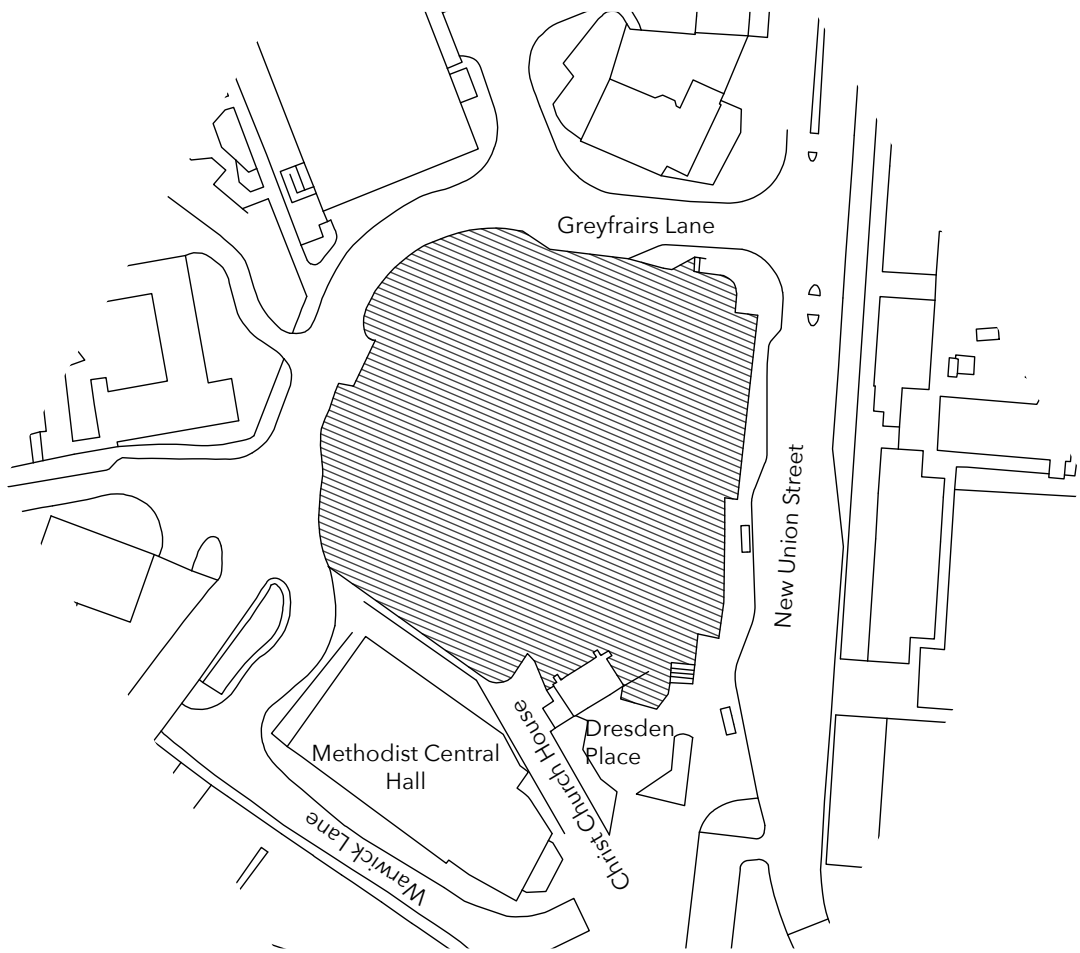


COVENTRY'S ENVIRONMENTAL CAR CRISIS:



Infographic to explain the growing electric car industry.



Collage of exploded electric vehicle

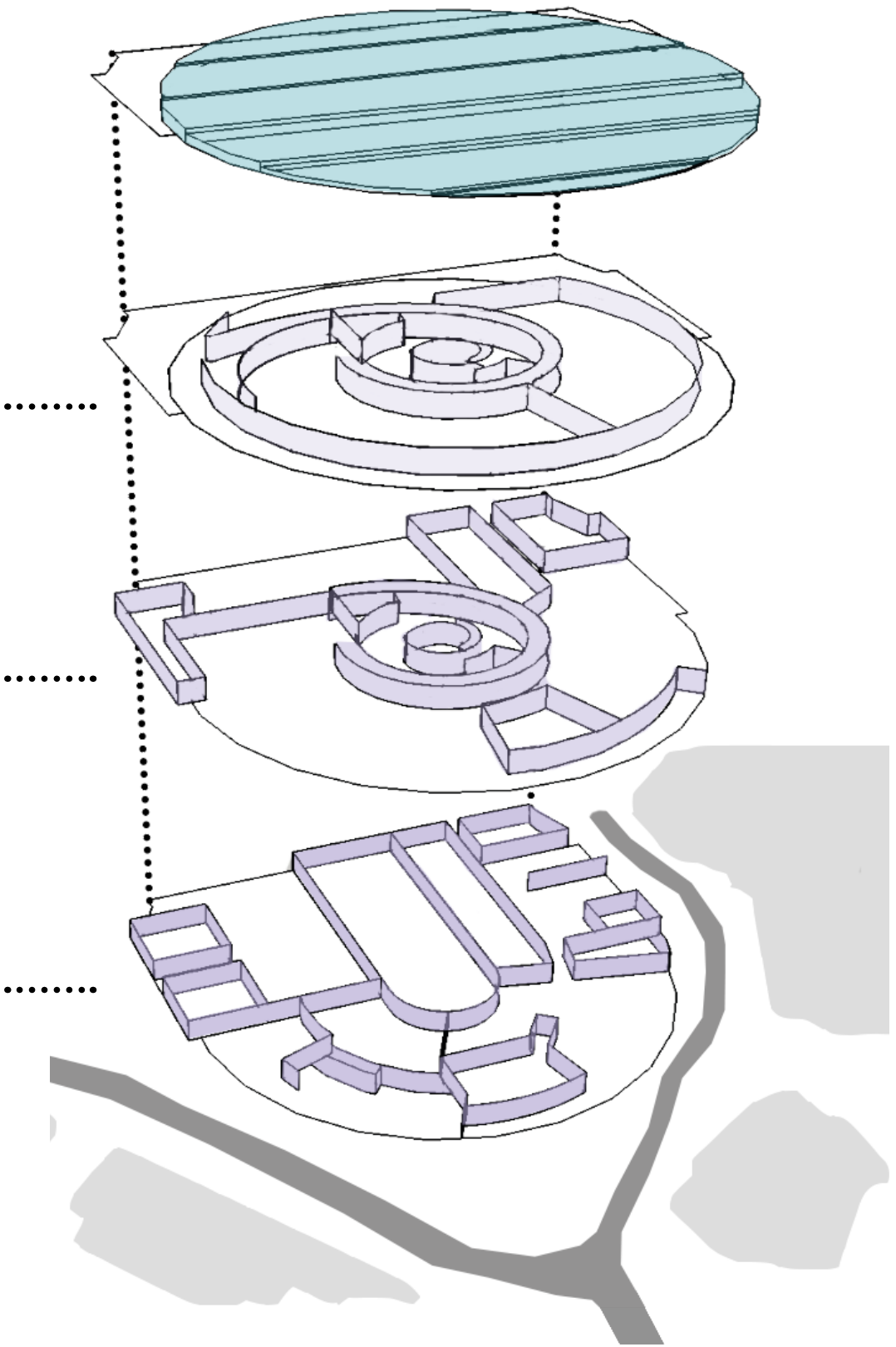
This exhibition focuses on the deteriorating natural environment and how implementing lifestyle changes such as the use of electric cars can affect people. Through an innovative, interactive design response, with a focus on public engagement, the exhibition will:

