MINING RENFREW STREET

THE MCLELLAN GALLERIES

Highly Commended - GSA MSA & PDE Sustainability Prize 2022

Video Presentation Link: https://youtu.be/1vAkQXXl_p0

Virtual Tour of Galleries: https://api2.enscape3d.com/v1/view/ee93877d-6e65-4f78-870d-41d6e58a6c90

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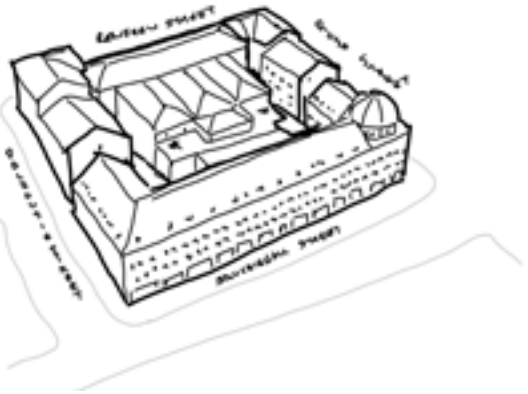
Leen Ismeik
MSA Year 2

Project Summary

Birdseye View

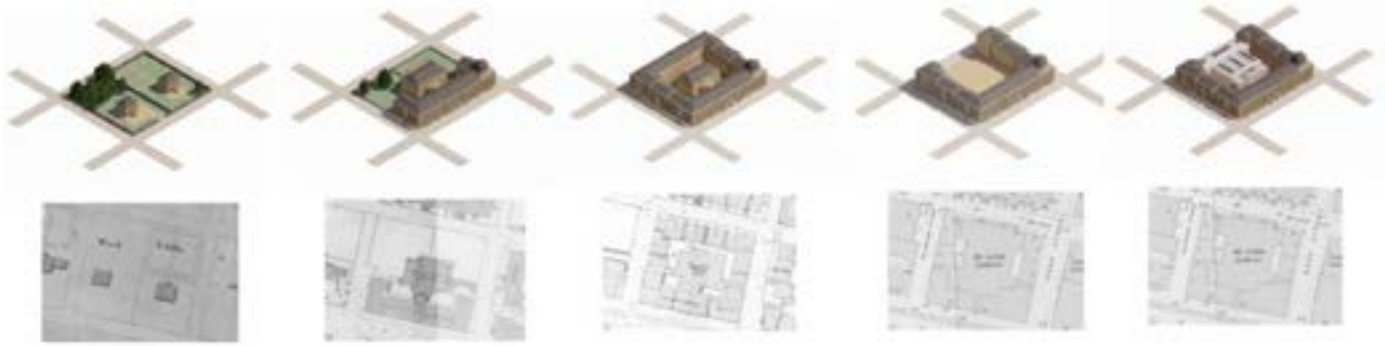
Conceptual drawings inspired by google earth images and in-person analysis.





Historical Background

Using CAD and Digimaps we created a realistic representation of the plot from 1900's to present.

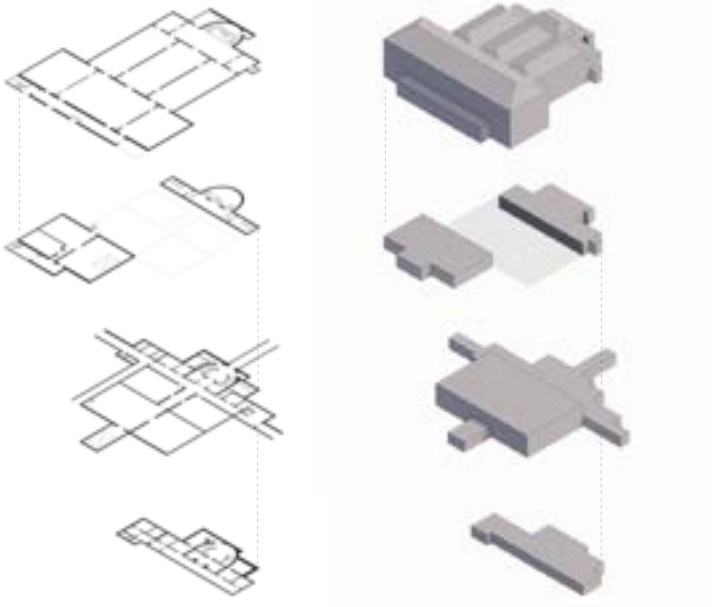


Building Exploration



Floorplans

Without official documents we made use of the fire-escape plan to create a floor plan of our building, aiding us to create as accurate of a model as possible. This primed our values within the dimensioning stage.



