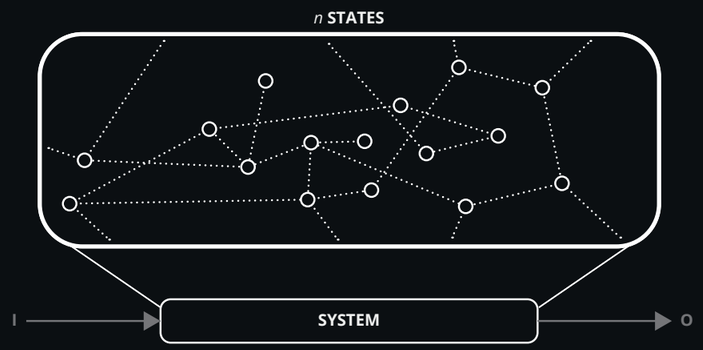
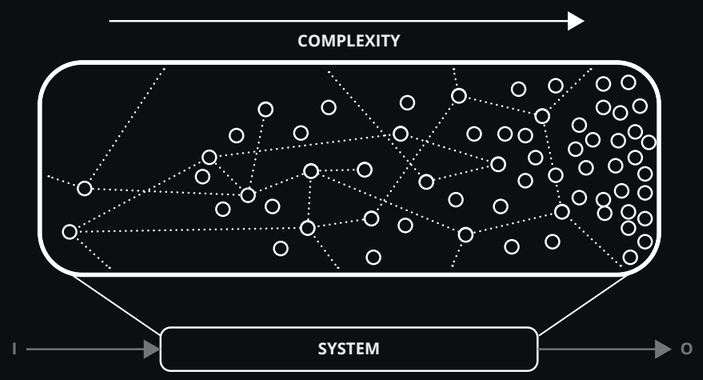
Variety, Complexity

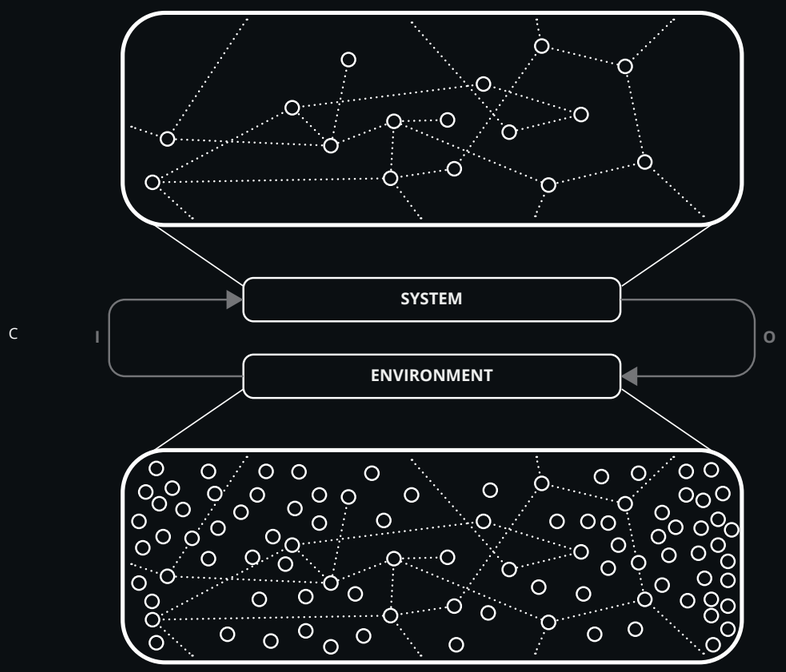
A



B



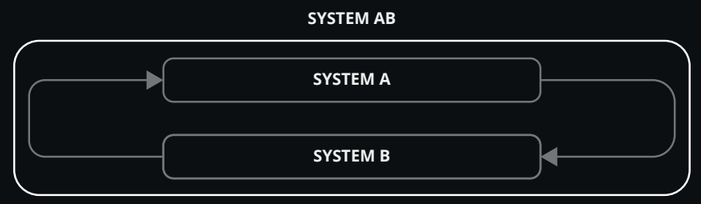
C



A system consists of a number of states, the amount of states in a system can be described as its variety (A), which forms a measure of a system's complexity (B). Systems are in every case embedded within an environment, which can be characterized in the same way: it has a number of states -- and often a very high complexity (C).

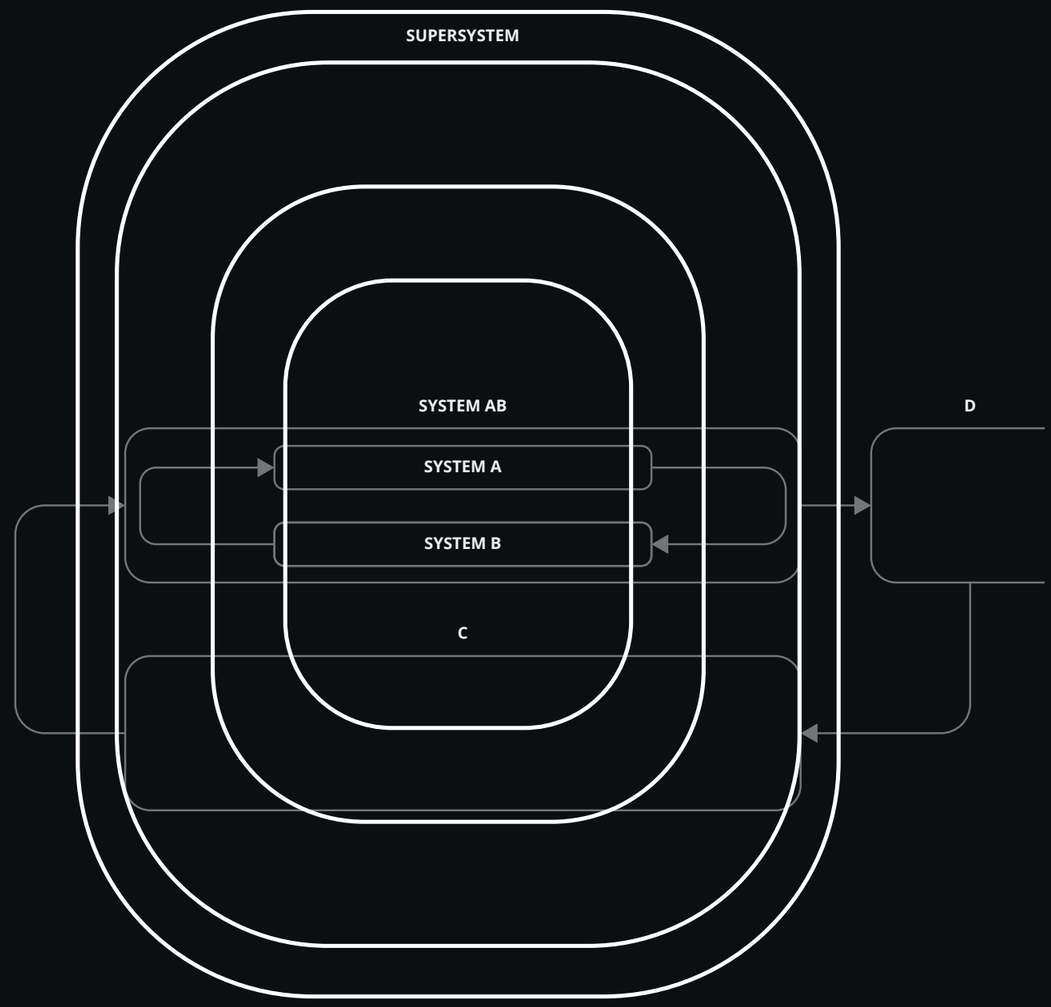
Systems can consist of subsystems - as is the case with environments. (D)

