

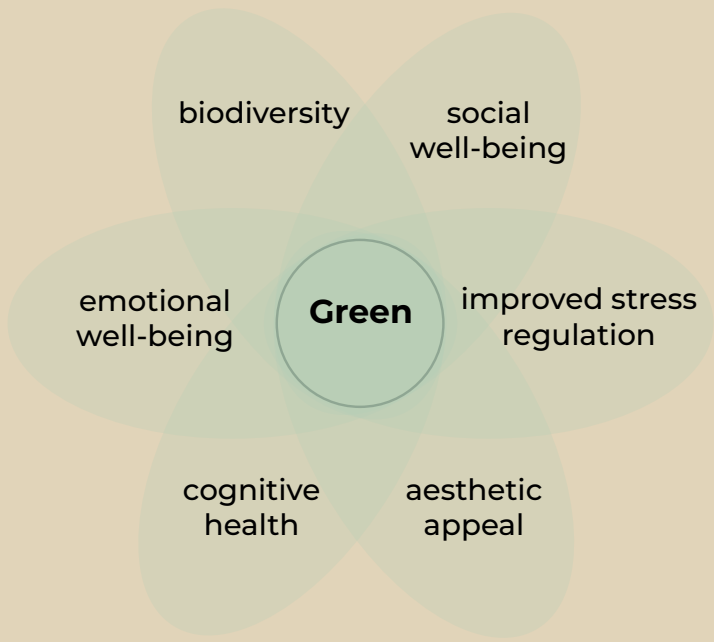
HARALDSHAVEN

DELFT UNIVERSITY OF TECHNOLOGY	ANTONIO CANTERO	GER WARRIES	SANG LEE
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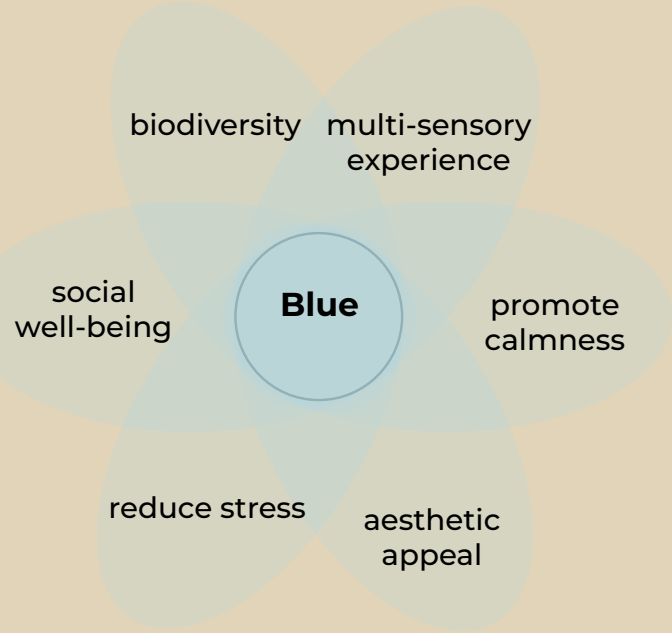
WHAT DOES YOUR CITY GIVES BACK TO YOU?

“33% OF COPENHAGEN YOUTH LIVES IN CHRONIC STRESS”

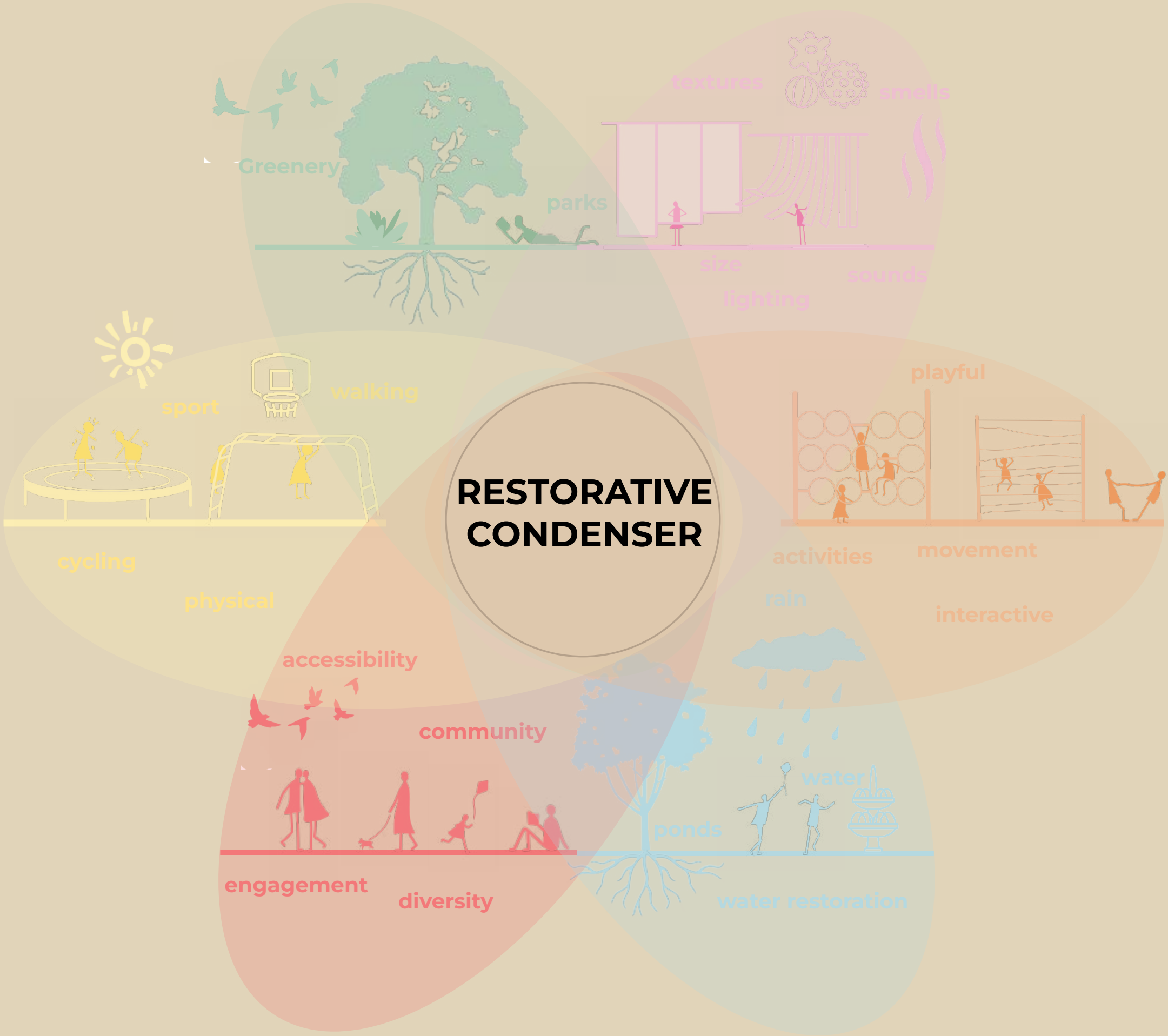
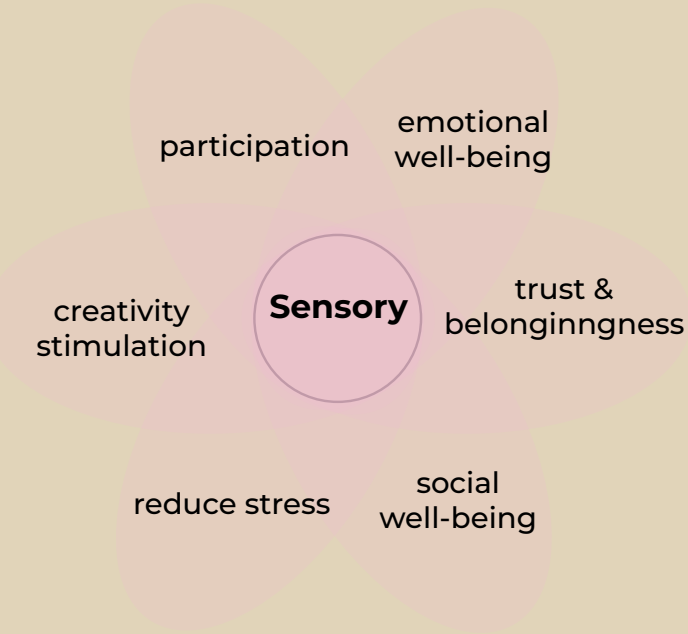
● User ● Spatial ● Environmental



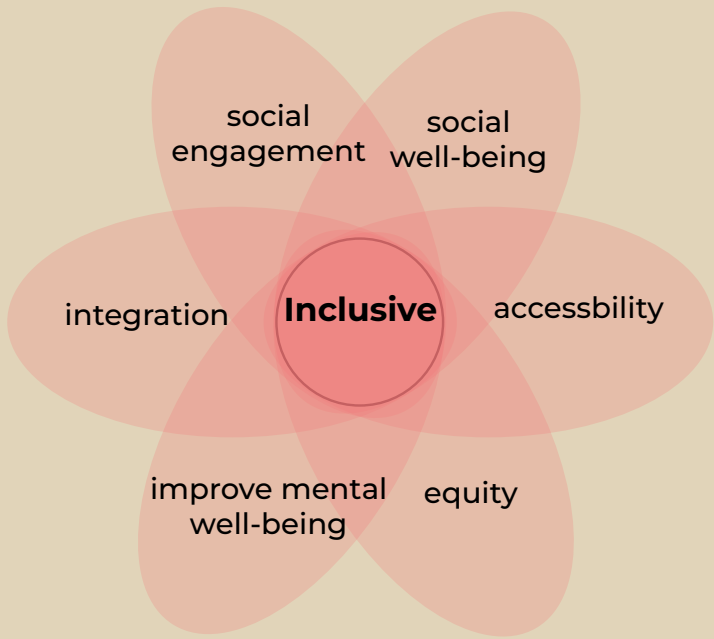
● User ● Spatial ● Environmental



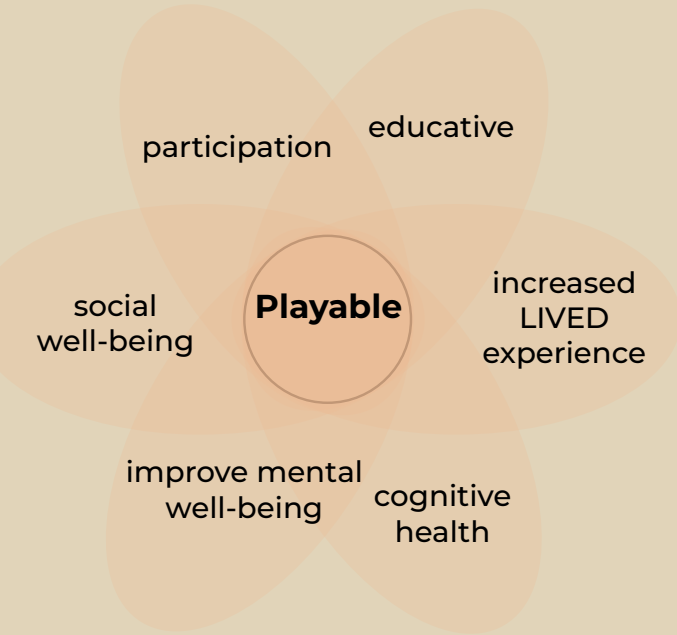
● User ● Spatial ● Environmental



● User ● Spatial



● User ● Spatial



● User ● Spatial ● Environmental



HARALDSHAVEN	THE SITE AS A MEMORY	26 JUN 2025
	<div data-bbox="969 333 1546 1478"><div>existing greenery</div><div>existing fauna & flora</div><div>air pollution</div><div>current parks evaluation</div><div>existing blue</div><div>raini analysis</div><div>flood analysis</div><div>water parks</div><div>soundscapes</div><div>smellscapes</div><div>visuals</div><div>textures</div><div>tactile elements</div><div>culinary integration</div><div>accessibilty &connectivity</div><div>active public spaces</div><div>play opportunities</div><div>inclusive opportunities</div><div>safety</div><div>demographics</div><div>cafes</div><div>safety</div><div>night/ day situations</div><div>walking opportunties</div><div>health facilities</div></div>	<div data-bbox="2645 891 3272 938"><div>what the site taught me</div></div>



GREEN



BLUE



SENSORY



ACTIVE



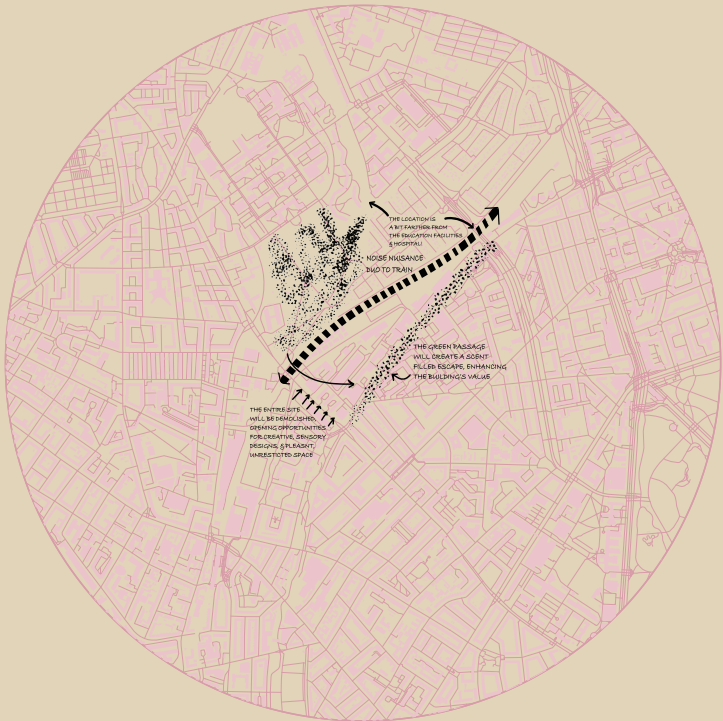
PLAYABLE



INCLUSIVE



Nørrebro: layered, loud, alive.



DESIGN MATRIX

DESIGN MATRIX

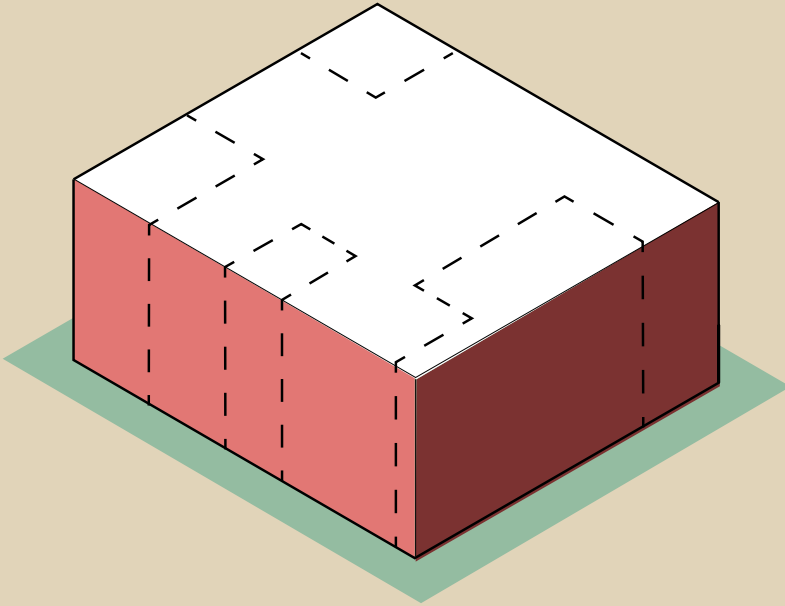
Design Framework for Restorative Architecture:
A Matrix for Enhancing Mental Well-Being

Design element	Greenery	Water	Sensory	Inclusive	Playable	Active
serene nature	★★★★	★★★★	★★★★	★★★★	★	★
30% tree cover	★★★★	★	★★★★	★	★	★
green view	★★★★	★	★★★★	★★★★	★	★
rich biodiversity	★★★★	★★★★	★★	★	★	★
climate adaptive	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★
green roofs & walls	★★★★	★★	★★	★★	★	★
moving water	★	★★★★	★★★★	★★	★★	★★

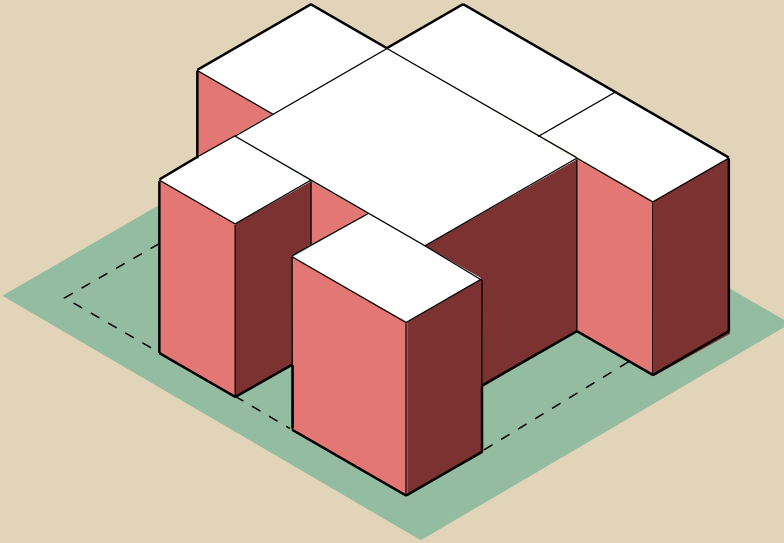
Evidence/ Justification	Priority level	Notes
A longitudinal Swedish study found that "serene" natural environments-characterized by tranquility and natural sounds such as birdsong-had the strongest positive impact on women's mental health over time (Van den Bosch et al., 2015, as cited in Roe & McCay, 2021).	High	Requires regular cleaning & maintenance
Tree cover of at least 30% was found to be more effective in reducing psychological distress compared to other types of urban greenery, such as grass (Astell-Burt & Feng, 2019, as cited in Roe & McCay, 2021). This indicates that incorporating diverse and complex vegetation typologies can enhance mental health outcomes	medium	Regular tree maintenance (e.g., trimming, monitoring health) is essential for safety and aesthetic quality.
Enhancing visual access to nature can have a meaningful impact on mental health. Examples include being able to see natural elements like inner courtyards or tree-lined avenues from windows (Gilchrist et al., 2015; Pretty et al., 2005; Vemuri et al., 2011).	high	Requires spatial allocation
A study revealed that psychological well-being is positively linked to biodiversity indicators, such as the richness of plant and animal species, regardless of factors like age, gender, or ethnicity (Wood et al., 2018, as cited in Roe & McCay, 2021).	medium	Requires ecological diversity enhancement.
A design that mitigates heat stress, provides shade, and offers protection from heavy rain ensures usability throughout the year. Incorporating features such as shelters, outdoor heating, and cooling systems enhances year-round accessibility to green spaces, promoting inclusivity and mental well-being.	high	Add shaded seating and weather protection to ensure year-round usability.
Enhances biodiversity, improve air quality, and provide visual relief, particularly in dense urban areas. (Roe & McCay, 2021)	high	High installation and maintenance costs.
Interacting with moving water, such as crashing waves , waterfalls, or fountains sparks high levels of fascination, curiosity, and engagement. Its dynamic and multisensory nature promotes attention restoration and helps reduce stress (Roe & McCay, 2021).	low	Maintain constant water flow to avoid stagnation.