Dimensioning

Lack of tools led us to use more tangible ways of measurement. As seen below using our physical ‘feet’ and photoshopping heights validated our assumptions.



Structure

Using a variety of software tools such as Rhino Jack used the dimension assumptions alongside internal exploration to reconstruct the building's structure.

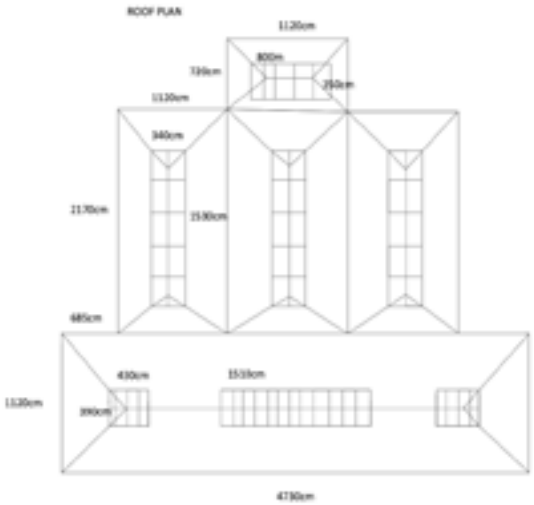


Jack Kerr
MSA Year 2

Quantifying Materials

Consulting with Heating Engineer

With our digital model, we consulted with heating engineer, Scott McCracken, to approve that our quantitive data of materials is viable.



Quantities Assumed by Digital Model

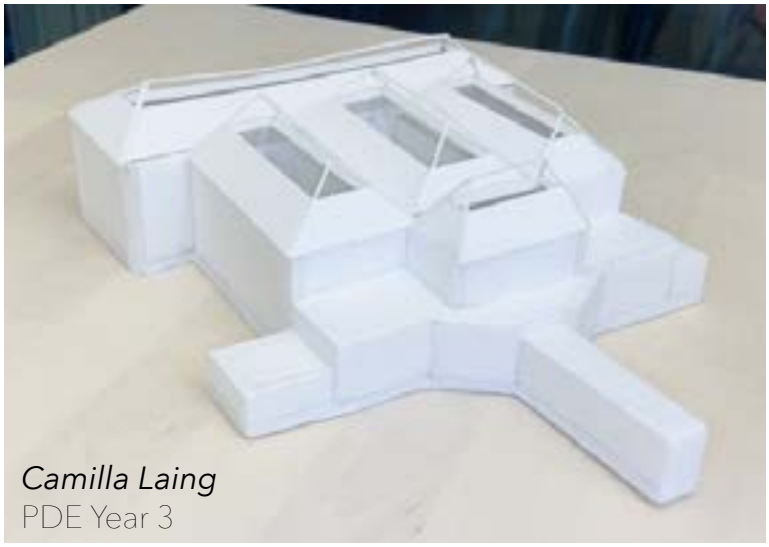
BIM allowed us to scale up the volume and embodied carbon within each material found on-site.



Exhibition

Foam Model

Foam model to a 1:200 scale.



