MANCHESTER SCHOOL OF ARCHITECTURE

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MANCHESTER 1824
The University of Manchester

Manchester Metropolitan University

Manchester Bolton & Bury Canal Society
MB&BCS

SUB-URBAN BROOKS

MSA LIVE 22

Team

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Partners (MBBCS)

Sub-Urban Brooks (MSA live group 20) have collaborated with ' The Manchester Bolton & Bury Canal Society' to not only create true change in the area but act ass a catalyst for the entire canal system.

The society is a group of passionate local people that volunteer to maintain and act as custodians for the local canal system that travels through the site. The society describe their objectives are "to restore, reconstruct, preserve, maintain and improve the Manchester Bolton & Bury Canal from Nob End, Little Lever to the River Irwell in Salford, to Church Wharf in Bolton, and to Bury Bridges in Bury.". This means that the members have a valuable in-site into the historical and cultural impacts of the canal alongside its practical requirements.

The Society acted as a client throughout this project and from site visits to regular meetings with ourselves have provided important guidance for the project. From our first interactions with the society it was clear that they not only had a deep passion for the community but their technical knowledge strengthened the project from the start. As the project progressed, this passion moved forward into impact-full feedback that has not only improved the project but the Sub-Urban Brooks approach outside of the given project.

Finally we would all like to offer our sincerest gratitude to the entire society for their input and guidance throughout the project, welcoming into their team with open arms. We would also like the thank the surrounding community for their contribution through the supplied survey.

For further information on the society or to donate please feel free to click the link bellow.
http://www.mbbcs.org.uk/

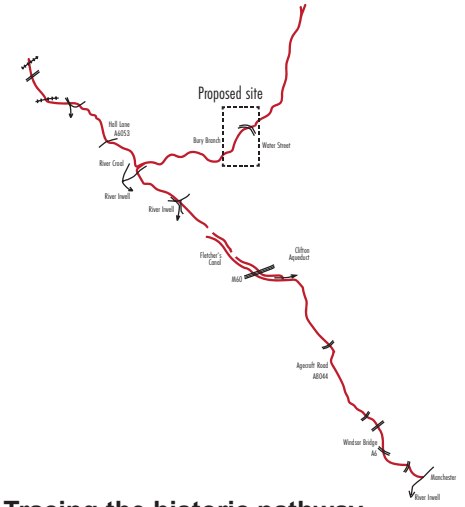
Agenda

SUB-URBAN BROOKS

A new restoration strategy is vitally important for Bury Bolton Canal to unlock potential contribution to the economic, social, and environmental wellbeing of regions, districts, communities, and individuals; along with protecting these valuable assets for the benefit of current and future generations. Our Agenda is restoration and maintenance of the 5 miles of Bury Bolton Canal with a focus on methods of engagement and consultation with local communities. We collaborate with the local networks to figure out the needs of the local community and priorities our purposes upon how they want to improve their local environments. Therefore, we aim to enhance the sense of belonging and community by providing suitable facilities and services.

CLICK ME FOR EXHIBITION BOARDS

STAGE ONE *[HISTORICAL ANALYSIS]*

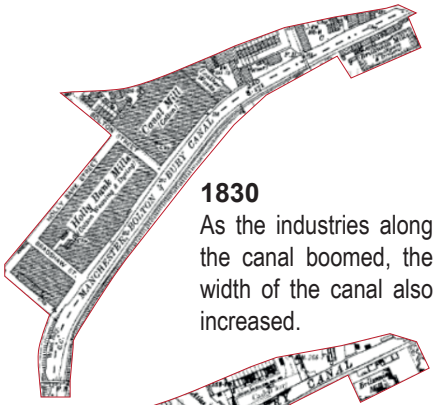


Tracing the historic pathway

The waterway winds through the north manchester landscape, creating cuts in the scenery as it leave its industrial mark on everything it touches. The group studied its math to develop an undertsand of its purpose and function.

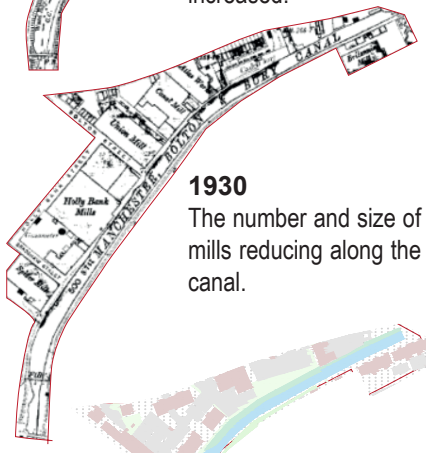
Ideas Workshop *(Depicted below)*

The canal has an industrial history that dates back to 18th century. The canal constructed mainly to to transport coal. By referring to historic maps and photographs, we could locate mills and collieries along and near the canal. The canal developed in various phases in 18th and 19th century, as the coal and textile industry soared.



