A photograph of a landscape. In the foreground, there is a stone structure made of several stacked, rectangular blocks, topped with a small pile of white material. The structure is surrounded by tall, dry grasses. In the background, a town or village is visible, with several large, multi-story buildings and a church with a red clock tower. The town is situated on a hillside, and the overall scene is captured in a muted, slightly desaturated color palette.

FIELD TIME CAPSULE, 2017  
near Huddersfield, West Yorkshire

# PROTOTYPE TIME CAPSULE

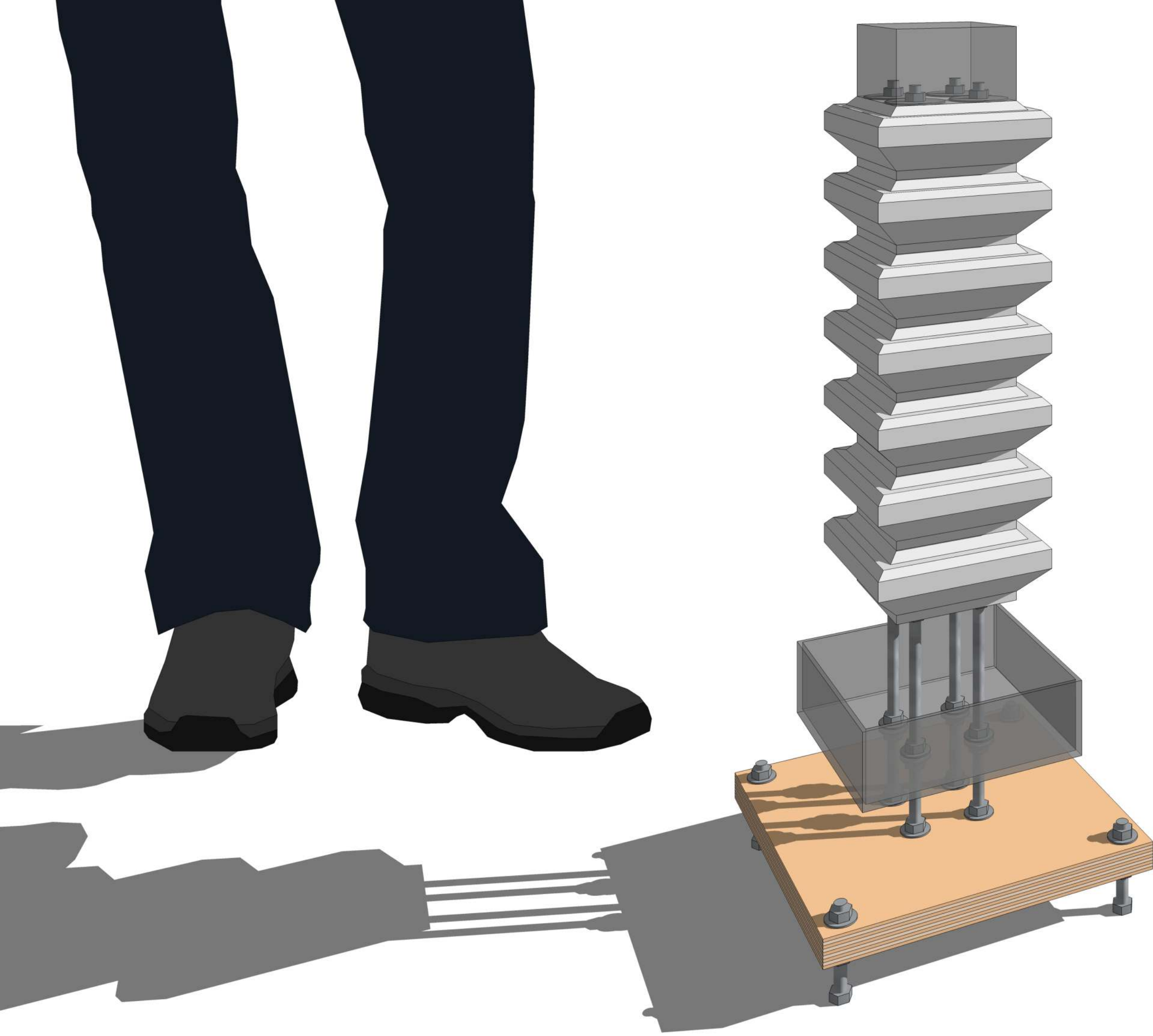
For full screen press: Ctrl+L (adobe pdf reader); F11 (foxit pdf reader)

Danni Kerr

Lead Researcher  
Sheffield School of Architecture  
in collaboration with

**Studio Polpo**  
of Sheffield





# Dynamic Time Capsules Exhibition

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### DESKTOP VERSION

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- DEPLOYMENT
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### FIELD VERSION

