Deliverable H - Prototype 3

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Prototyping Test Plan Results

Initial plan

Below is the test plan used to test our second prototype.

Test ID	Test Objective	Prototype used and the test method	Results to be recorded and their function	Estimated test duration and start date
Peer & Client Feedback	- Use people unfamiliar with the problem statement to gain an understanding of the design and functionality of the building from the public's eyes. - Use the client feedback from the client meeting to compare our design to what they want changed.	Prototype 2	- People's opinions on different areas of the building, based on both aesthetic and functionality. - The client's feedback and how it compares to our design.	Start date: Nov 12, 2023 Estimated duration: Until Nov 26, 2023

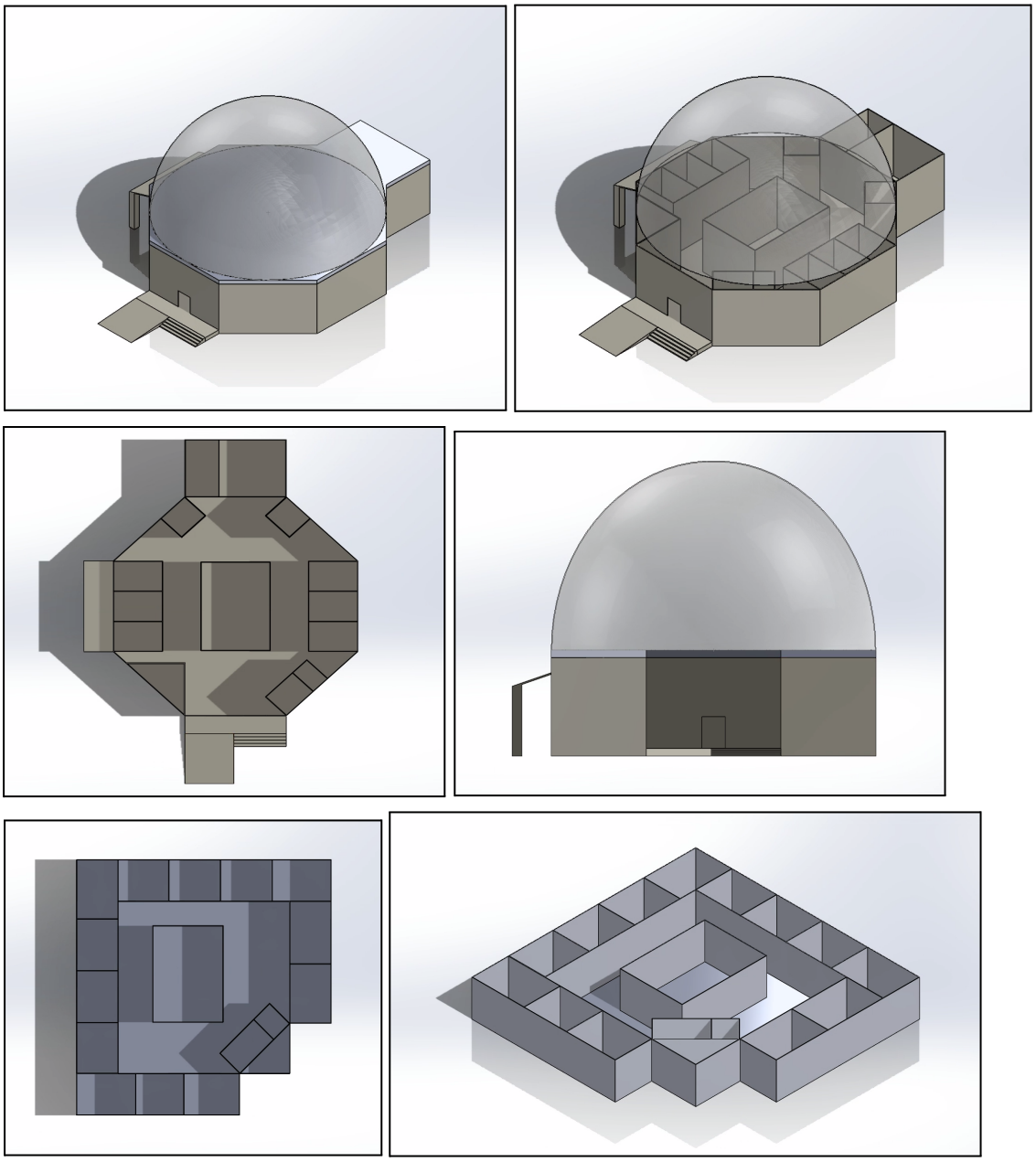
Feedback given

After talking to our peers in GNG1103, we have received consistent feedback that the building requires a meeting room.

Changes made to Prototype 2

For the third prototype, we have decided to add a meeting room to the basement. This is for employee use, and will house room for fifteen people to sit around a table, as well as space in the front of the room for any presentations that need to be given. The third prototype has been built off of the first and second, as we have taken functionality and realism into account for each step of the way.

Prototype 3



Not pictured are windows and doorways. Each room of the first floor will feature a window to the outdoors. The lab will have windows lining its walls.