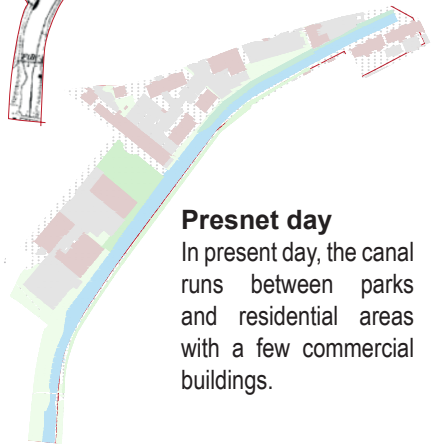
1830

As the industries along the canal boomed, the width of the canal also increased.



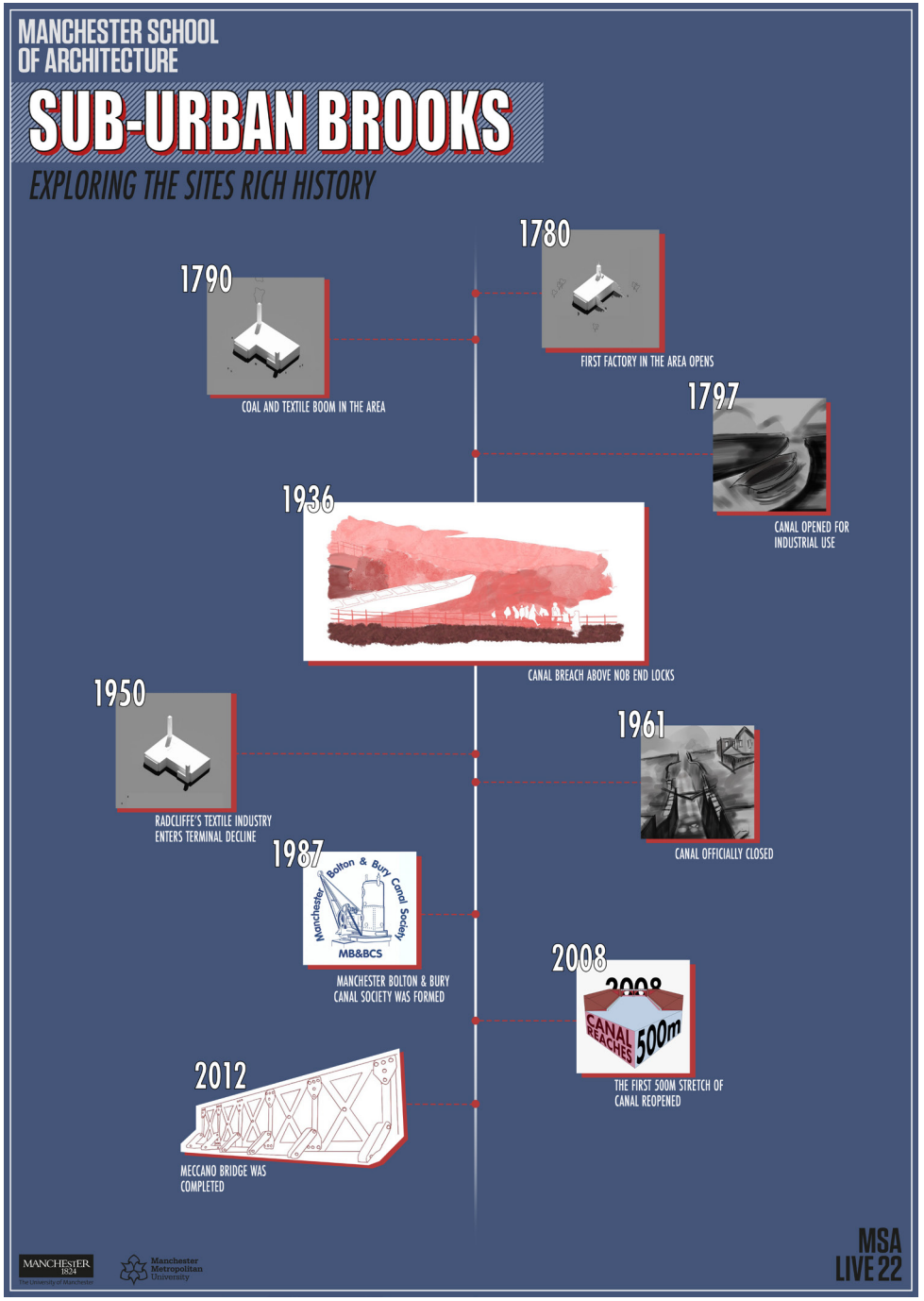
1930

The number and size of mills reducing along the canal.



Presnet day

In present day, the canal runs between parks and residential areas with a few commercial buildings.

