

Boathouse 4 carries the unfinished breath of 1938 – a structure paused by war, yet still alive with the rhythm of hands that repair, teach, and remember. Today it stands in Portsmouth Historic Dockyard as a working Boat Academy, where volunteers and staff move with a quiet pride, tending to the craft that shaped the harbour's past.

**Harbour Hotel** grows from this spirit of belonging. It introduces a new layer of life to the building, settling gently into spaces left dormant. Its interior language draws from the seaweed drifting in nearby waters – soft, sinuous forms that brush against the building's stern geometry, offering contrast without intrusion whilst preserving its function, story and respecting those who work there.

Constructed from timber using traditional boat-building techniques, the pods can be fabricated by the Boathouse 4 team themselves, strengthening the relationship between the building's heritage craft and its contemporary future. Each pod is named after submarines with historical ties to the site – the **Midget** and the **Sealion** – with the smaller pod referencing the X4 Midget submarine secretly built here during the war.

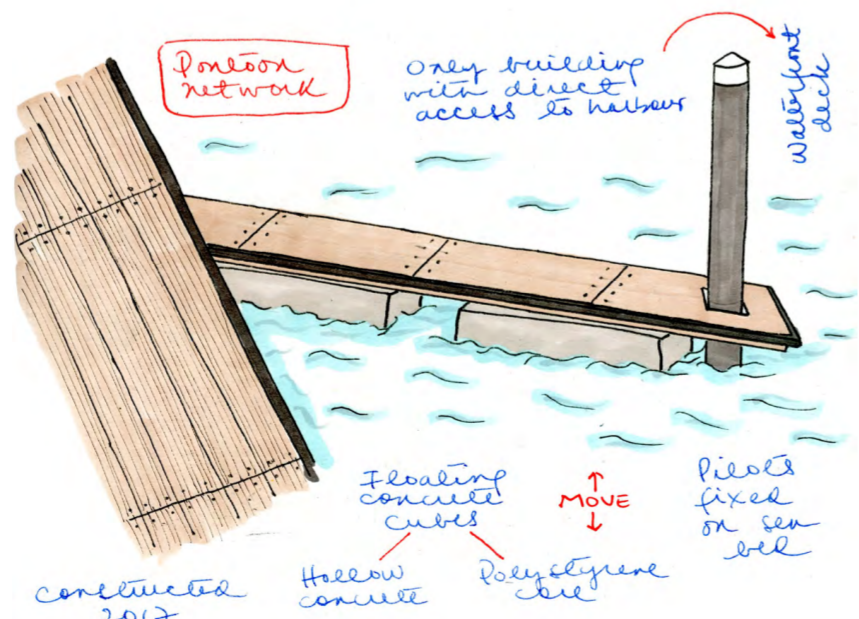
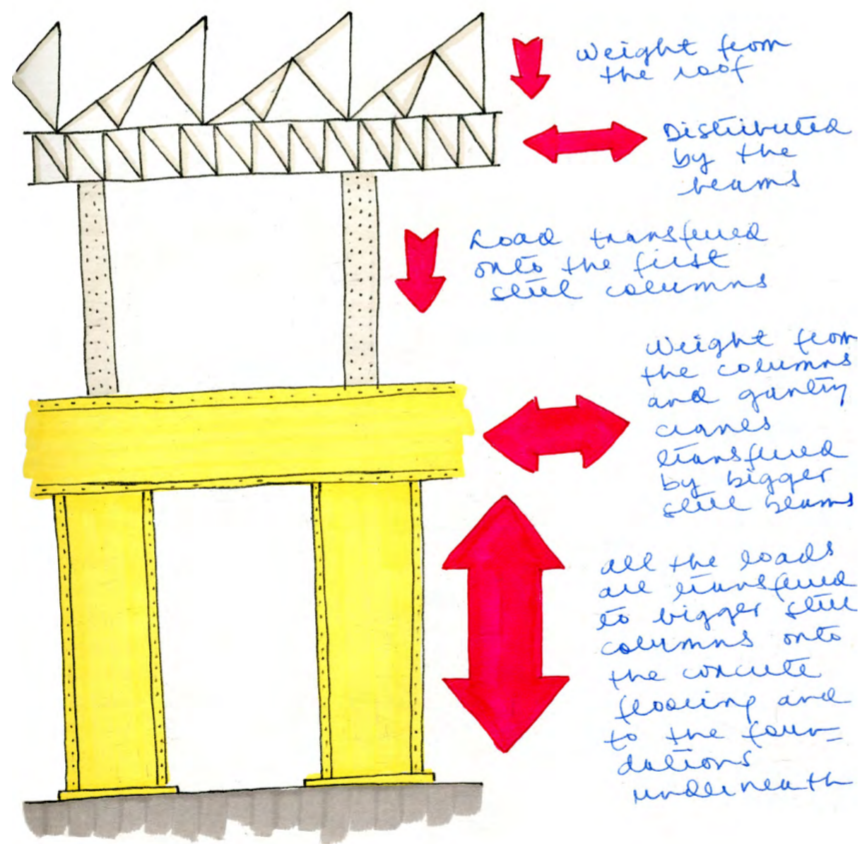
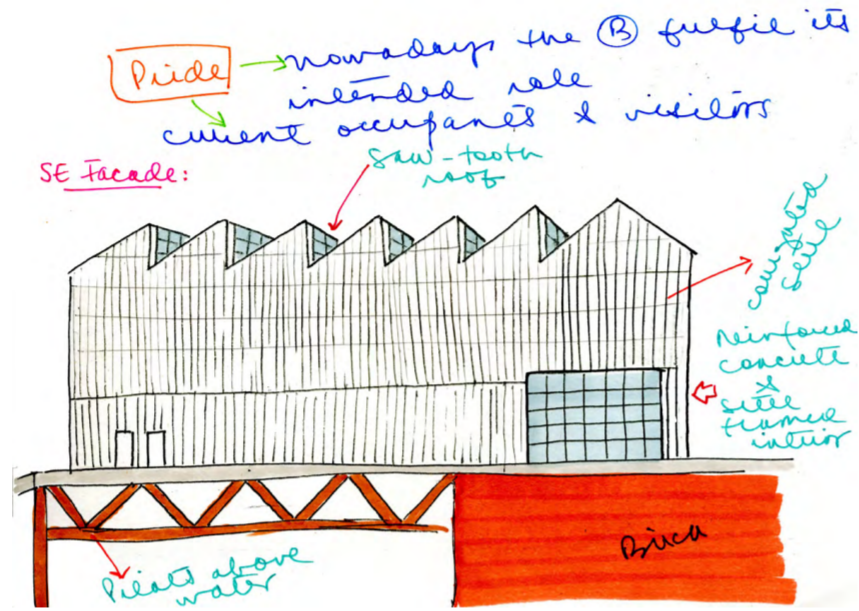
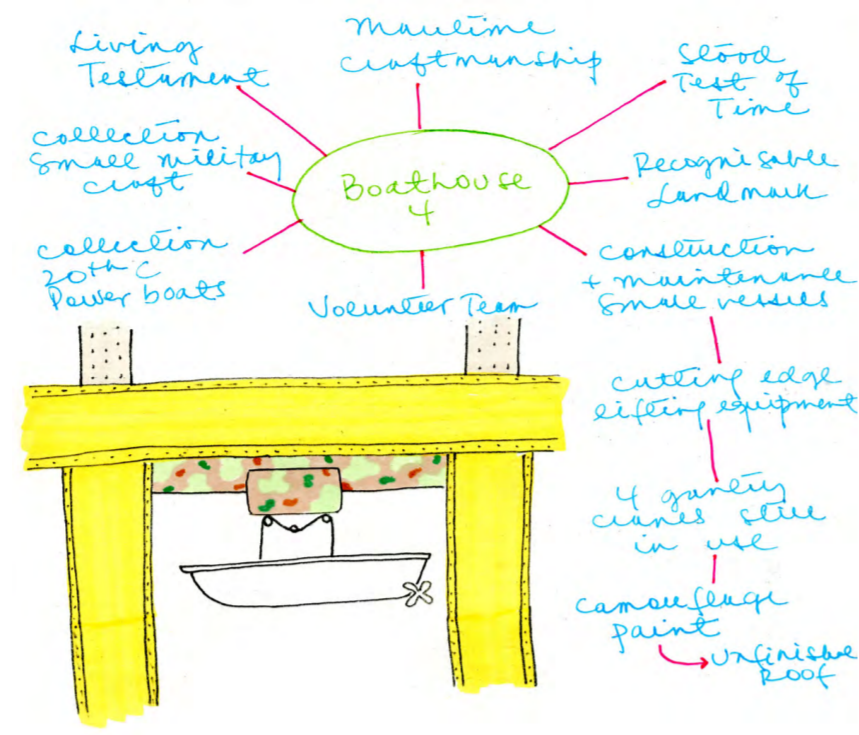
Most importantly, the pods are designed with accessibility at their core. Beyond wheelchair access, they support guests with visual impairments through a spatial configuration that aids intuitive navigation and orientation. The aim was to understand the *experience of a space when vision is impaired*. The design ensures that all visitors can experience the building's history, atmosphere, and craft legacy with dignity and ease.