- Educate viewers about the depleting environment and how electric cars can help,
- While promoting electric cars through the means of sculptures, written boards and artwork.

This will simultaneously create a completely inclusive environment by providing wheelchair access and a multi-media environment by using headsets. In Coventry, the demographic is diverse, with 50 languages being spoken in primary schools, so by including headsets it ensures that the maximum amount of people are engaged. Public engagement is becoming increasingly important because environmental damage is accelerating and without potential change we risk the environmental damage becoming irreversible.

To create a lasting image in the visitors mind, a large scaffolding structure encases and weaves around the building to ensure a positive and memorable experience.

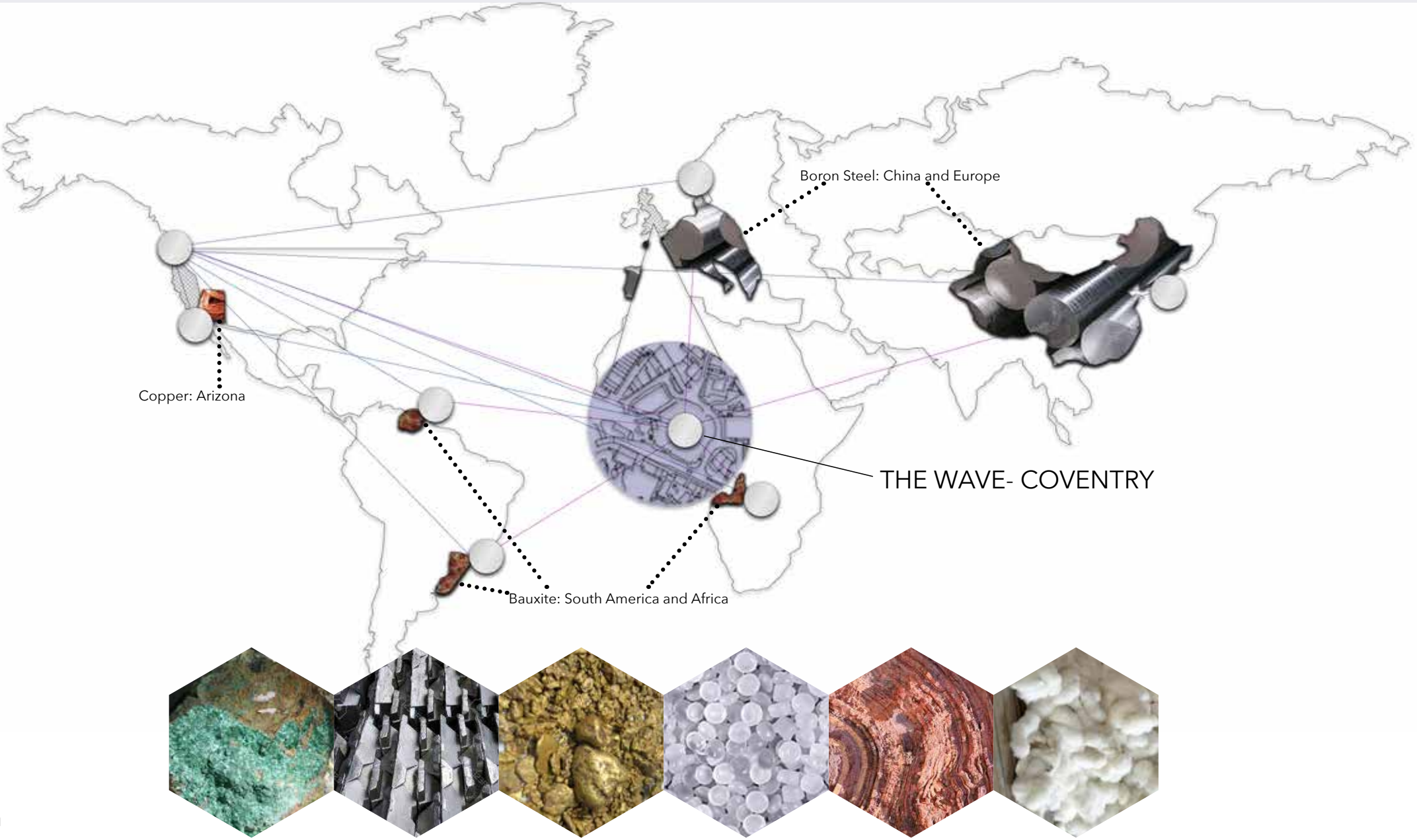
AXONOMETRIC OF EXISTING BUILDING



Sculptures and interactive features would blossom from this floor and continue through the building.

This floor would become the start of sculptures and interactive features and wall art. Also the home of another cafe/ shop.

Instead, the ground floor becomes the ticket office and beginning of the exhibition. The history of the EV would begin here, and a cafe.