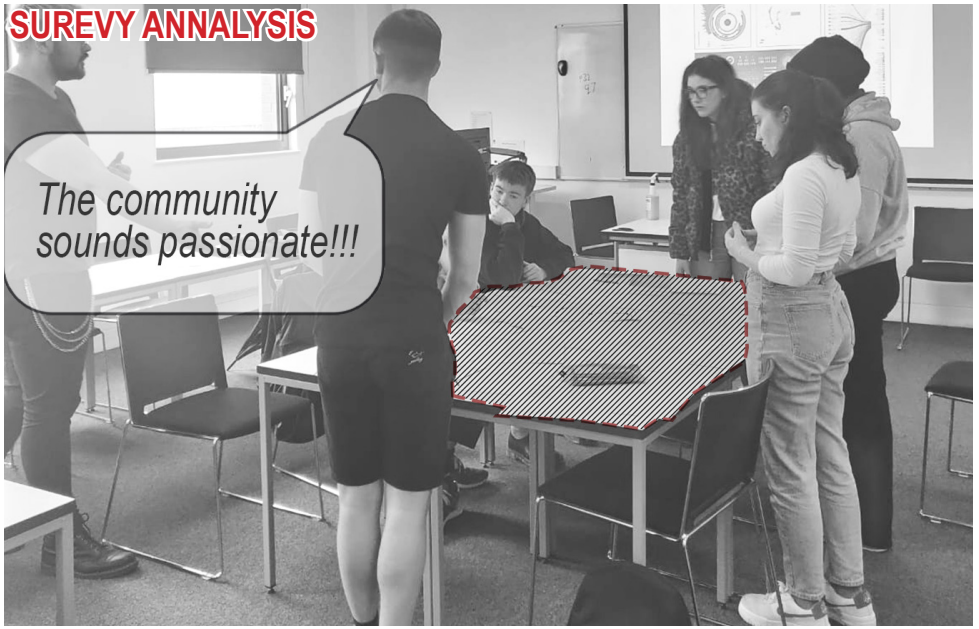


Final Proposal

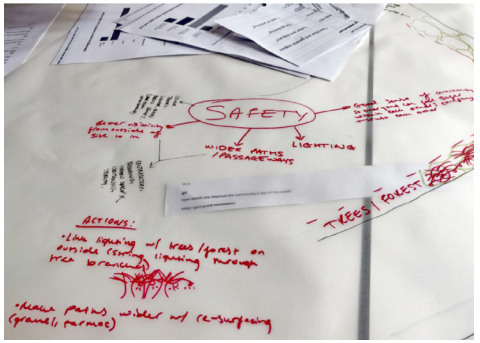
The client requested exhibition quality boards (A1) displaying the master-plan, shown above.

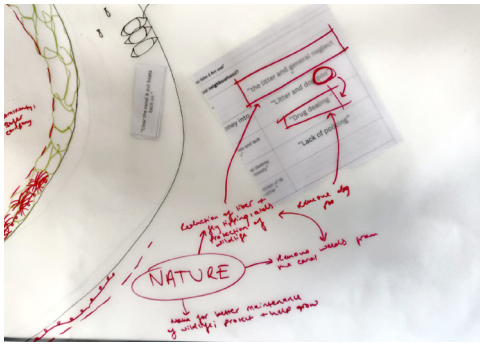
STAGE ONE *[COMMUNITY ANALYSIS]*

SUREVY ANNALYSIS

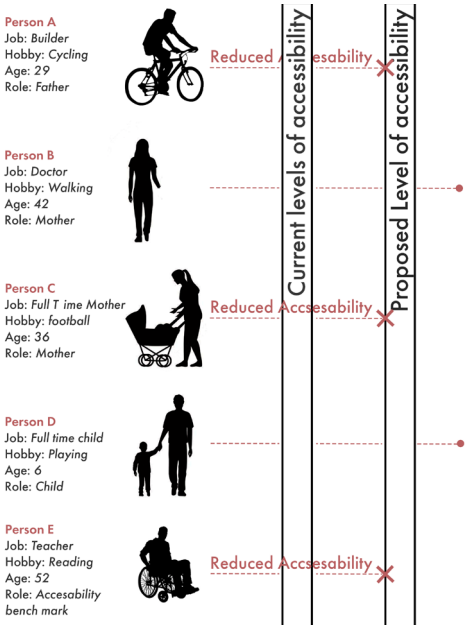


To better understand the community, a survey was issued two weeks before the project start date. The feedback from this survey helped the group understand and formulate the project from a community first approach.