**Toby, Ned, Emma and Sam**  
Grandparents with their grandchildren

Ned and Emma are a retired couple in their 60s. Ned's dad was part of the Royal Navy so Ned grew up hearing histories about Boathouse 4 and the Historic Dockyard in Portsmouth. Ned has progressively lost his eye sight, and he and Emma heard that there is a new hotel at Boathouse 4 that has been designed with individuals with visual impairment in mind. They will stay in the **Sealion** Pod and brought with them Toby and Sam, their grandchildren, as they both also like all things nautical!

Context

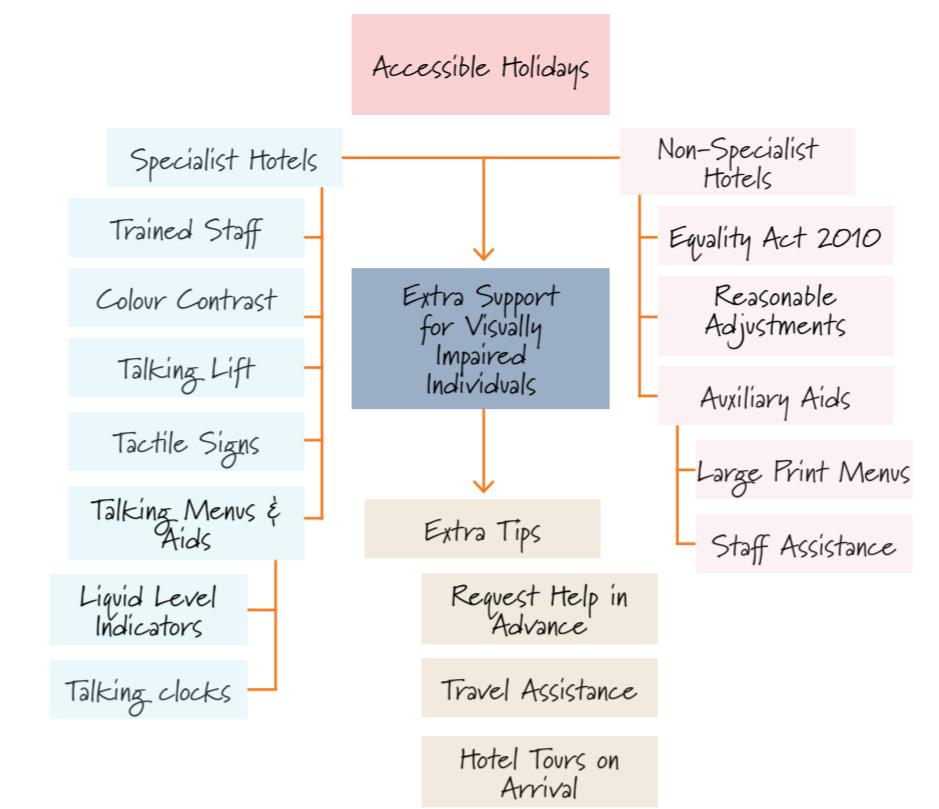


**Site Analysis.** Several sketches were created to understand the building after the site visit

Personas

Understanding the building

**Holidays in the UK.** Understanding how the hotel industry complies with the law and prepares to serve a person with visual impairments [diagram by the author with information from RNIB, <https://www.rnib.org.uk/living-with-sight-loss/independent-living/leisure/holidays/>]



**Laughing at the Dark (A Poem)**

In a world that values sight,  
I stand out with my daily plight  
Mismatched shoes on my feet,  
But they're both tied, neat, and sweet.

I may talk to mannequins and knock signs down,  
But it's all in good fun, without a frown  
My cane is my drumstick, my sunglasses my shield,  
In my own world, I'll never yield.

I'm a blind person, but that's okay,  
For laughter and joy, I make way  
Join me in the fun, let's all break through,  
For in this world, being different is true.