DESIGNING FROM EVIDENCE

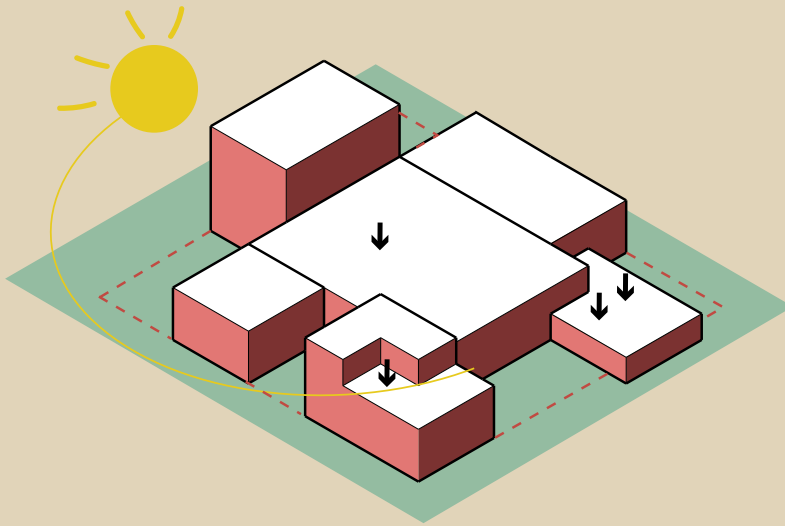
A BUILDING THAT CONDENSES CARE!



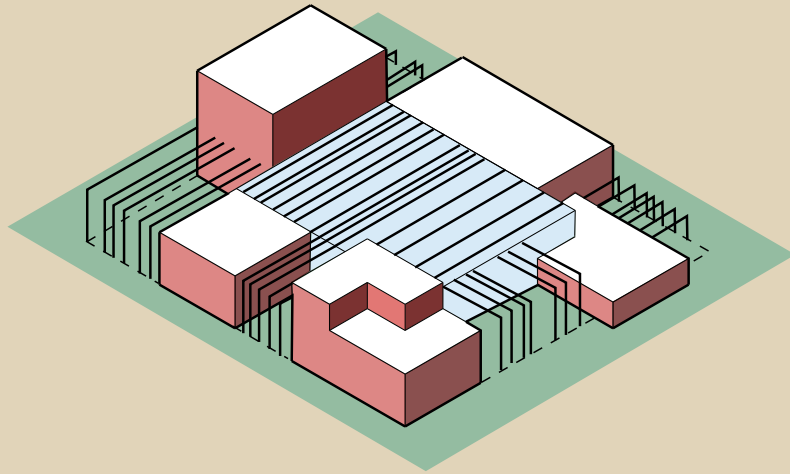
a silent mass,
unaware of its context



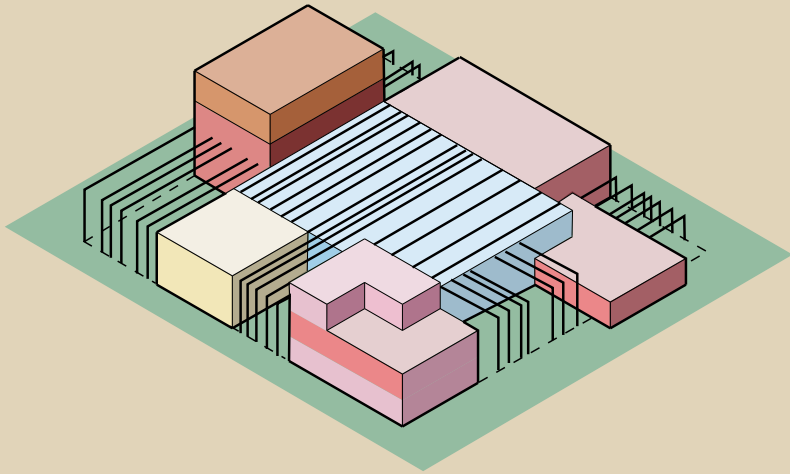
carved open to welcome
access & light



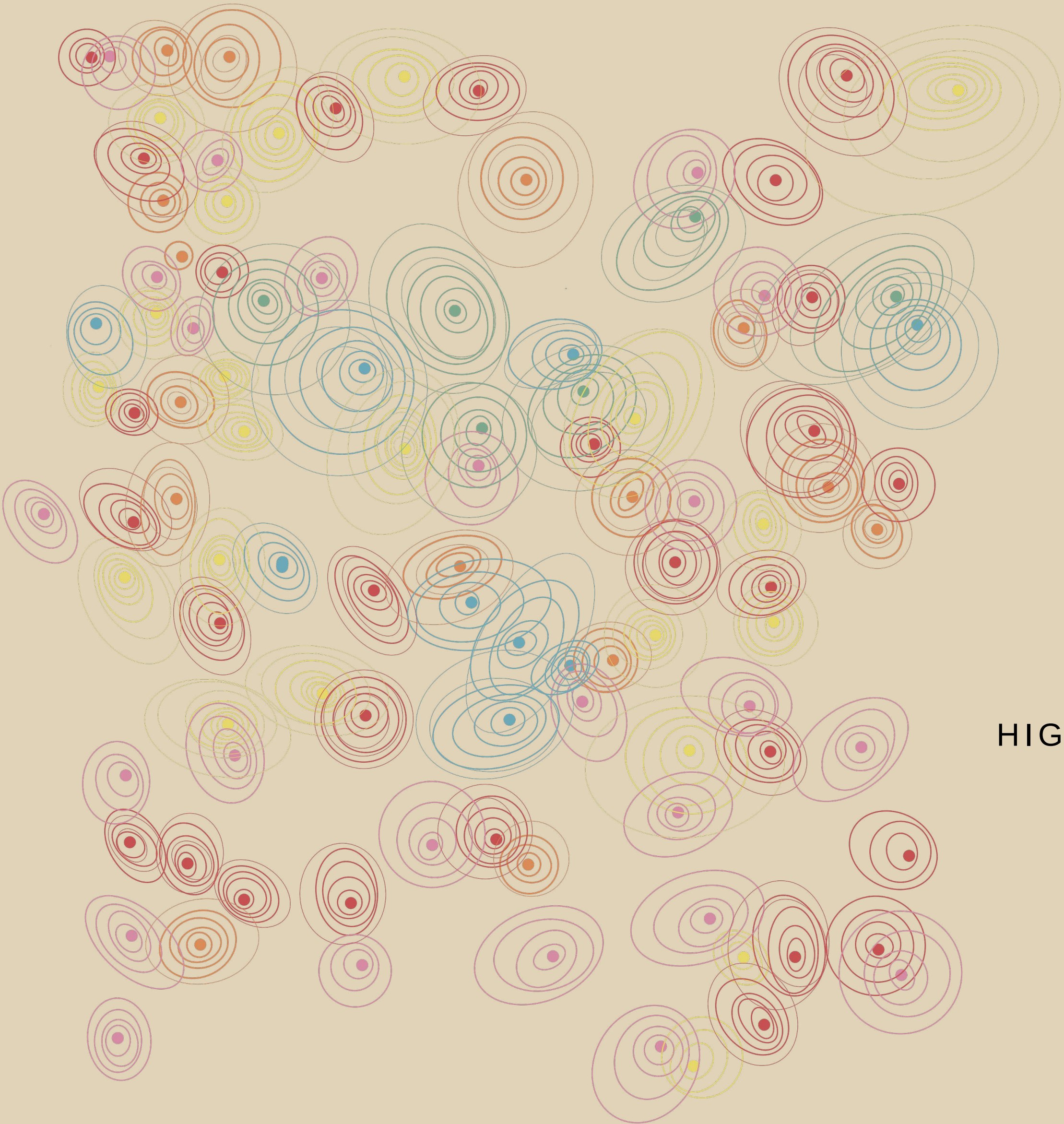
a heart space invites
light, people, & air



shading, vegetation,
& porosity define
edges



a hybrid building that
condenses care



HIGHS TO PLAY, LOWS TO REST

comfort
peace

●

tranquility
stillness

●

joy
curiosity

●

safety
belonging

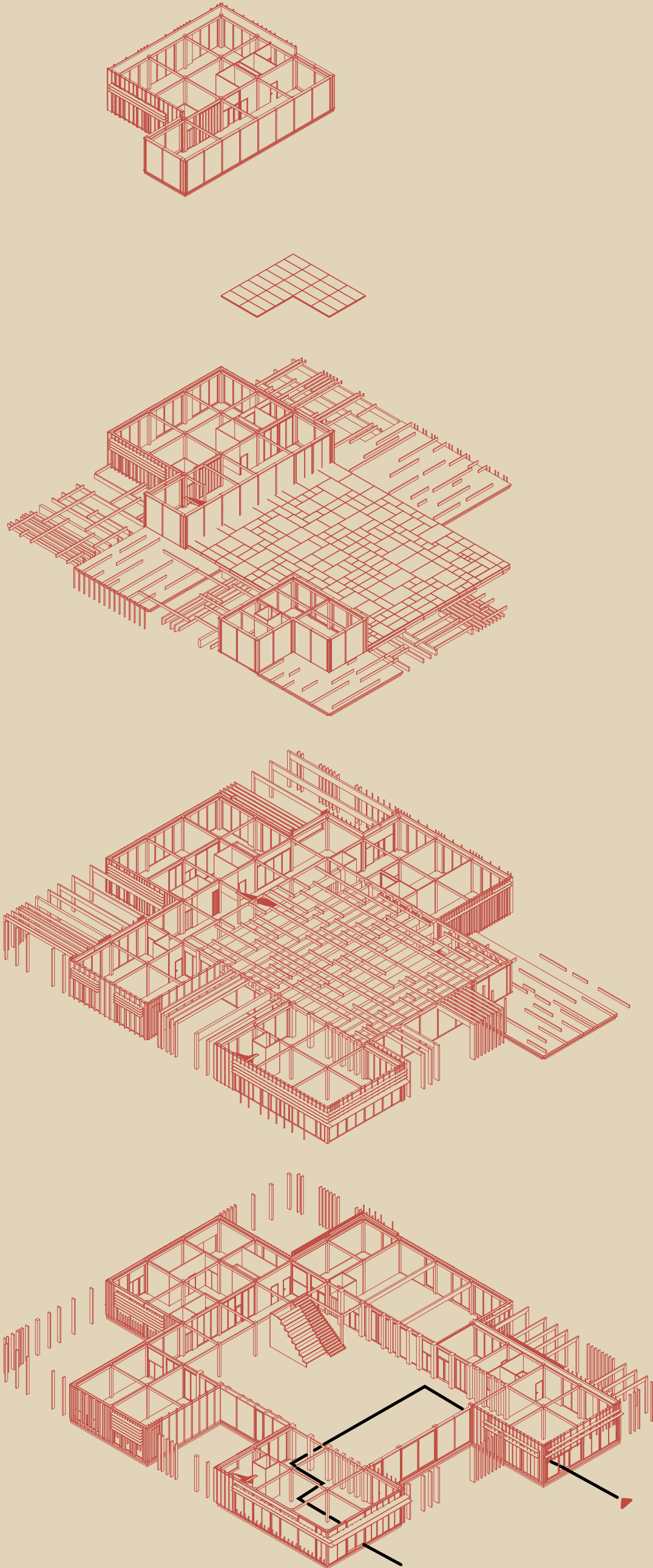
●

motivation
excitment

●

creativity
spontaneity

●



ATRIUM ECOSYSTEM

Asian										
Japanese Maple		sun/shade	edible	flower	scent	colorful	humid/dry	small/big roots	habitat	
Camellia		sun/shade		flower		colorful	humid/dry	small/big roots	habitat	
Cornus kousa		sun/shade	edible	flower		colorful	humid/dry	small/big roots	habitat	
Azalea		sun/shade		flower		colorful	humid/dry	small/big roots	habitat	
Ferns		sun/shade				colorful	humid/dry	small/big roots	habitat	
Hostas		sun/shade		flower		colorful	humid/dry	small/big roots	habitat	
Moss		sun/shade				colorful	humid/dry	small/big roots	habitat	

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Tropical										
Traveller's Palm		sun/shade	edible	flower	scent	colorful	humid/dry	small/big roots	habitat	
Jacaranda		sun/shade		flower		colorful	humid/dry	small/big roots	habitat	
Royal Poinciana		sun/shade		flower		colorful	humid/dry	small/big roots	habitat	
Bird of Paradise		sun/shade		flower		colorful	humid/dry	small/big roots	habitat	
Philodendron Xanadu		sun/shade				colorful	humid/dry	small/big roots	habitat	
Alcornoque		sun/shade				colorful	humid/dry	small/big roots	habitat	
Heliconia rostrata		sun/shade		flower		colorful	humid/dry	small/big roots	habitat	

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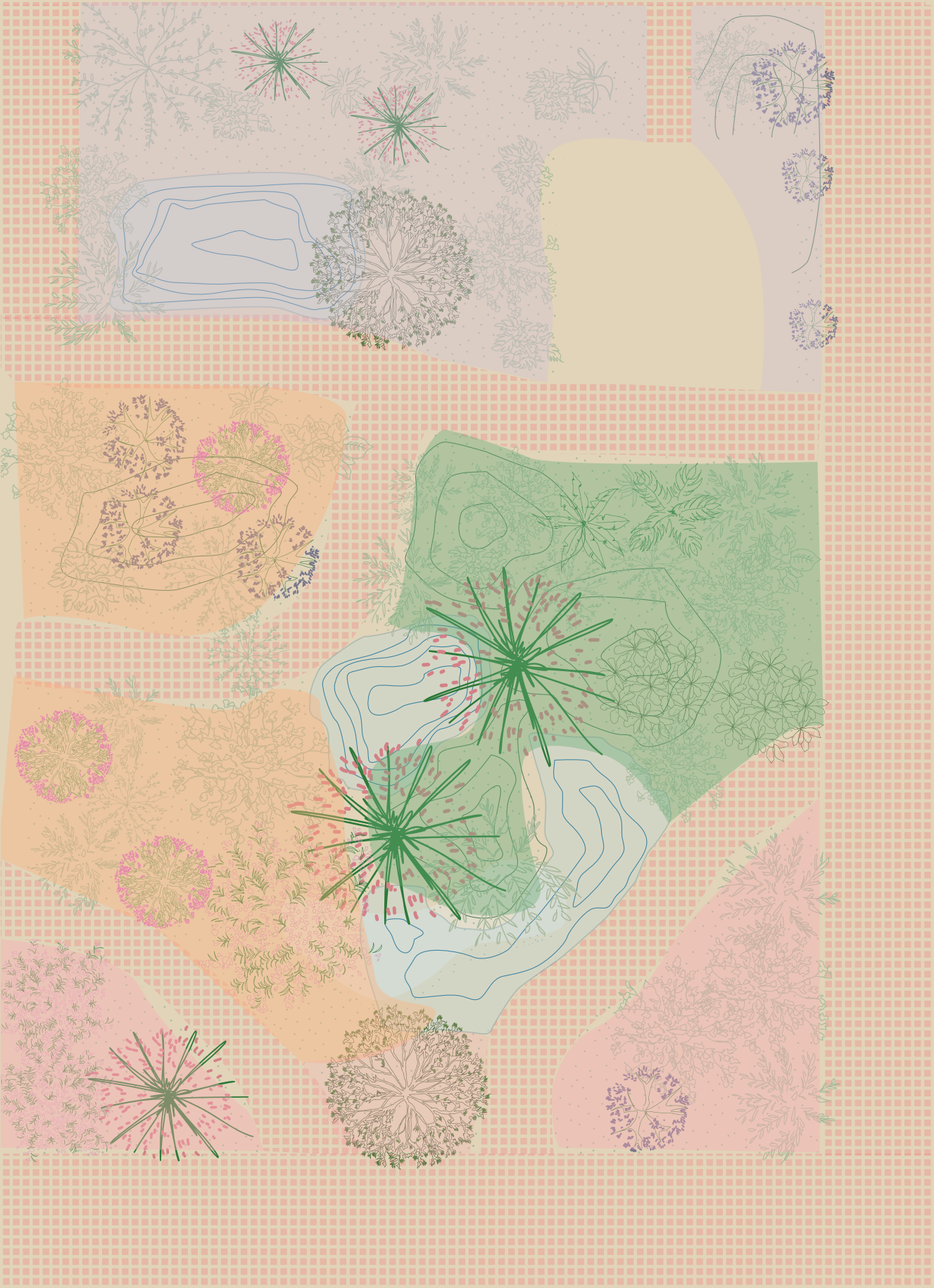
Mediterranean										
Olive tree		sun/shade	edible	flower	scent	colorful	humid/dry	small/big roots	habitat	
Carob tree		sun/shade	edible	flower		colorful	humid/dry	small/big roots	habitat	
Pomegranate		sun/shade	edible	flower		colorful	humid/dry	small/big roots	habitat	
Rosemary		sun/shade	edible	flower		colorful	humid/dry	small/big roots	habitat	
Thyme		sun/shade	edible	flower		colorful	humid/dry	small/big roots	habitat	
Lavender		sun/shade		flower		colorful	humid/dry	small/big roots	habitat	
Sedum spurium		sun/shade		flower		colorful	humid/dry	small/big roots	habitat	