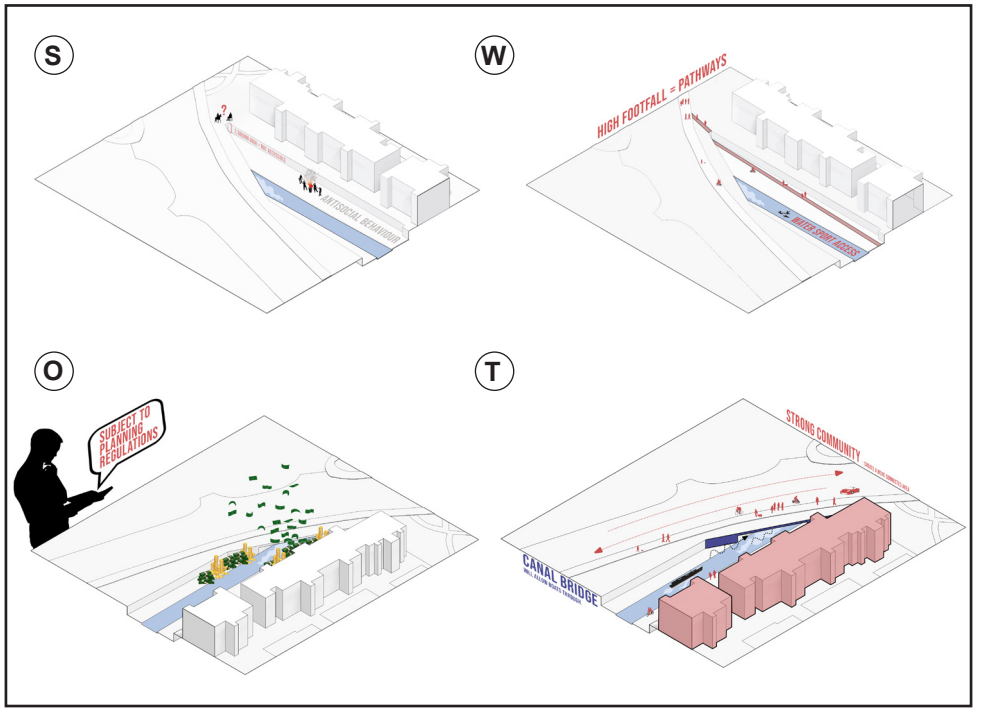




USER DEFINITUION



STAGE ONE *[SITE STUDY]*



STAGE TWO *[MASTERPLAN]*

01 **Introduction to Master-planning** *(Depicted to the right)*

After a discussion with the group it was clear that they did not have experience in master-planning. This was an opportunity to introduce new skills to the group through a talk and workshop session.

02 **Ideas Workshop** *(Depicted below)*

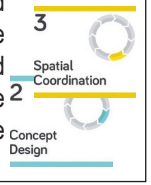
Utilising historical, site and community knowledge, the group collaborative sketched at a large scale to form a new master-plan. This allowed the team to discuss concepts around community and infrastructural values.

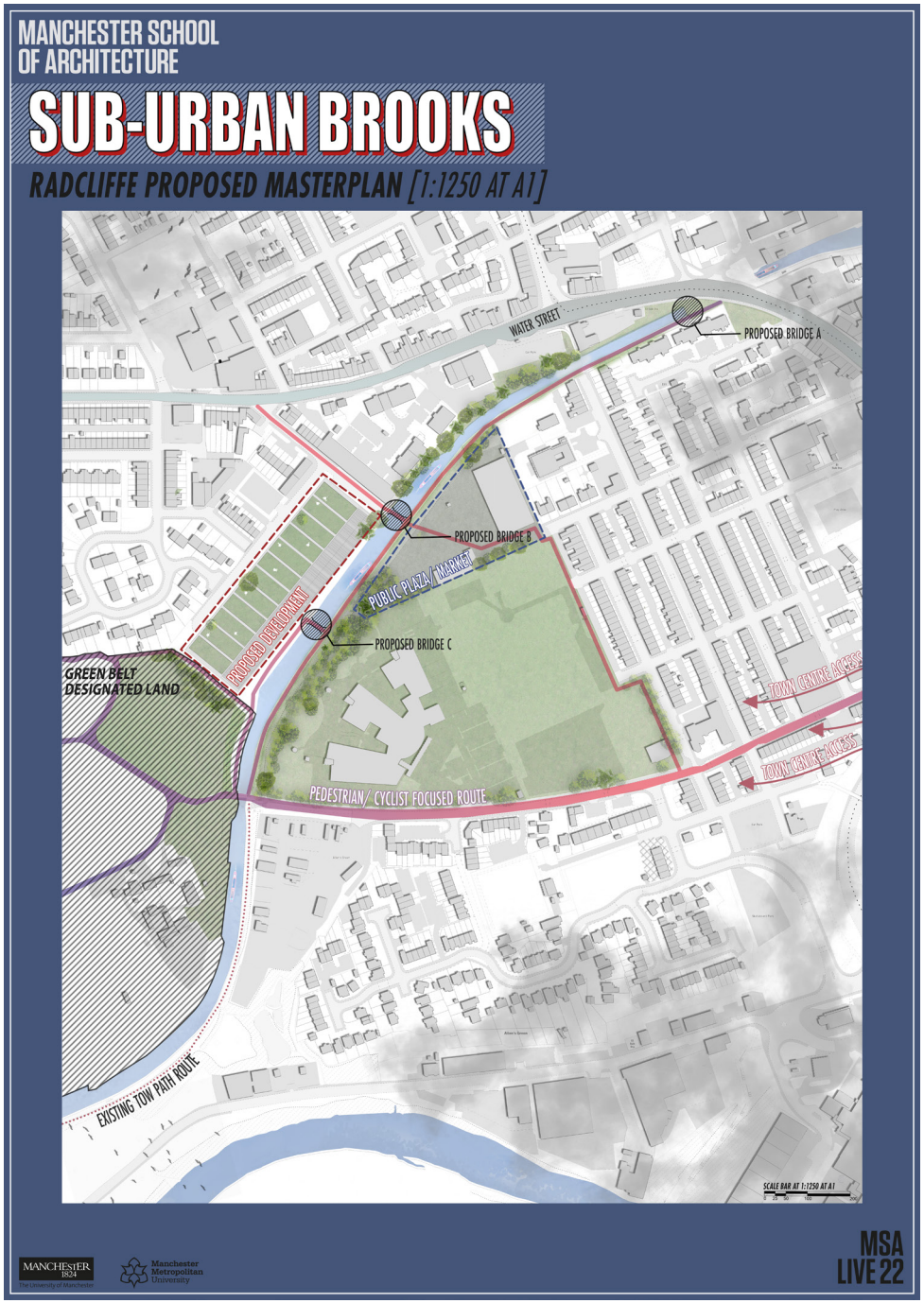
03 **Final Proposal** *(Depicted opposite)*

The final proposal allowed the undergraduates to understand how to put together a master-plan, using CAD software's and photoshop to produce an attractive drawing to convey the community and infrastructural values discussed.