Some might pity my lack of sight,  
But I don't need their sympathy, not tonight  
I've got my quirks and my unique style,  
And I'm happy to go the extra mile

I embrace the challenges that come my way,  
I learn to adapt, and I seize the day  
I see the world in a different light,  
And for that, I'm grateful, despite the blight

So, I wear my mismatched shoes with pride,  
And walk with confidence, stride by stride  
I talk to mannequins and have a blast,  
It's all in good fun, my days are never cast

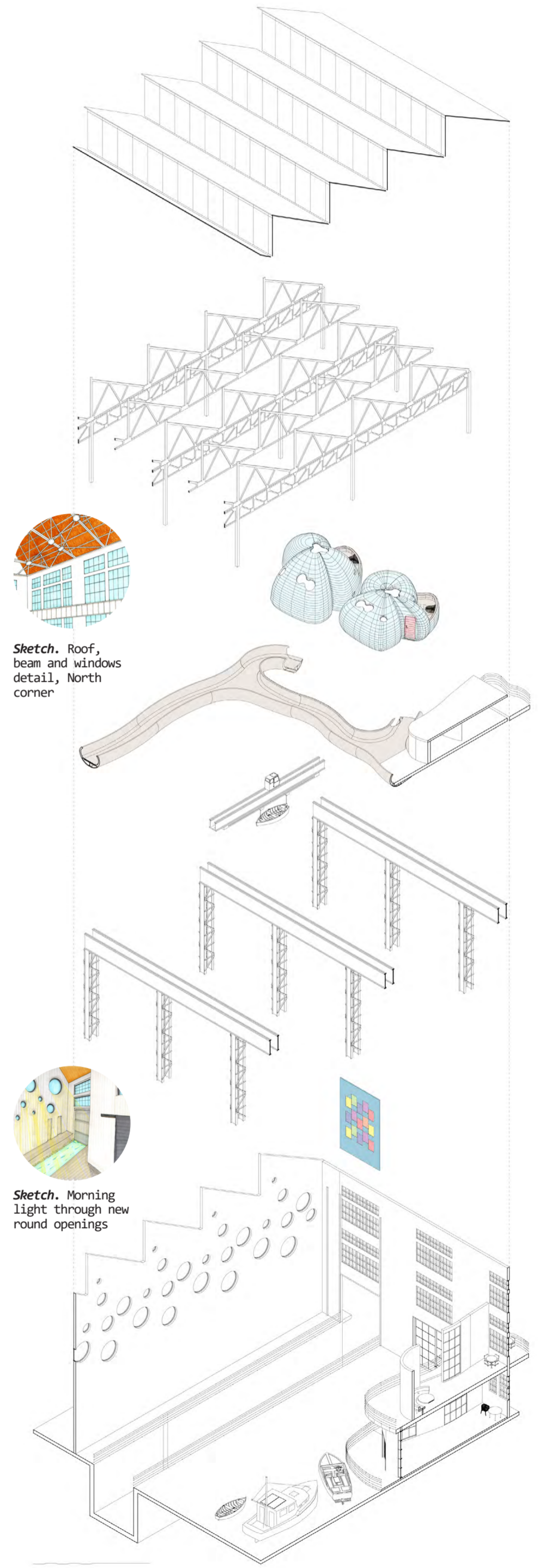
With my cane as my trusty guide,  
I march on with nothing to hide  
And when the world stares in disbelief,  
I simply smile, with no sense of grief.

For in the end, it's not about what they see,  
But about how I live, wild and free  
With a heart full of joy and a soul so true,  
Being blind is just a part of what I do.

– by The Blind Mom

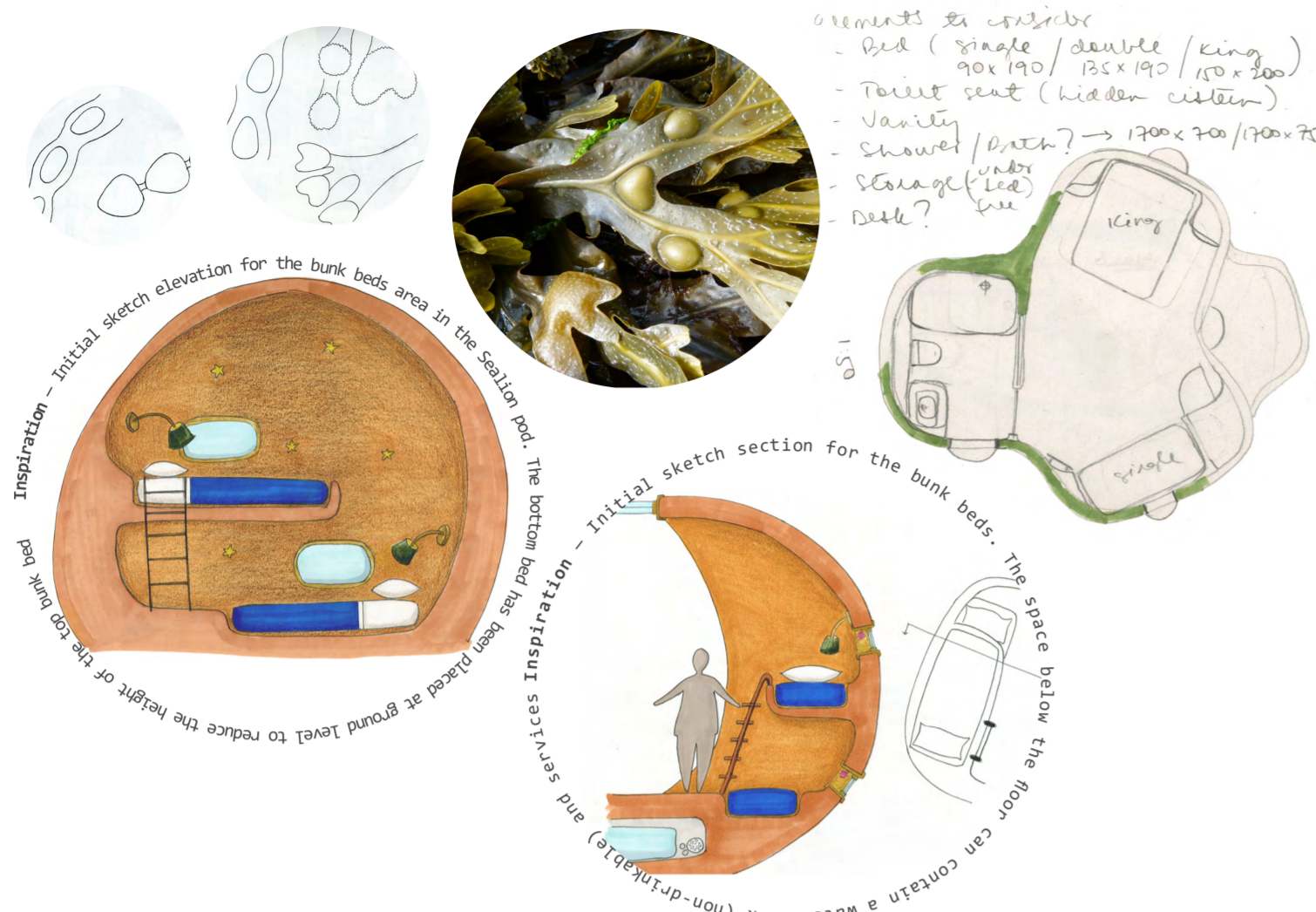
**Poem.** Laughing at the Dark, by The Blind Mom [extracted from <https://seeinginthedarkness.blogspot.com/2023/02/laughing-at-dark-poem.html>, 26th February 2023]