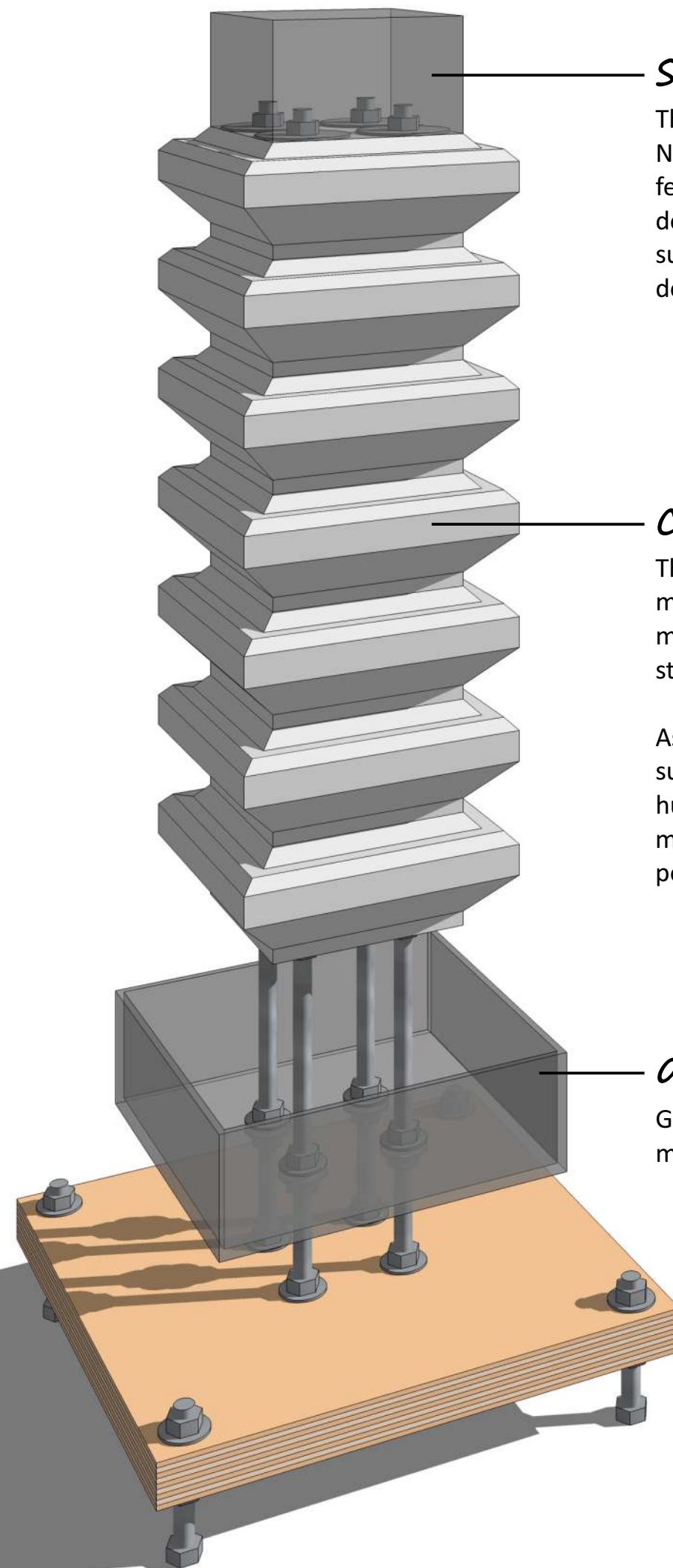
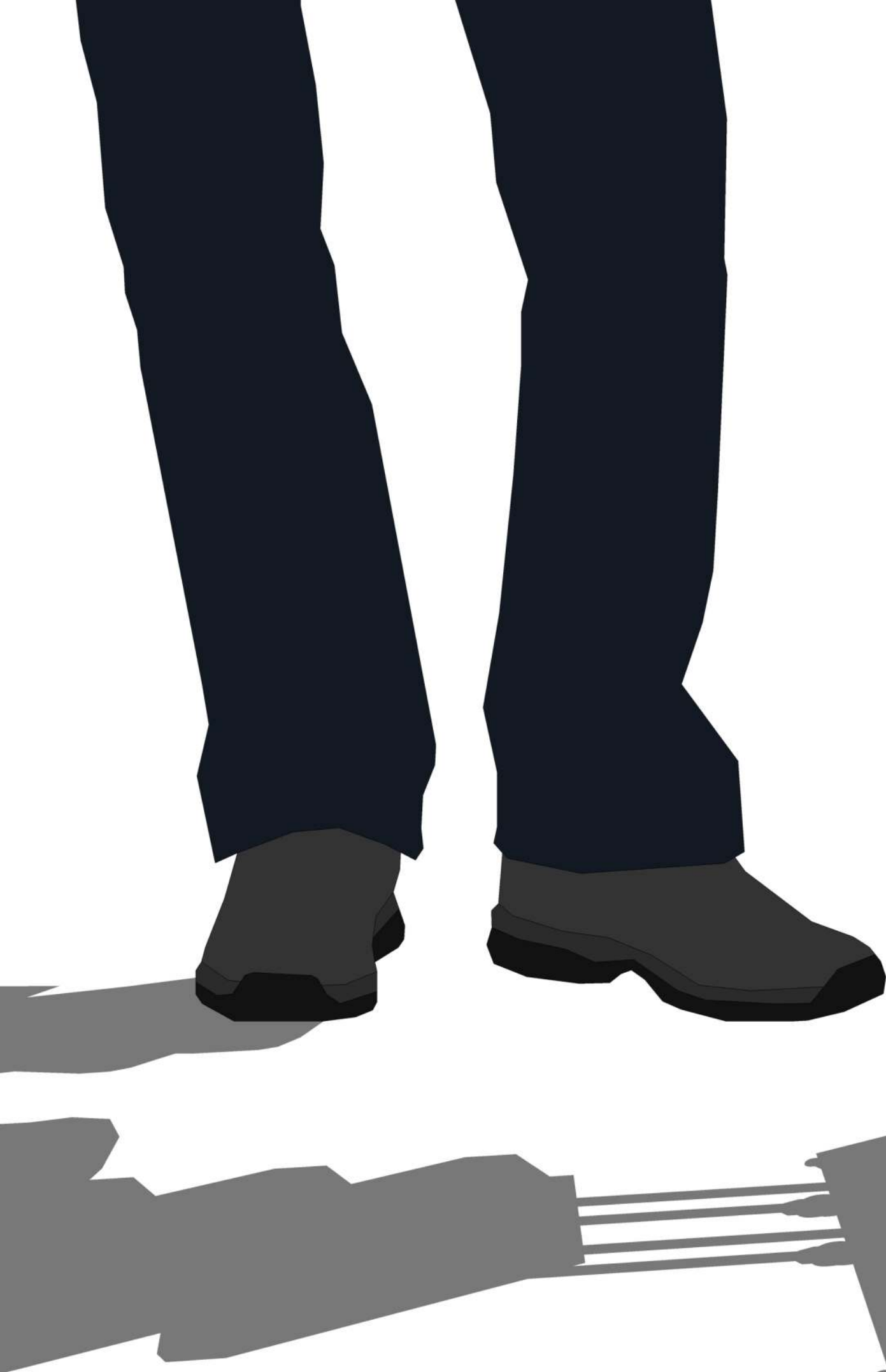
- DESIGN
- DEPLOYMENT
- EXHIBITION