RIBA *stages of work*

To further instil what is involved when practicing architecture, the stages of work were discussed at every level. This allowed the undergraduates to gain valuable incites into the profession.





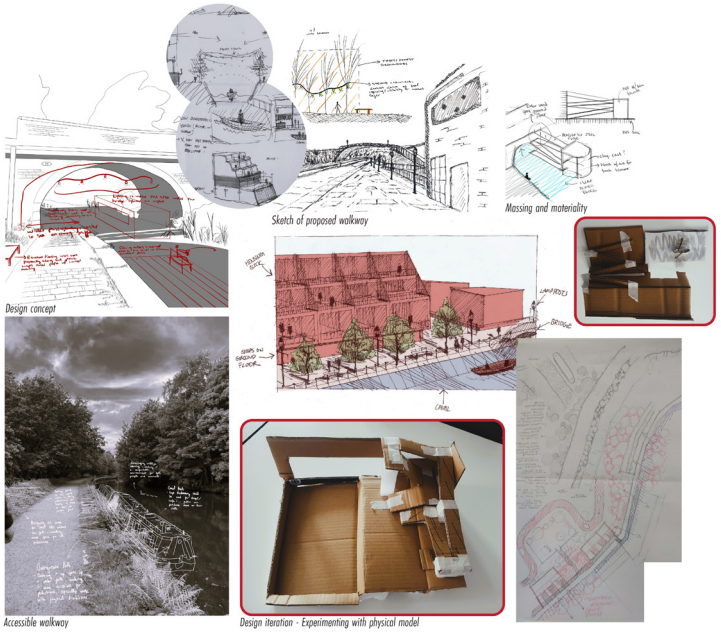
03 **Final Proposal**

The client requested exhibition quality boards (A1) displaying the master-plan, shown above.

STAGE THREE *[DESIGN DEVELOPMENT]*

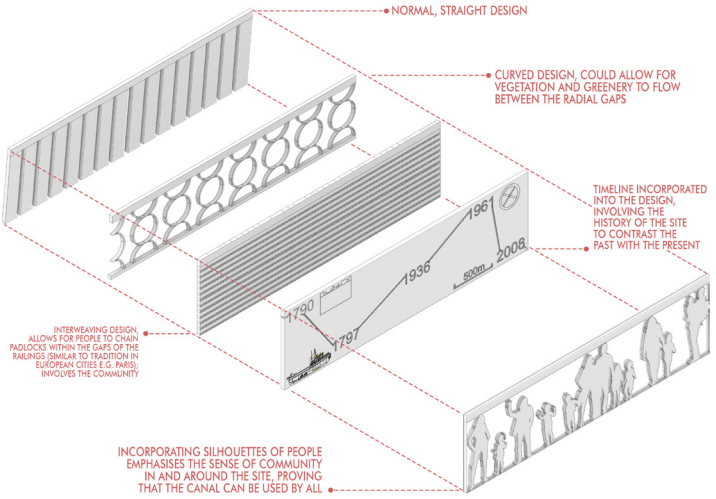
DESIGN DEVELOPMENT

After the team had evaluated the sites historic and community context, development sketches could be made to explore design options and different interventions that we saw as necessary after the site visit. This highlighted our collective desire for a more accessible solution to the proposed bridge on water street.



Materiality Study

After a client meeting to discuss our proposal, the design was confirmed and the feedback was extremely positive. The main point of change was their desire for an artistic approach when addressing the large quantity of hand railing for the ramp. This was then redesigned and iteratively tested using digital software, furthering the undergraduates digital sk ill level.