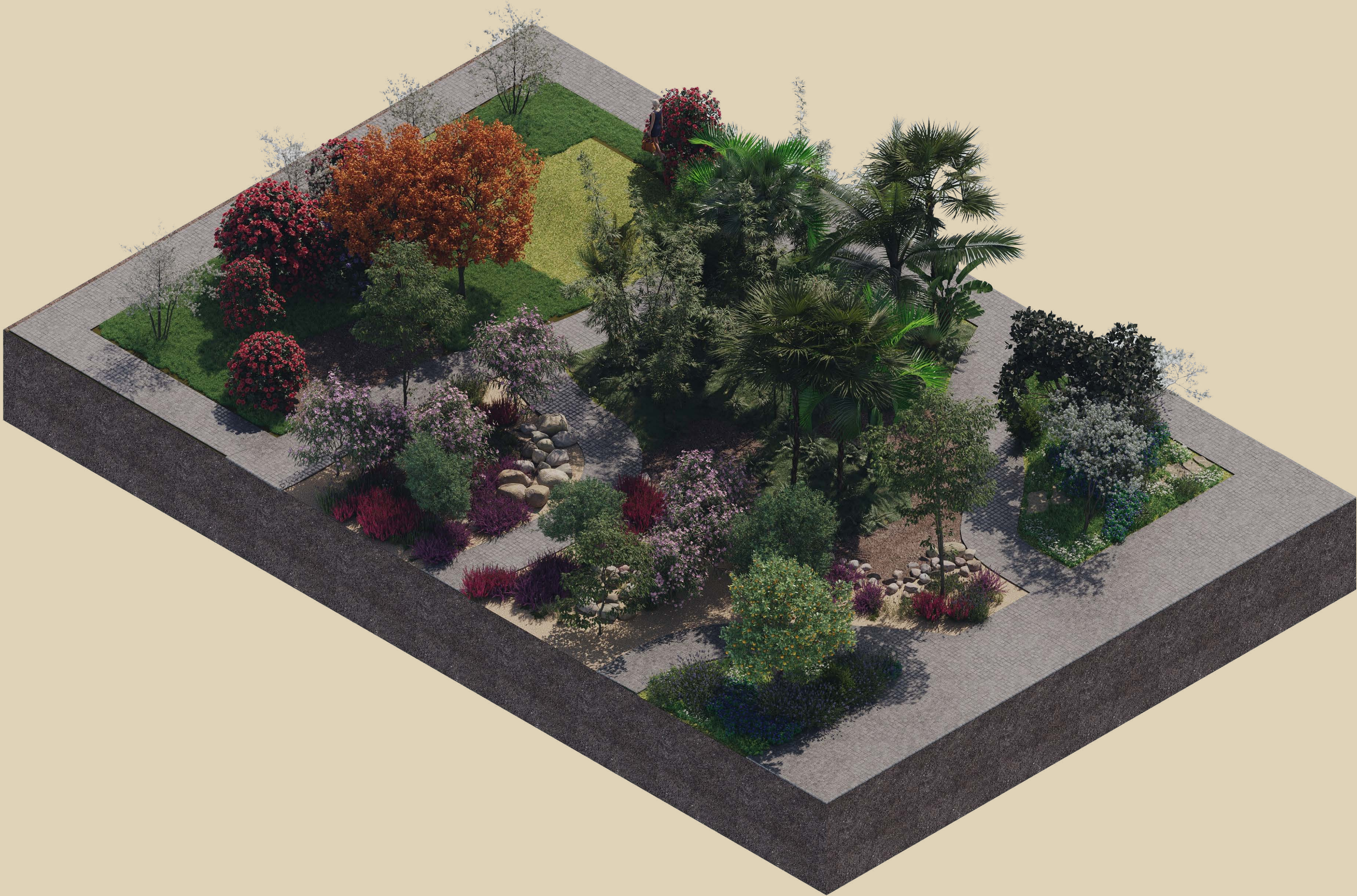
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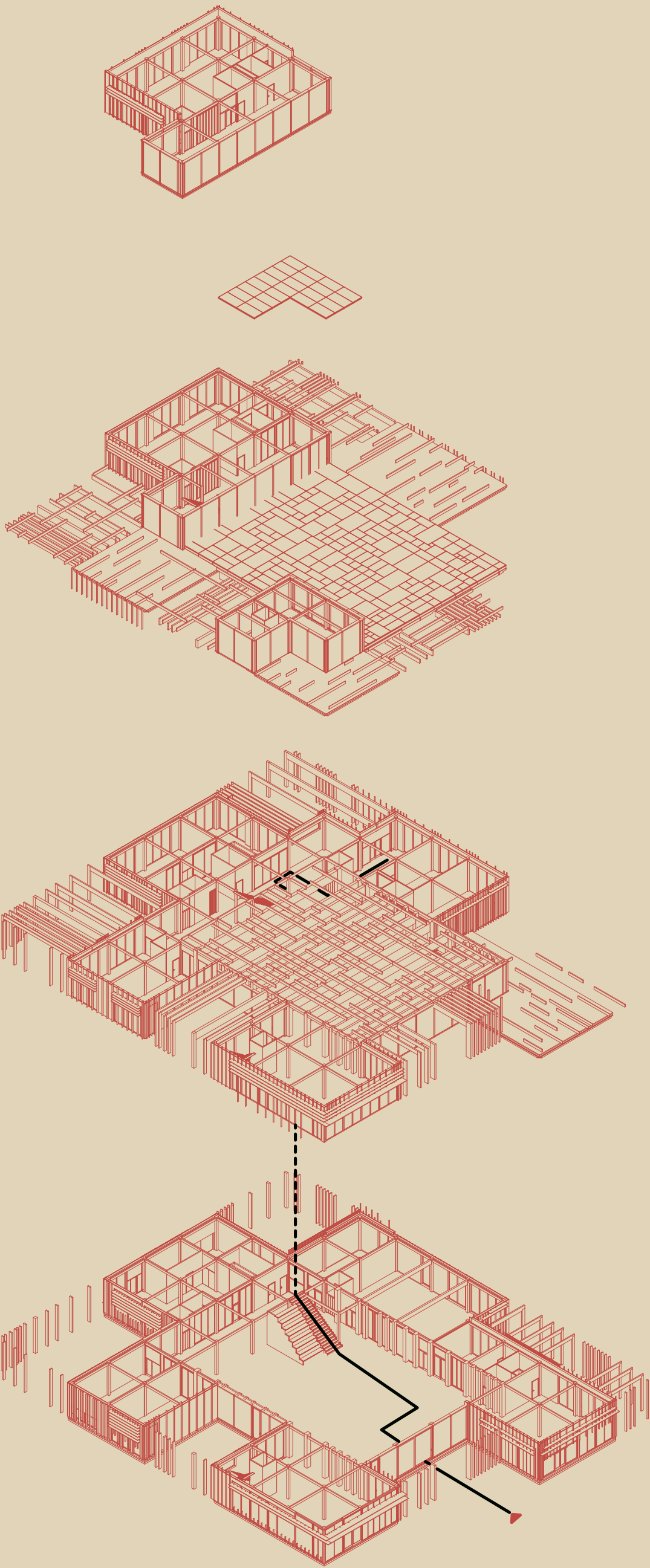
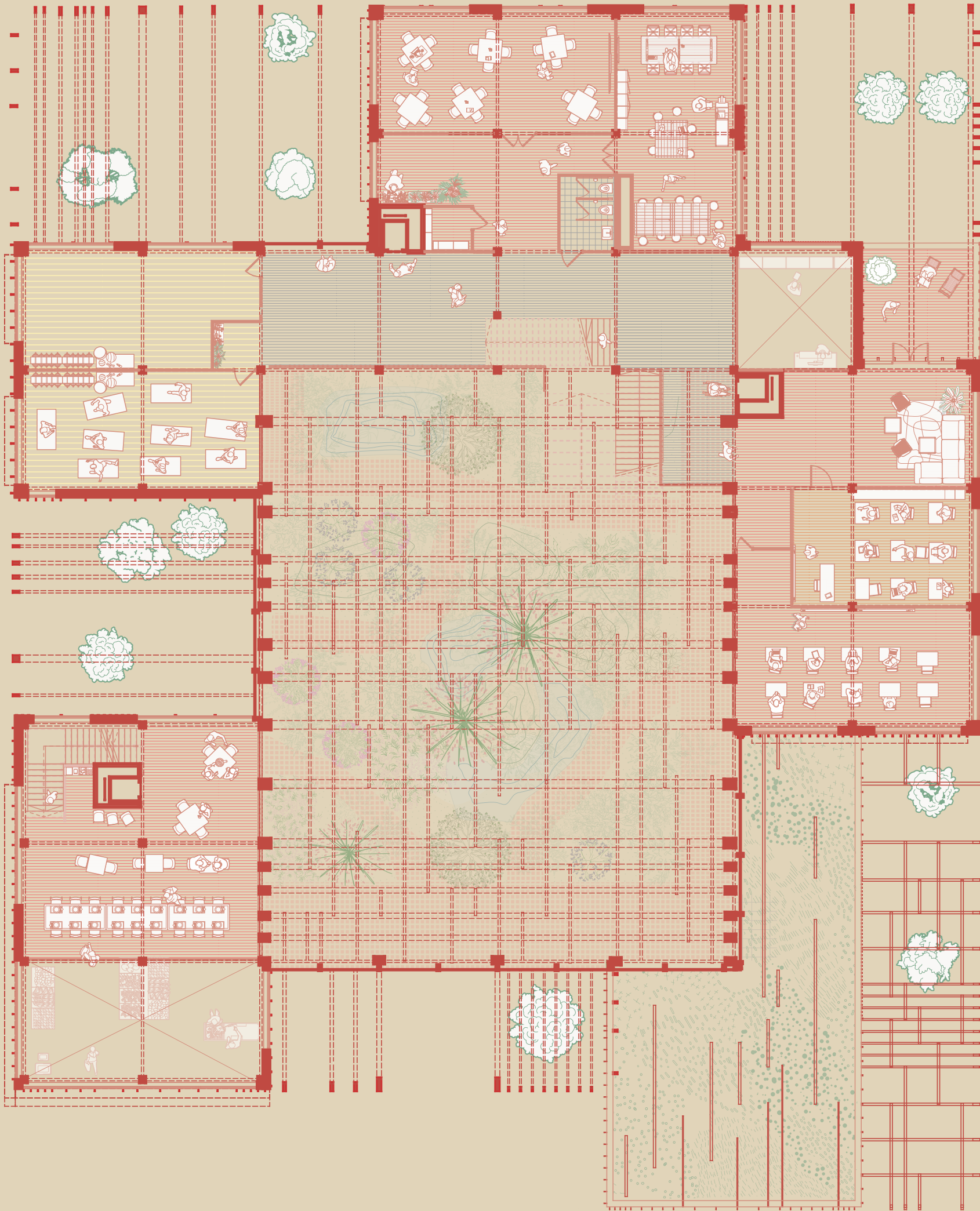
Edible/ sensory										
Serviceberry		sun/shade	edible	flower	scent	colorful	humid/dry	small/big roots	habitat	
Meyer Lemon		sun/shade	edible	flower		colorful	humid/dry	small/big roots	habitat	
Strawberry guava		sun/shade	edible	flower		colorful	humid/dry	small/big roots	habitat	
Feijoa		sun/shade	edible	flower		colorful	humid/dry	small/big roots	habitat	
Wild strawberry		sun/shade	edible	flower		colorful	humid/dry	small/big roots	habitat	
Viola odorata		sun/shade	edible	flower		colorful	humid/dry	small/big roots	habitat	
Pearlwort (Scented Geranium)		sun/shade		flower		colorful	humid/dry	small/big roots	habitat	

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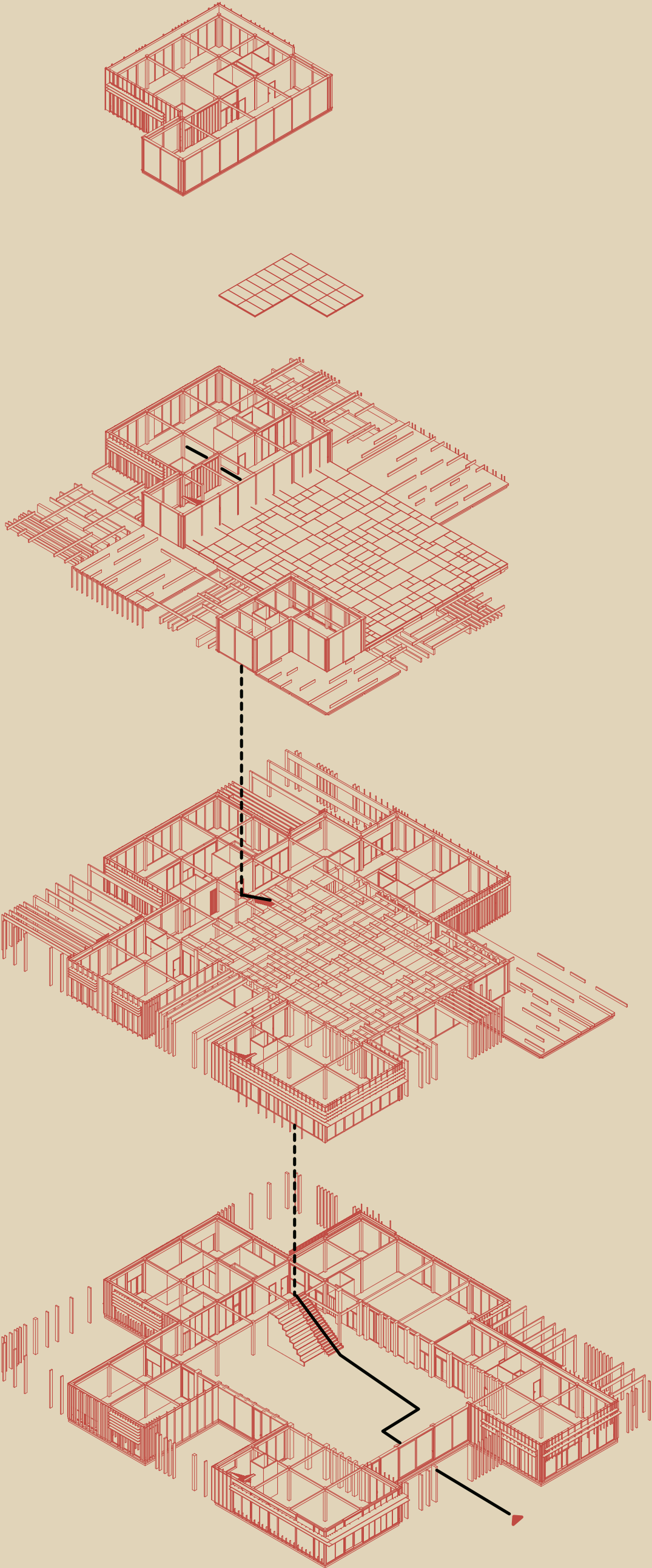
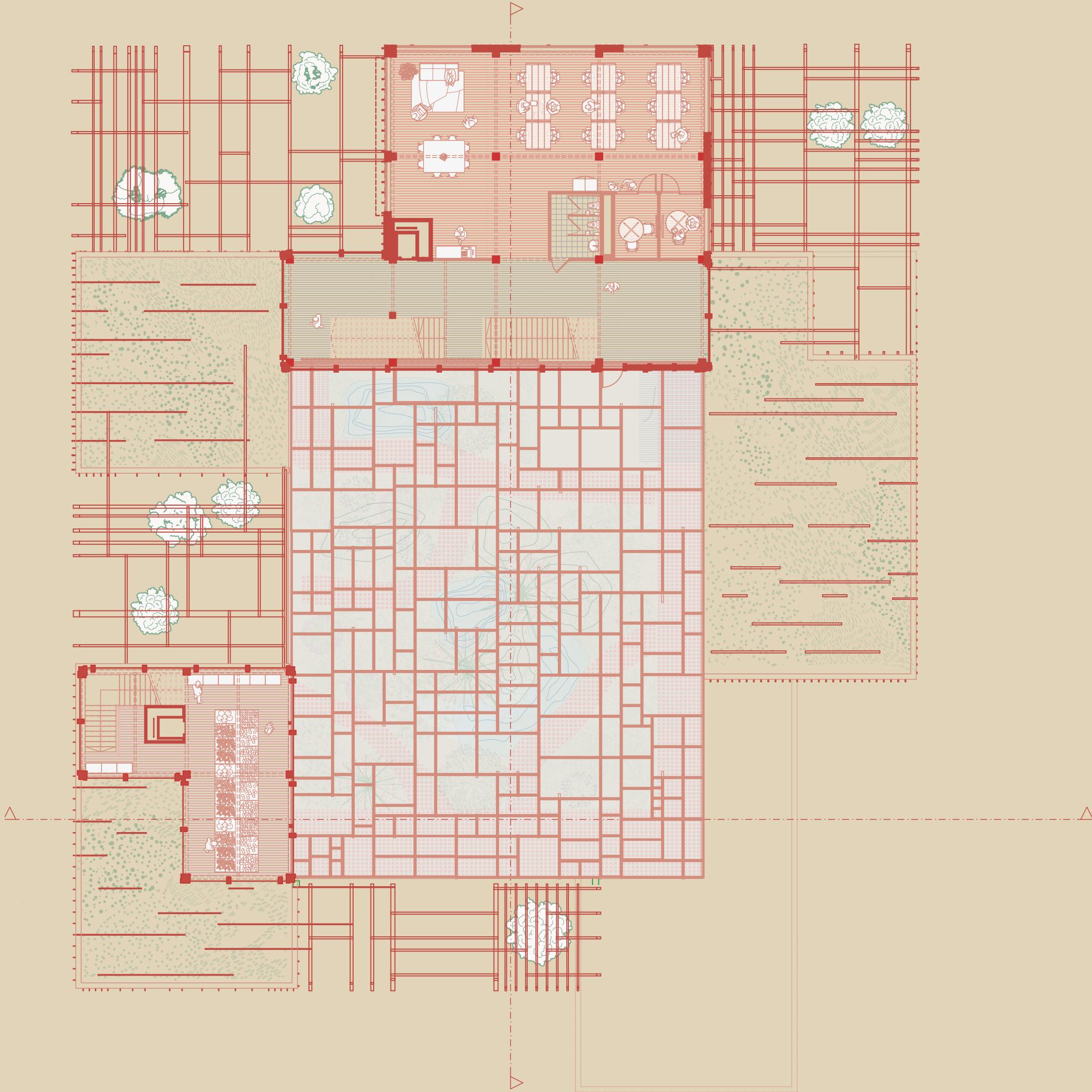