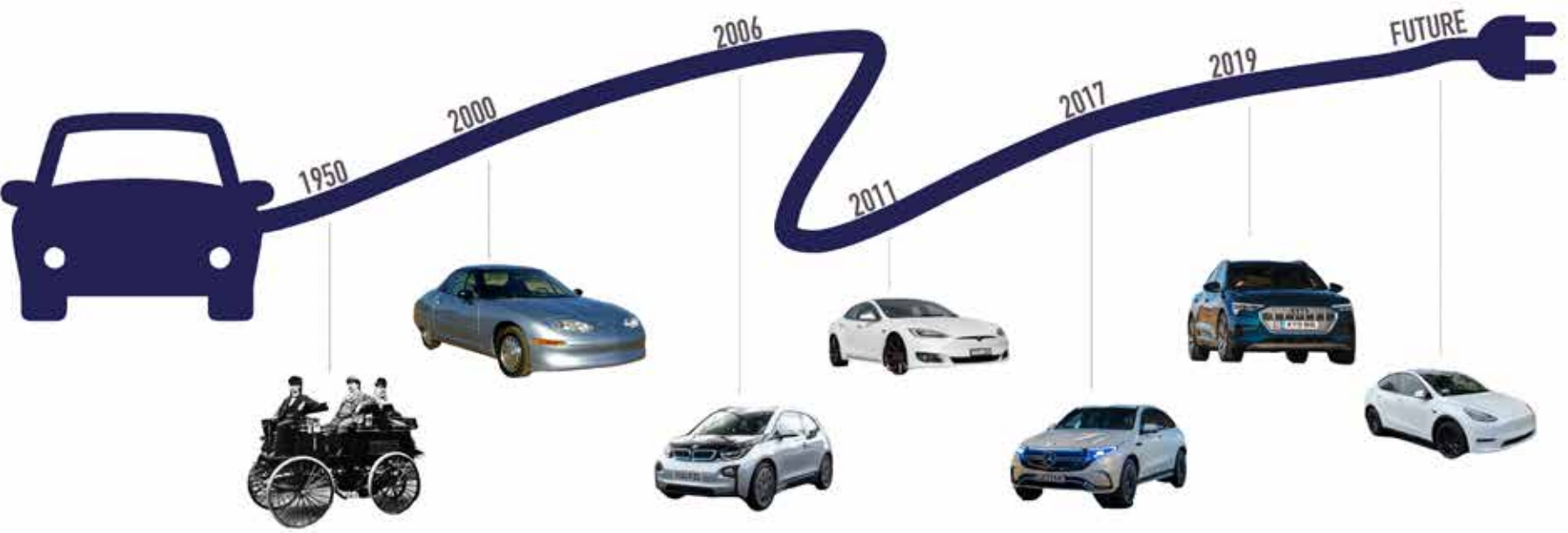
Raw materials currently travel world wide to become electric cars, this concept model explored how they already have to travel and how far they would if they were built in the UK.

The principal users of the space will be students and educators. The design will be proposed for educators to bring their students and will be packed full of interactive exhibits such as simulations of electric cars, and also large sculptures and artefacts, including ones hanging from the ceiling and those placed on the ground. This is to provide optimum attention-grabbing for people visiting, especially younger children. The user of this building would also be people interested in how to help improve the environment and would have leaflets and staff that are experienced in the field so that nobody leaves the museum with unanswered questions.



- Educators and students, alongside environmentalists and car fanatics.
- Coventry City Council

The intended client for the proposal will be Coventry City Council. It is the main council located inside of the City, and the people who originally approved all planning permission for the building. The City Council decided to devote 2019 to improving well being and thus The Wave was opened as an investment into sport and leisure to bring more tourism into the City. The council already has many buildings under their control, but an electric car museum is something that they do not currently have.



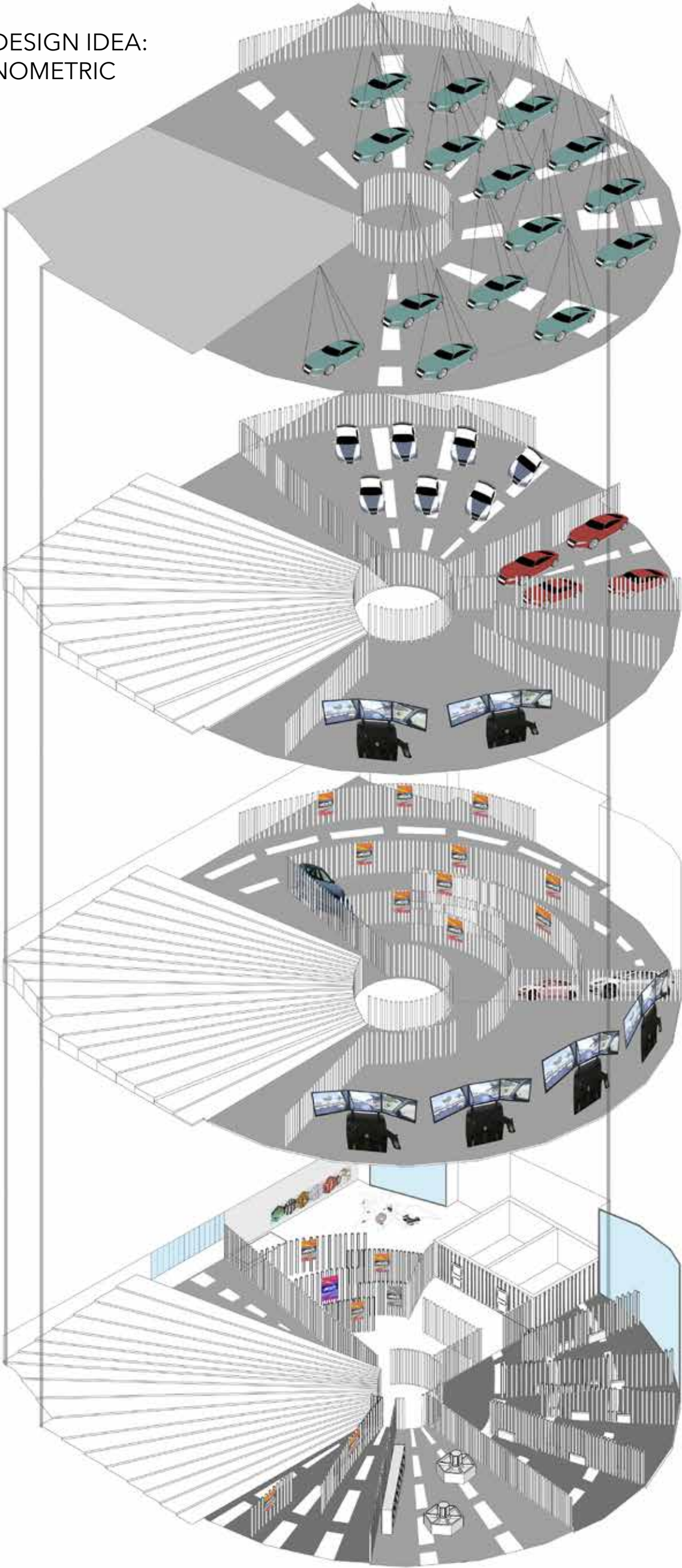
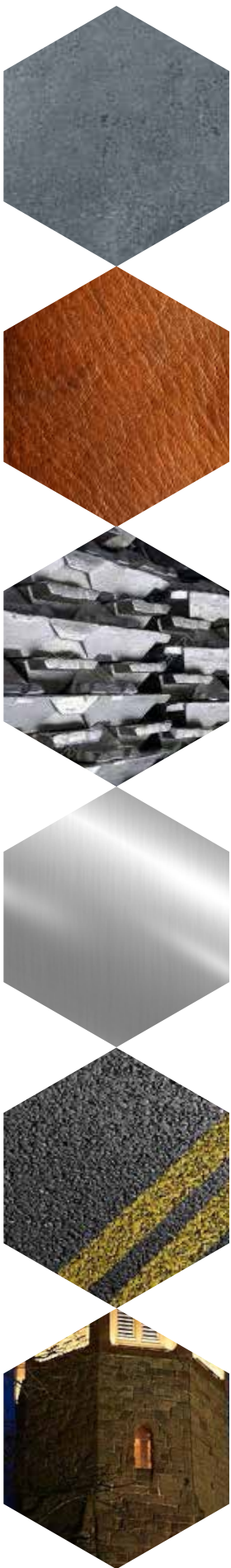
COVENTRY'S ENVIRONMENTAL CAR CRISIS:

CONCEPTUAL ANALYSIS



Initial North Section at scale 1:500

INITIAL DESIGN IDEA: AXONOMETRIC



THIRD FLOOR

Hanging car exhibition where attendees can sit and see the cars from different angles. Lift on this floor takes viewers back downstairs to the shop and to exit the building.

SECOND FLOOR

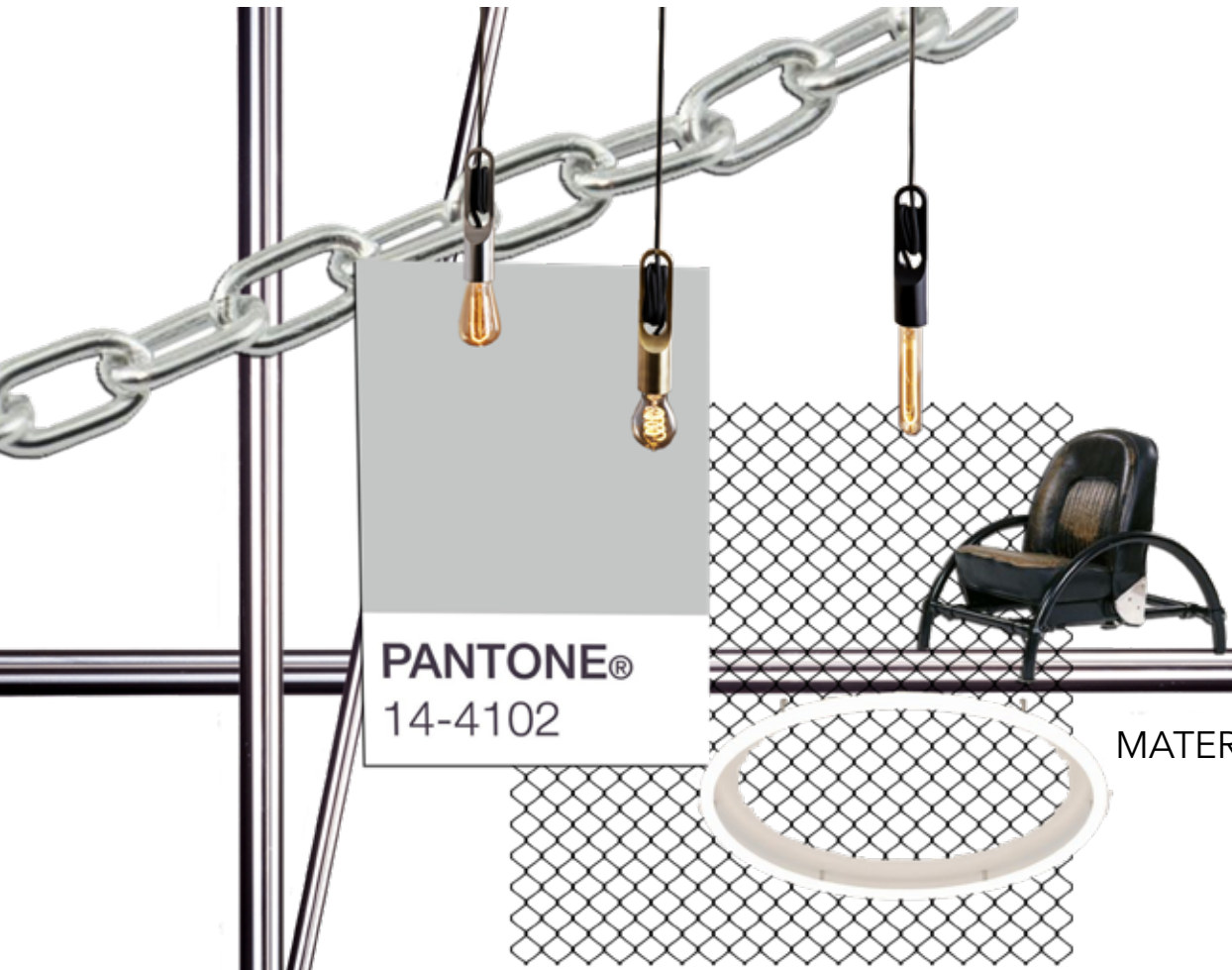
On this floor attendees are introduced to luxury electric vehicles, however they are also shown affordable ones. The affordable vehicle section is larger in order for the demographic to be more likely to buy an electric vehicle. Lastly there are more interactives for viewers to drive and a section for them to build batteries for vehicles.