Bringing inclusivity into the building



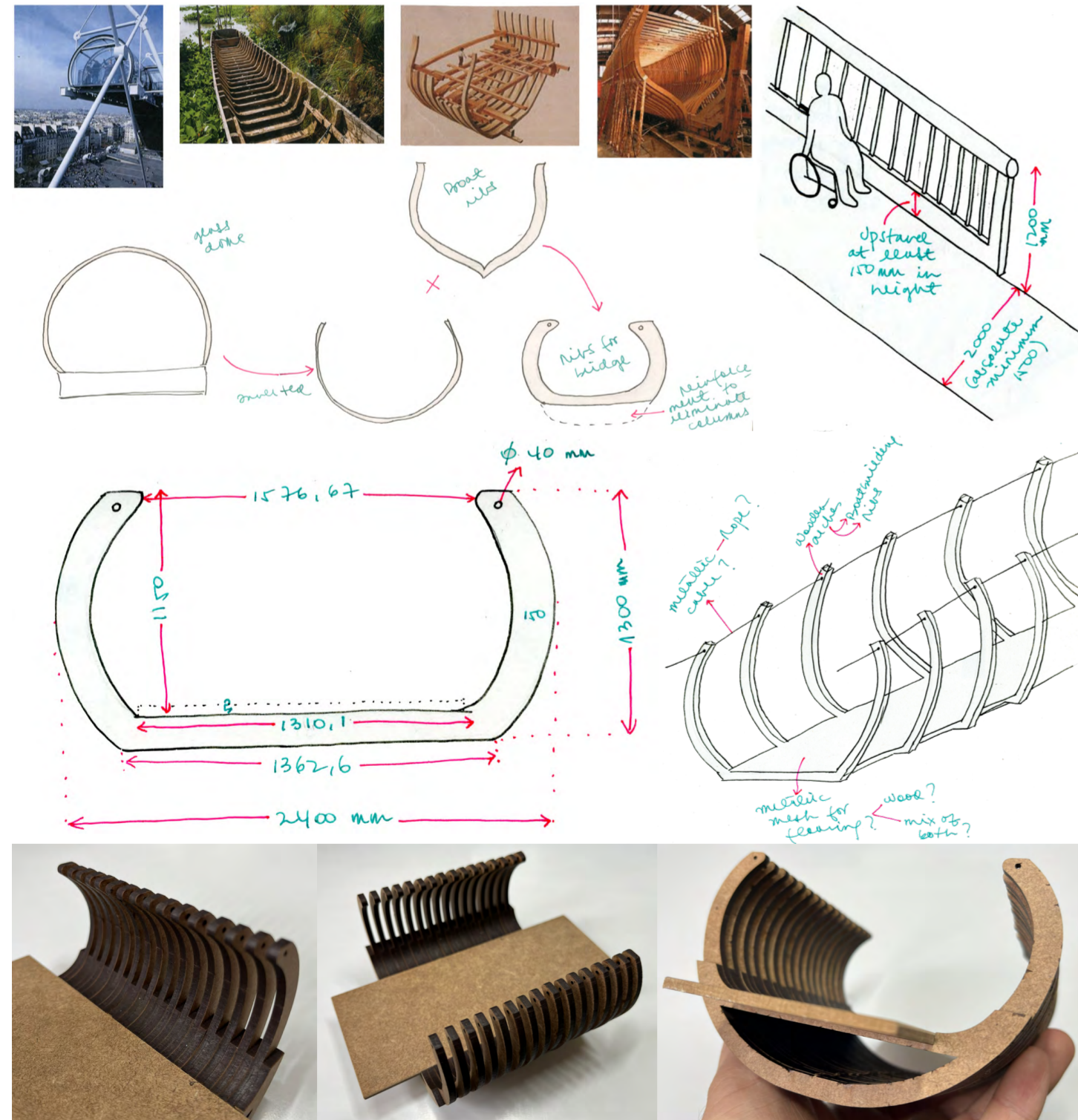
**Exploded Axonometric.** The pods sit above the sea canal and under the roof trusses, at the junction between the SE and SW façades. A new bridge/walkway has been projected, leaving clear pathway for the gantry cranes. Scale 1:400