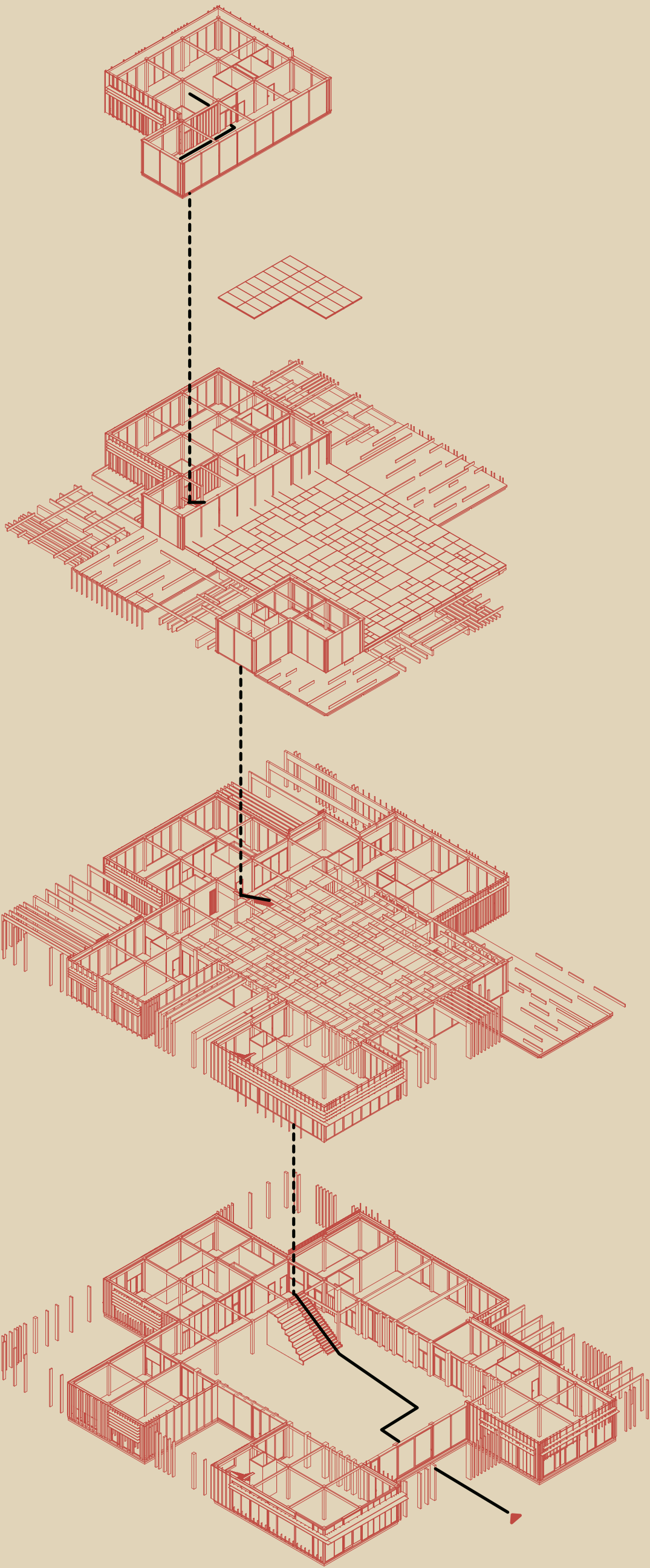
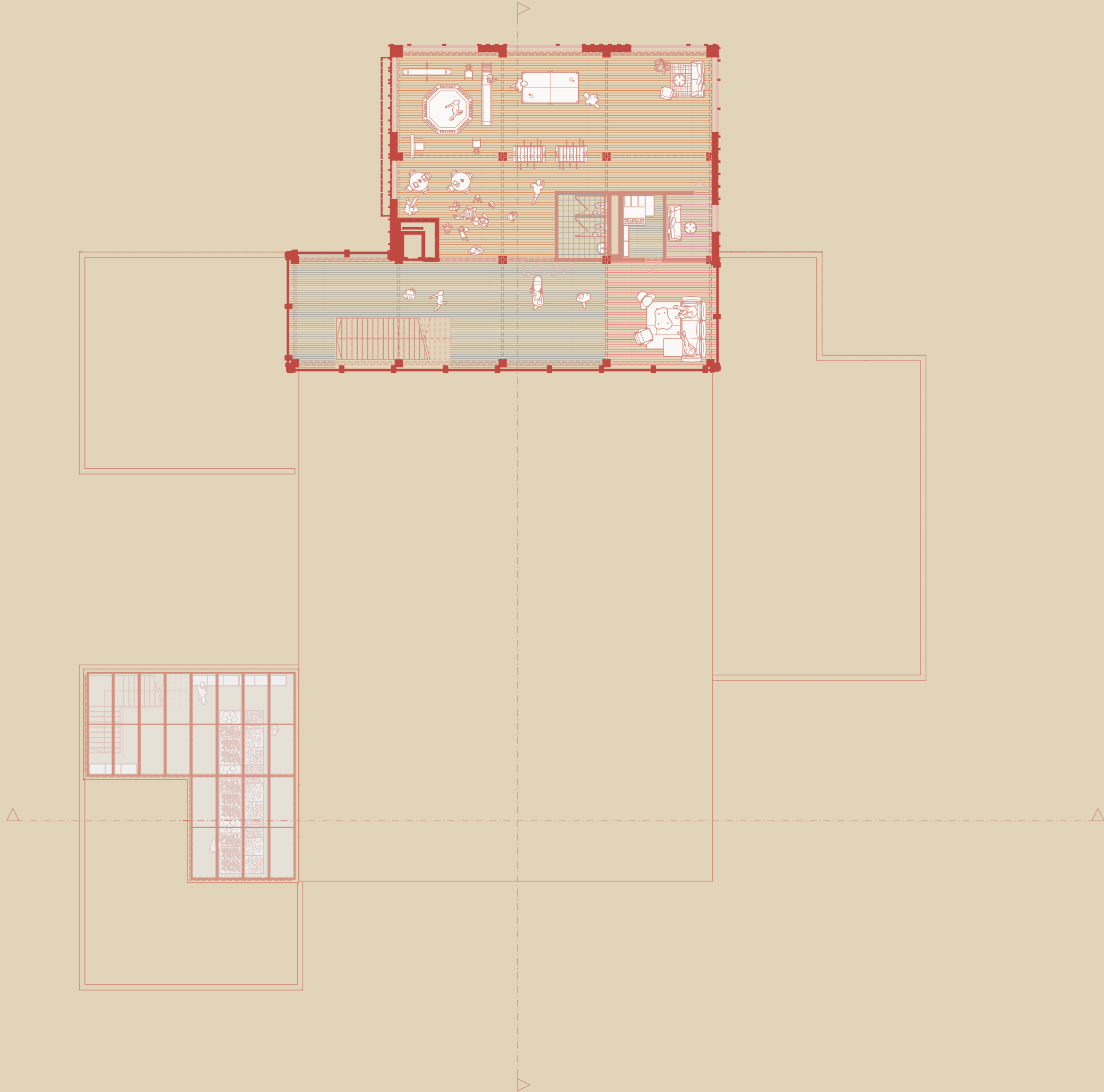