### PAVILION VERSION

### 2018 TIME SCALES OVERVIEW

### COSTS BREAKDOWN

### CONTACTS



### *silicone gel*

The silicone gel is a highly viscous Newtonian fluid which is the interactive feature of the time capsule. It can be designed to flow over the concrete superstructure at a desired rate on deployment.

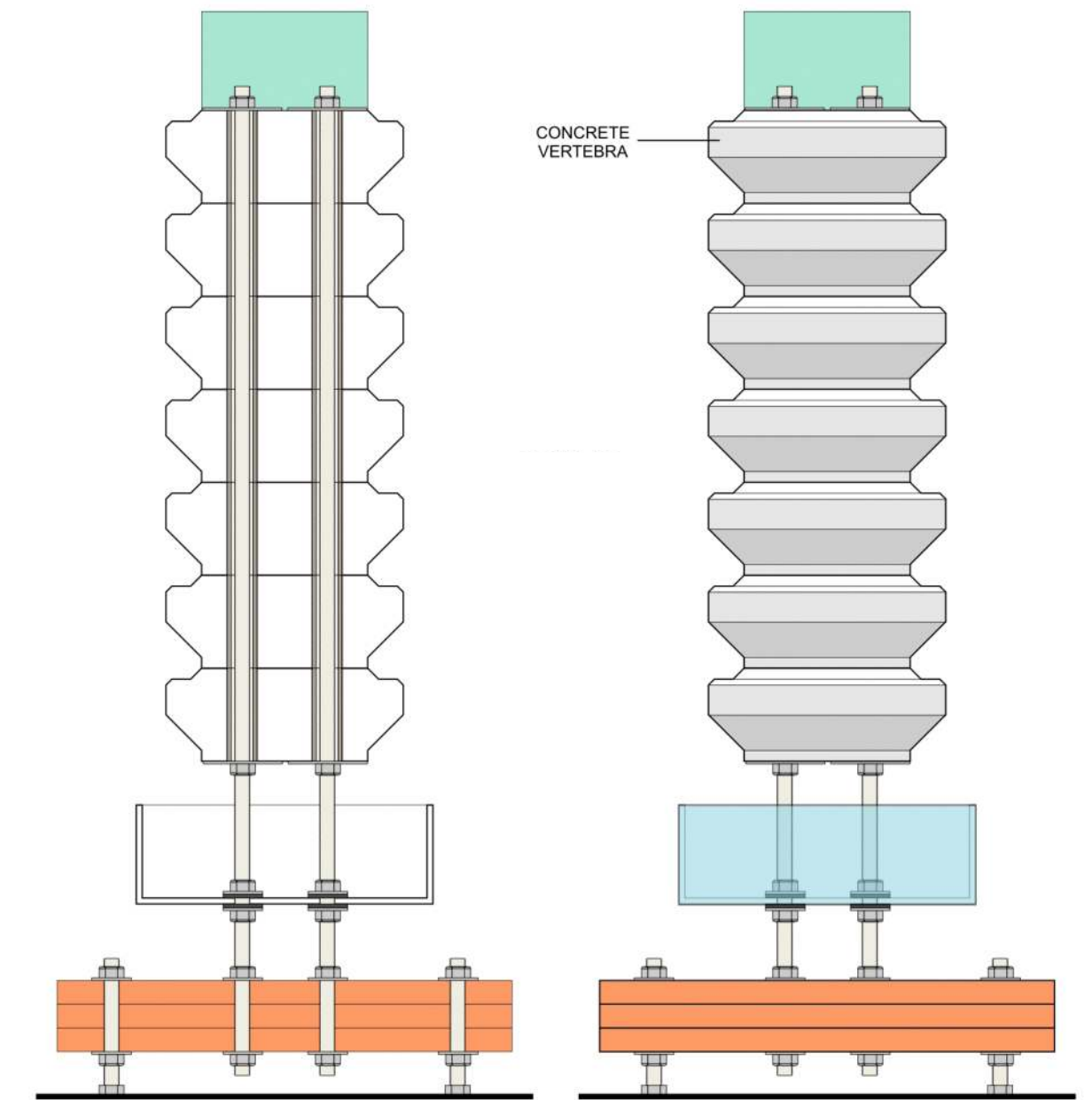
### *concrete vertebrae*

The concrete vertebrae cast from a resin mould (formed from a hand craft timber maquette) form the dimensionally stable base of the capsule.

As the silicone gel flows over the capsule surface, it collects objects added by human interaction and other contextual materials during the deployment period.

### *acrylic tray*

Gel collects in the tray and can be manually recycled.



## DESKTOP TIME CAPSULE

A portable version of the dynamic time capsule which is suitable for interior deployment

For her research, Danni Kerr has designed and fabricated prototype time capsules which when deployed in the public domain record contextual and human interactions over time, recording radically different outcomes in different contexts.



## DESKTOP TIME CAPSULE

Time capsule made by Danni Kerr and exhibited at the University of Sheffield Ideas Bazaar 2017.



## DESKTOP TIME CAPSULE

A portable version of the dynamic time capsule which is suitable for interior deployment

Danni Kerr employs a small scale version of the time capsule as the vehicle for discussion in a series of research workshops she runs where she provides participants with a simple design exercise and carefully records and analyses their conversation using Cognitive Discourse Analysis. The impact of the research is the development of temporal theory in a manner which is practical and meaningful to architects, designers and creative practitioners.



## EARLY PROTOTYPE TIME CAPSULE

An early prototype deployed in an architecture students' studio at the Sheffield School of Architecture showing how the capsule collects materials from its context.