D

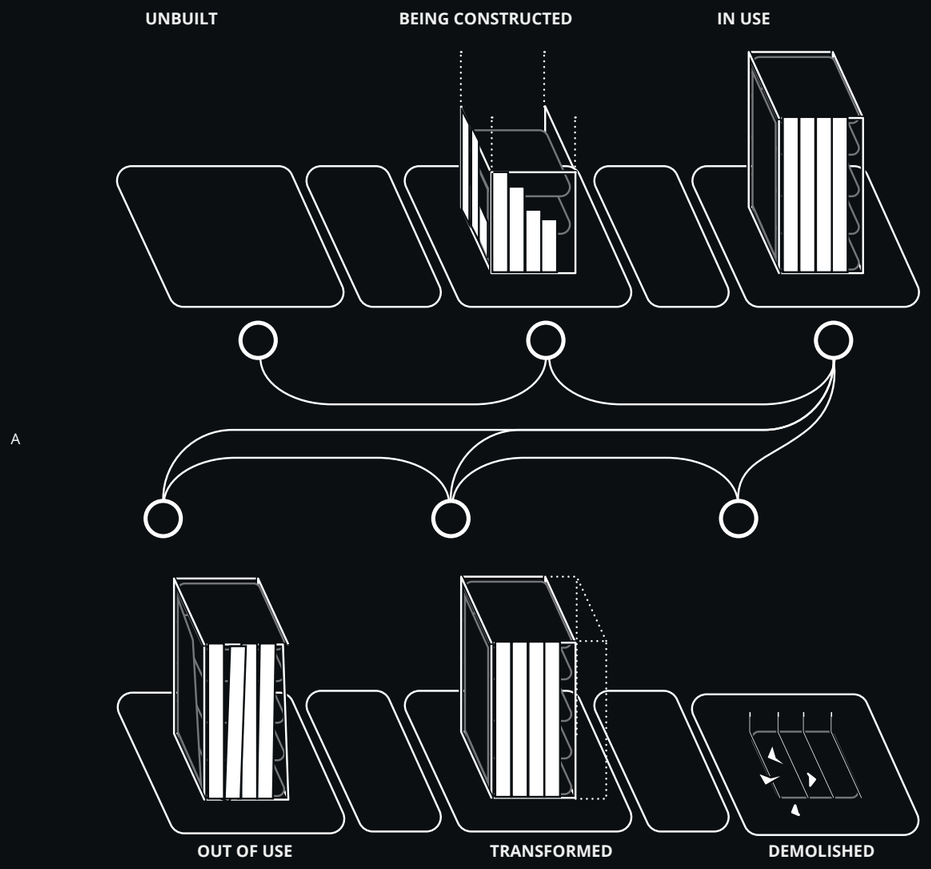


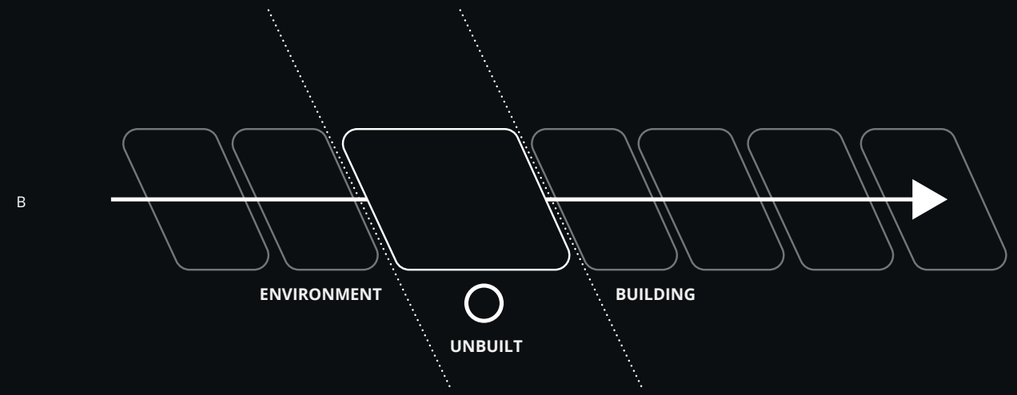
Recursivity

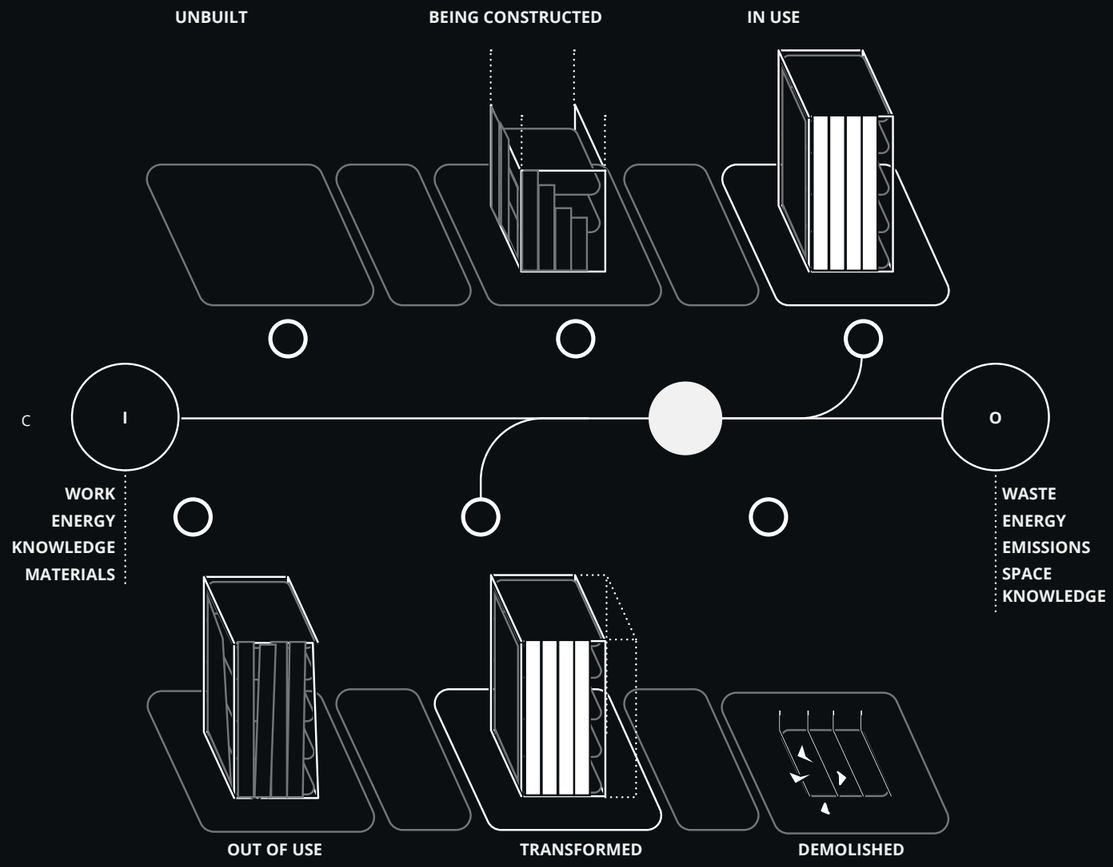
Systems made up of other systems can be characterized as being recursive: parts have the same properties as wholes -- each with their own interrelated states, and thus behaviours owing to those relations.



Building states



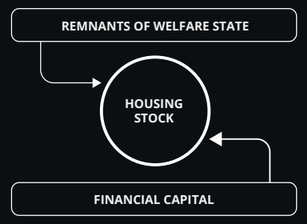




Similarly, buildings can take on states (A) -- those states are not as discrete as here shown, but instead, form continuous transitions between them (B). As with any system, there are inputs and certain behaviour that produce outputs (C).

Design problem: housing in amsterdam.

A



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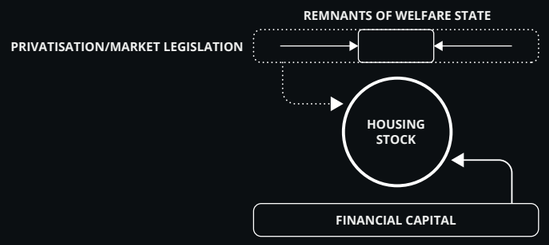
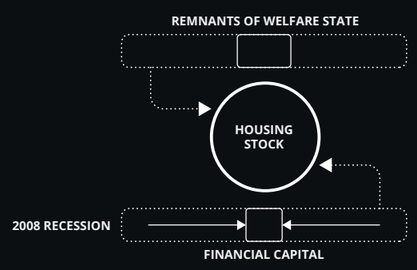
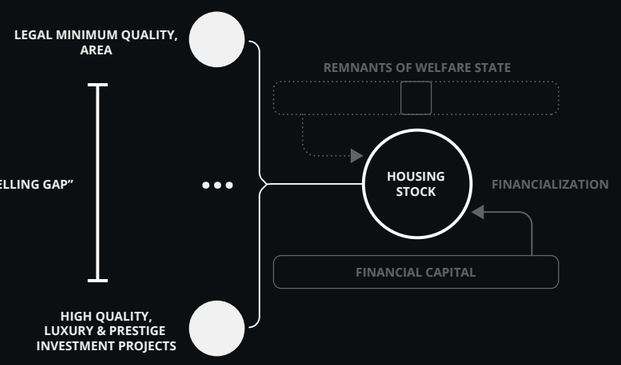