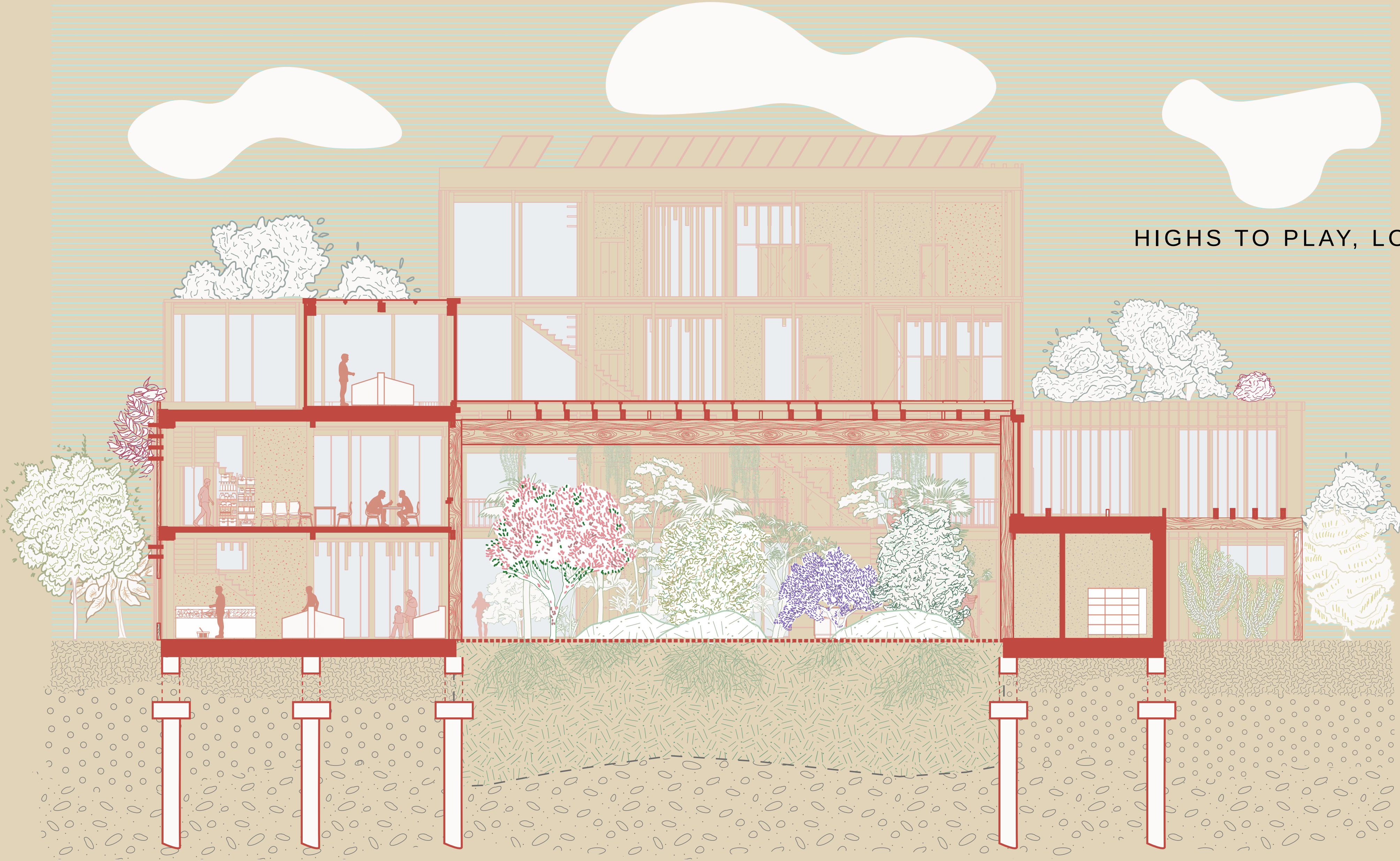




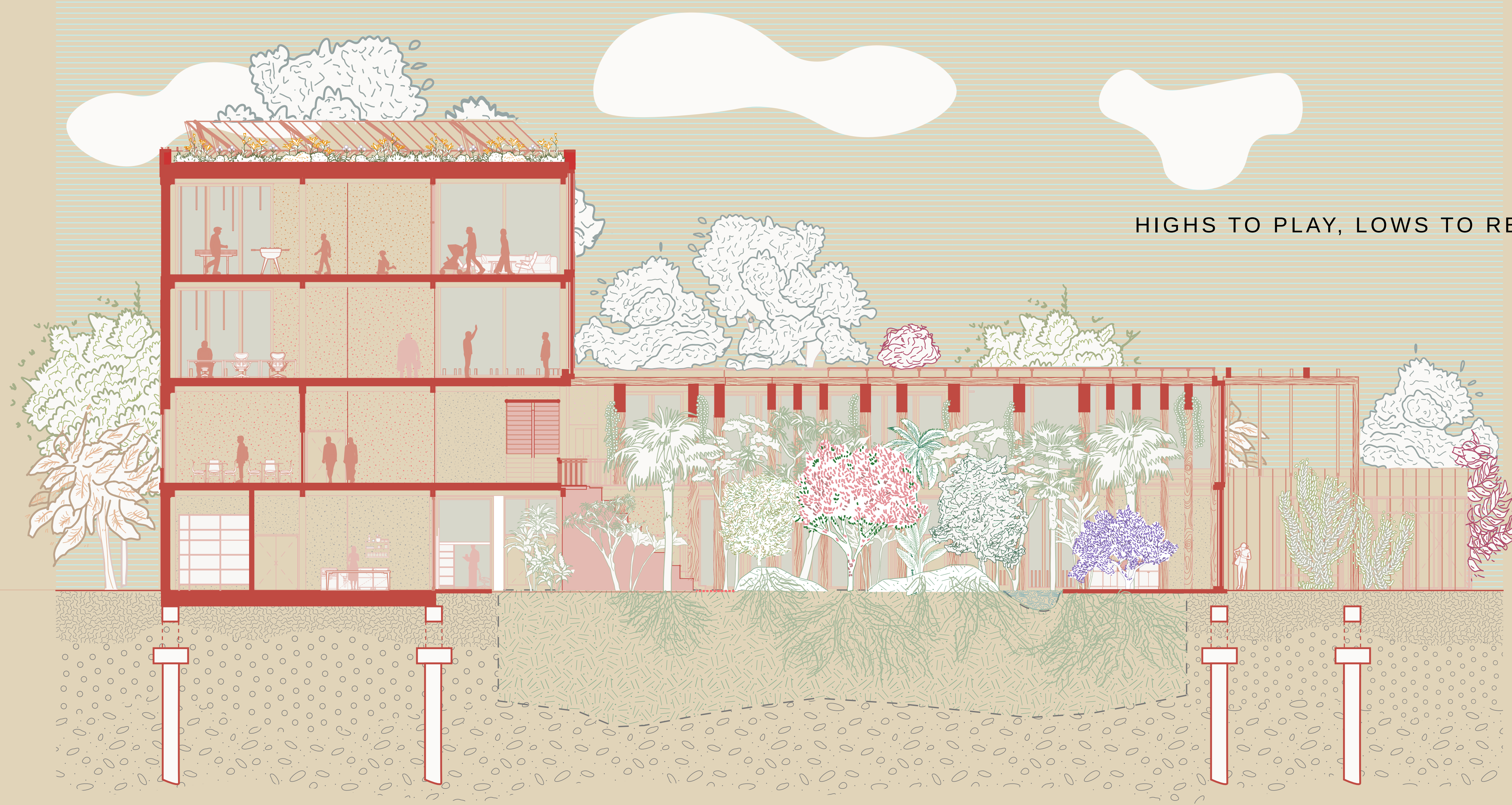




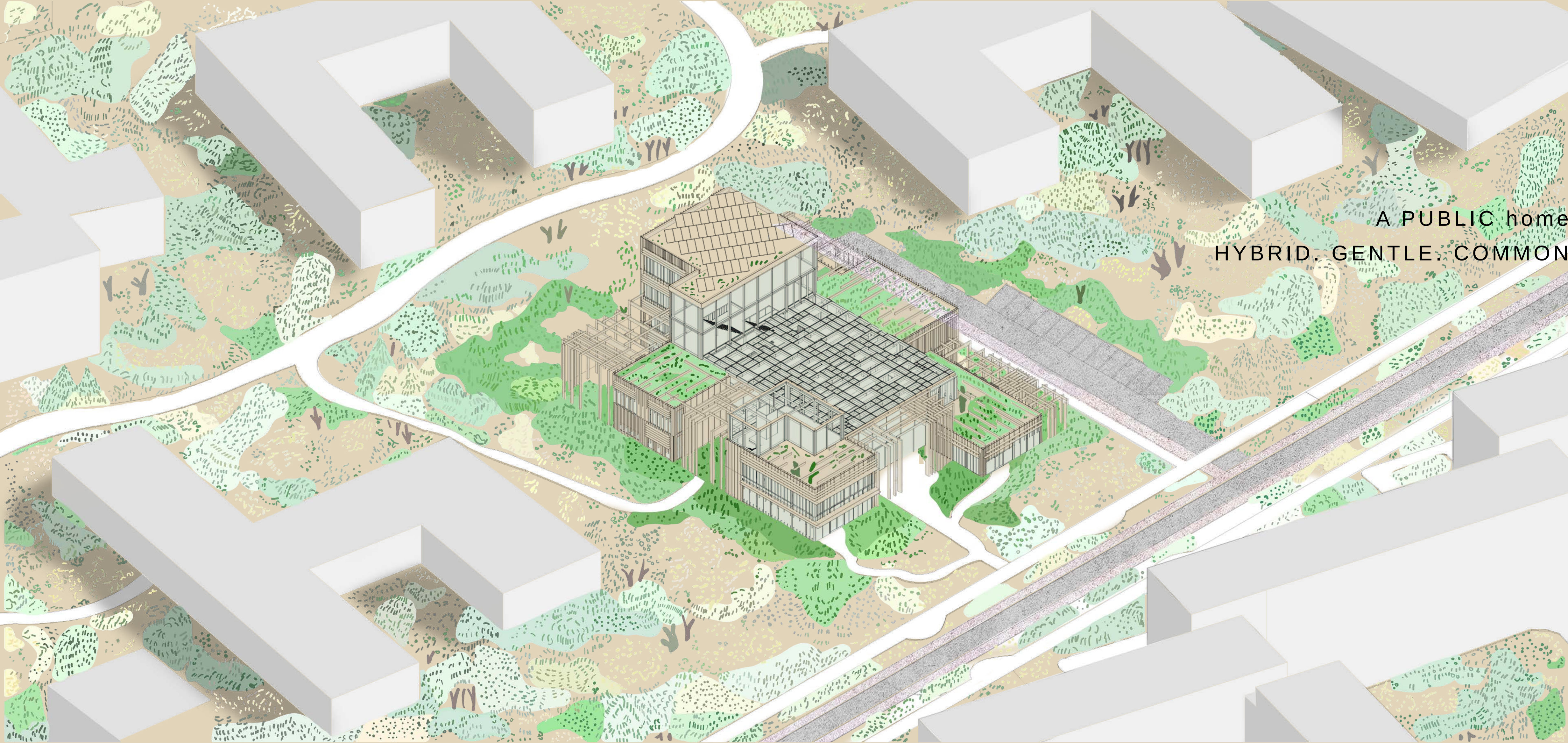




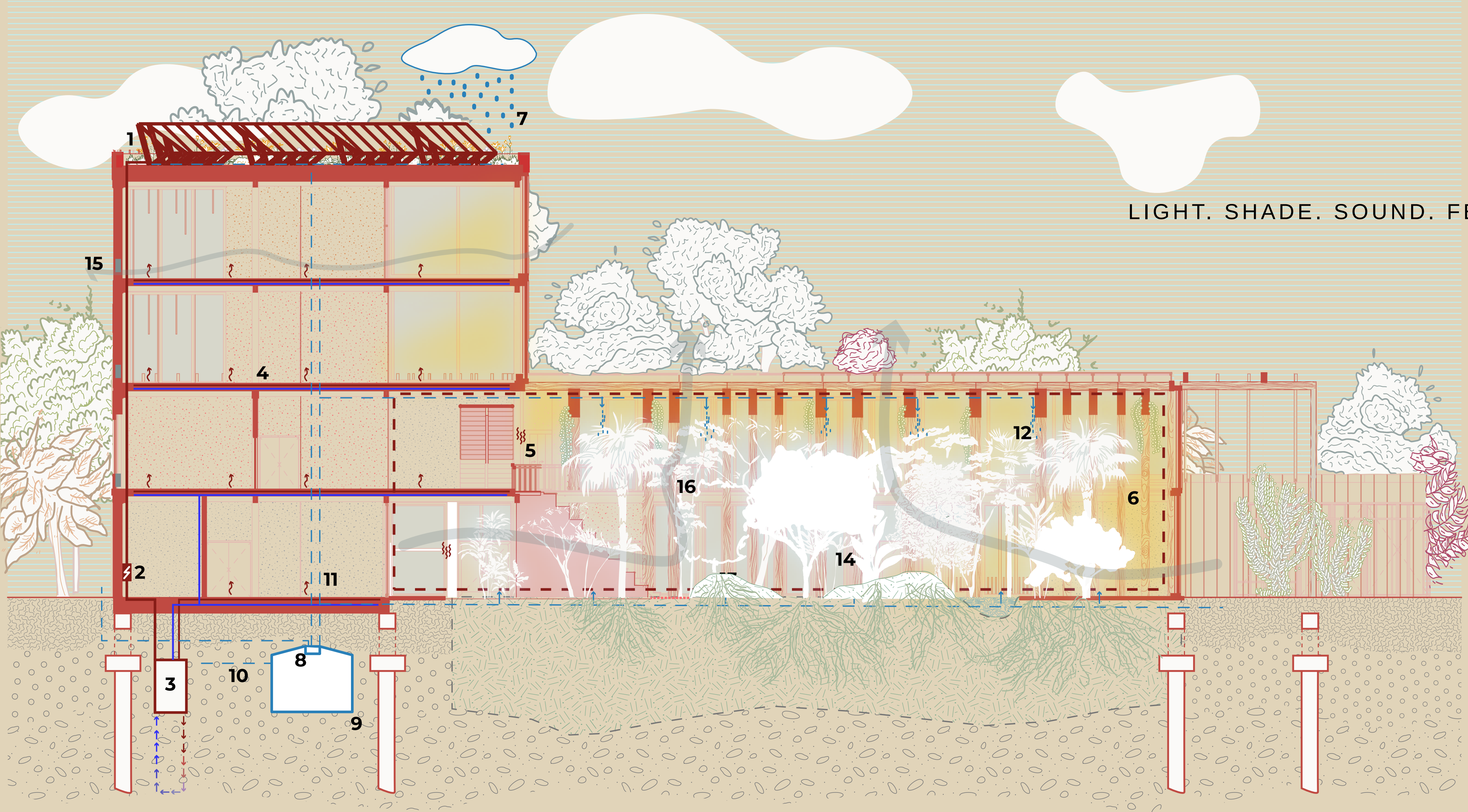
HIGHS TO PLAY, LOWS TO REST



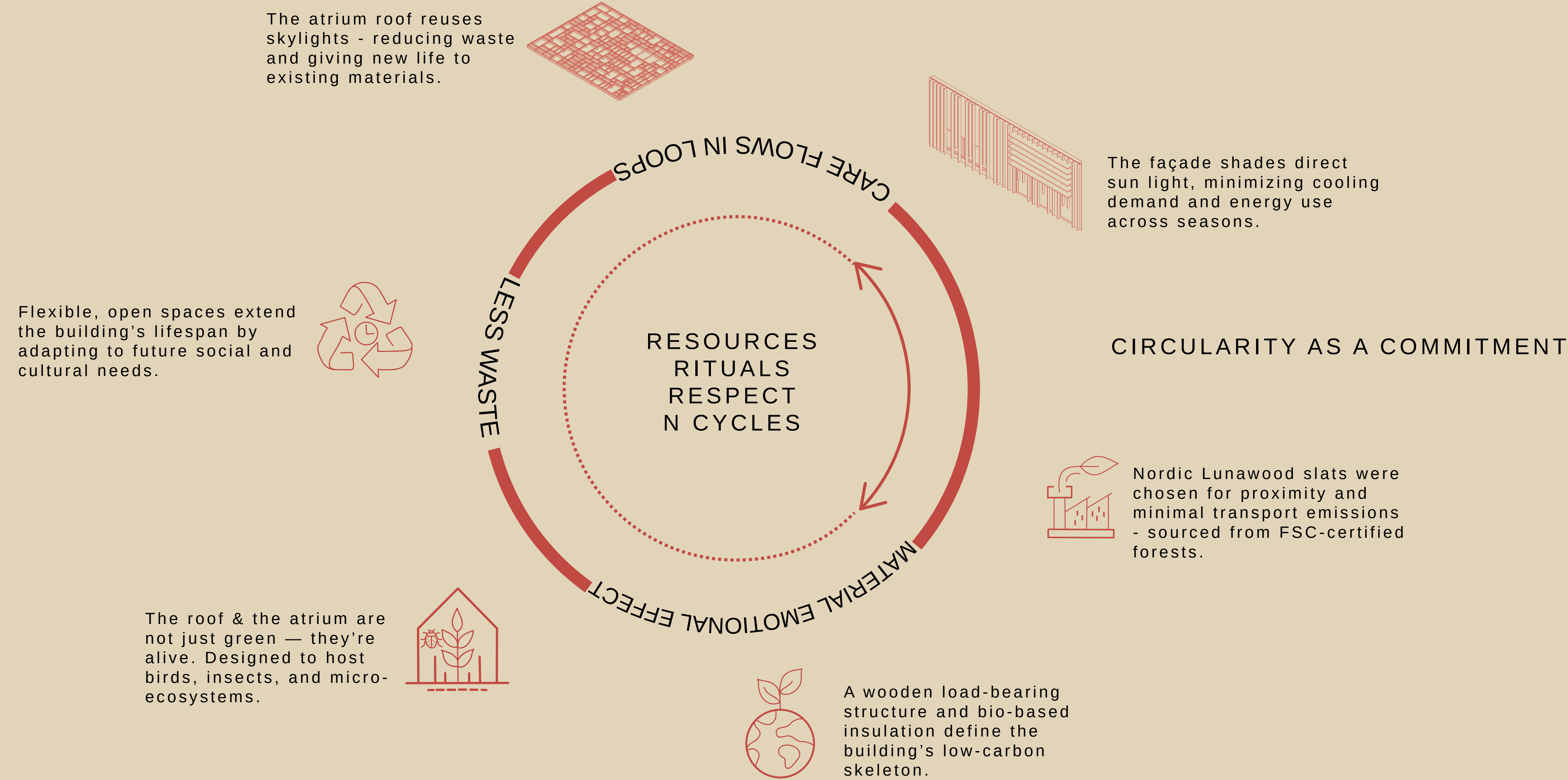
HIGHS TO PLAY, LOWS TO REST

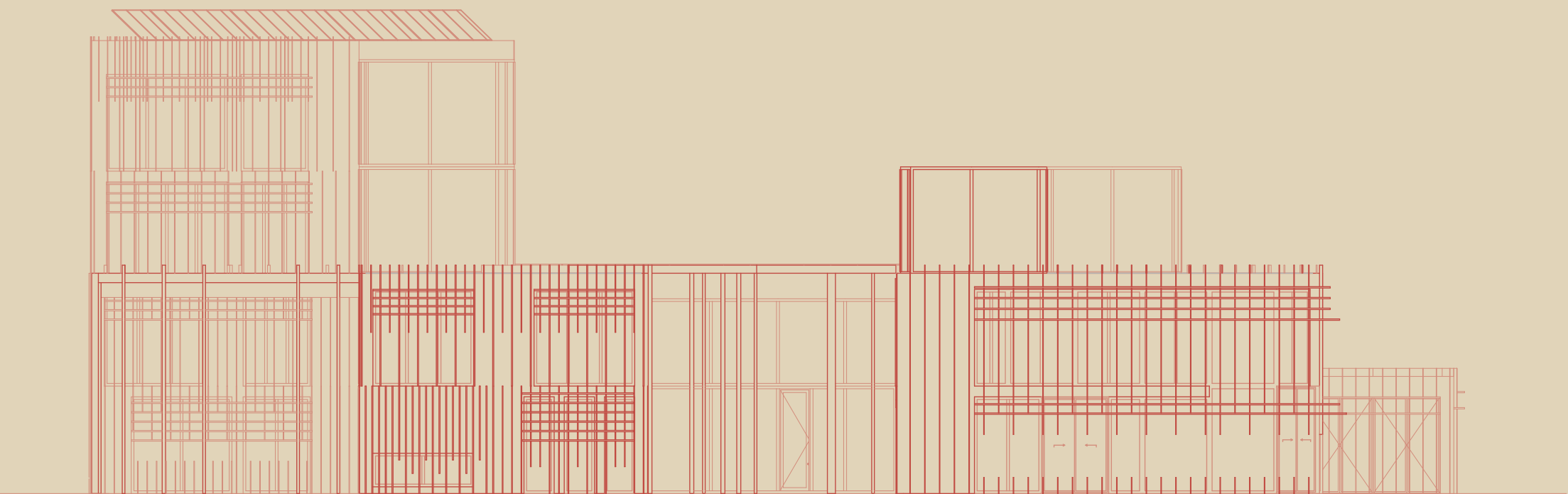


A PUBLIC home
HYBRID. GENTLE. COMMON

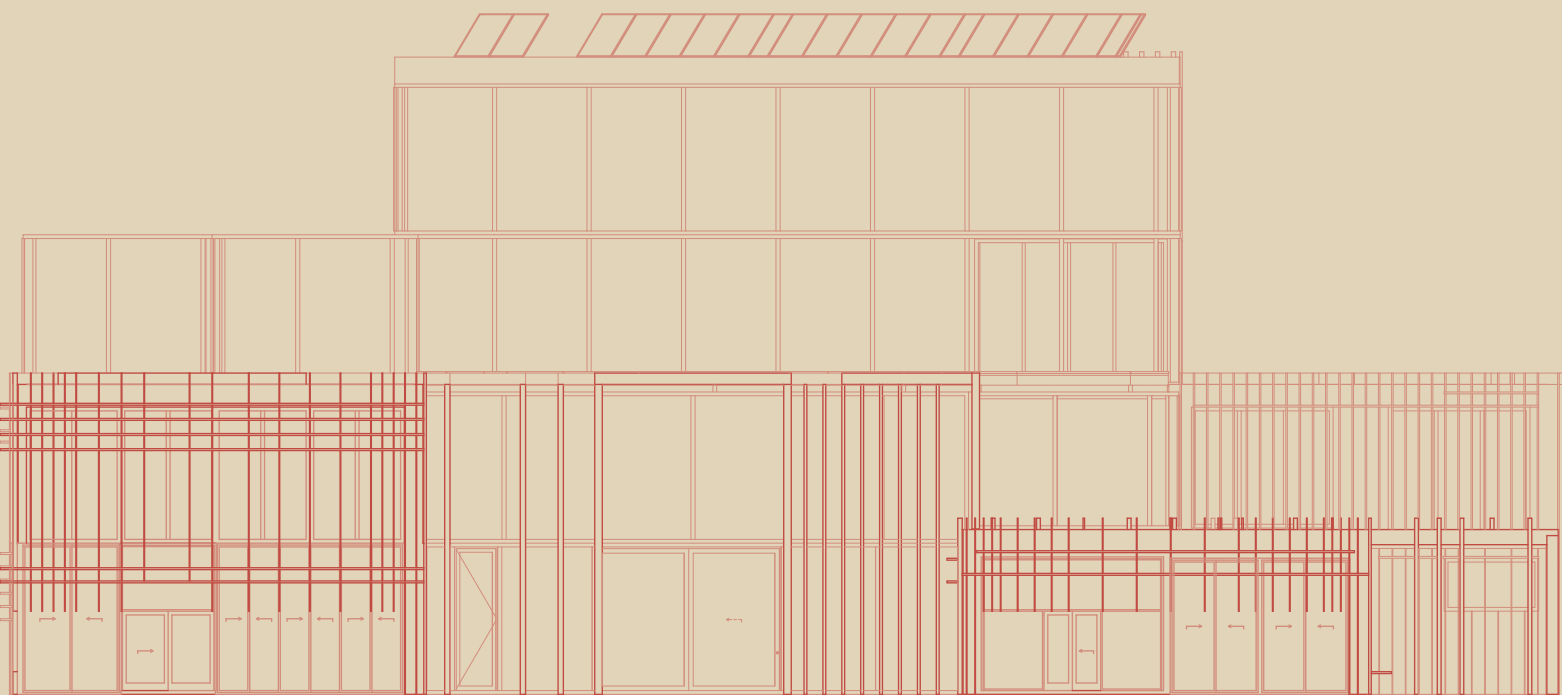


LIGHT. SHADE. SOUND. FEEL.