The proposed structures

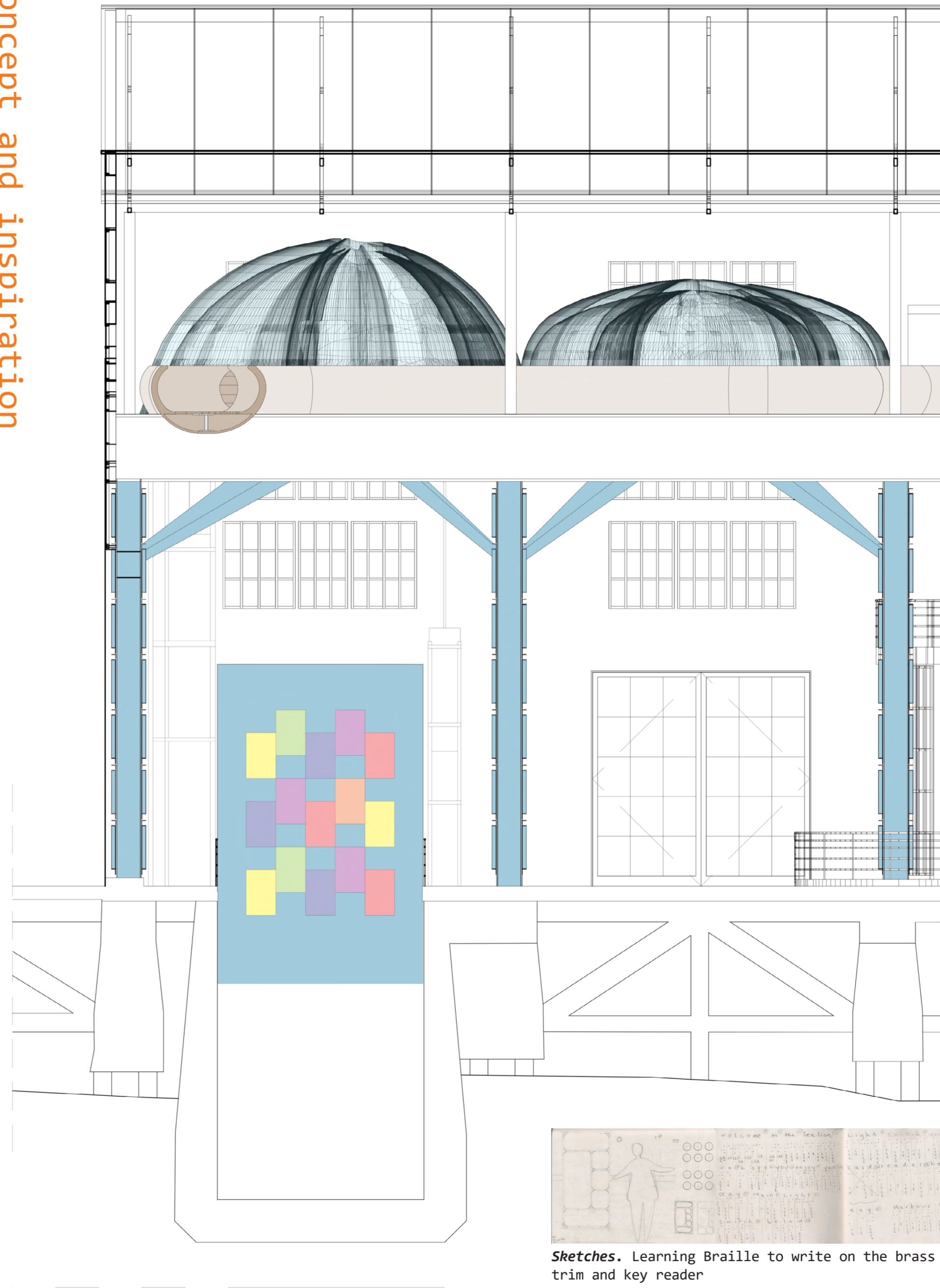


Concept and inspiration

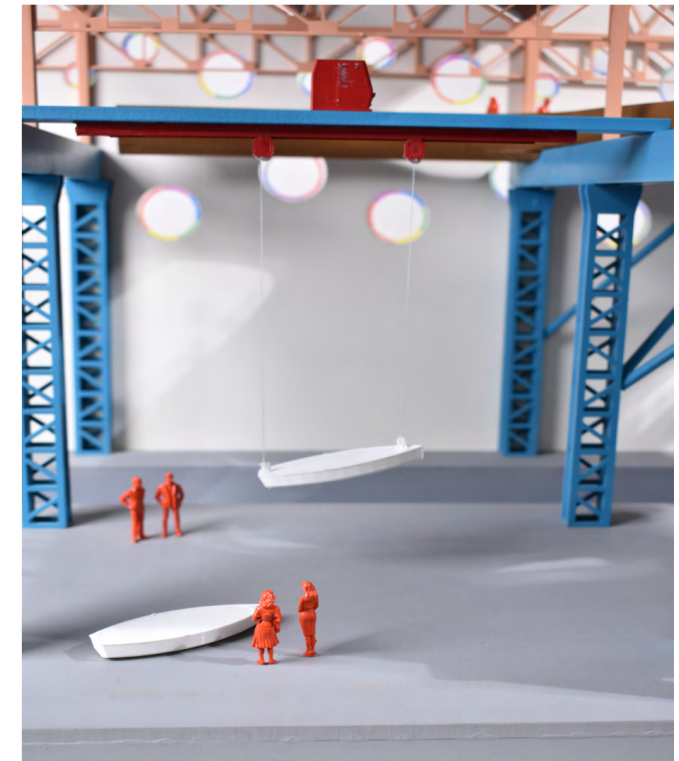
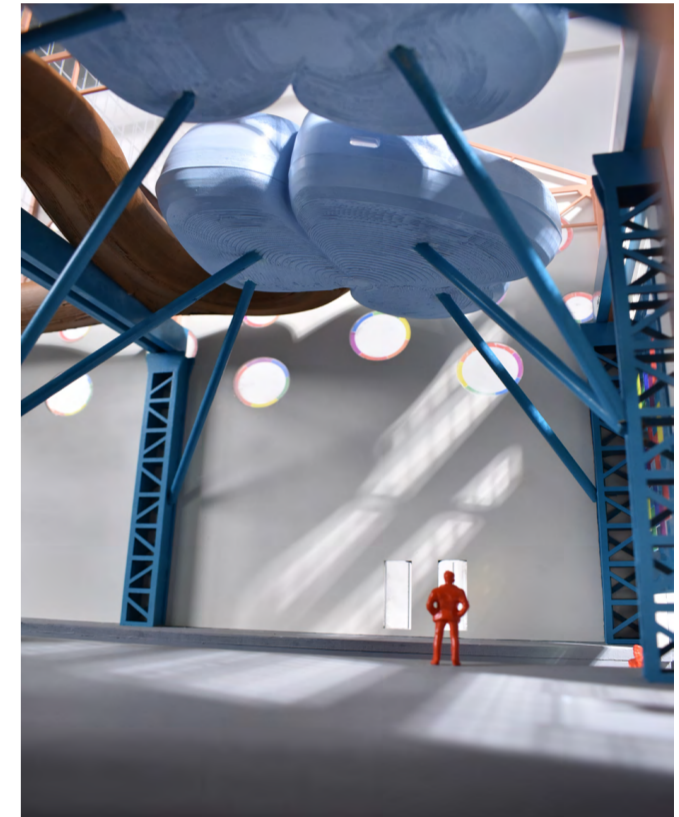
**Design inspiration.** The pods are inspired by the air vesicles found in Bladder Wrack, a type of seaweed that grows in the Solent. The air-filled bladders aid with flotation, allowing the plants to perform photosynthesis. The floor plan was conceived to adapt within these organic shapes; and besides the bathroom area, no internal partitions were considered to reduce the amount of obstacles that a visually impaired person might find when navigating the space



**Bridge evolution.** Taking inspiration from the Centre Pompidou and traditional wooden boat ribs, the bridge has an organic shape whilst being safe for wheelchair and visually impaired users using a walking aid device. Prototype in scale 1:25



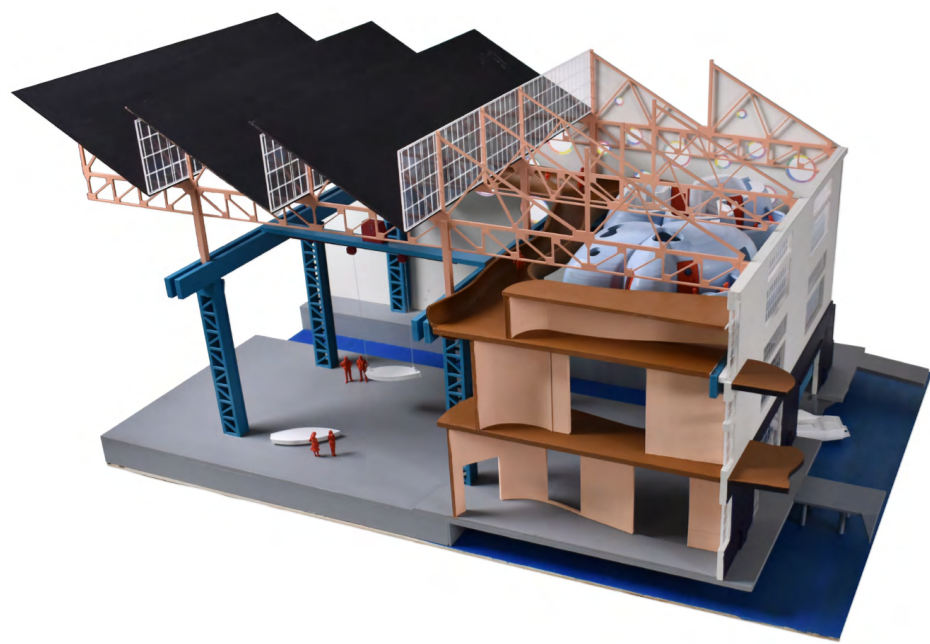
**Section.** The section shows the relationship between the pods and the roof trusses, but also the proposed bridge connecting the pods with the second floor without any floor disruptions nor differences in height. The cylindrical columns transfer the load onto the existing structural steel columns. Note the new colourful gate on the sea canal. Scale 1:110