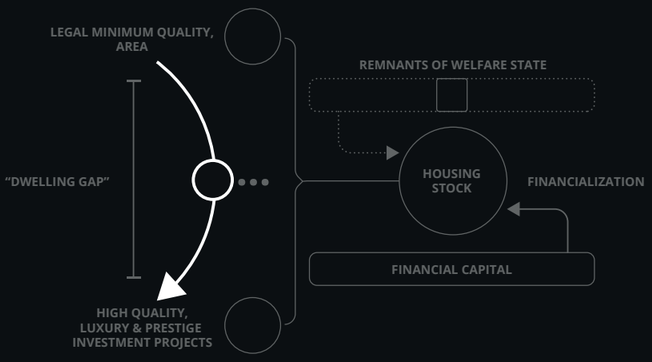
C



D

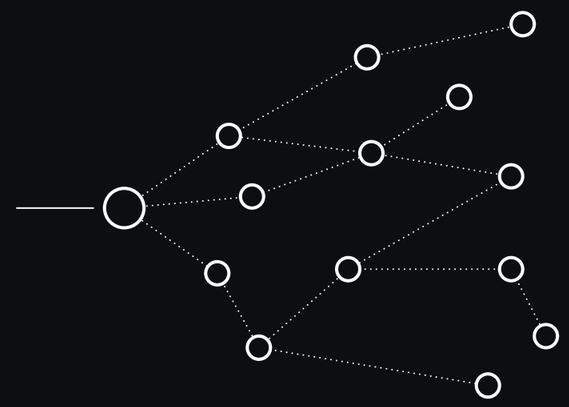


D

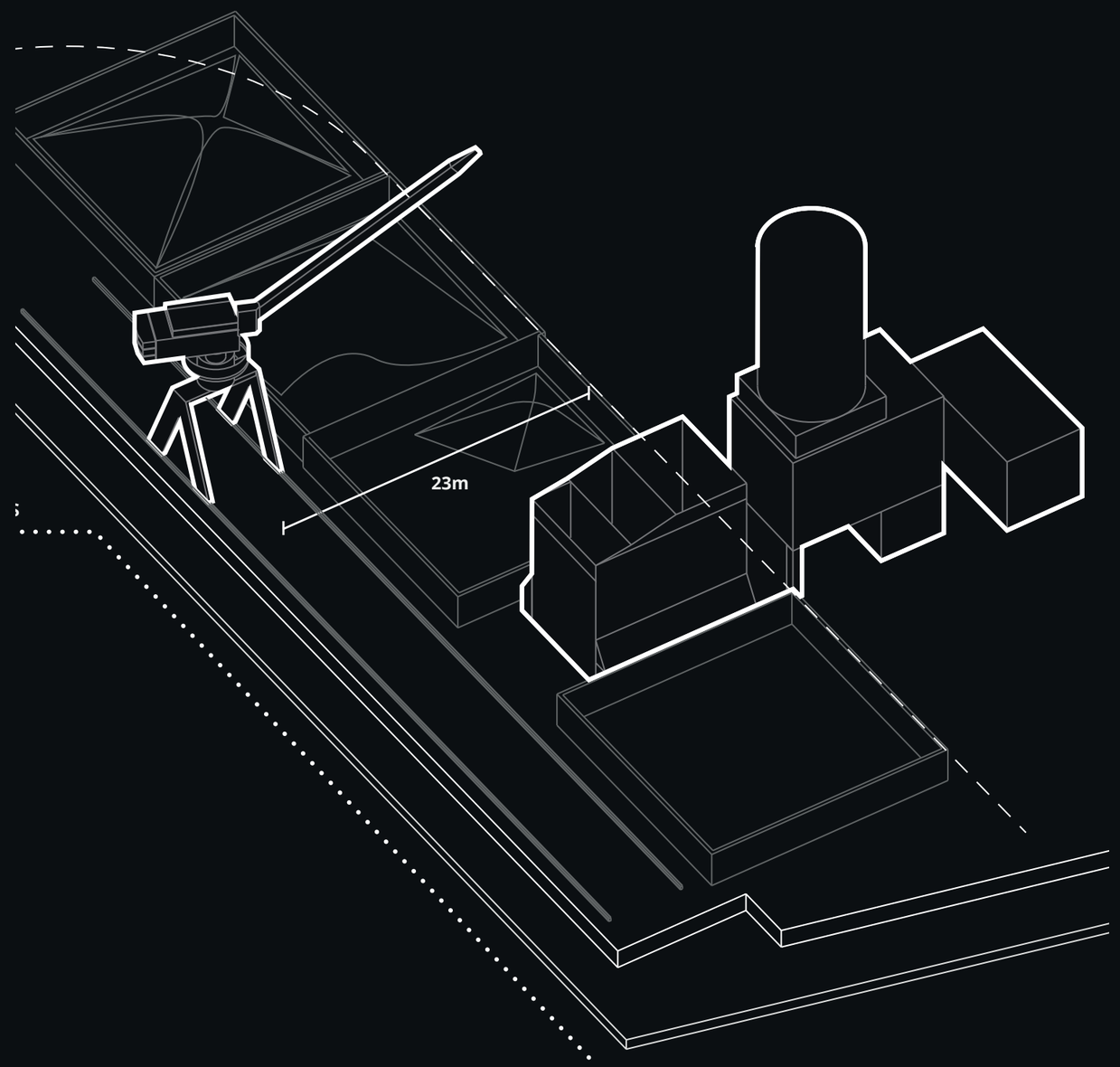


The city of Amsterdam has traditionally profited from a very strong welfare state. A significant portion of the city's housing stock originates with it, the other portion can be ascribed to private actors (A). Recent drives towards privatisation and legislation centered around enforcing market mechanisms in housing have decreased the effect of the remnants of the welfare state on housing construction (B). While financial capital recovered quickly after the 2008 recession (C), its effects when seen together with the reduction in influence for public actors have caused a so-called "dwelling gap" to arise (D). Moreover, what remains of public housing is quickly being sold off into private hands (D). This dynamic provides the backdrop for this project: an attempt at utilizing architectural strategies to circumvent the rapid sell off of public housing by introducing indeterminacy (E).

E

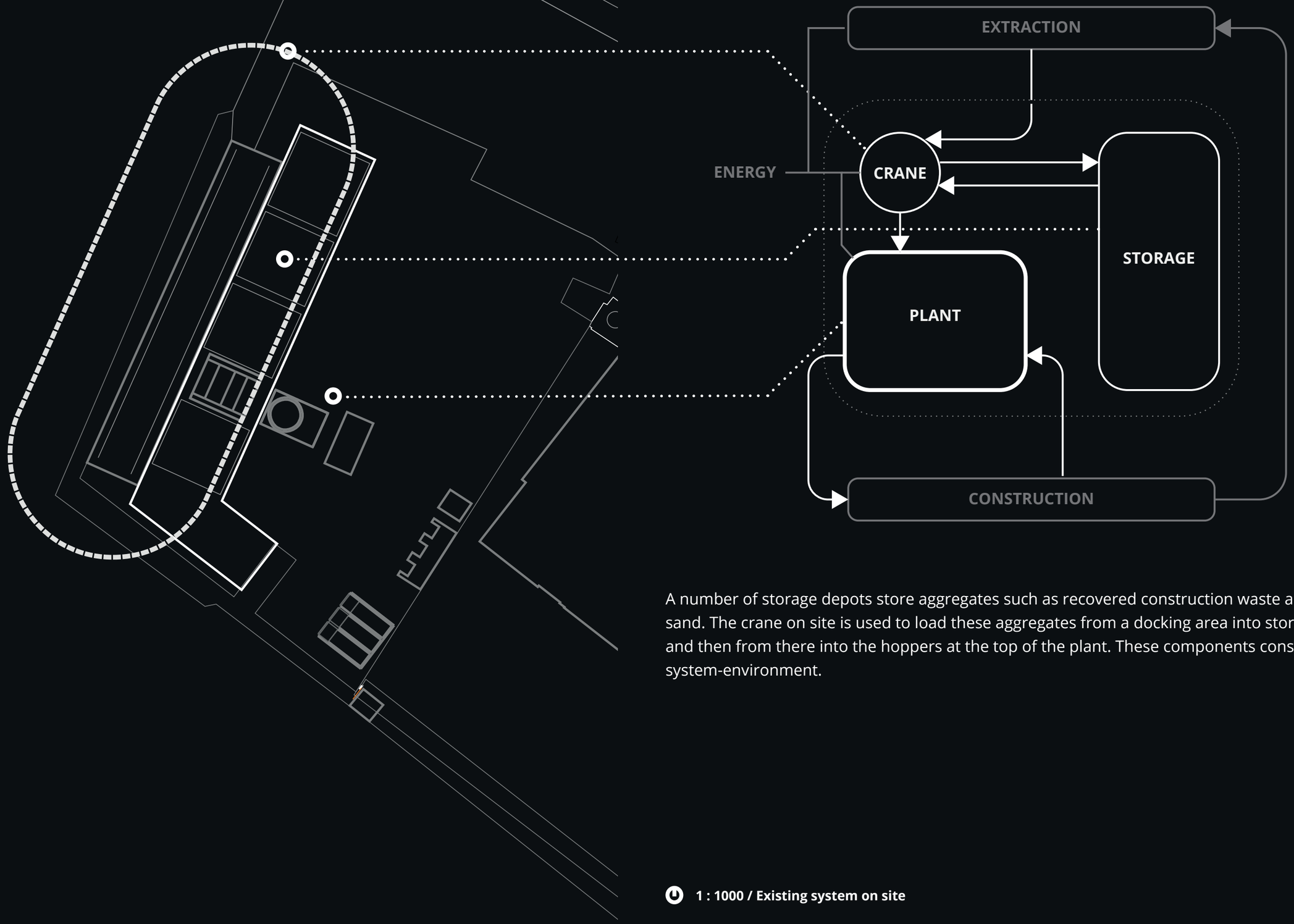


Site



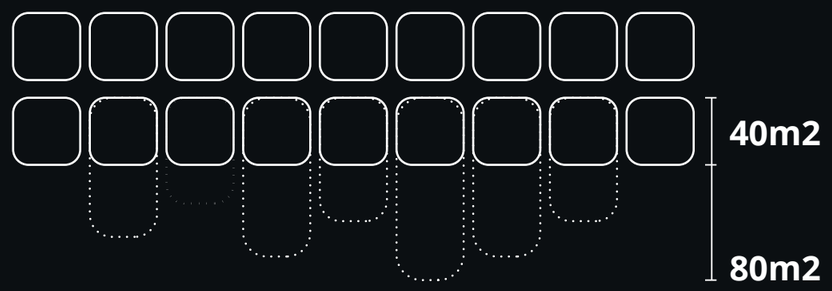
The site consists of a number of components that together make up the machine that is the conrete plant.

