coast – Senior Lecture
+61 7 5430 1139