**Final model.** Several visuals of the space help position the pods within the building. Scale 1:50



Sketches. Learning Braille to write on the brass trim and key reader



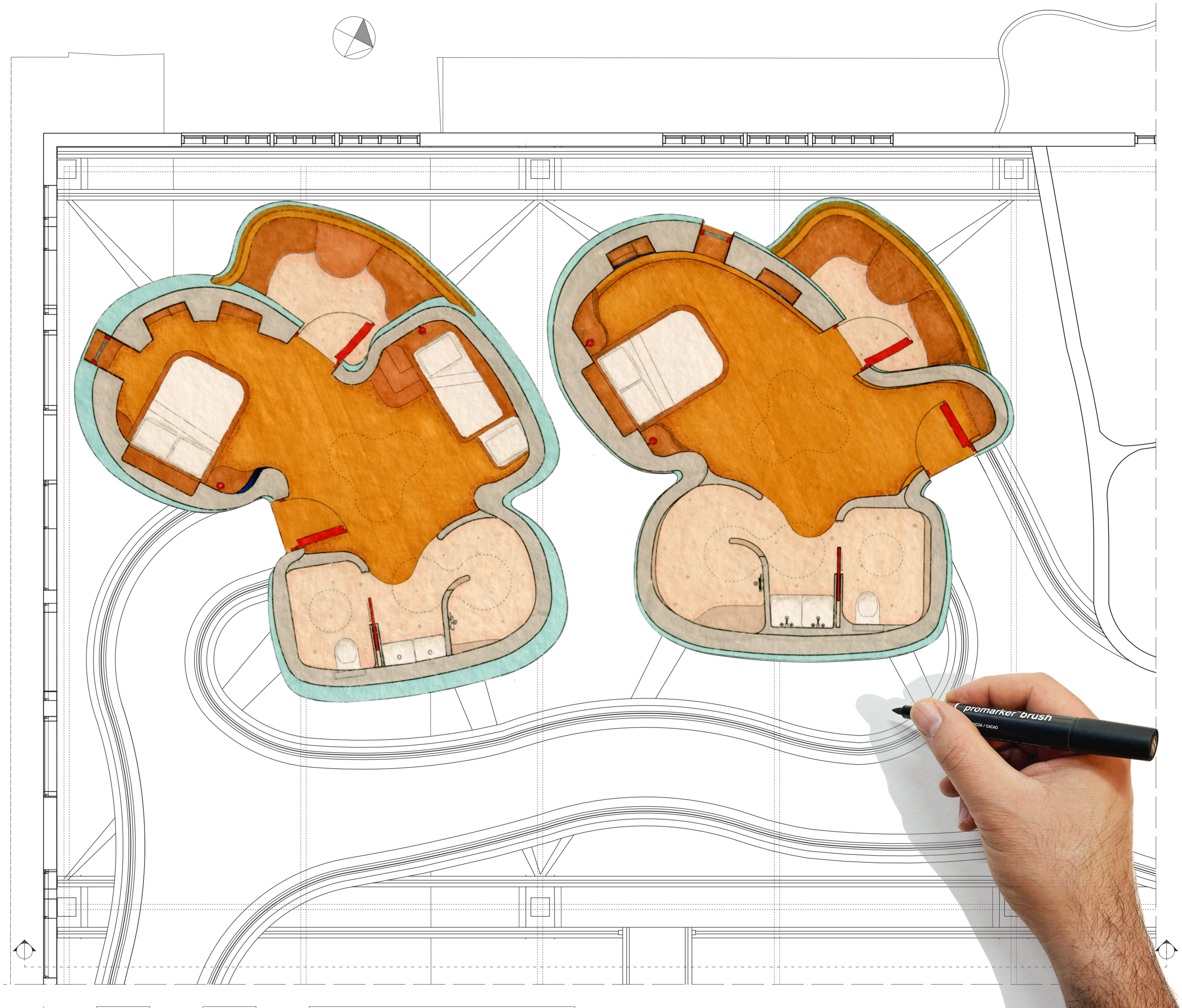
**Final Model.** Shows the strong connection of Boathouse4 with the sea; but also the pods' relationship with the restaurant and the open workshop space. Scale 1:50



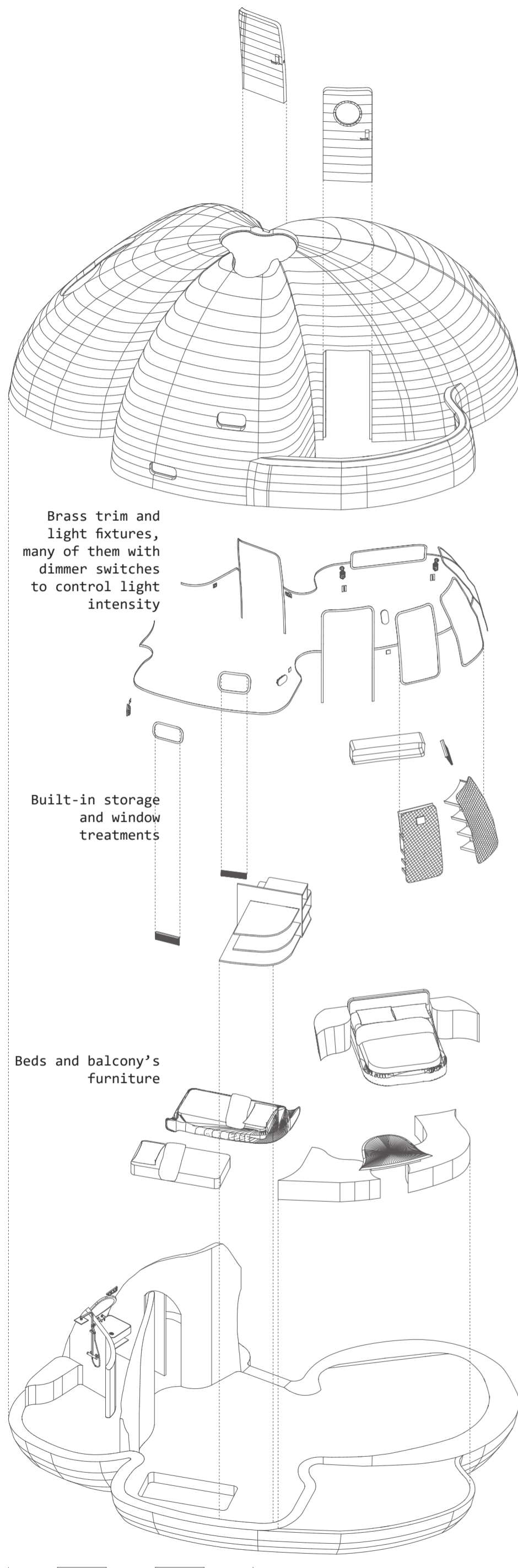
**Sea view and Light control.** Both pods enjoy views to the Solent through the building's existing windows and the proposed round windows on the SE façade. To avoid glare, the pods' windows have been carefully placed. Morning light from the building's NE facing roof windows come inside the pods through the pods' top windows. Their SW facing windows have been made deliberately narrow to reduce the amount of light entering the space, and easy-to-operate window treatments help controlling light