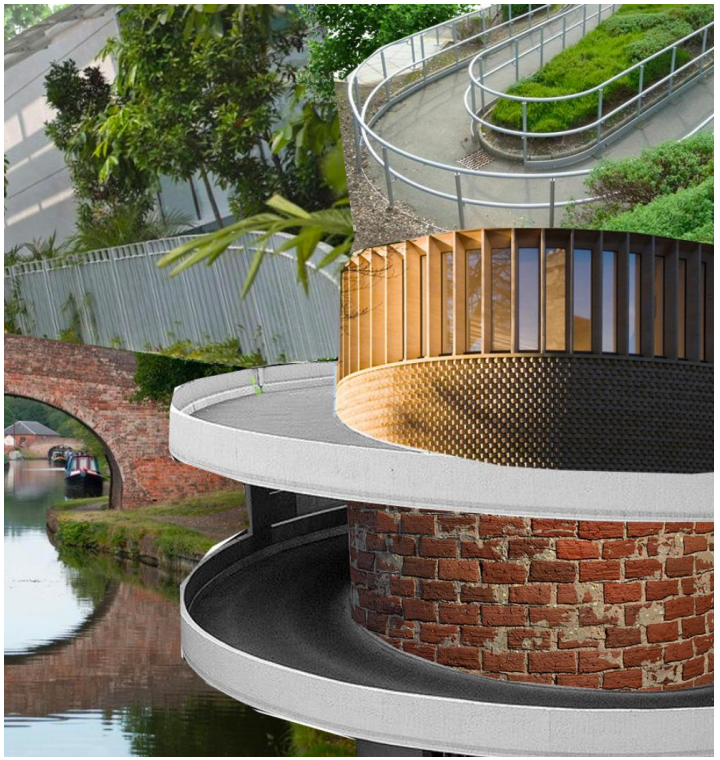


STAGE THREE *[DETAILED DEVELOPMENT]*

Materiality Study

(Depicted to the right)

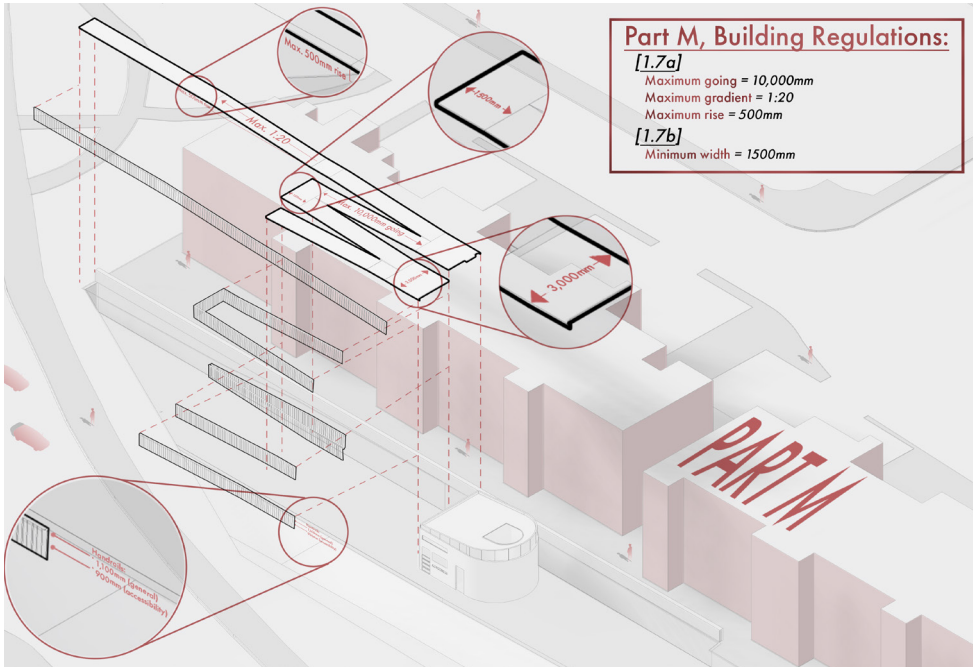
To further develop our understanding of how the proposal may sit within the site, different materiality studies were produced to establish the relationship between



BUILDING REGS

(Depicted below)

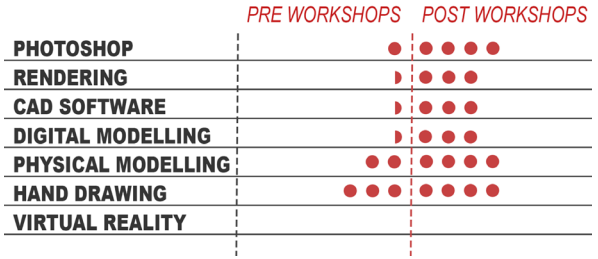
To give the undergrads a better understanding of real world practices we introduced them to specific building regulation applications. This was due to our focus around ramps and part-M as a whole.