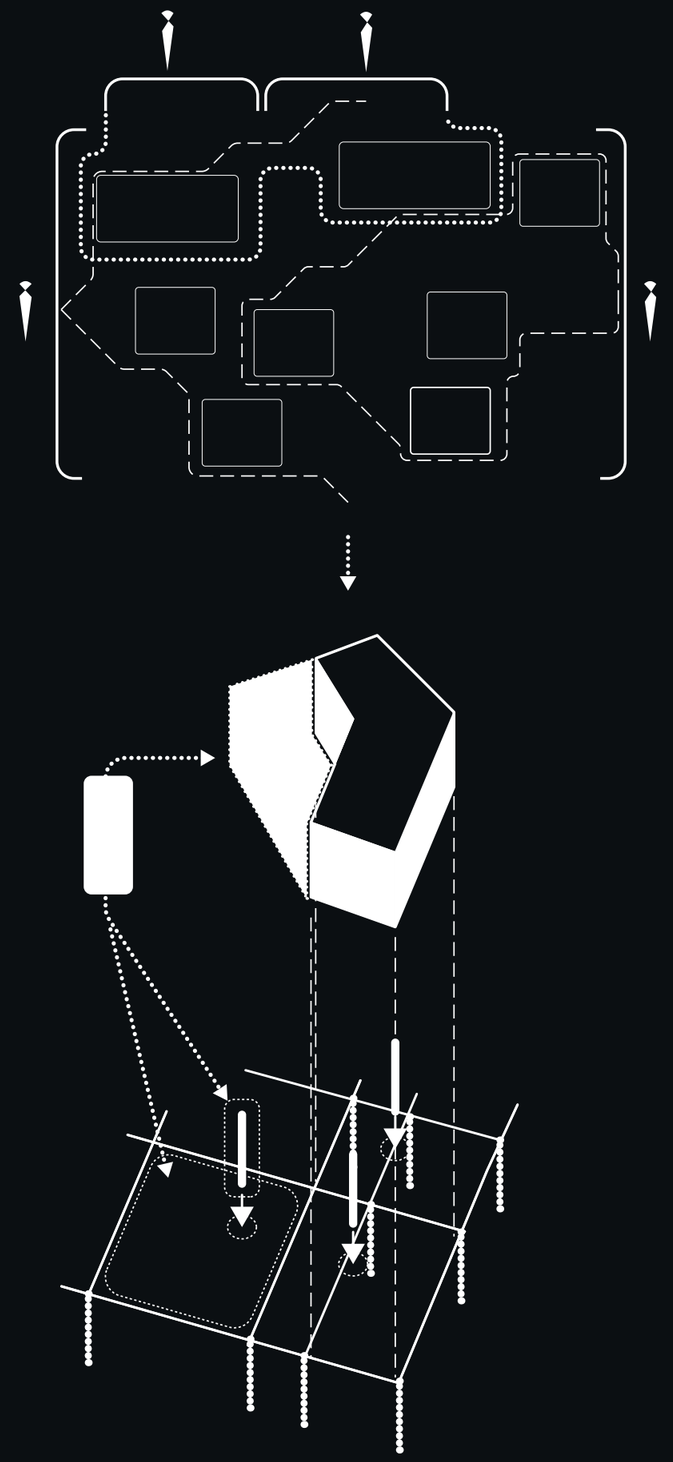
System-environment



A number of storage depots store aggregates such as recovered construction waste and sand. The crane on site is used to load these aggregates from a docking area into storage, and then from there into the hoppers at the top of the plant. These components constitute a system-environment.

1 : 1000 / Existing system on site

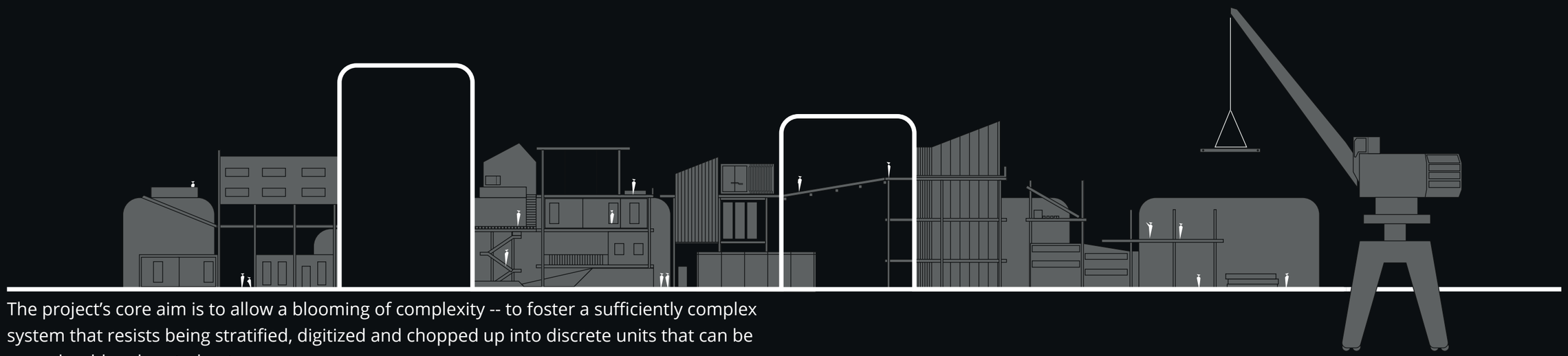




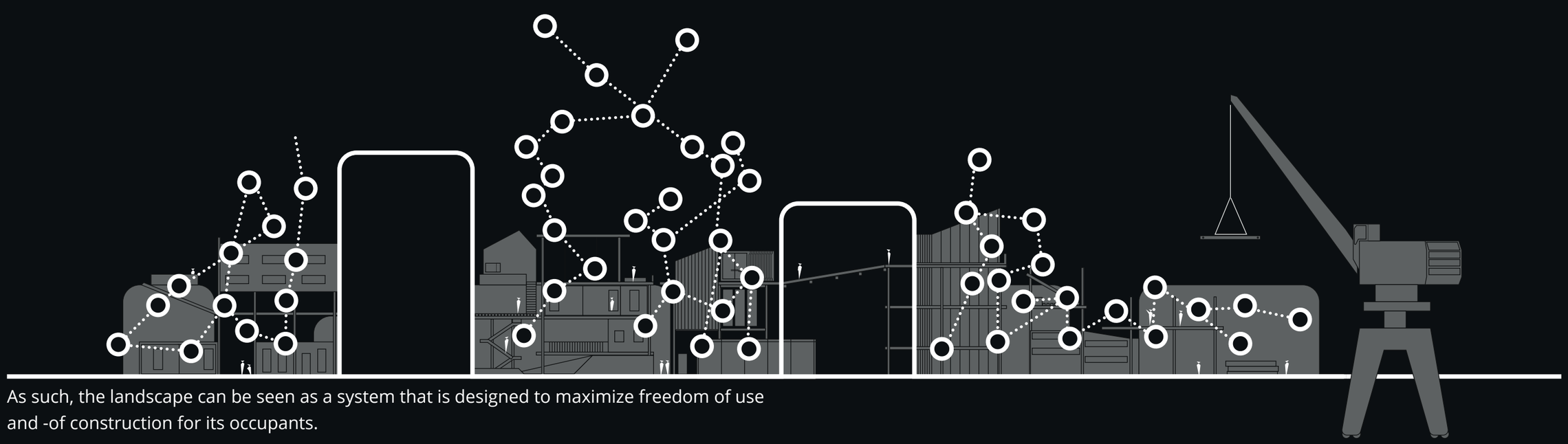
The project's program can be formulated as follows:

A landscape that can provide a material substrate for 60 occupants, with 40-80m2 of space for each of these. It provides flows of energy, construction materials, and a suitable support structure to enable convenient construction and reconstruction for its occupants.

Material Landscape

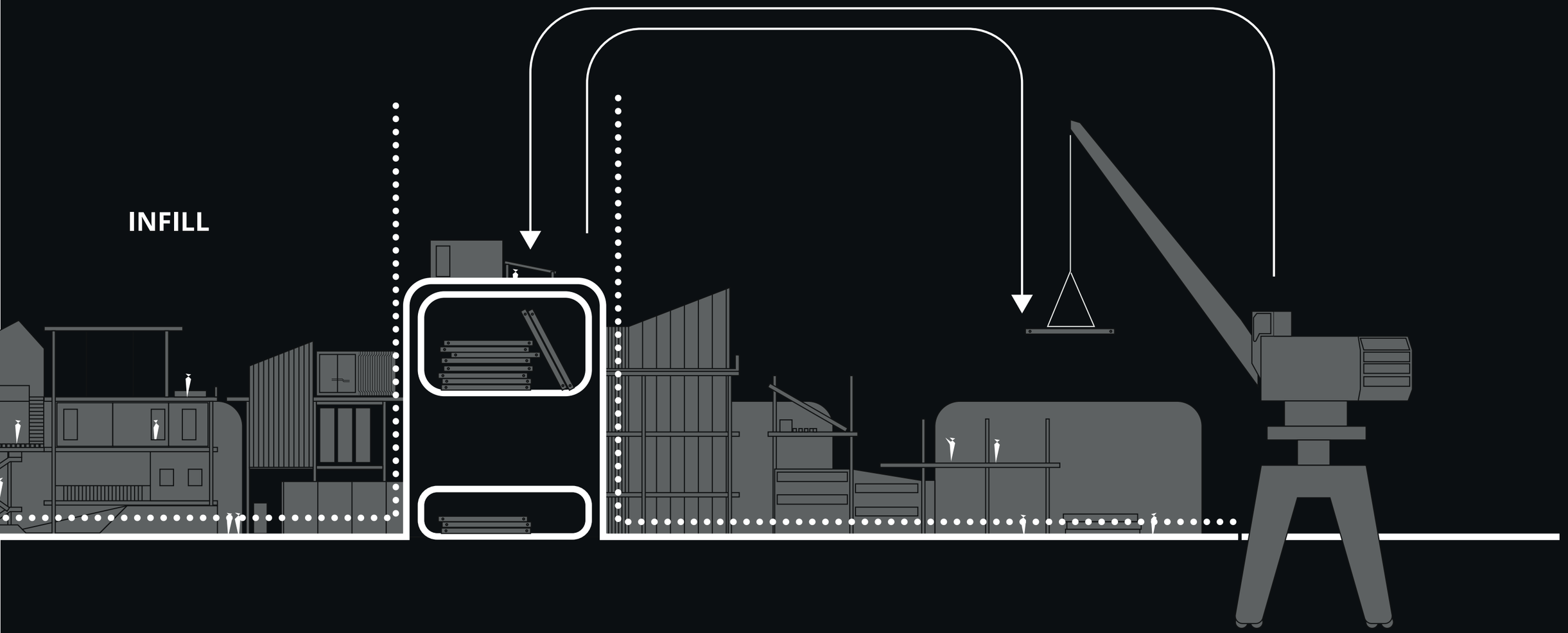


The project's core aim is to allow a blooming of complexity -- to foster a sufficiently complex system that resists being stratified, digitized and chopped up into discrete units that can be owned, sold and rented out.