FIRST FLOOR

This floor starts as showing the history of electric vehicles. This has both wall art and actual cars in order for people to be able to interact with them. Next, you approach a room full of interactives. This is for people to sit and enjoy whilst going through the exhibition.

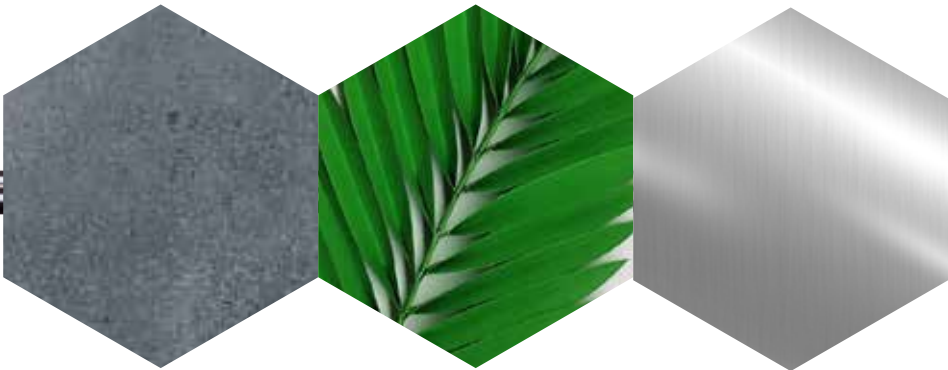
GROUND FLOOR

Once the ticket is bought, there is a brief introduction to car information which you approach through a maze of scaffolding. Interactive materials and maps are at the end of this. Next are the toilets and cloakroom. After this is a cafe, where tables are interlaced with scaffolding for viewers to feel apart of the building. The next section is the shop- however it is easily bypassed to continue with the rest of the exhibition. The lift from the top floor brings viewers back down via the shop.

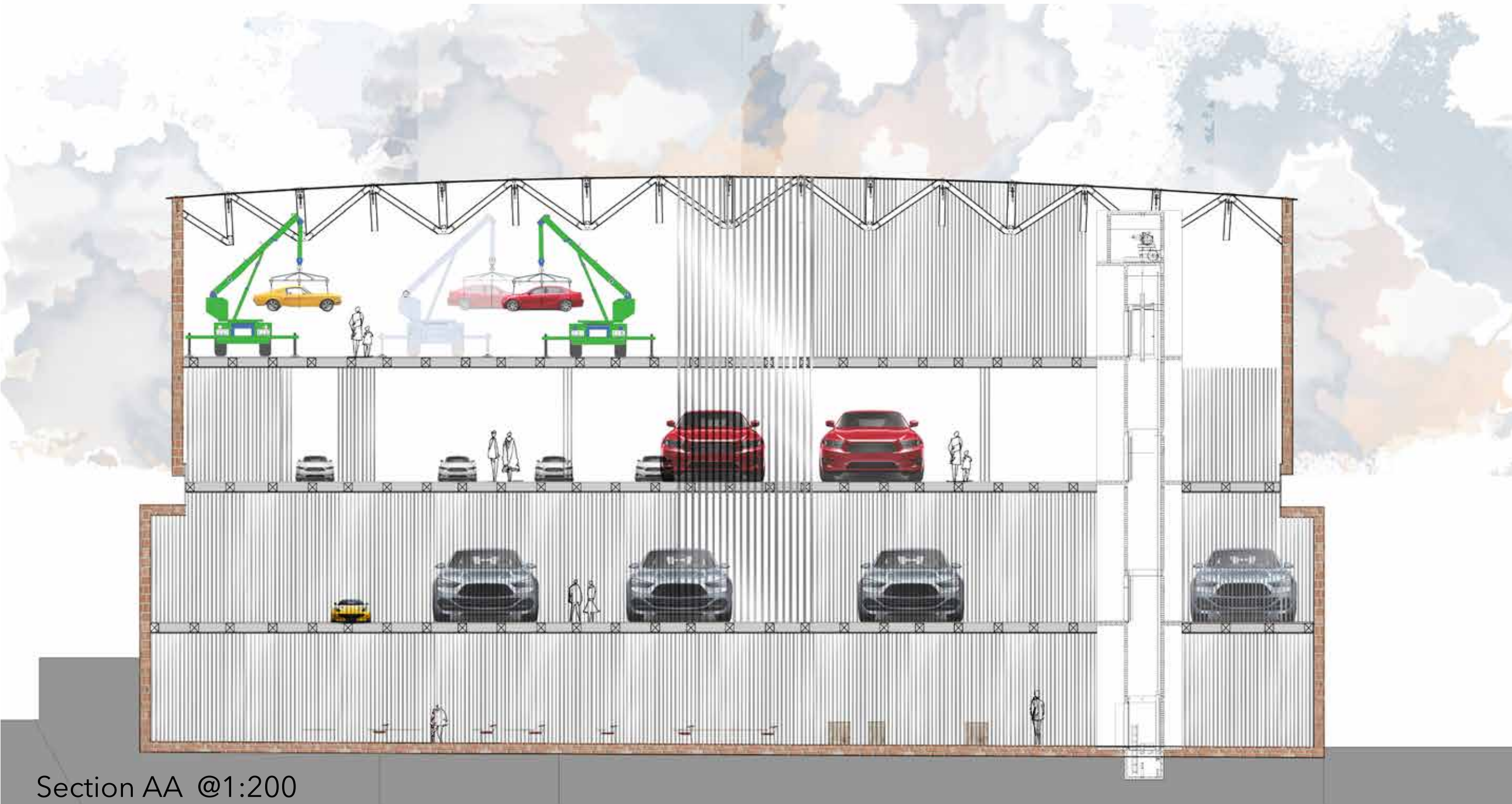


Materials used inside the building include leather, which is also used inside vehicles for seating. Steel and Aluminium for the scaffolding structure- also used as the exterior of vehicles. Lastly, concrete and tarmac used for flooring which relates to roads.