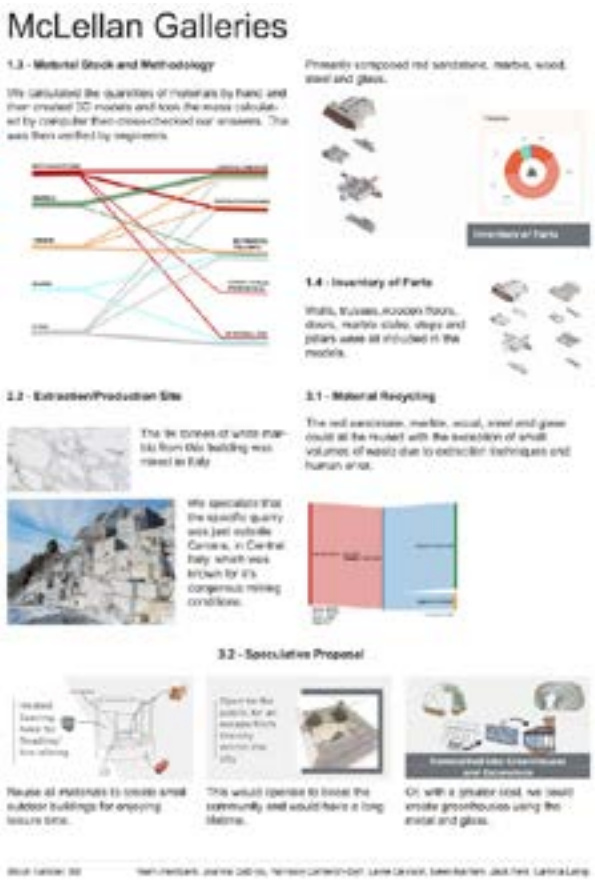
Camilla Laing
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Material Quantity

Representing the weight of key materials found inside the building.



Summative Poster



1:1 Scale

We choose to represent the redestone brick.



Feature

A key feature that stood out to us was the beautiful italian marble.

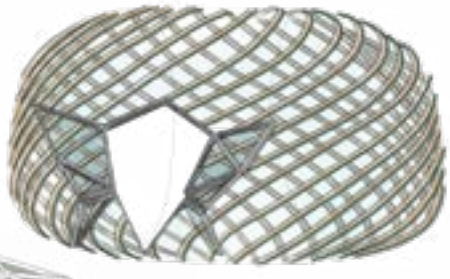


Feasibility Propositions

Reusing Glass



Harrison Cameron-Barr
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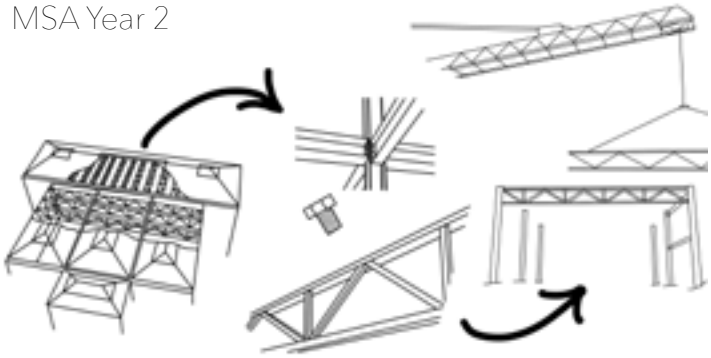


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Remoulded glass could be used within new greenhouses and panels directly placed into new housing extensions.

Reusing Steel

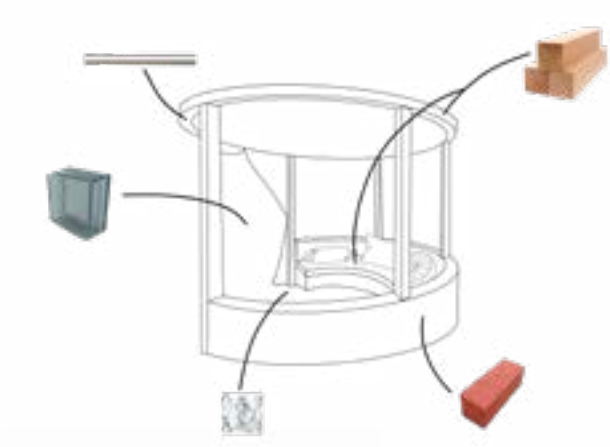
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Recycled steel could be directly repuporsed into new building structures.

Reusing all Materials

Repurposing all materials and space to better benefit the local community. Pods powered by algae to illuminate at night create an open safe space for social iteractions within a naturistic feel in the heart of the city.





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