As such, the landscape can be seen as a system that is designed to maximize freedom of use and -of construction for its occupants.

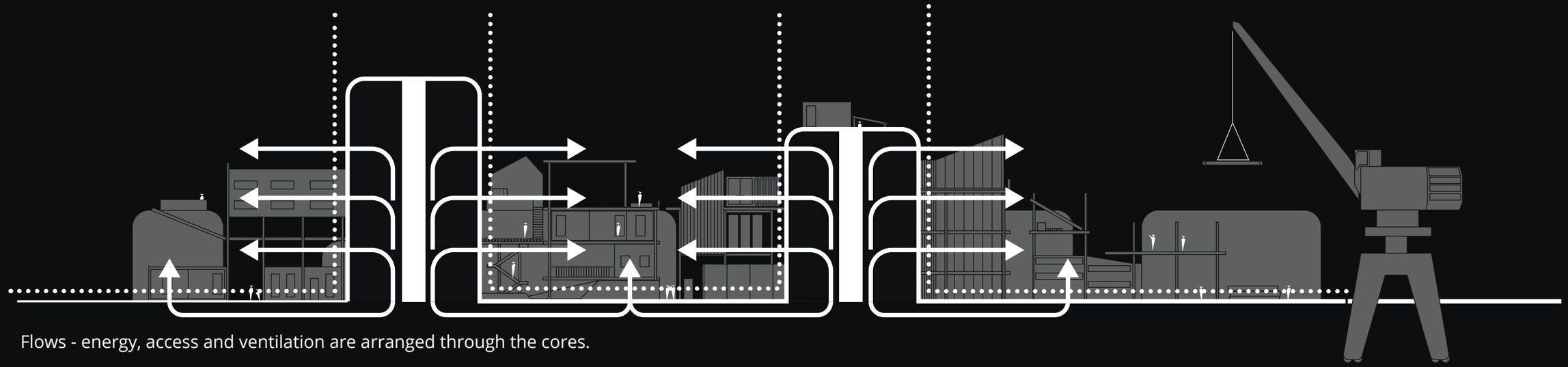
INFILL



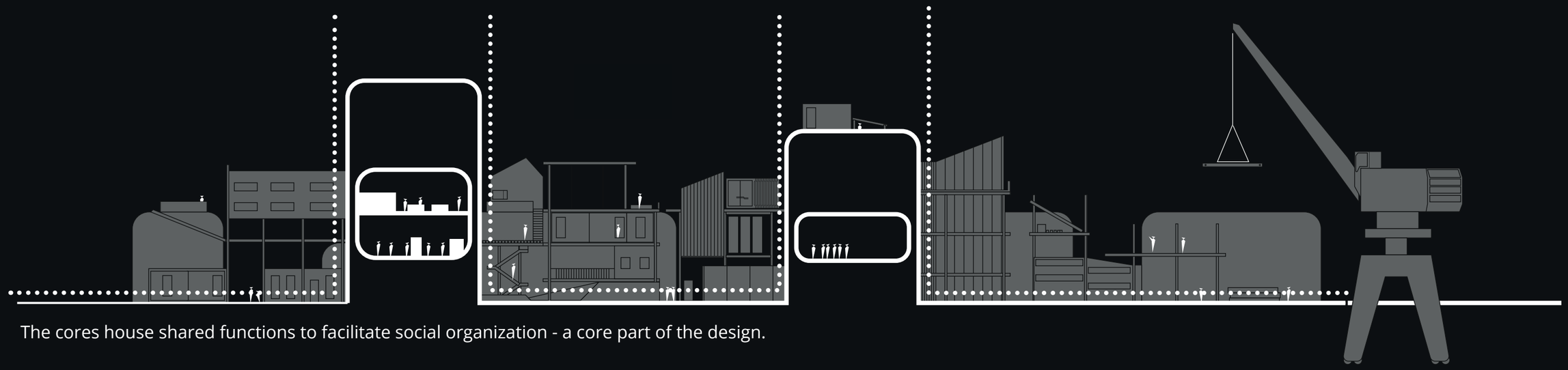
LANDSCAPE

CRANE

Infill / cores

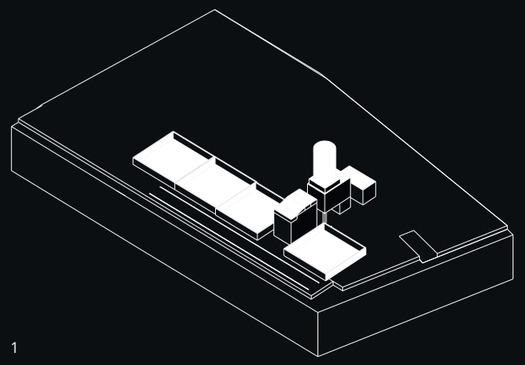


Flows - energy, access and ventilation are arranged through the cores.

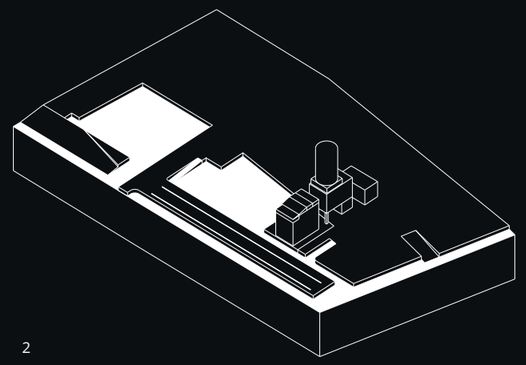


The cores house shared functions to facilitate social organization - a core part of the design.

Construction process



1



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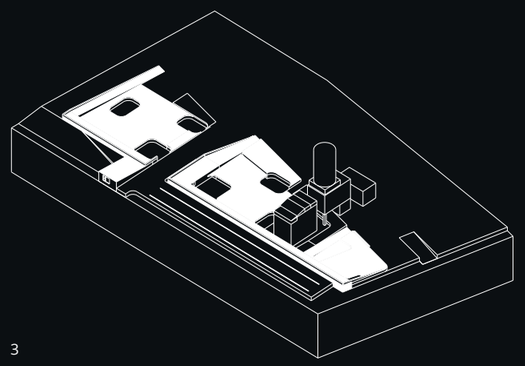

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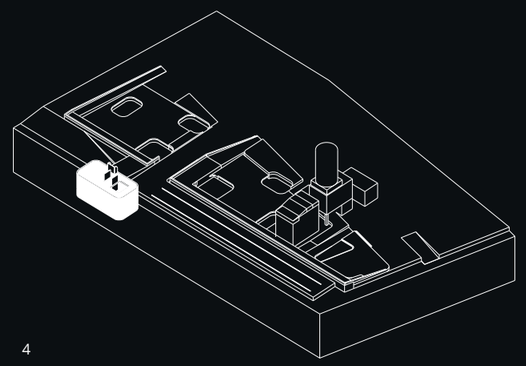

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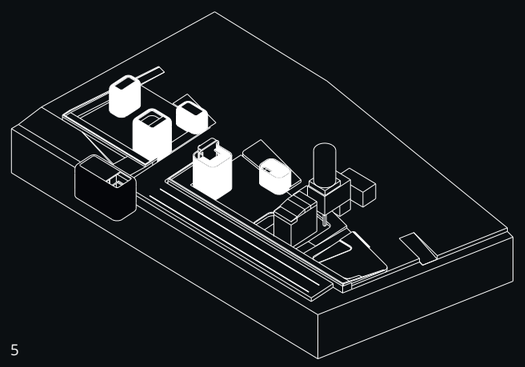