**Midget Pod.** The doors have been painted red-orange to maximise the contrast with the pale blue of the pods



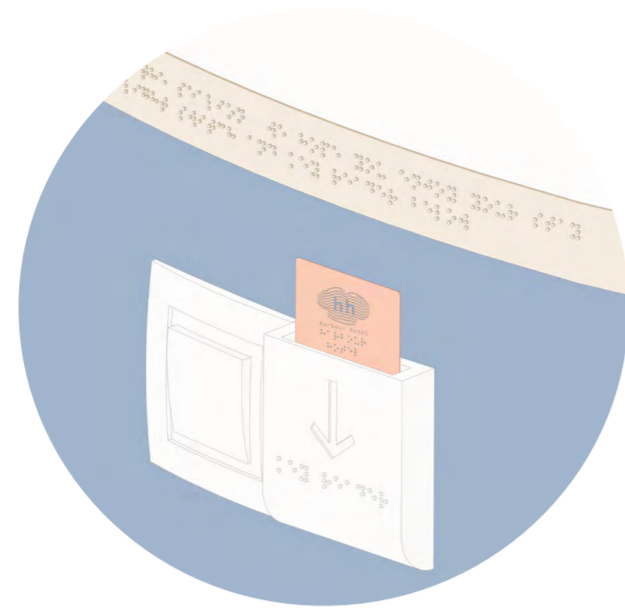
**Second Floor Plan.** The plan shows both pods and their relationship with the new bridge/walkway that connects them with the rest of the proposed second floor level. The Midget pod can accommodate up to two guests, whilst the Sealion pod to the left can accommodate up to four guests. Both floor plans have been rendered by hand. Scale 1:50



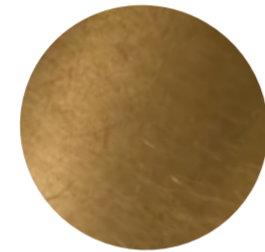
Brass trim and light fixtures, many of them with dimmer switches to control light intensity

Built-in storage and window treatments

Beds and balcony's furniture



A brass trim with Braille writing is located 1200mm above the floor level. It wraps the entire space (except wet areas in the bathroom) and it helps visually impaired users to navigate the space. It has a brushed finish to reduce its shininess, and the Braille in it would not be perceived when the space is used by sighted users unless it is inspected at a closer look. The brass will also be unlacquered, so it can develop a lovely patina over time, which will be enhanced by the touch of hands and the passage of time



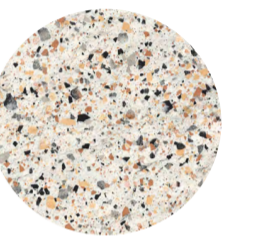
The timber used in this project could greatly depend on the material the Boat Academy normally works with. The frame can be constructed using *Douglas Fir*, *Cedar* or *Red Cedar* (even softwood as it will be indoors). The cladding of the structure can be done with *12mm marine plywood*. For finishes, solid *Teak* or *Iroko* could be used to craft the bespoke furniture and built-in storage, and could also be used for the flooring and skirting. However, a better option could be a natural *Walnut* and *Cork* laminated flooring system as the one from Cork Flooring. Cork is a natural sound and thermal insulator with more than 40 million "cushion cells" per cubic centimetre. Warm and lovely to the touch, cork floors are incredibly quiet and cosy underfoot, reducing the possibility of sharp noises inside the pod, which is important for visually impaired individuals as they normally rely on their hearing. Cork based flooring would improve the experience for both sighted and visually impaired users inside the pods