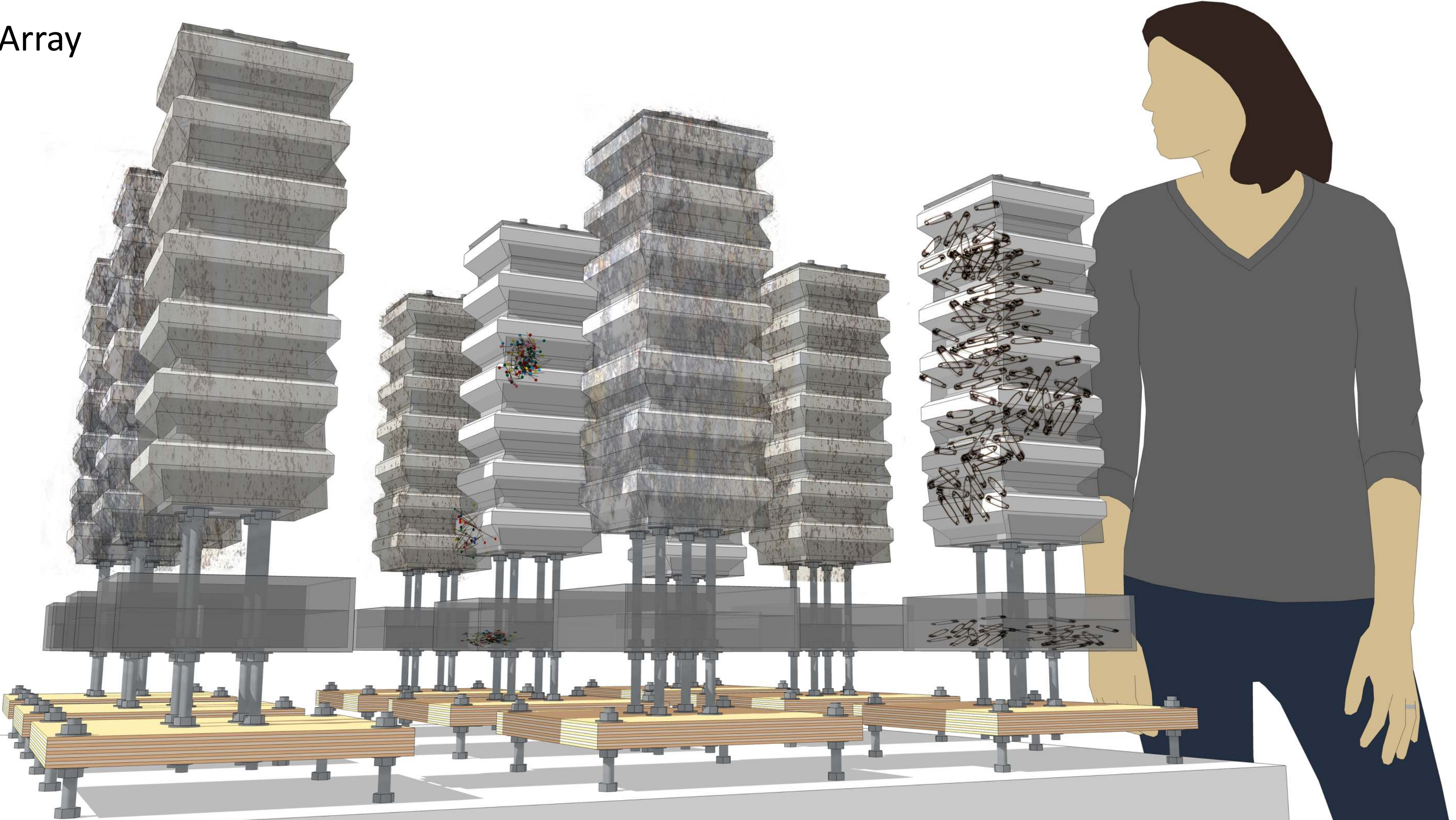


# Desktop Time Capsule Array EXHIBITION

A key finding emerging from the doctoral research is the potential for divergent outcomes observed for different time capsules with an identical design due to contextual/human interactions. Therefore the proposal is to: fabricate, deploy, bring together and exhibit architectural scale time capsules which have been deployed in the context to communicate these divergences.

It is proposed that Studio Polpo will fabricate, assist in the deployment and exhibition (including exhibition materials) of an array of desktop time capsules.