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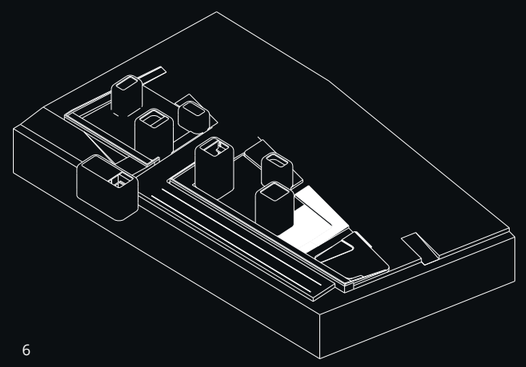
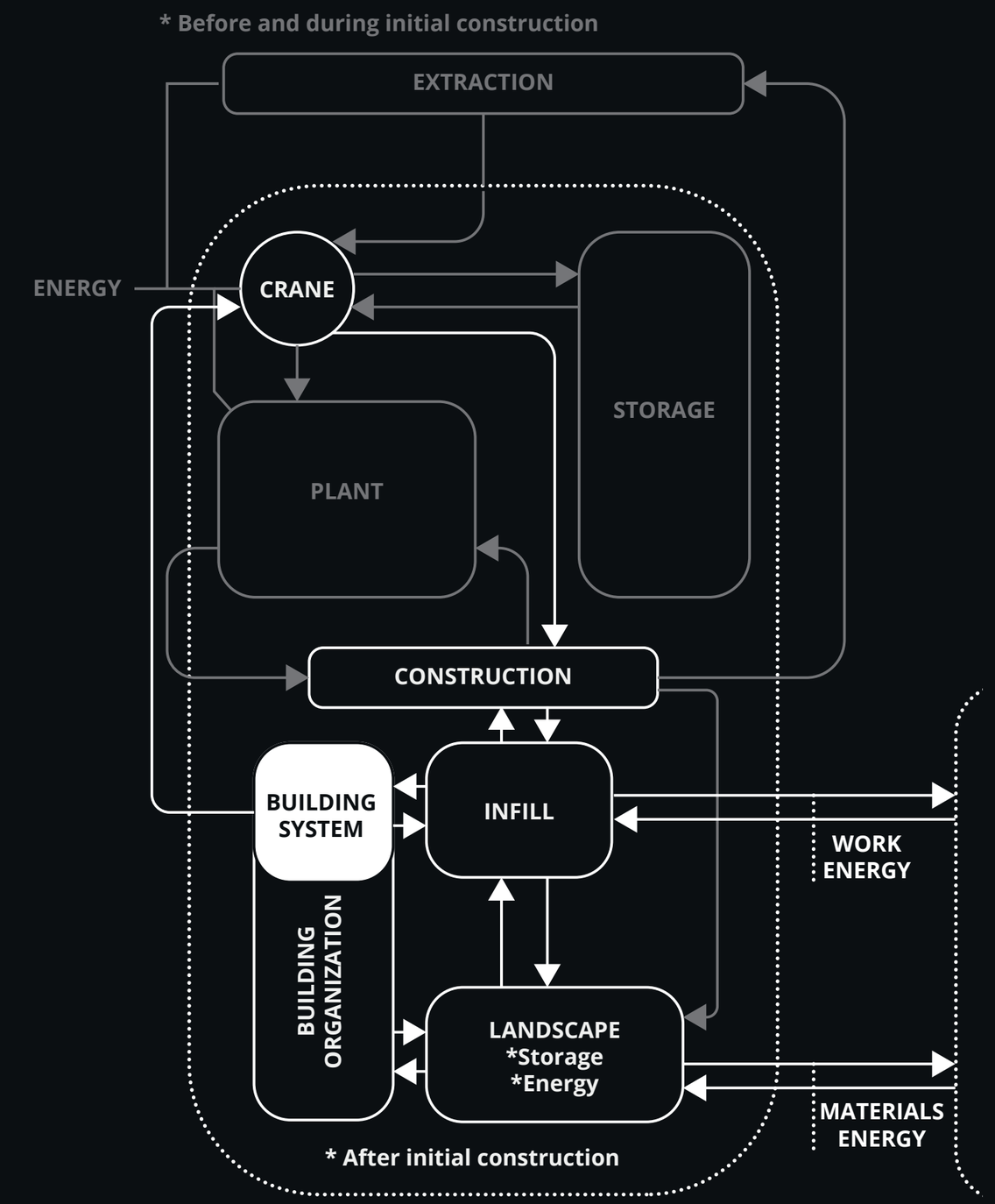


6

The construction process (1-6) of the landscape is an integral part of the approach to this site: the building functions as a plug-in to the existing system-environment of the site, that gradually spreads over the site and eventually takes the place of the concrete mill.

Plug-in approach



Organization

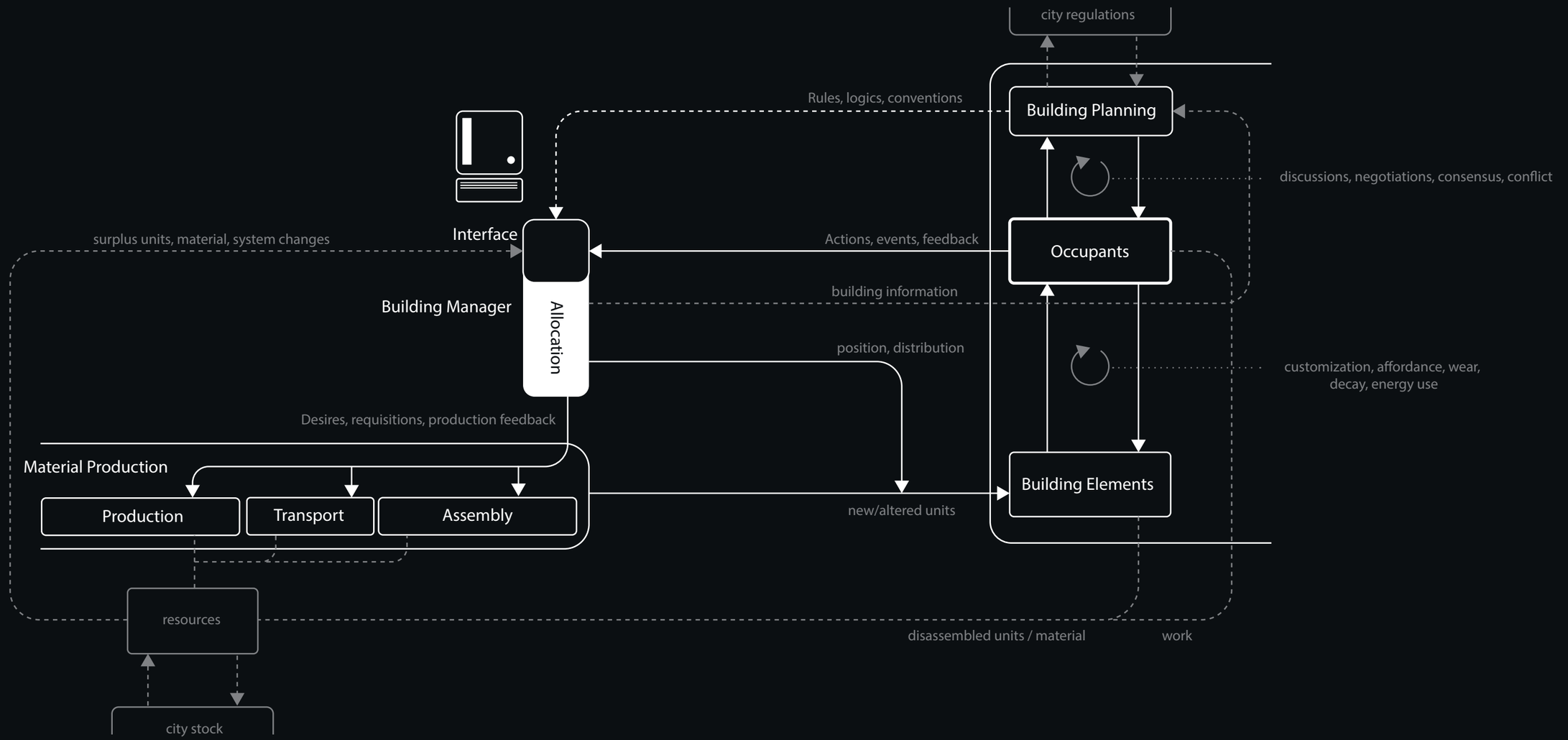
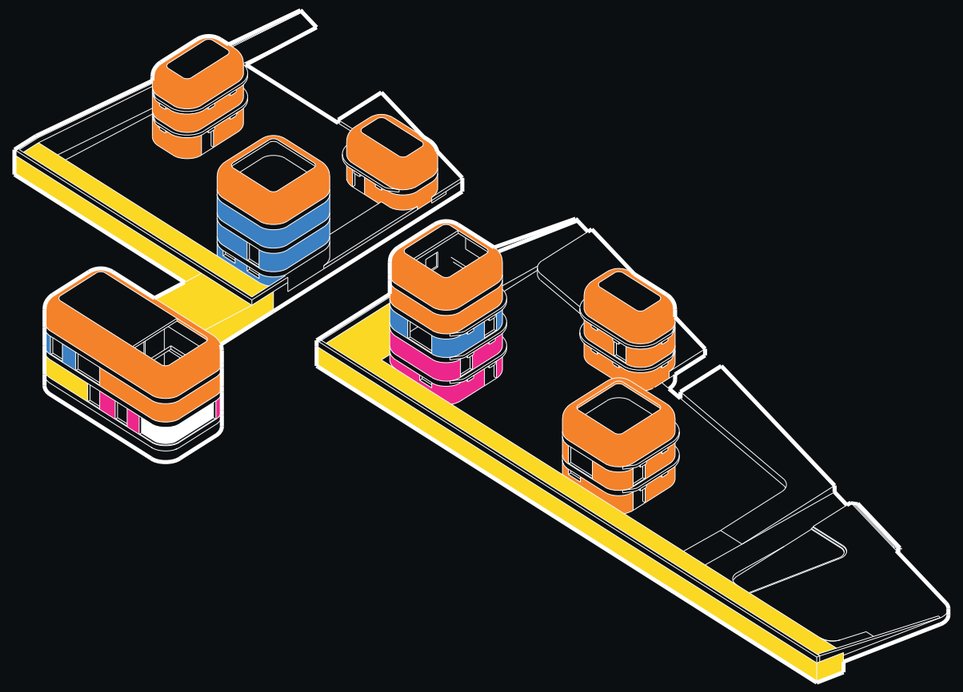


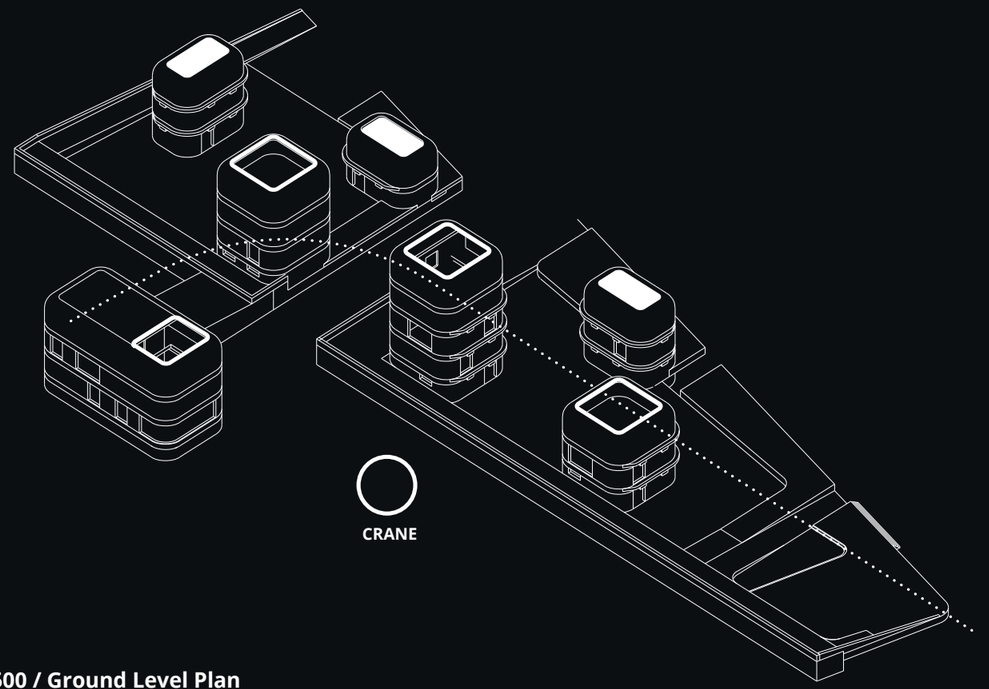
Diagram of the organizational structure for the cooperative on site.