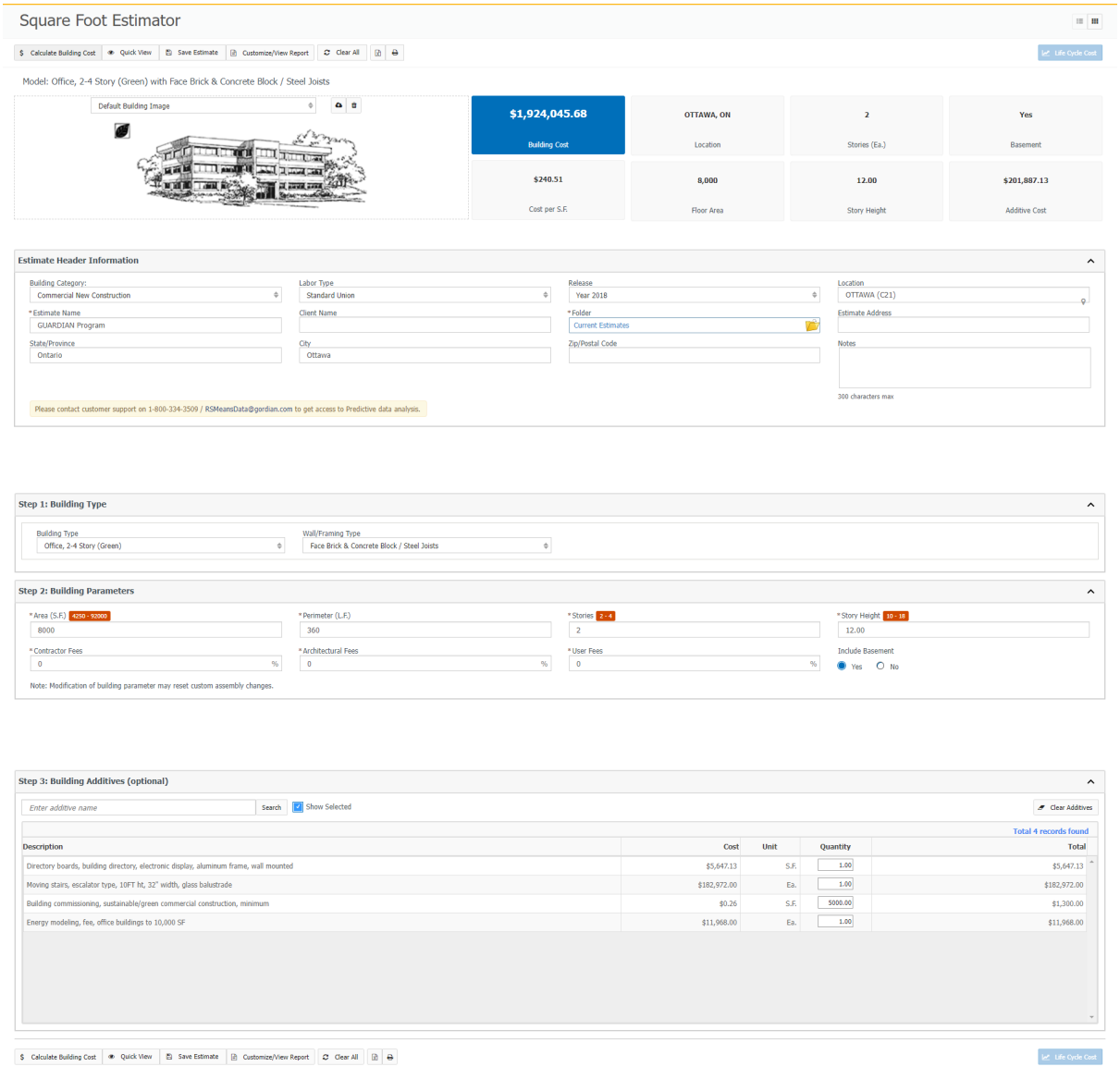
List of Equipment

Below is a list of equipment necessary for the construction of our prototypes.

Item	Description	Type	Prototype #	Source
Solidworks	To build design	Software	1,2,3	Solidworks
Tinkercad	To format for 3D printing	Software	3	Tinkercad
Ultimaker 2+	To 3D print the design	Equipment	3	Makerspace

Bill of Materials

Item Name	Description	Unit of measure	Quantity	Unit Cost ($)	Link
PLA Filament	2.85mm diameter 3D printer filament in colour Tangerine Boost	Unit	1	40.00	Materio3D PLA Filament (Diameter: 2.85mm, Color: Trangerine Boost) (makerstore.ca)



Using RSMeans, it was estimated that the cost of the building is estimated to be $1 924 045.68. This does not vary from our original BOM, as the cost for a basement was added as a precaution in our original estimate.

Updated Prototyping Test Plan

Test ID	Test Objective	Prototype used and the test method	Results to be recorded and their function	Estimated test duration and start date
Peer & Client Feedback	- Use people unfamiliar with the problem statement to gain an understanding of the design and functionality of the building from the public's eyes. - Use the client feedback from the client meeting to compare our design to what they want changed.	Prototype 3	- People's opinions on different areas of the building, based on both aesthetic and functionality. - The client's feedback and how it compares to our design.	Start date: November 26th Estimated duration: November 29th