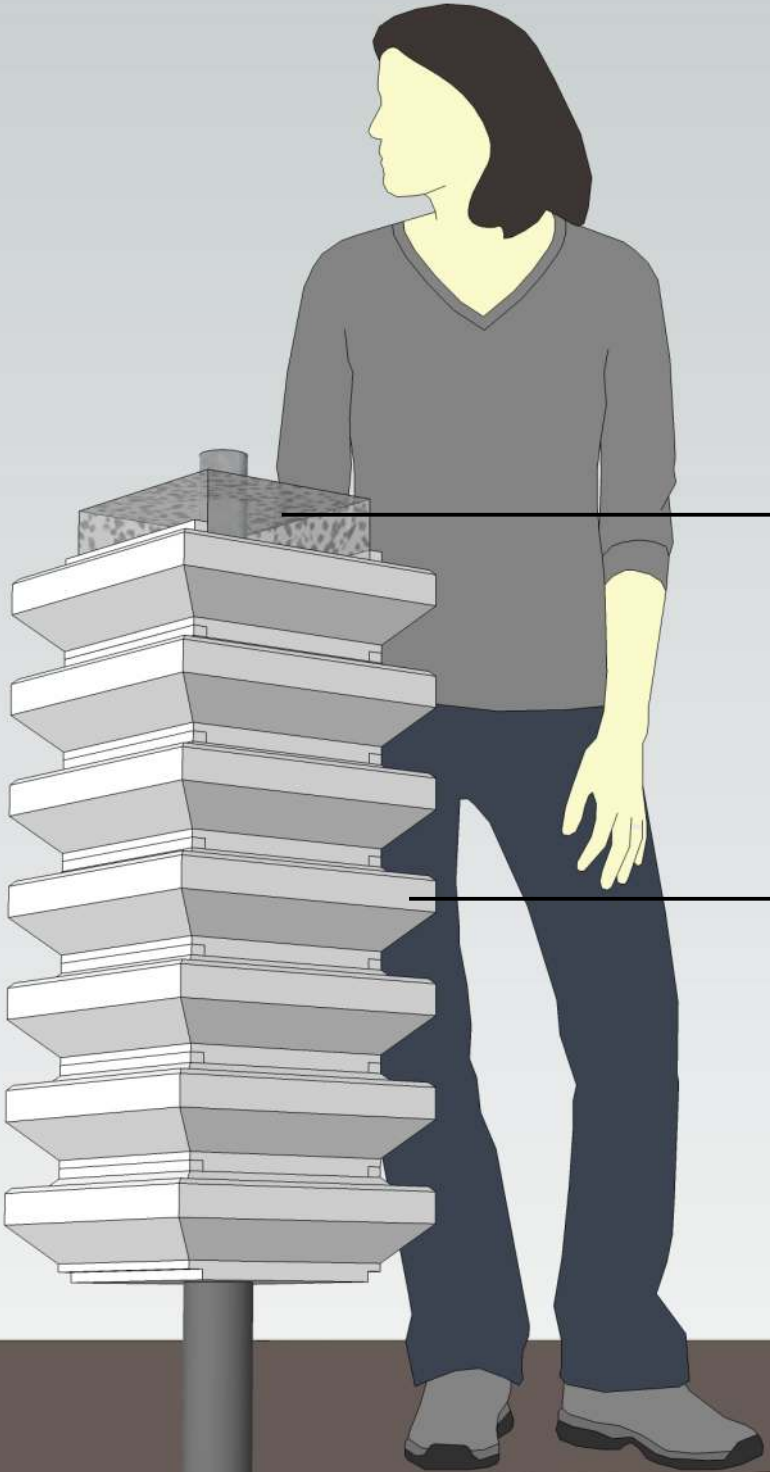
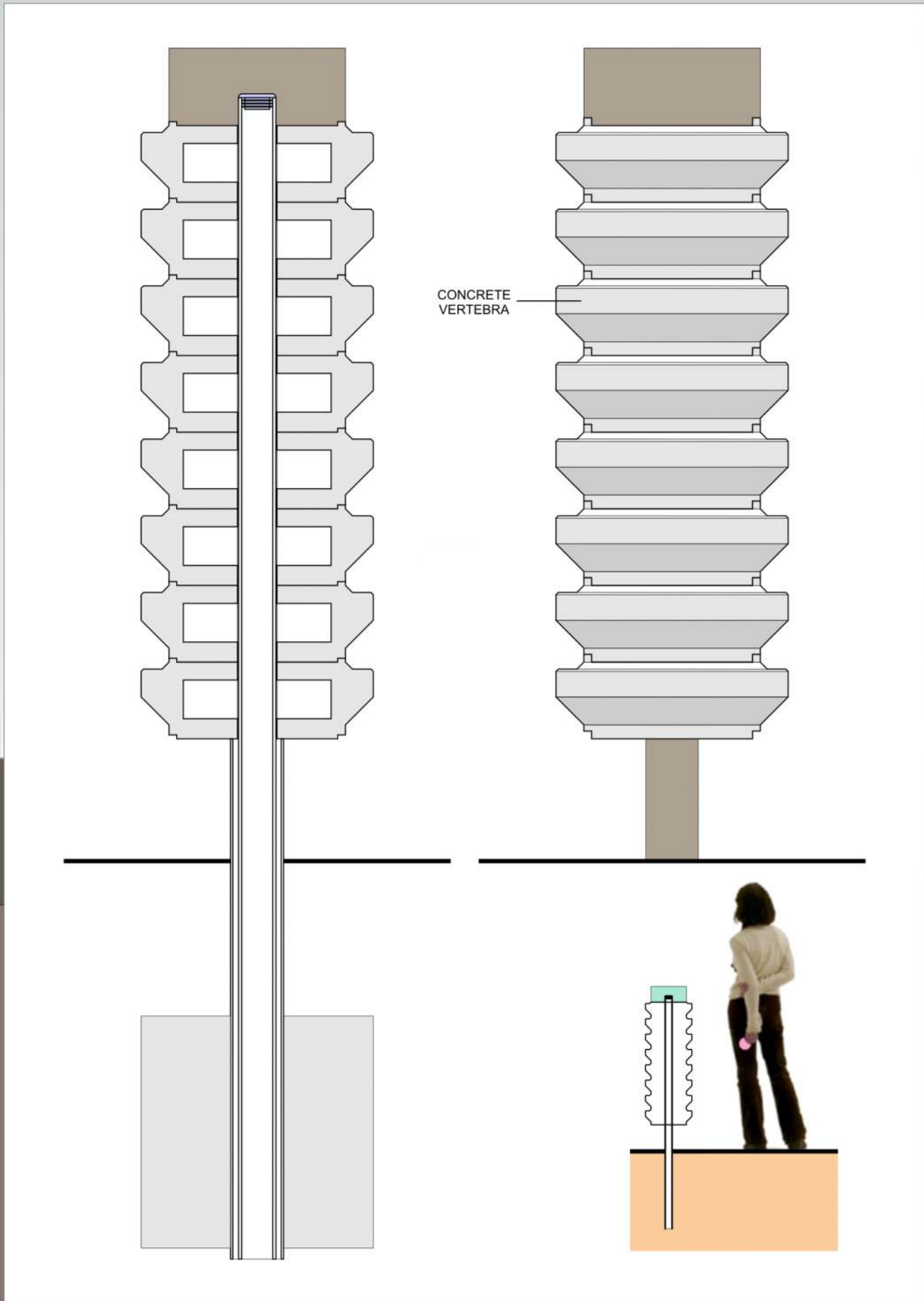
*plinth* —————





# FIELD TIME CAPSULE

An architectural version of the dynamic time capsule which is suitable for exterior deployment



### *viscous material*

For the exterior version silicone rubber is blended with the gel to provide weather proofing and to increase the viscosity for long deployment periods.