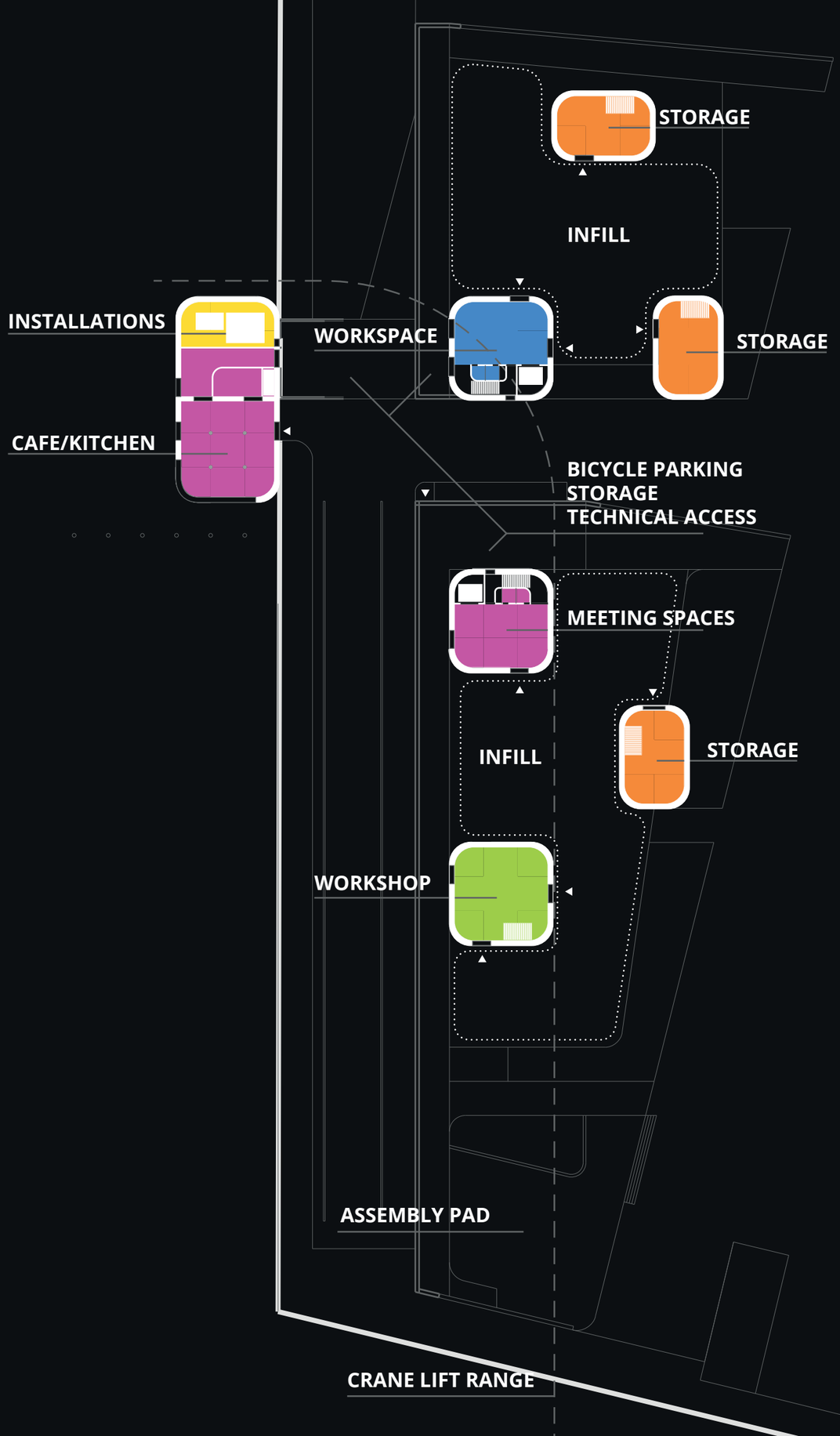
Use

Functional layers.



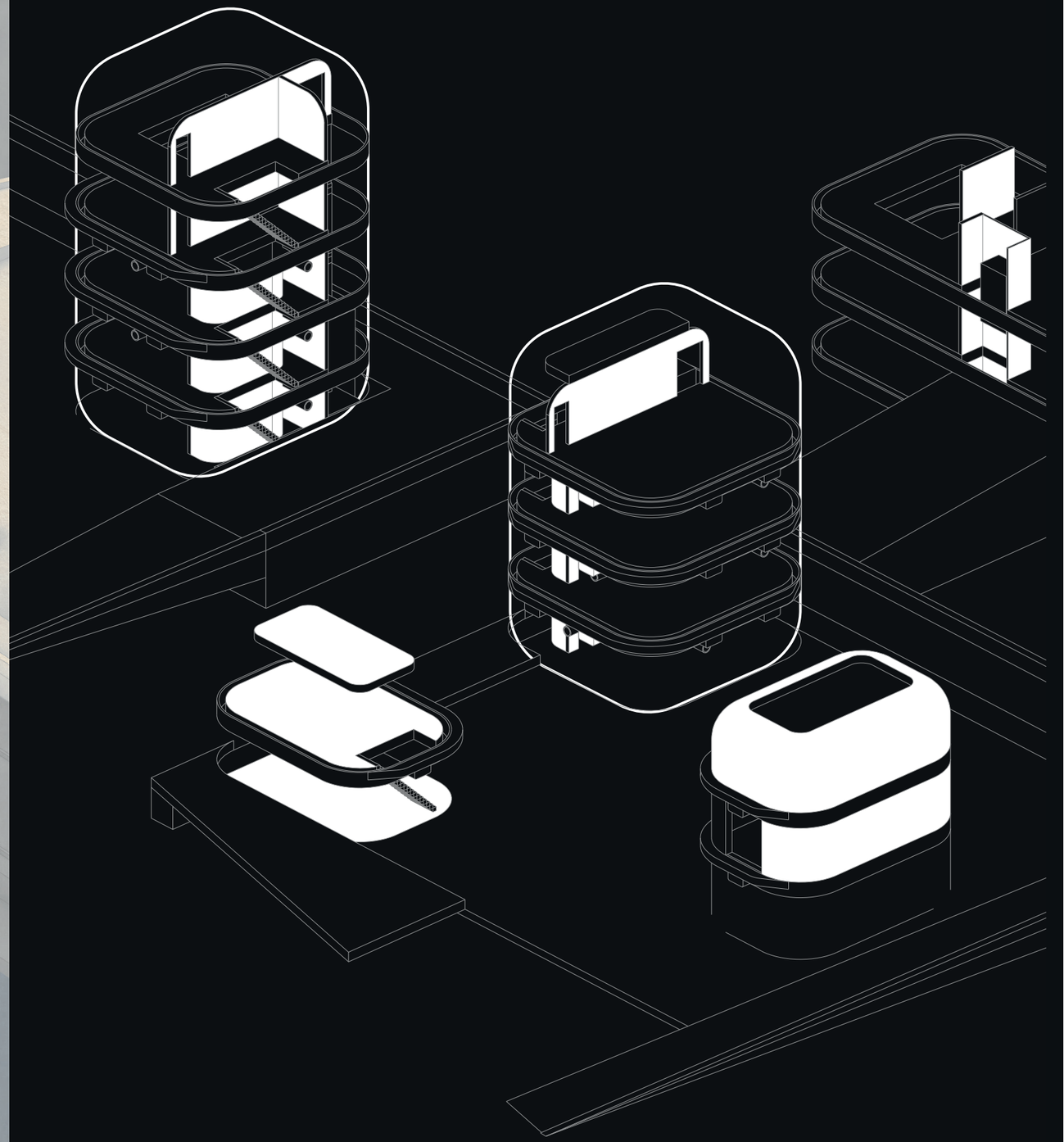
Crane access opening diagram.