MATERIALS BOARD



COVENTRY'S ENVIRONMENTAL CAR CRISIS:

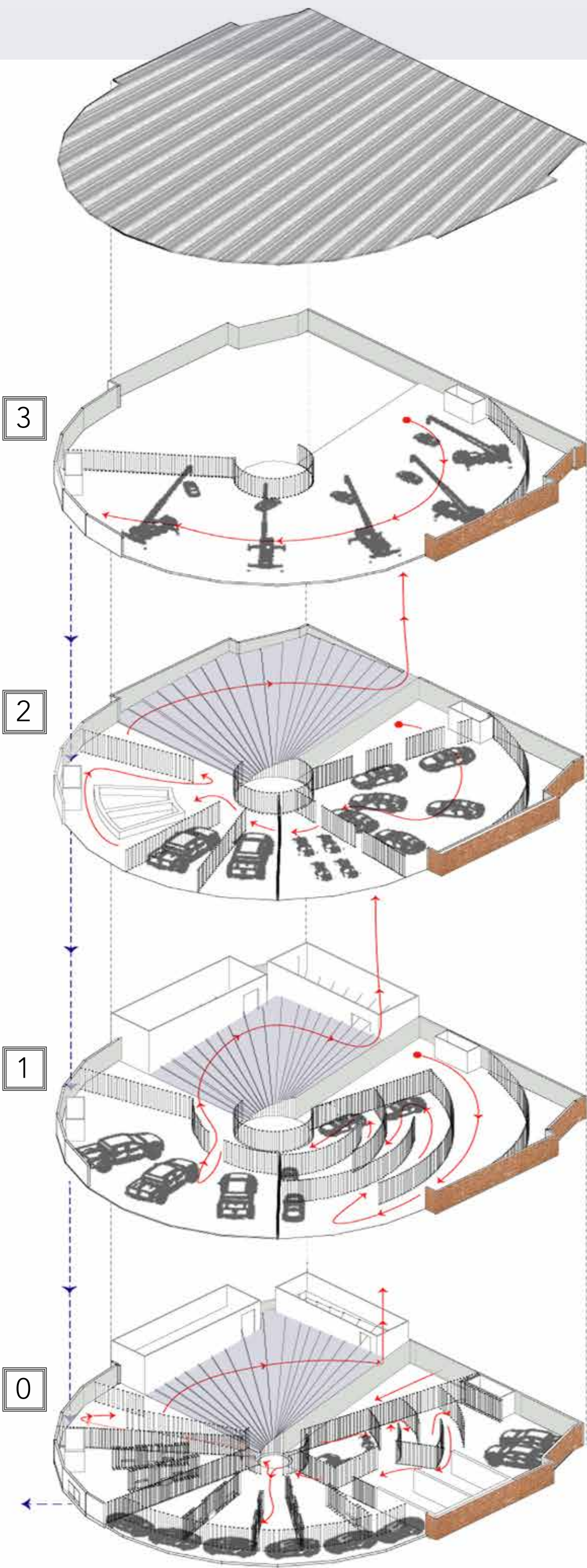


THIRD FLOOR
Hanging car exhibition where attendees can walk among cars which are hung from different angles, suspended by cranes. The lift on this floor takes viewers back downstairs to the shop and to exit the building.

SECOND FLOOR
Attendees are introduced to luxury electric vehicles, however they are also shown affordable ones. The affordable vehicle section is larger to suit the demographic so they are more likely to buy an electric vehicle. Lastly there are more interactives for viewers to drive and a section for them to build batteries for vehicles.

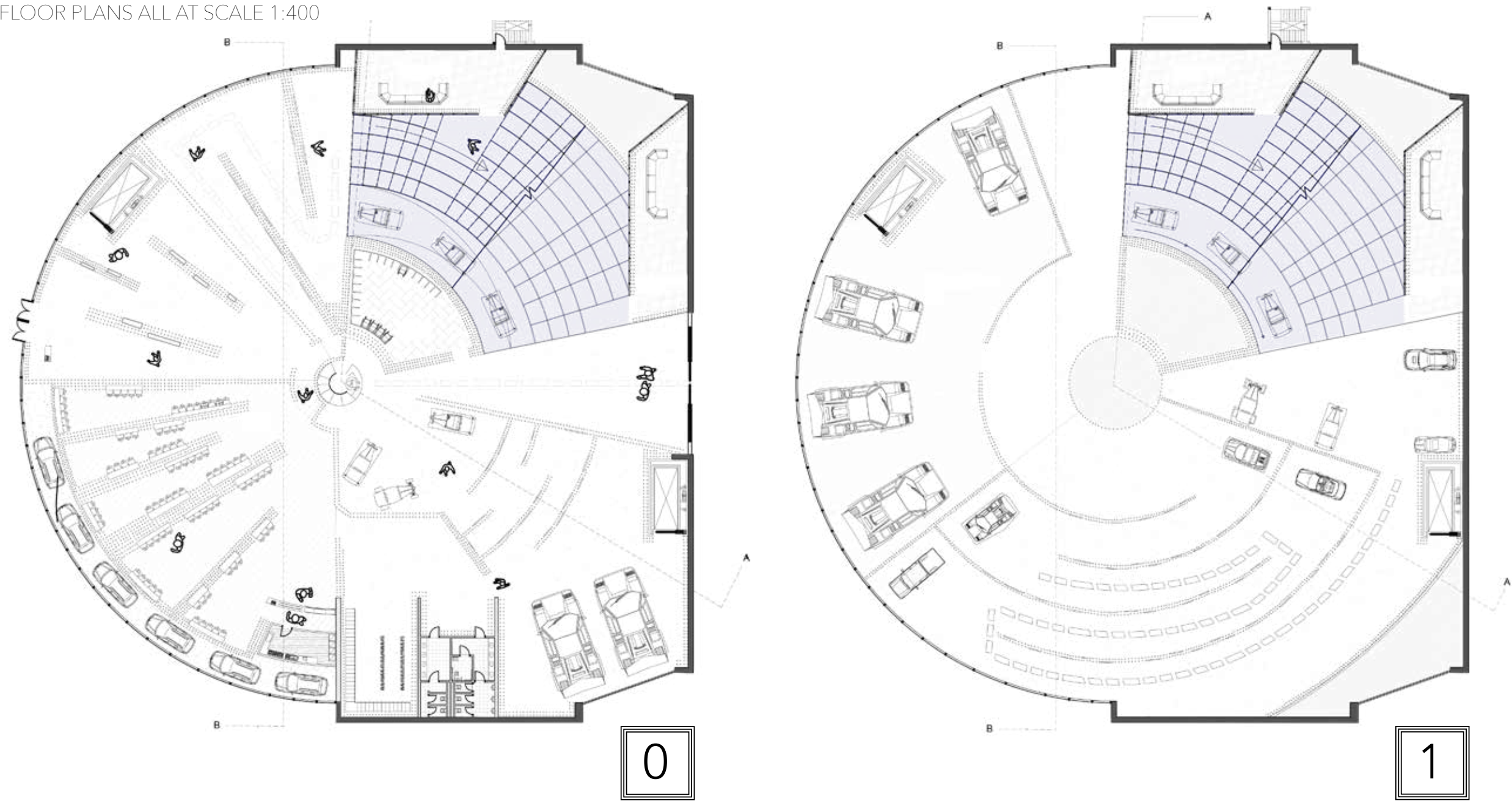
FIRST FLOOR
This floor starts as showing the history of electric vehicles. This has both wall art and actual cars in order for people to be able to interact with them. Next, you approach a room full of interactives.