### *concrete vertebrae*

The use of discrete concrete vertebrae allows for the safe installation and de-mounting of a significant concrete super structure.

### *steel column*

Made from a scaffold tube provides safe structural stability.

### *concrete foundation*

Provides discrete structural stability.

A set of interactive field time capsules working to an architectural design by Danni Kerr are fabricated and deployed with the assistance of Studio Polpo in urban and other public domains to weather and accrue contextual interactions for a period of many months.



FIELD TIME CAPSULE  
deployed near Huddersfield

The deployment is documented including time lapse recordings of the time capsules' performance.





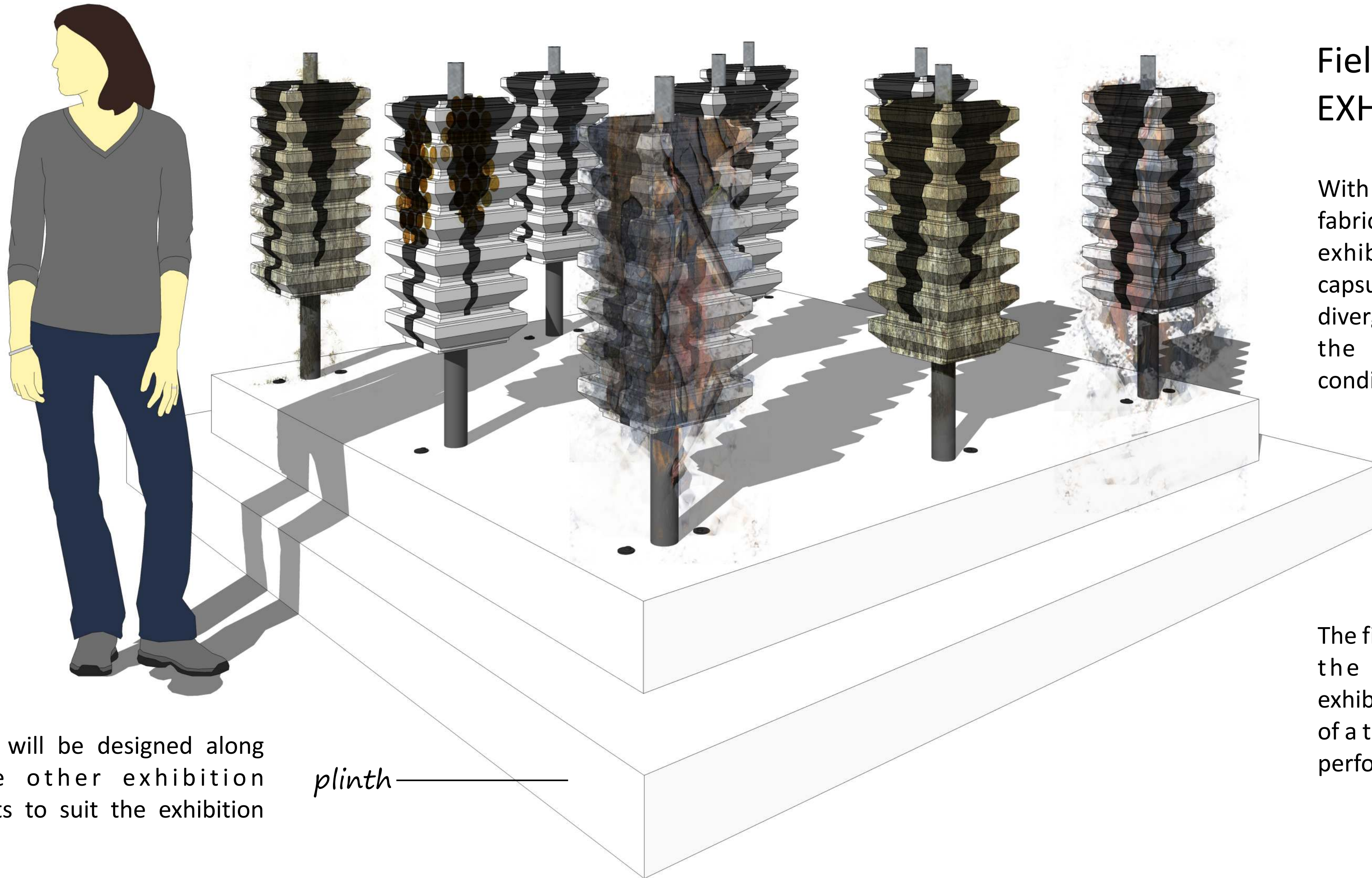
## PRE-EXHIBITION PHASE

Studio Polpo will assist in the fabrication, deployment and de-mounting of a set of field time capsules.

The dynamic performance of the field time capsules is recorded by Danni Kerr and Studio Polpo over a 4 month period (May - August) with still photography. This is compiled into a set of time lapse films which will form part of the exhibition.

FIELD TIME CAPSULE, 2017  
near Huddersfield, West Yorkshire





## Field Time Capsule Array EXHIBITION & FILM

With Studio Polpo the proposal is to: fabricate, deploy, document and exhibit architectural scale time capsules to communicate contextual divergences due to interactions in the field from identical initial conditions.