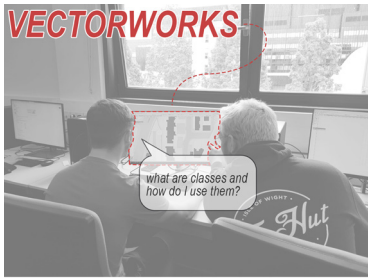


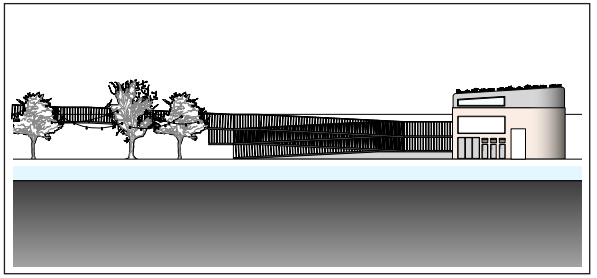
PERSONAL DEVELOPMENT *[DIGITAL SKILL PROGRESSION]*

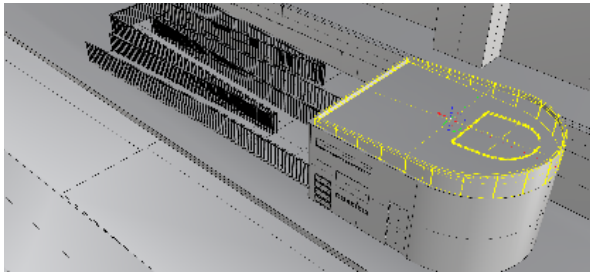
Understanding skill levels

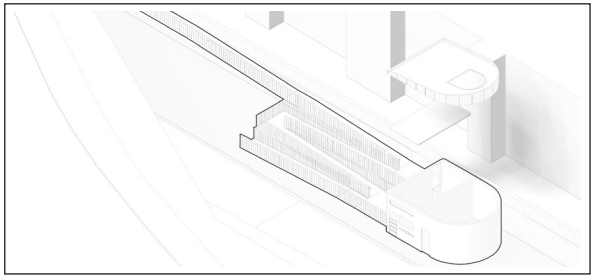
To understand the current skill levels of the group we asked them about their experience with various software's and skills. This showed the limited existing skills regarding digital technology, leading to us prioritising the introduction of new software's.

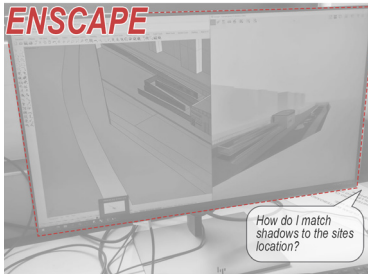




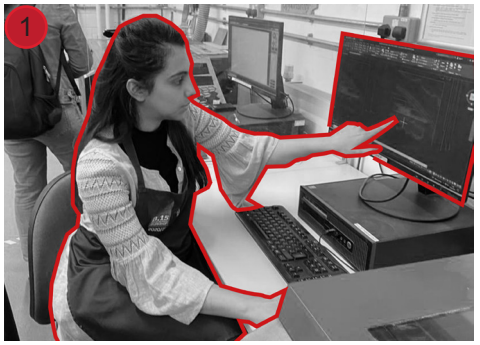


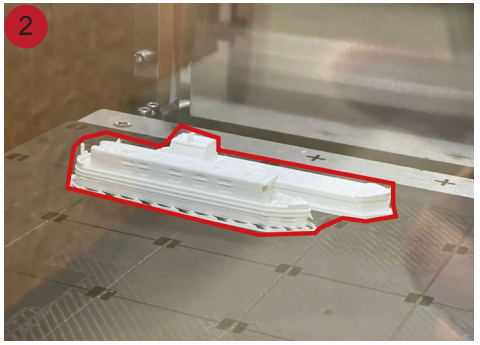




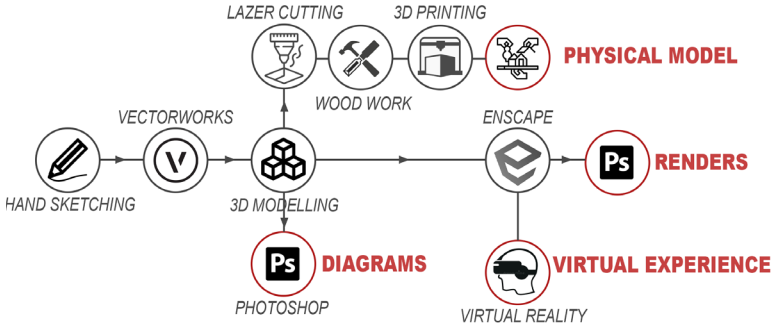


PERSONAL DEVELOPMENT *[MODEL SKILL PROGRESSION]*

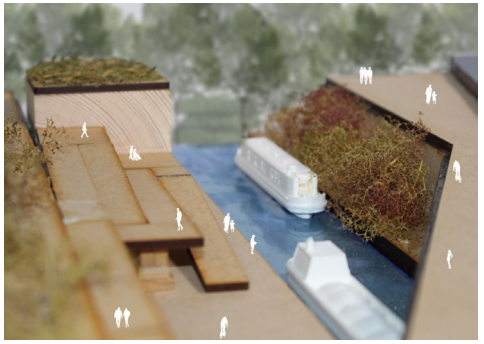


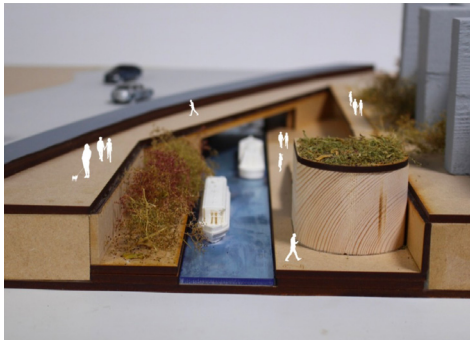


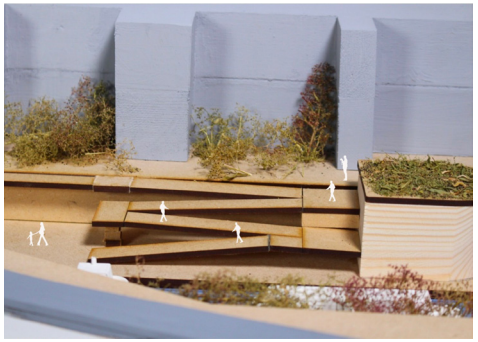
1. Preparing the Autocad file for **laser cut-tingmachine**
2. Using **3D Printer** for Boat models
3. **Traditional** model making
4. Assembling physical model