GROUND FLOOR
Once the ticket is bought, there is a maze of scaffolding holding information. Interactive materials and maps are at the back. Next are the toilets and cloakroom. After this is a cafe, where tables are interlaced with scaffolding for viewers to feel apart of the building. The next section is the shop- however it is easily bypassed to continue with the exhibition.

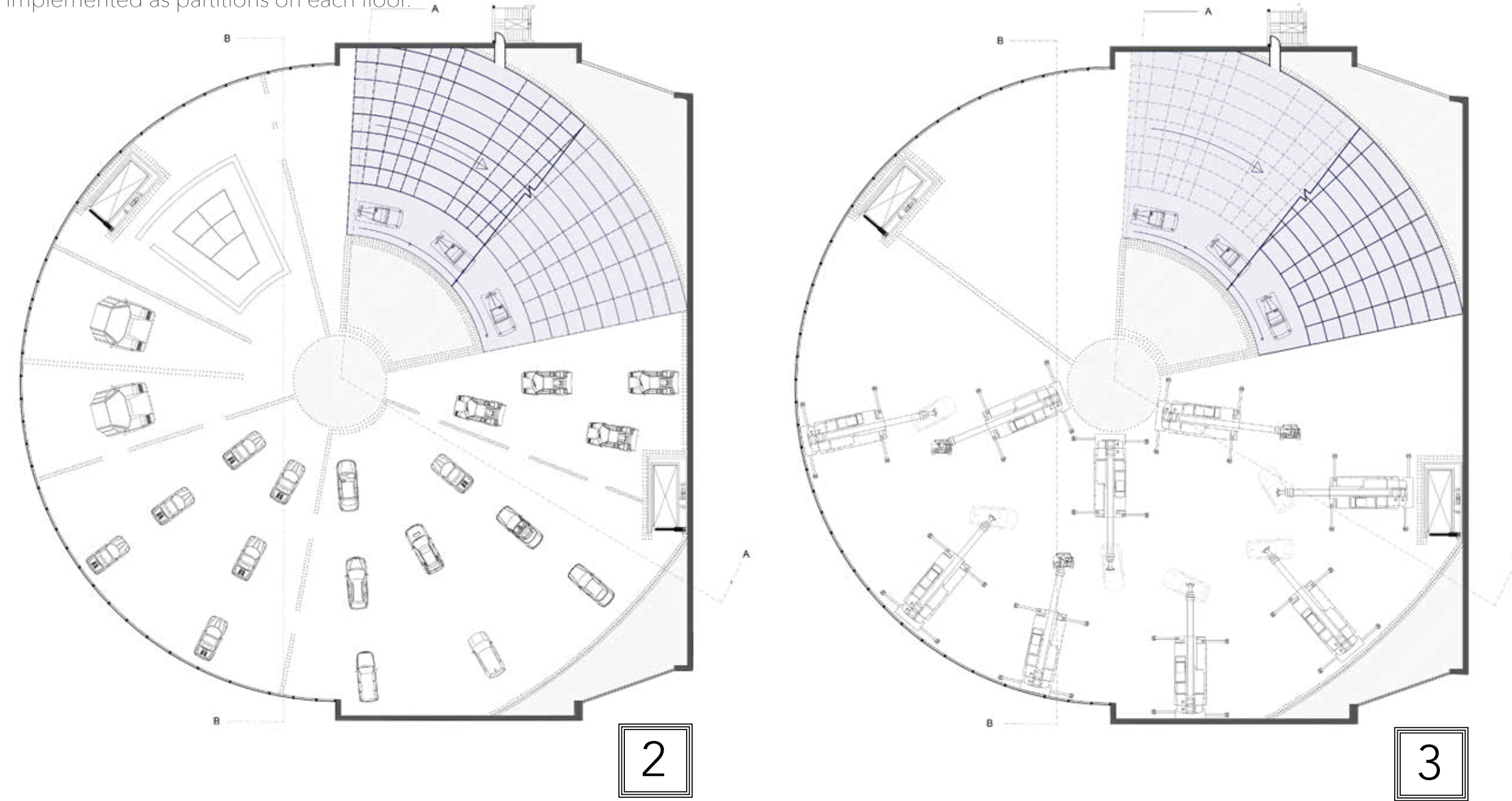


COVENTRY'S ENVIRONMENTAL CAR CRISIS:

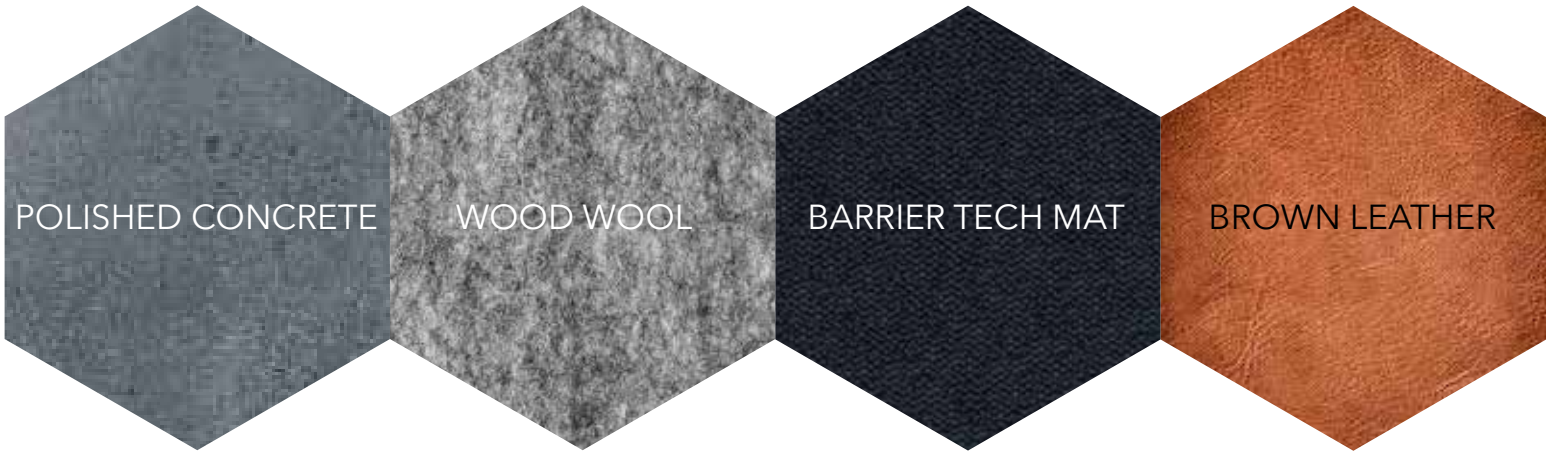
FLOOR PLANS ALL AT SCALE 1:400



The proposal relied on radial grids and long piercing pieces of scaffolding which were seen at every opportunity. The main concept idea would heavily revolve around elegant scaffolding used as walls and dividers throughout the museum. Other than the toilets which would require solid walls, the use of the scaffolded dividers would be a transparent alternative making the space appear even bigger. Not only this, but it also translated from car factories, tying the intervention even closer to its contents of motor vehicles. So, the exhibition became exclusively radial with scaffolding implemented as partitions on each floor.



CINEMA ROOM VISUAL



CAFE VISUAL



COVENTRY'S ENVIRONMENTAL CAR CRISIS:

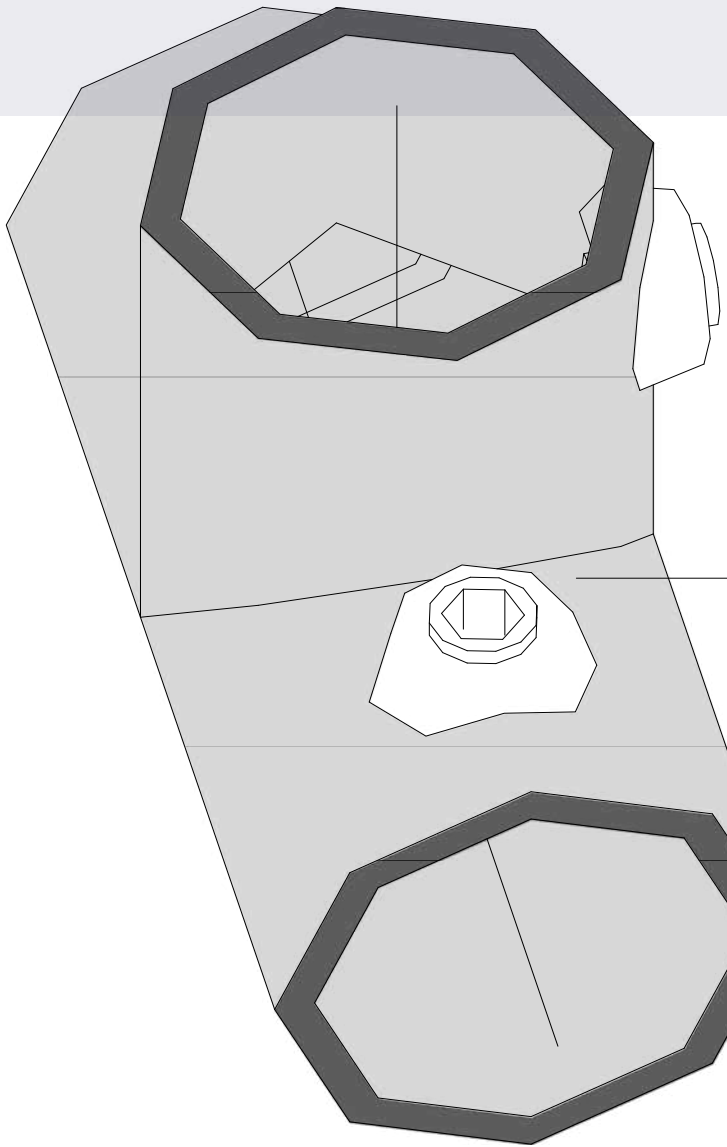
HANGING CAR EXHIBITION VISUAL



EXHIBITION VISUAL



Looking at the Amore Flagship Store inspired a scaffolding like structure which encases the building and weaves between each room and floor level. It allows transparency whilst still separating rooms on the same floor. This building was the heaviest influence of the design. I further researched how to implement a scaffolding cage around the building experimenting with modelling and collaging. The original model then developed into different models and will wrap around the building. Firstly the concept came from where a car is built. When researching, it was evident that warehouses are full of scaffolding, specifically the Tesla Gigafactory. Warehouses that cars are built in usually present some type of scaffolding outer edge which inspired these models.



3 DIMENSIONAL MODEL OF DETAIL B NOT TO SCALE



Amore Flagship Store Section (Belogolovsky, 2019)



Amore Flagship Store (Belogolovsky, 2019)

SCAFFOLDING DETAIL: FROM CONCEPT

M20 28mm bolt to secure scaffolding into coupler

Tig Weld around M20 bolt to ensure secure fastening

Scaffolding Coupler which joins pieces of scaffolding together with the use of bolts

60mm gap to fit scaffolding in securely

Putlog Steel Coupler
Ledger

1991

1985

Ledger
Transom