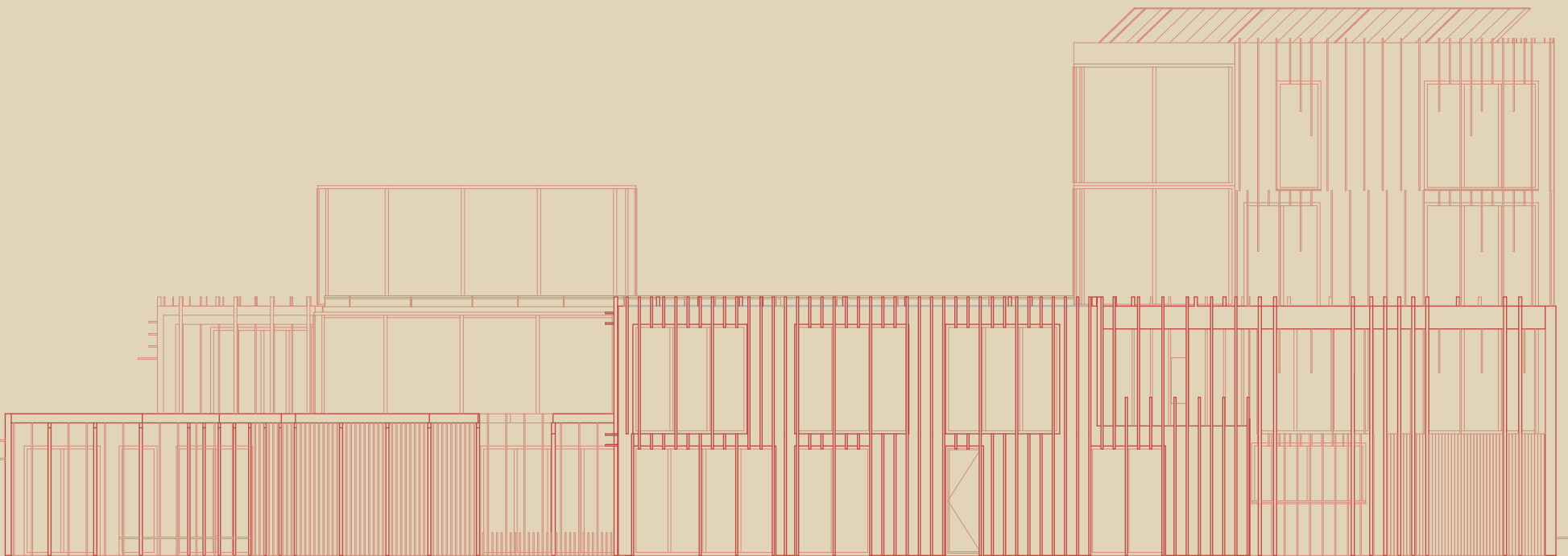


south west

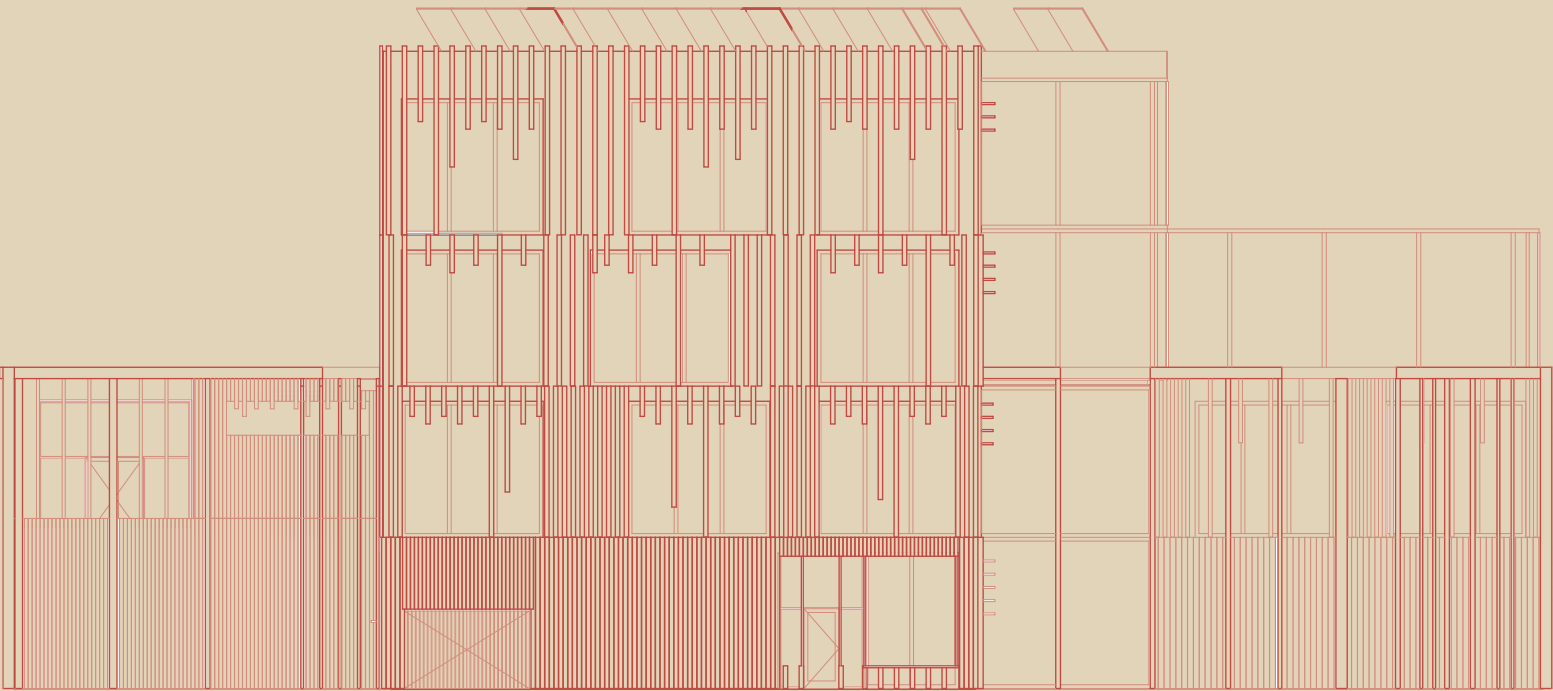


south east

FILTERED. FELT. ALIVE



north east



north west

C1
 Sun context
Mostly in shadow for most of the day

Late afternoon summer sun (17:00–21:00) enters at a low angle (~20–30°)

Light is soft but can cause long horizontal glare if not filtered

Winter sun: almost no direct exposure — mostly ambient daylight

- 00 Sensory room**
 - Concept:** enclosed, private & immersive
 - Window/s:** none
 - mood:** Enclosed, private, focused - supports sensory isolation

Horizontal slats start at	none
vertical slats	very dense 188x19 spacing is 193
Result	No light, dense & private

- 01 Studio**
 - Window/s:** Large windows
 - mood:** Dynamic, open, warm in afternoon; calm and clean in the morning-feels active

Horizontal slats	none
vertical slats	42 mm × 68 mm / spacing: 800 mm and 256 where there are not any windows
Result	Play with staggered slat heights if view is to play-ground – feels active

B1
 Sun context
strong, low-angle summer sun (15:00–21:00)

Risk of glare, overheating, and intense reflections in glass

Winter sun is weak but may still offer passive gain if filtered well

- 00 Yoga Room (right)**
 - Window/s:** a narrow vertical windows 1125x3600mm

- mood:** green, quiet zone & private
 - Horizontal slats start at2 m, spacing 350 and depth 450mm
 - vertical slats26x140 mm, spacing 350mm. A little denser for more privacy
 - ResultLet filtered light and glimpses of greenery in & maintain privacy

- 00 Sensory Room (left)**
 - Window/s:** one low wide horizontal slit 1250x3750

- mood:** Darker, immersive space
 - vertical slatsThick vertical slats 40x185, spacing in the middle 500mm and tighter towards the edge 250 mm
 - ResultLet small amount of light and glimpses of greenery in & maintain privacy & the immersive mood

- 01 Studios**
 - Window/s:** Large glazing 3600x3750 for maximum view

- mood:** Dynamic, open, warm in afternoon; calm and clean in the morning

vertical slats	deep slats 40x185 & thinner ones 26x140 starting at 2m for more shadow
result	the vertical rhythm is casting soft patterns and shift mood with daylight
Horizontal	450x50 space 300 starting at 2.7 m

A1
 Sun context
Full sun exposure throughout the day, especially midday

High-angle summer sun (10:00–15:00) risks overheating and glare

Low-angle winter sun (10:00–14:30) provides valuable passive heat gain Ideal for controlled daylighting and seasonal responsiveness if properly shaded

- 00 Yoga Room**
 - Concept:** Calm, meditative, cool in summer
 - Window/s:** a narrow vertical windownear the edge this brings morning light but avoids glare.

Cover the rest with a green façade

vertical slats behind greenery for rhythm and structure.

No horizontal slats here the window is small - no need to block high sun.

- Benefit:** Reduced overheating, visual softness, natural sound insulation from greenery.

- Light quality:** soft diffused light from edge, mostly shade

- mood:** secluded, green quiet zone

Horizontal slats	none
vertical slats	140x26 mm, spacing 350 - where no windows 1050 mm
Result	Winter sun (15–25°) enters from edge window; summer sun blocked from top

- 01 Studio**
 - Concept:** cool, active, calm

- Window/s:** a narrow vertical windownear the edge this brings morning light but avoids glare.

Cover the rest with a green façade

vertical slats behind greenery for rhythm and structure.

No horizontal slats here the window is small - no need to

B2
 Sun context
strong, low-angle summer sun (15:00–21:00)

Risk of glare, overheating, and intense reflections in glass

Winter sun is weak but may still offer passive gain if filtered well

- 00 Staff Office (right)**
 - Window/s:** full height (3600 mm) with light filtering

- mood:** Comfortable work zone, active view
 - Horizontal slatsstarts at 2 m, spacing 350 and depth 450mm
 - vertical slats26x140 mm, spacing: 350 mm. At the windows closed till height 1200mm to provide privacy and then open
 - ResultKeeps the light soft and workspace usable throughout the afternoon

- 01 workshop space**
 - Window/s:** full height (3600 mm) with light filtering

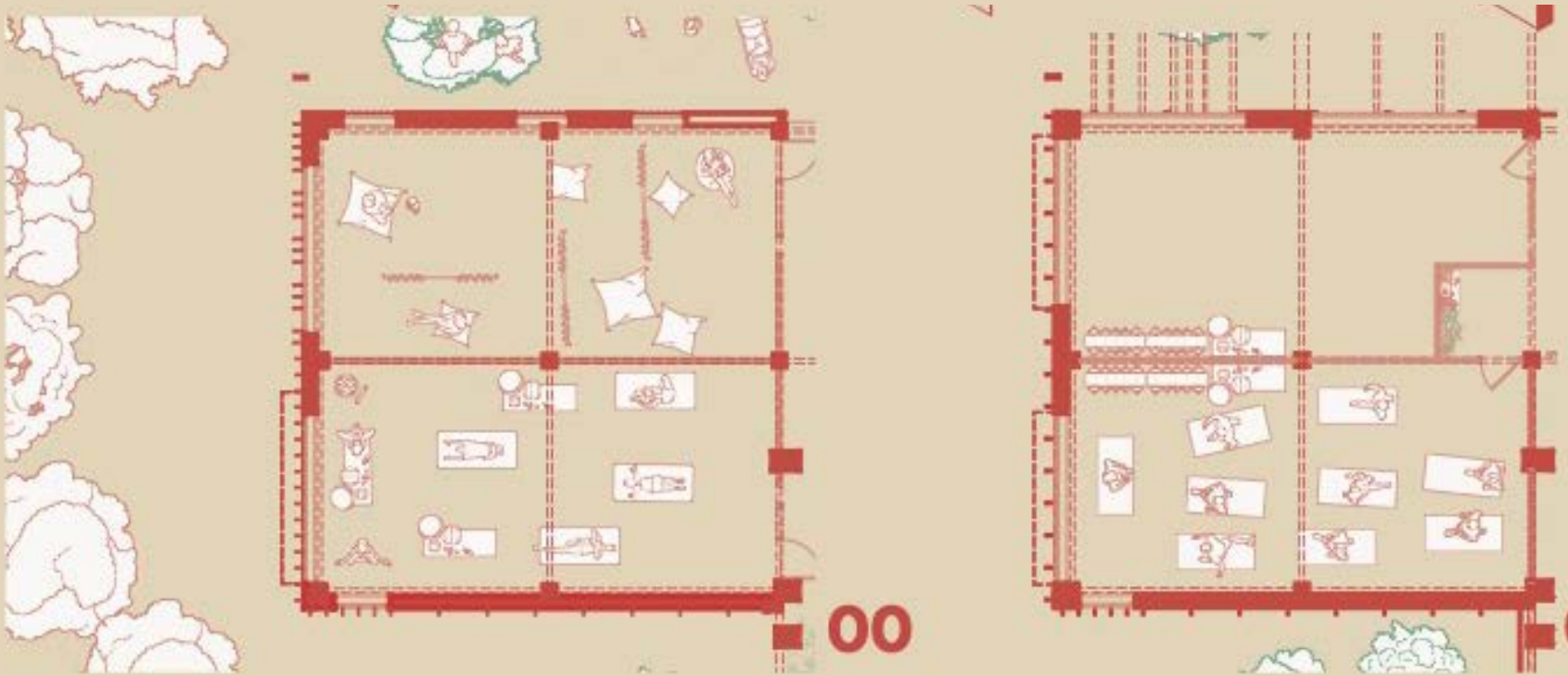
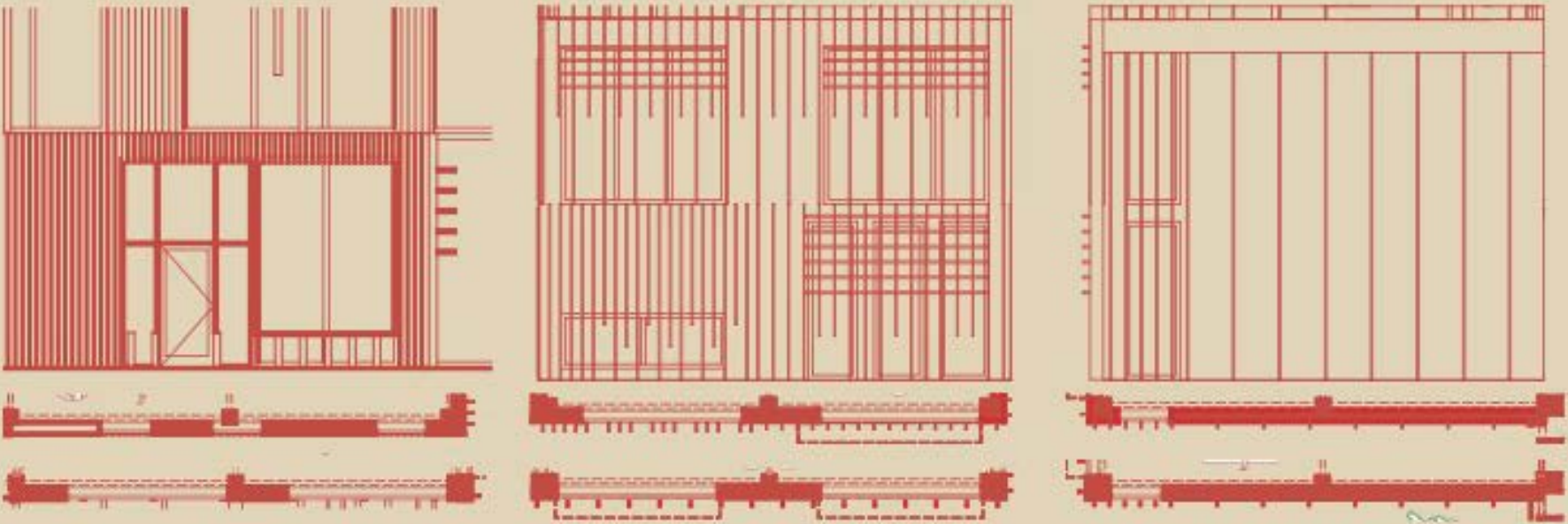
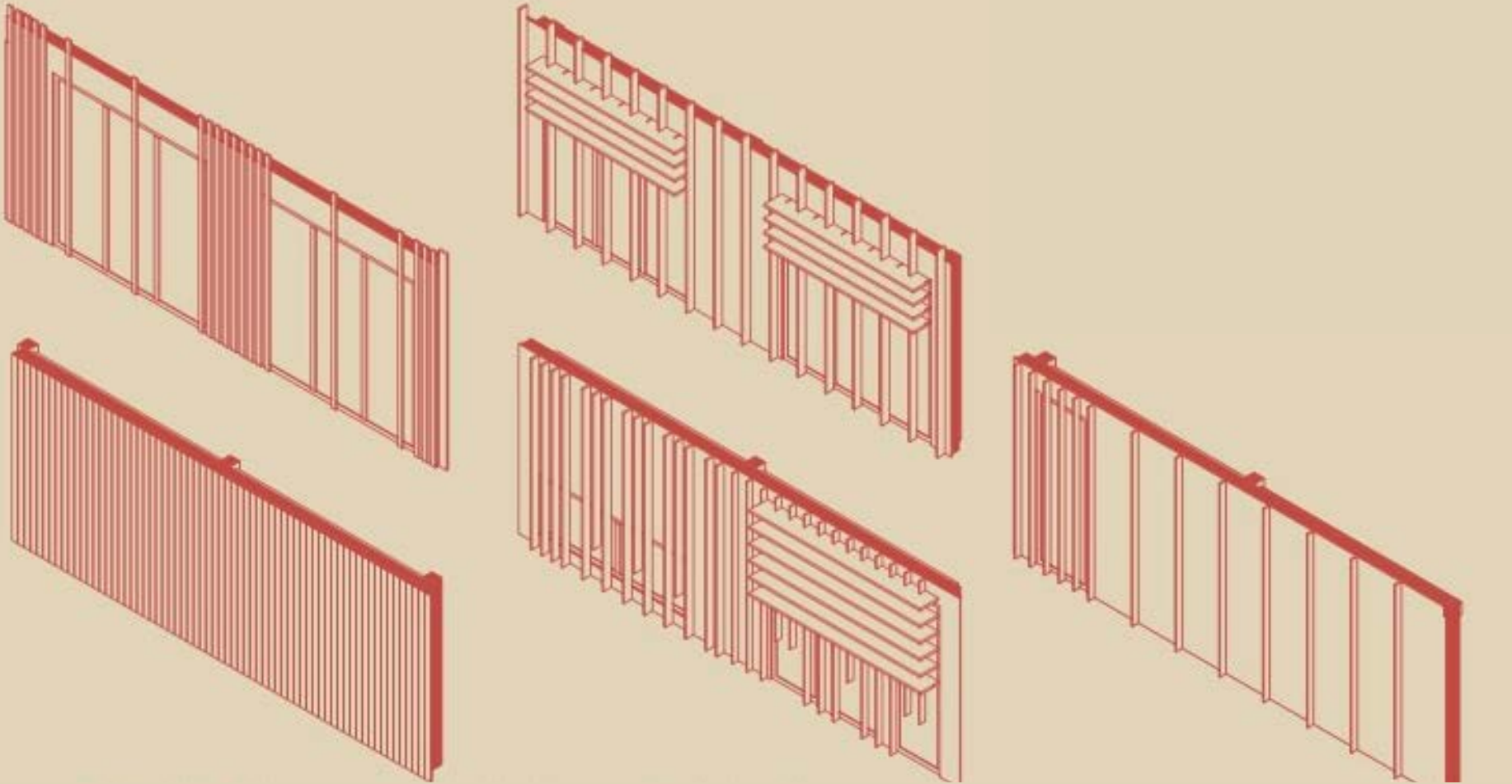
- mood:** bright & active
 - Horizontal slatsstart at 2.5 m, spacing 350 and depth 400mm
 - vertical slats19x92 mm, spacing: 350 mm.
 - ResultMaintains daylight and visual activity with functional sun protection