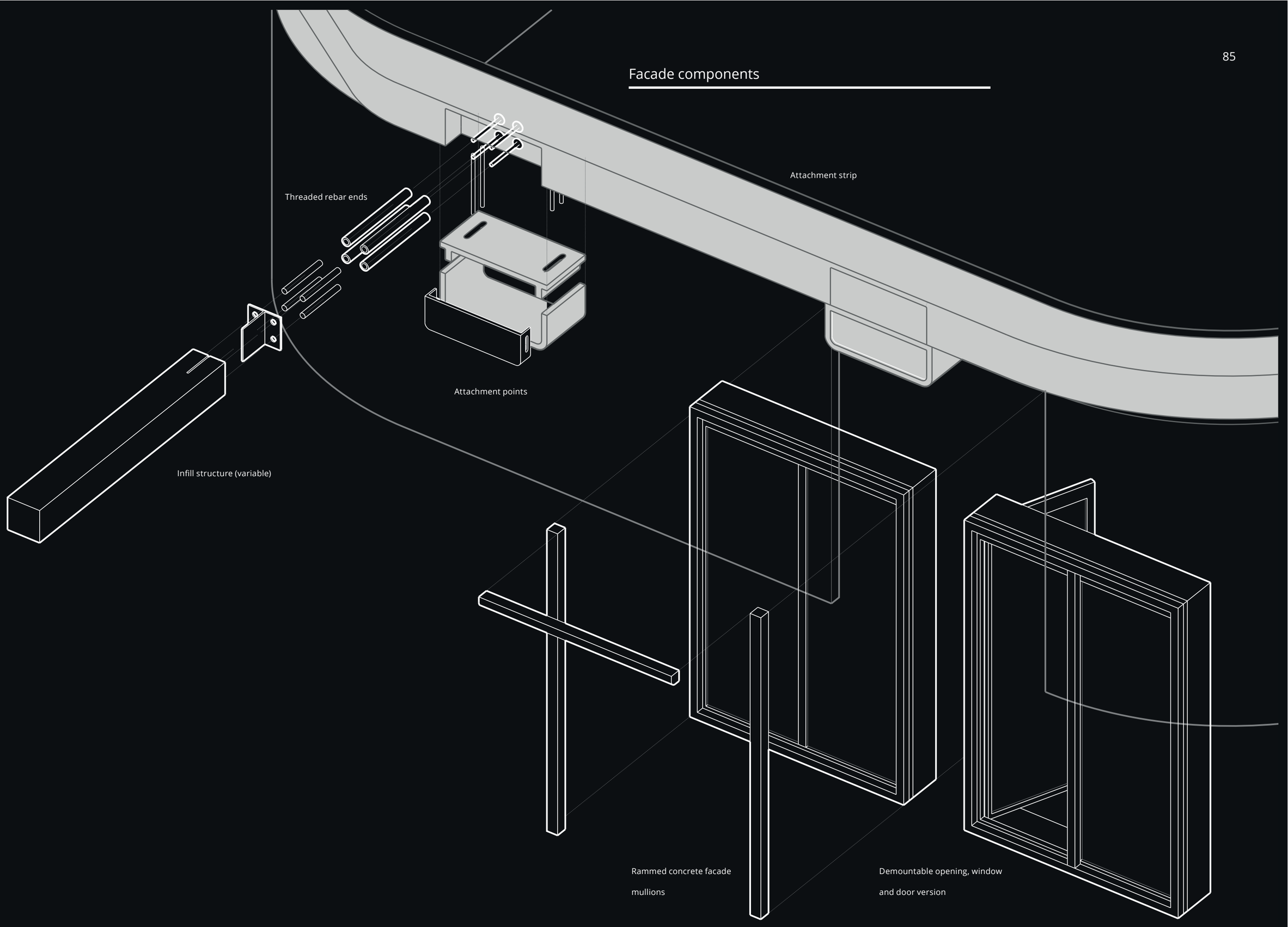


1 : 500 / Ground Level Plan

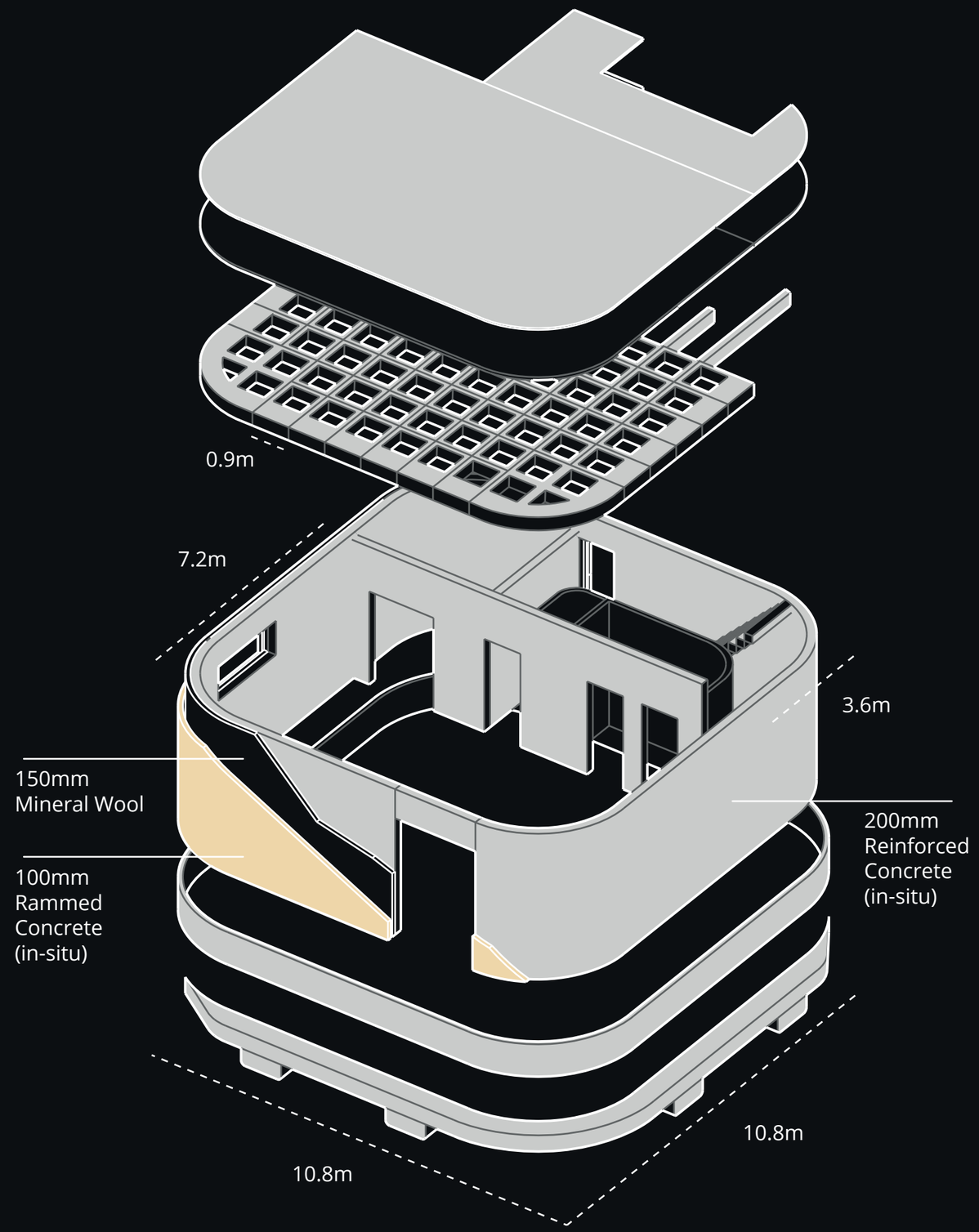
Structural elements



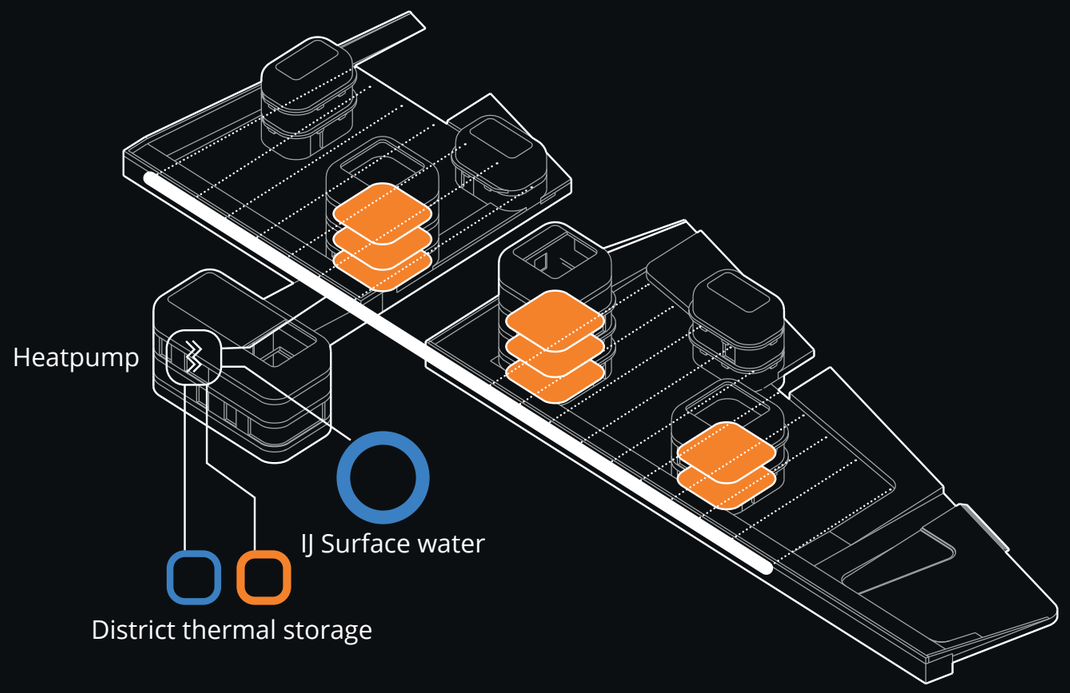
Facade components



Core build-up



Thermal system



Ventilation & insulated segments