FINAL OUTPUT *[PHYSICAL MODEL PRODUCTION]*



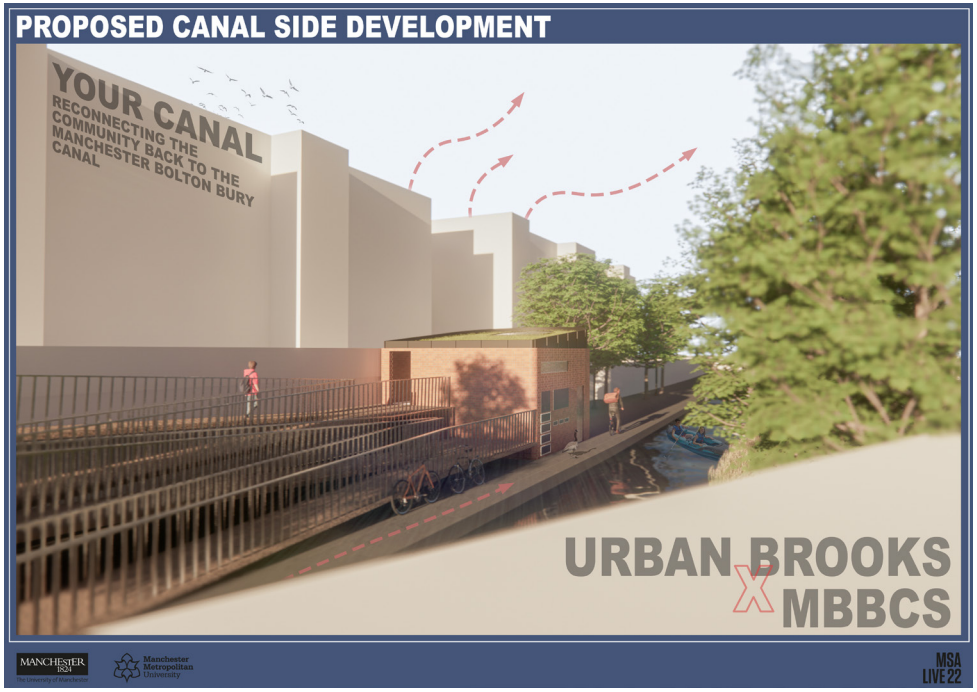




FINAL MODEL MAKING

Half of the undergraduate students showed a keen passion for model making and physical representations, while also wanting to learn new skills. This prompted us to develop their skill sin 3d printing, laser cutting and woodwork. This required planning and execution skills that we believe produced a model that truly convey the accessibility that the scheme provides.

FINAL OUTPUT *[DIGITAL PRODUCTION]*



FINAL EXHIBITION VISUAL *(AT CLIENTS REQUEST)*

FINAL VIRTUAL REALITY EXPERIENCE *(AT CLIENTS REQUEST)*

ABOUT

This year within MSA Live our group has had a range of undergraduates from year 1 and year 2. We planned the workshops according to what they would like to learn as well as getting involved within the project as much as possible, to expand their knowledge and skills.

LIVEPROJECTS

All MSA LIVE projects are live. A live project is where an educational organisation and an external partner develop a brief, timescale, and outcome for their mutual benefit. (the expeience the undergraduate had was getting more involved in a real life project by presenting to the client, site visit, and experimenting with different materials and areas to develop the concept designs. As well as creating the right environment for the undergraduates as if they are working for a real practise)

SOCIAL IMPACT

All MSA LIVE projects have social impact. Social impact is the effect an organization's actions have on the well-being of a community. Our agendas are set by our external collaborators.(it was very significant to help the undergraduates undertand the users carefuly as it is a community project, as well as the importance of survey and how it has the affects on the concept design.)

EXTERNAL PARTNERS

MSA LIVE projects work with many organisations: charities, community groups, social enterprises, community interest companies, researchers, practitioners and educators.(it was very significant for this project to understand the involvement of the organisations and the importance of the community within this project as it is charitable project.

STUDENT-LED

Our MSA masters students take the lead in the project conception, brief development, delivery and co-ordination of a small project. Other cohorts joined for an eventful 2 weeks of activities at the end of the academic year. (All workshops were planned and designed before the 2 weeks began as we wanted to share our knowledge with the undergraduates to get the most out of it is also an experience for us masters students in coordinating and teaching.)

KNOWLEDGE TRANSFER

Working in teams within and across year groups and courses; MSA students participate in peer to peer learning. In addition, collaborators, participants and students engage in the transfer of tangible and intellectual property, expertise, learning and skills.(physical model making, digital models, revit, photoshop, rendering softwares, rhino, grasshopper, VR, and sketching. these are some of the core areas covered in sharing our knowledge with the undergraduates.)

LARGE SCALE

This year approximately 550 students from 4 cohorts in MSA have worked on 35 projects with partners. (Overall within our team we had 4 masters students, 12 undergraduate students)

QUESTIONS

For questions about MSA LIVE please contact the MSA LIVE team:

msalive@mmu.ac.uk