- 02 CO-working space**
 - Window/s:** full height (3600 mm) with light filtering

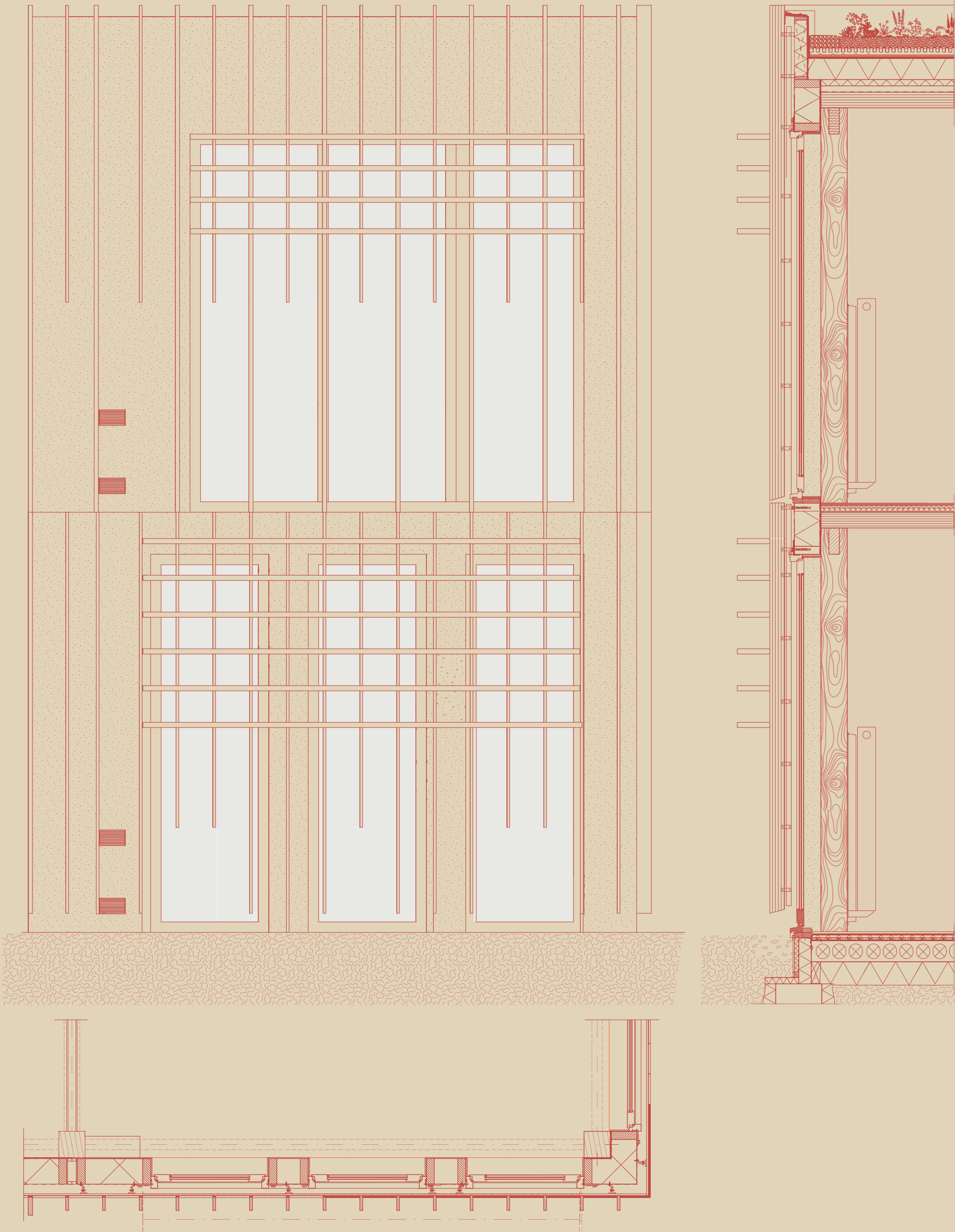
- mood:** bright, green & open
 - Horizontal slatsstart at 2.5 m, spacing 350 and depth 400mm
 - vertical slats26x140 mm, spacing: 500 mm.
 - Resultdaylight for focus, minimal glare on screens

- 03 Indoor playground**
 - Window/s:** full height (3600 mm) with light filtering

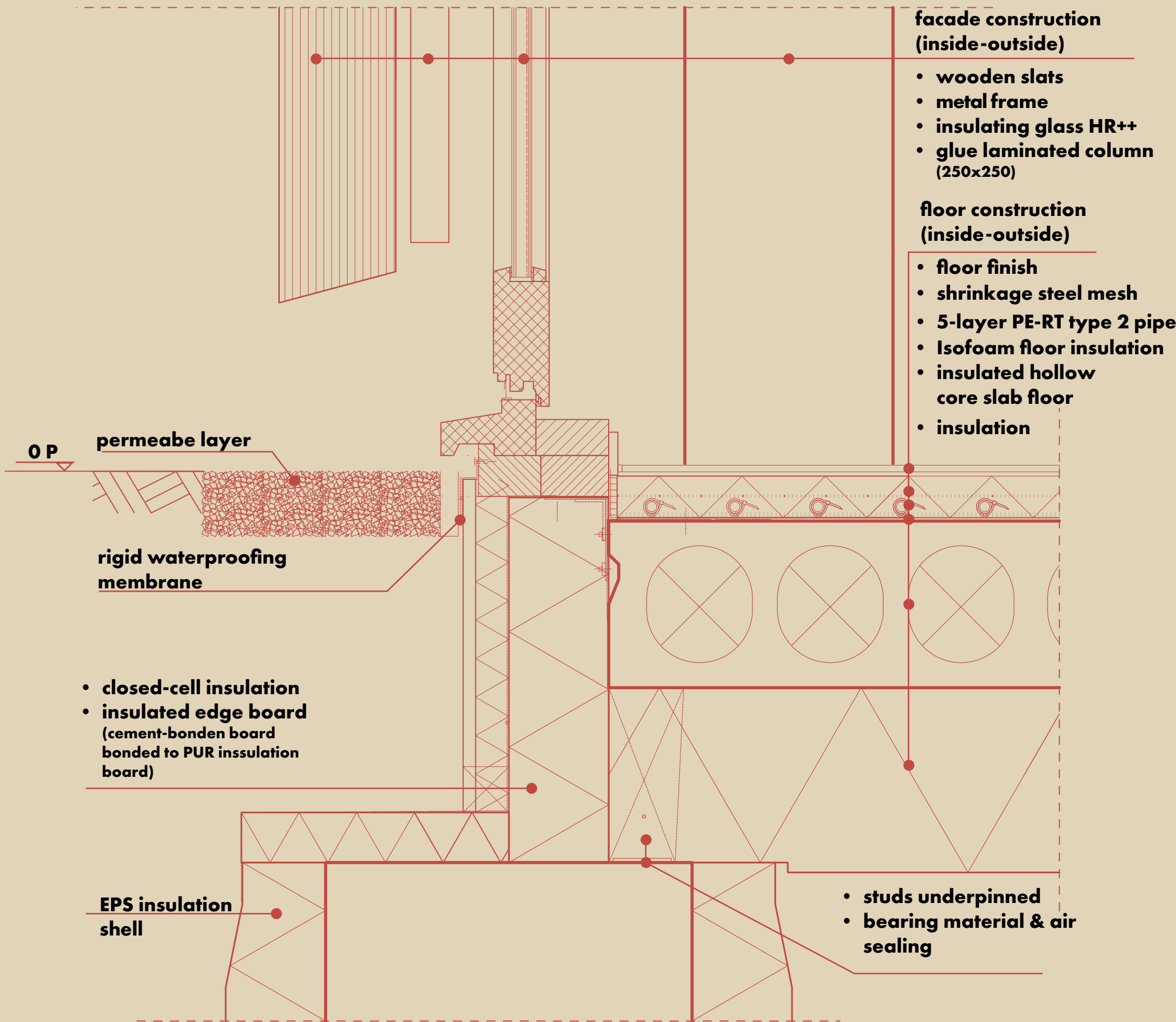
- mood:** joyful, bright
 - Horizontal slatsstart at 2.8 m, spacing 350 and depth 450mm
 - vertical slats19x92 mm, spacing: 500 mm.
 - ResultBright & joyfull sphere