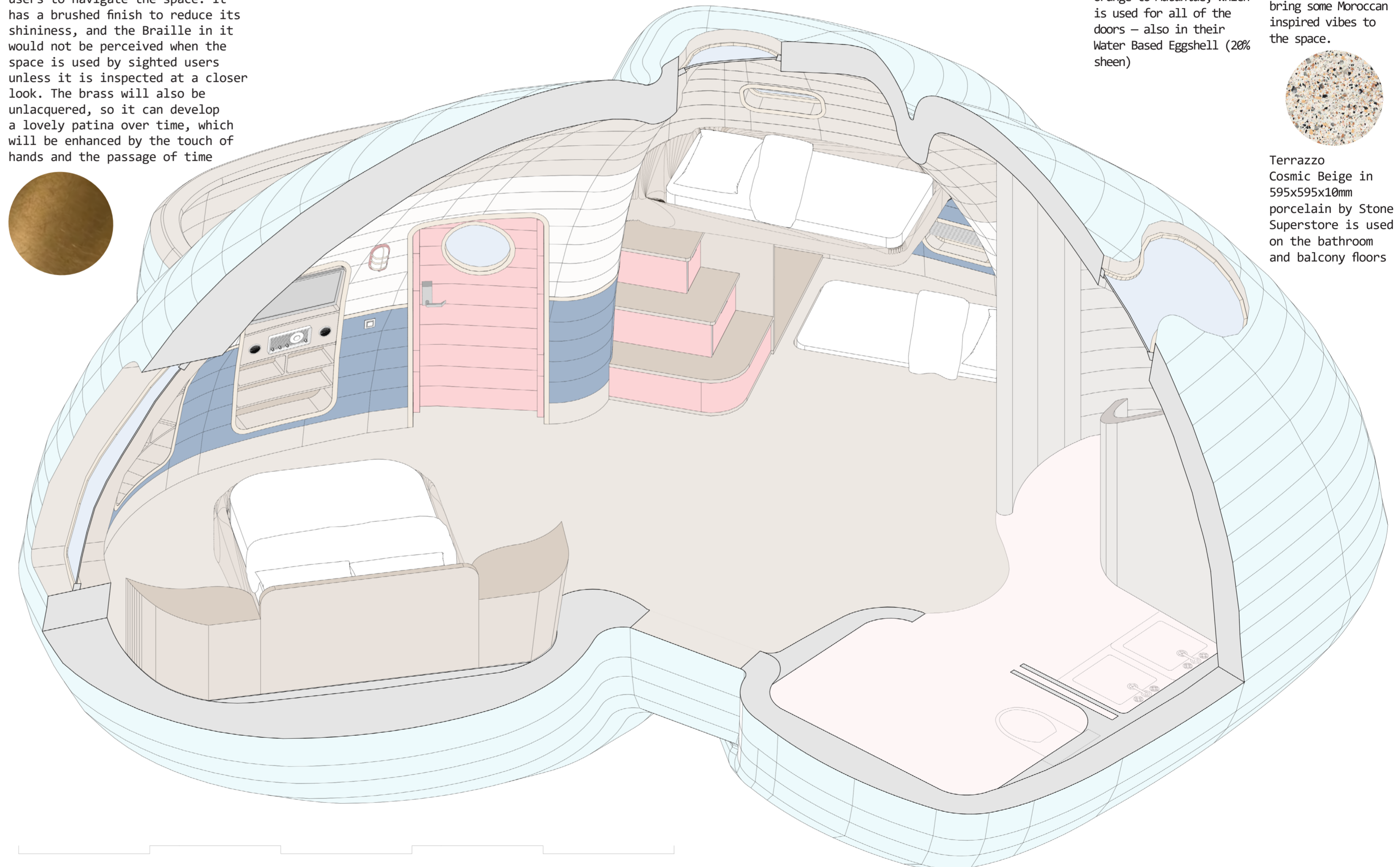
The paints used in this project belong to Edward Bulmer Natural paint as these are made with natural ingredients, are chemicals and plastics free, have very low odour and are overall safer for our health. Since contrast is important for visually impaired users, the upper part of the wall is painted in *Spanish White* in Water Based Emulsion; the outside of the pod is painted in *Lucca* using Water Based Eggshell (20% sheen); and the key card used to enter the space and activate the lights is a similar strong red-orange to *Malahide*, which is used for all of the doors – also in their Water Based Eggshell (20% sheen)



Tadelakt London in their *Bright Khaki* plaster colour will be used on the bathroom as it can be applied on the curved walls from floor to ceiling. It is a waterproof product which is practical, possesses anti-fungal properties and will bring some Moroccan inspired vibes to the space.



Terrazzo Cosmic Beige in 595x595x10mm porcelain by Stone Superstore is used on the bathroom and balcony floors



**Sealion Pod.** Exploded axonometric showing the different components within the pod. Scale 1:75

**Sealion Pod.** Isometric Axonometric showing the Sealion's interior configuration, where the space can be navigated with almost no obstacles. The shower area complies with wheelchair dimensions and has a curved wall that minimises the risk of stumbles whilst providing privacy. This timber structure can be constructed by the Boat Academy team. Scale 1:27

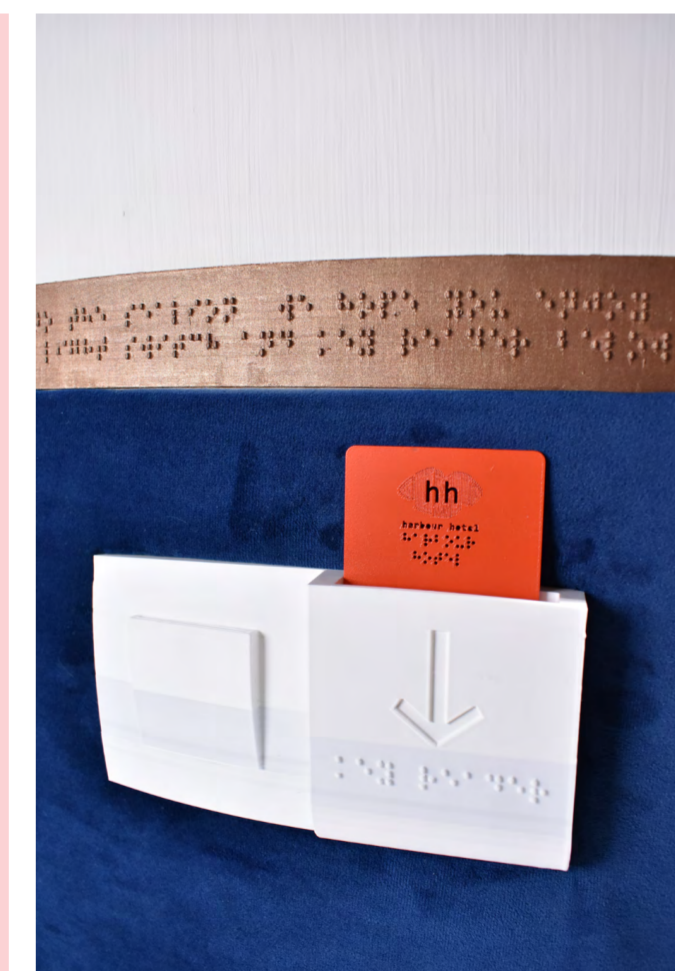


**Final model.** A section of the Sealion wall has been recreated at a scale 1:1. It shows a light switch and card/key reader next to the main entrance. This real-size model shows how contrast and texture are important for visually impaired users. The EU-style light switch is bigger than the UK ones, making it easier to operate. 1000mm of the bottom part of the walls is upholstered in *marine blue velvet* by UK Fabrics Online (45,000+ Martindale Rub Score). The velvet wraps the space in one direction, helping to inform the user where they are going based on the pile orientation.

**Sealion pod.** Ned uses the brass trim to navigate the space inside the pod whilst Sam watches him from the top bunk bed



**A child's perspective**  
 From down here,  
 the room feels carved rather than built  
 a hollowed-out shelter of warm wood,  
 its curves rising around me  
 like the inside of a seashell.  
 The ceiling flows  
 in one long sweep,  
 walls softened and rounded  
 arching in a single gesture  
 as if shaped by hands,  
 not tools.  
 — by the Author



**Final model.** The Braille inscription in this section next to the entrance reads "Welcome to the Sealion. We hope you enjoy your stay. Light switch and key reader below"

**Sealion pod.** Toby observes the space from the bottom bunk bed located at the floor level, keeping an eye on Grandma, Grandad and Sam. Storage has been concealed under the upper bed and inside the steps, making the most out of the space. LED strip lighting helps organising where everything goes