The field array is the priority item for the dynamic time capsules exhibition together with a showing of a time lapse documentary of their performance in the field

The plinth will be designed along with the other exhibition components to suit the exhibition venue.

*plinth* —————



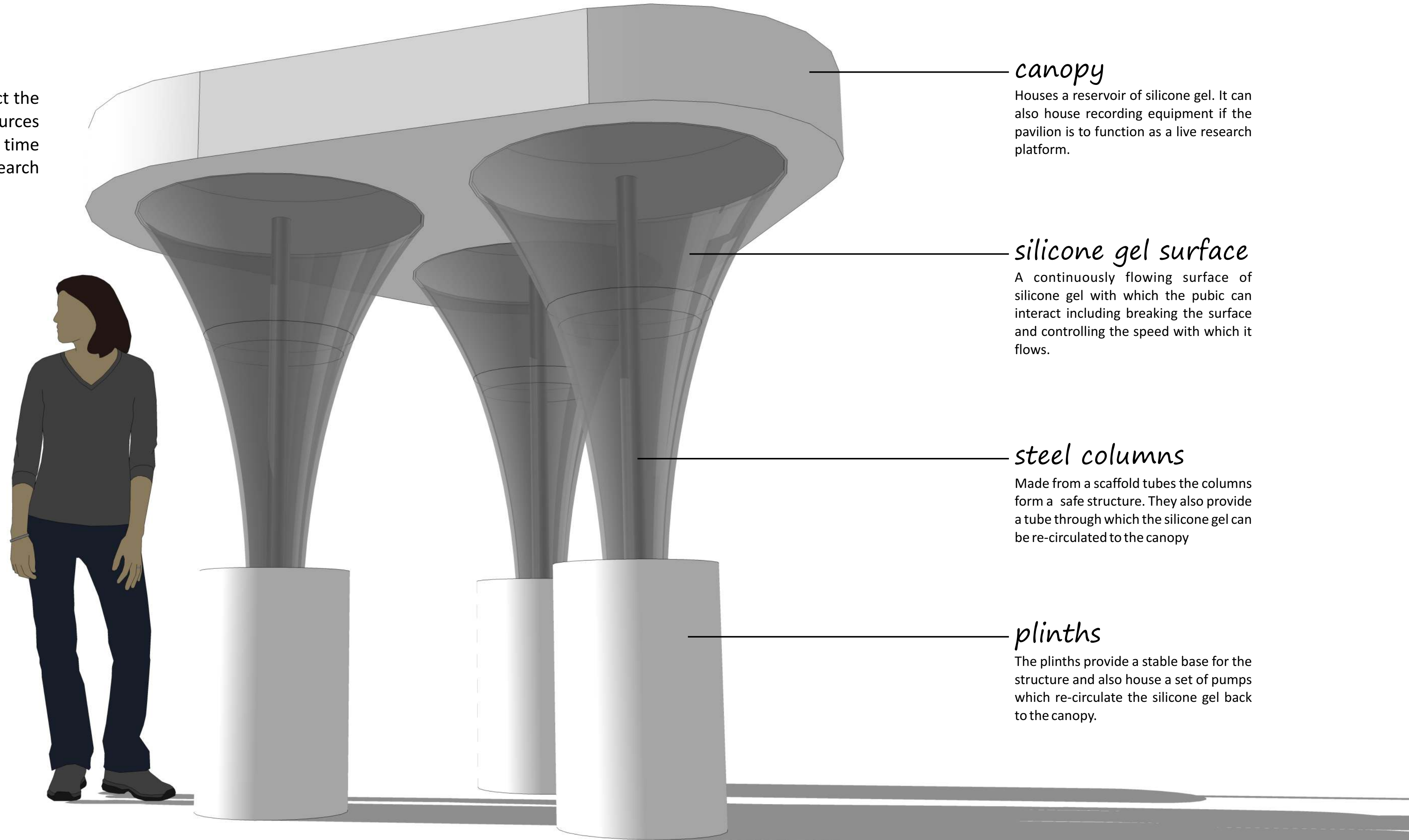
# INTERACTIVE PAVILION

Working with Studio Polpo design, test, construct and construct the additional components for exhibition. In the event that resources allow this will include an interactive pavilion version of the time capsule. The interactive pavilion can also function as a live research platform.



PROTOTYPE MODEL for an INTERACTIVE PAVILION

A prototype model showing how silicone gel can be configured to form a flowing interactive surface



## *canopy*

Houses a reservoir of silicone gel. It can also house recording equipment if the pavilion is to function as a live research platform.

## *silicone gel surface*

A continuously flowing surface of silicone gel with which the public can interact including breaking the surface and controlling the speed with which it flows.

## *steel columns*

Made from a scaffold tubes the columns form a safe structure. They also provide a tube through which the silicone gel can be re-circulated to the canopy

## *plinths*

The plinths provide a stable base for the structure and also house a set of pumps which re-circulate the silicone gel back to the canopy.