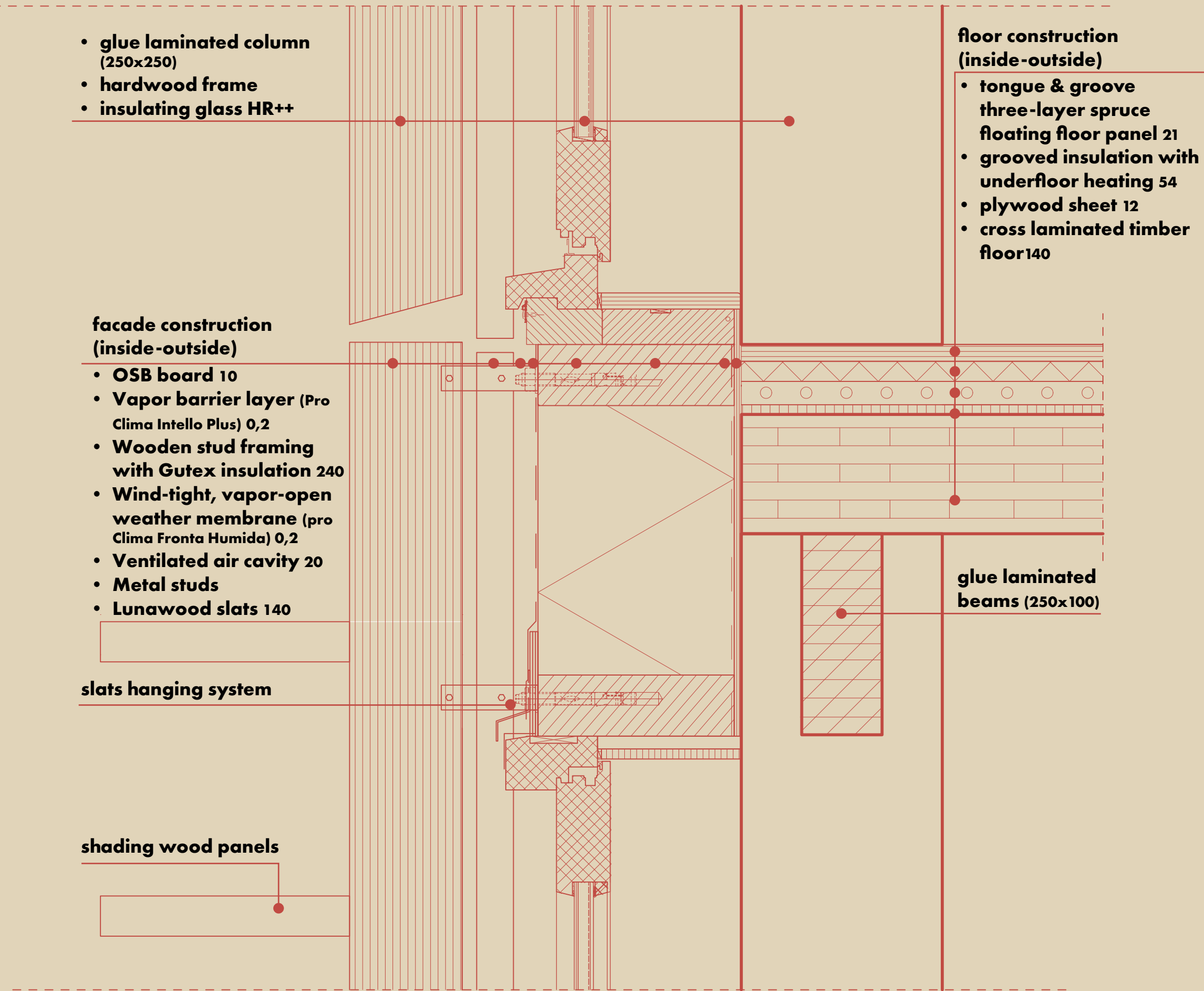
FILTERED. FELT. ALIVE



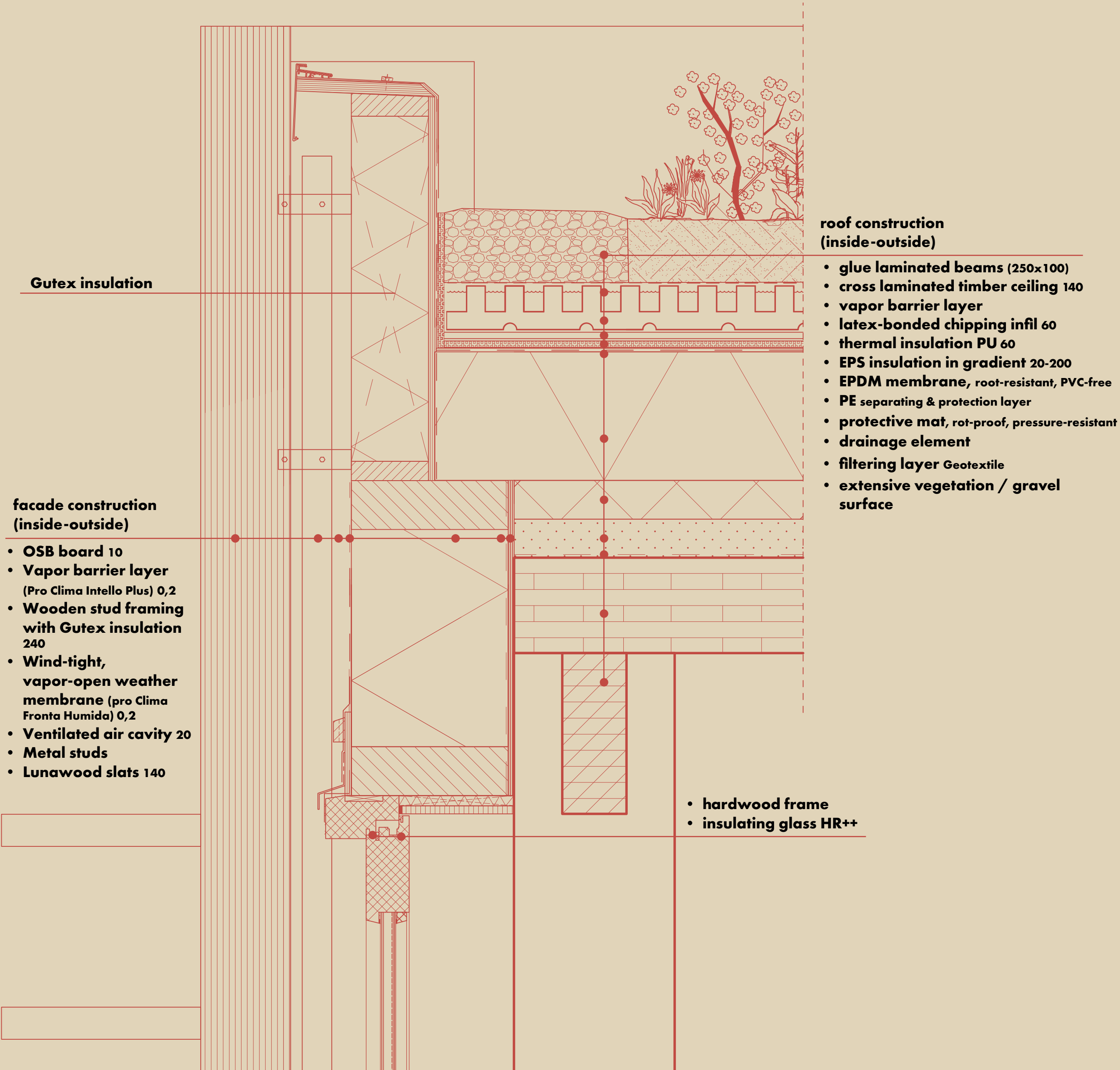
CARE IN EVERY CUT



CARE IN EVERY CUT

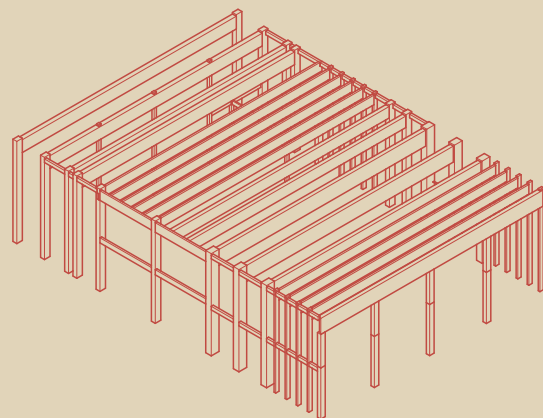


CARE IN EVERY CUT

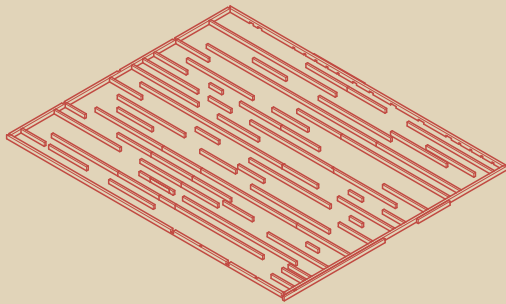


CARE IN EVERY CUT

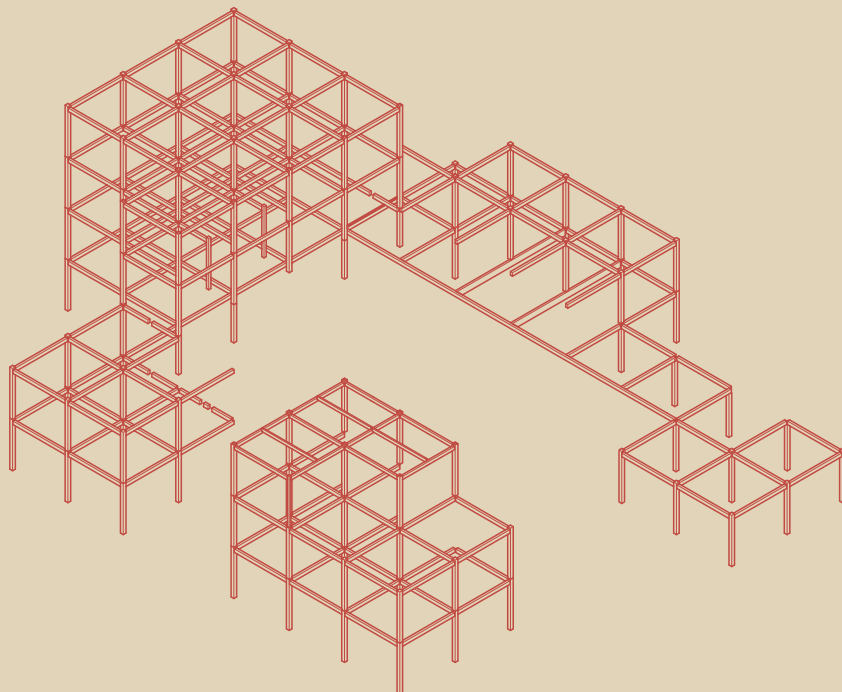
CARE IN EVERY CUT



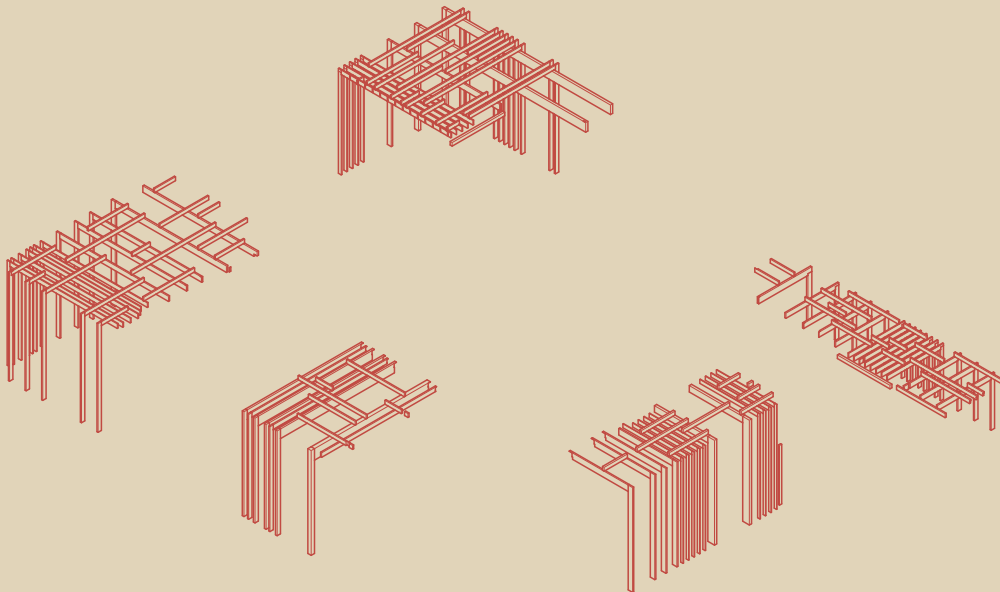
central
emotional heart



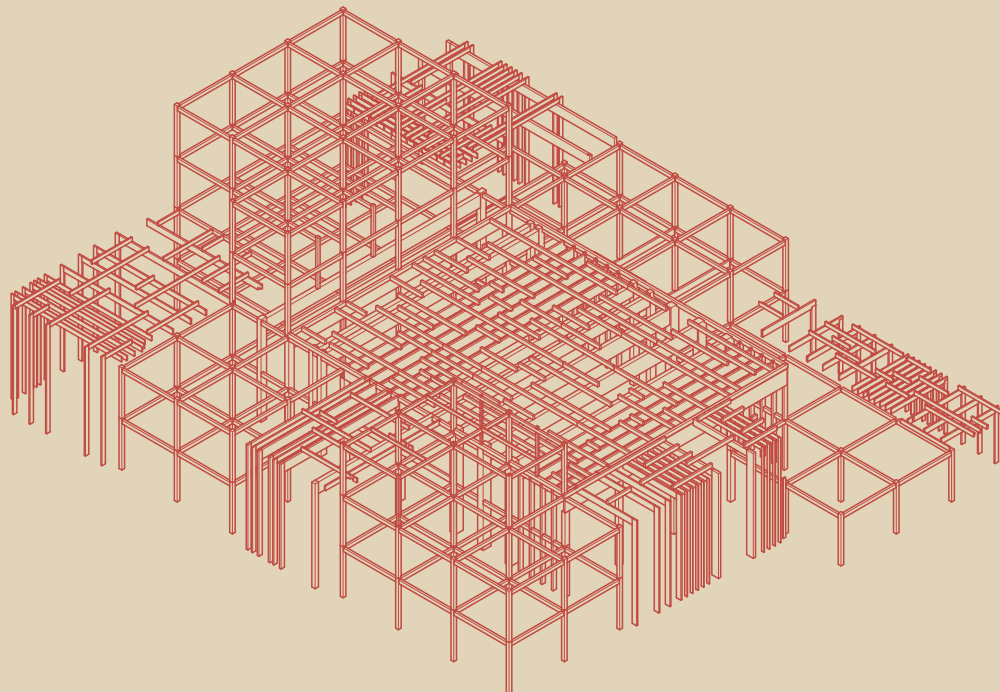
sky connection
ligt & stability



backbone
neutral framework



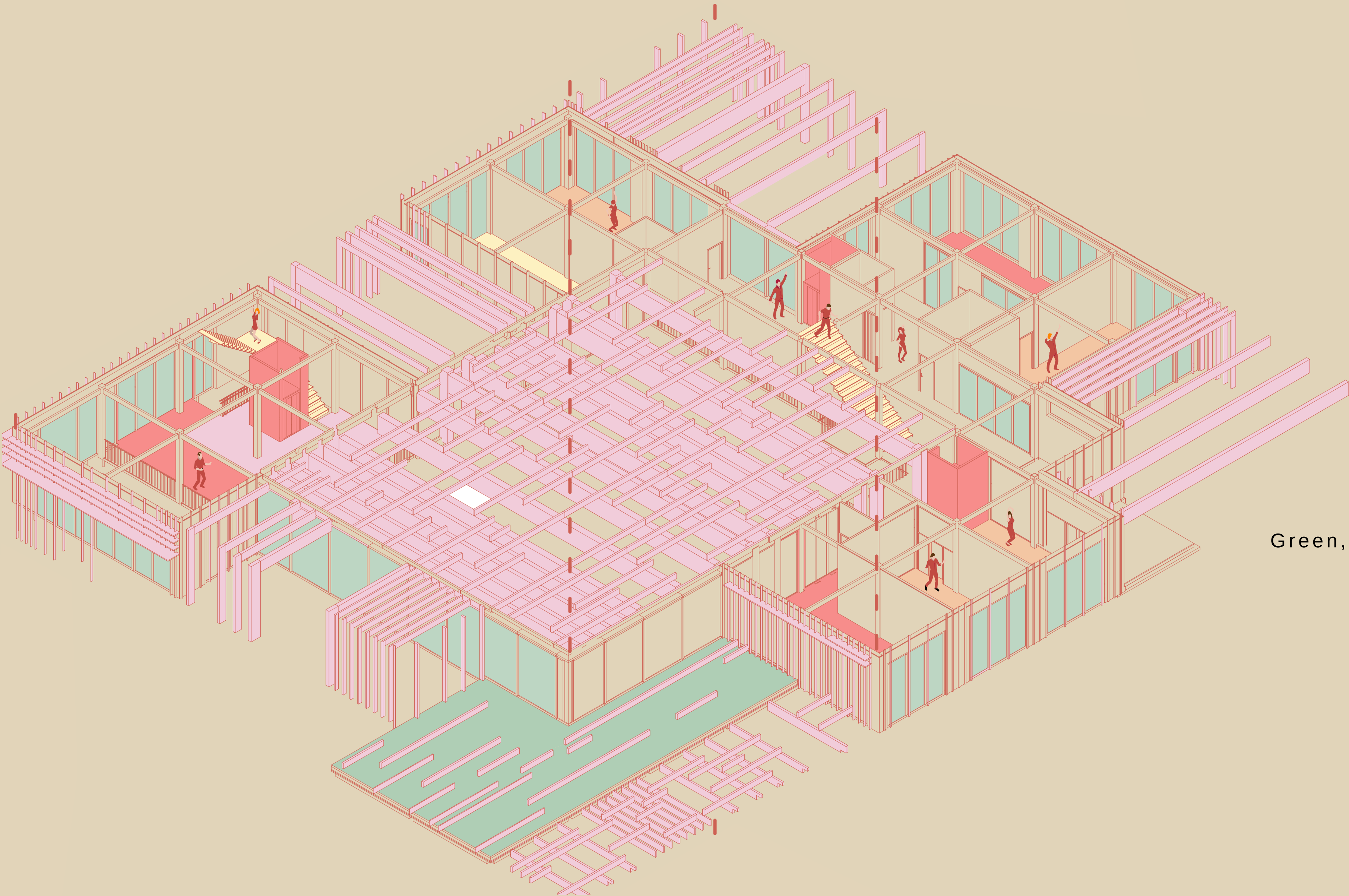
semi open
light structure



flexible structure

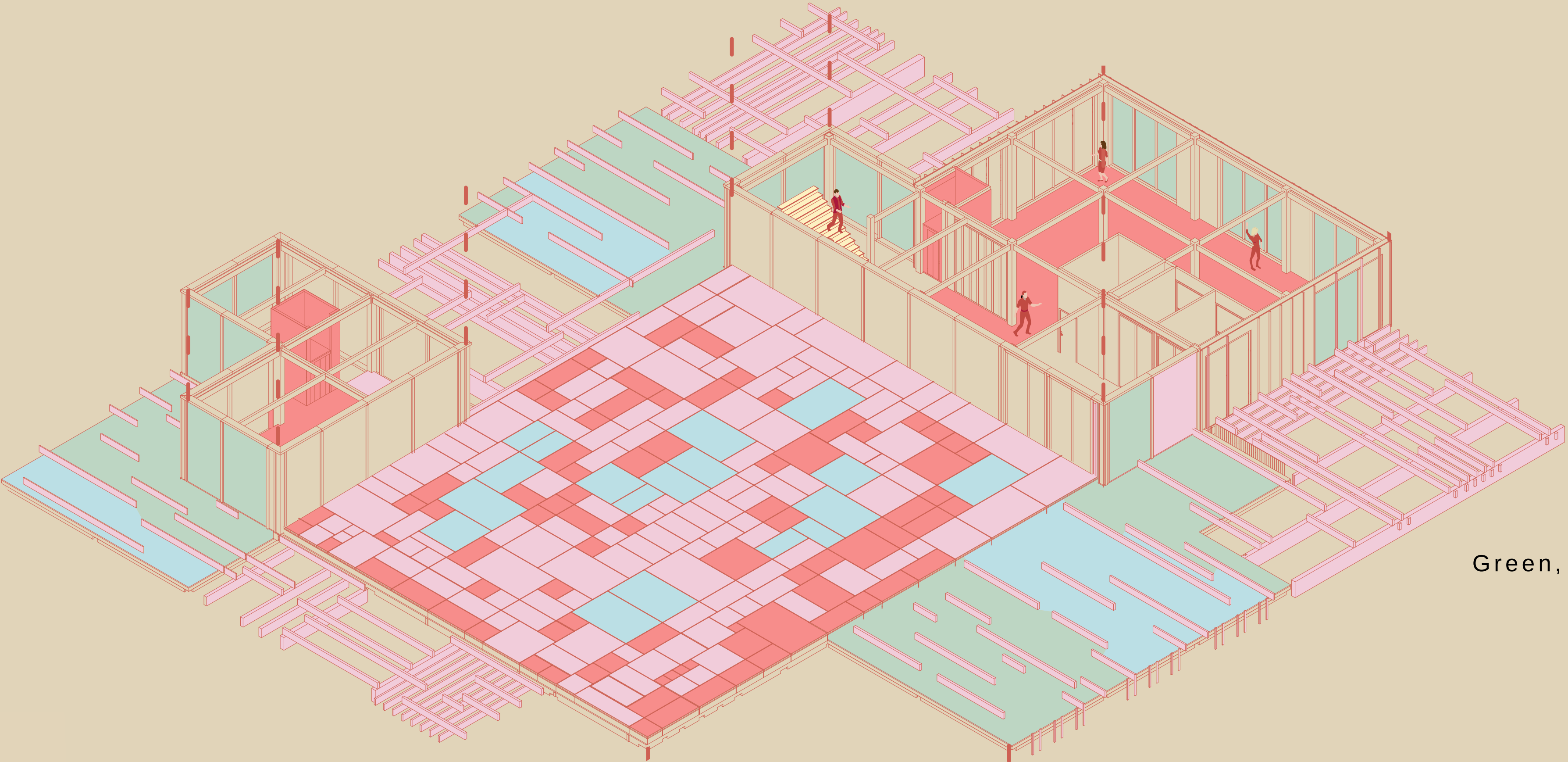


Six Stories, Six Sensibilities
Green, Blue, Active, Sensory, playable, inclusive
across the floors



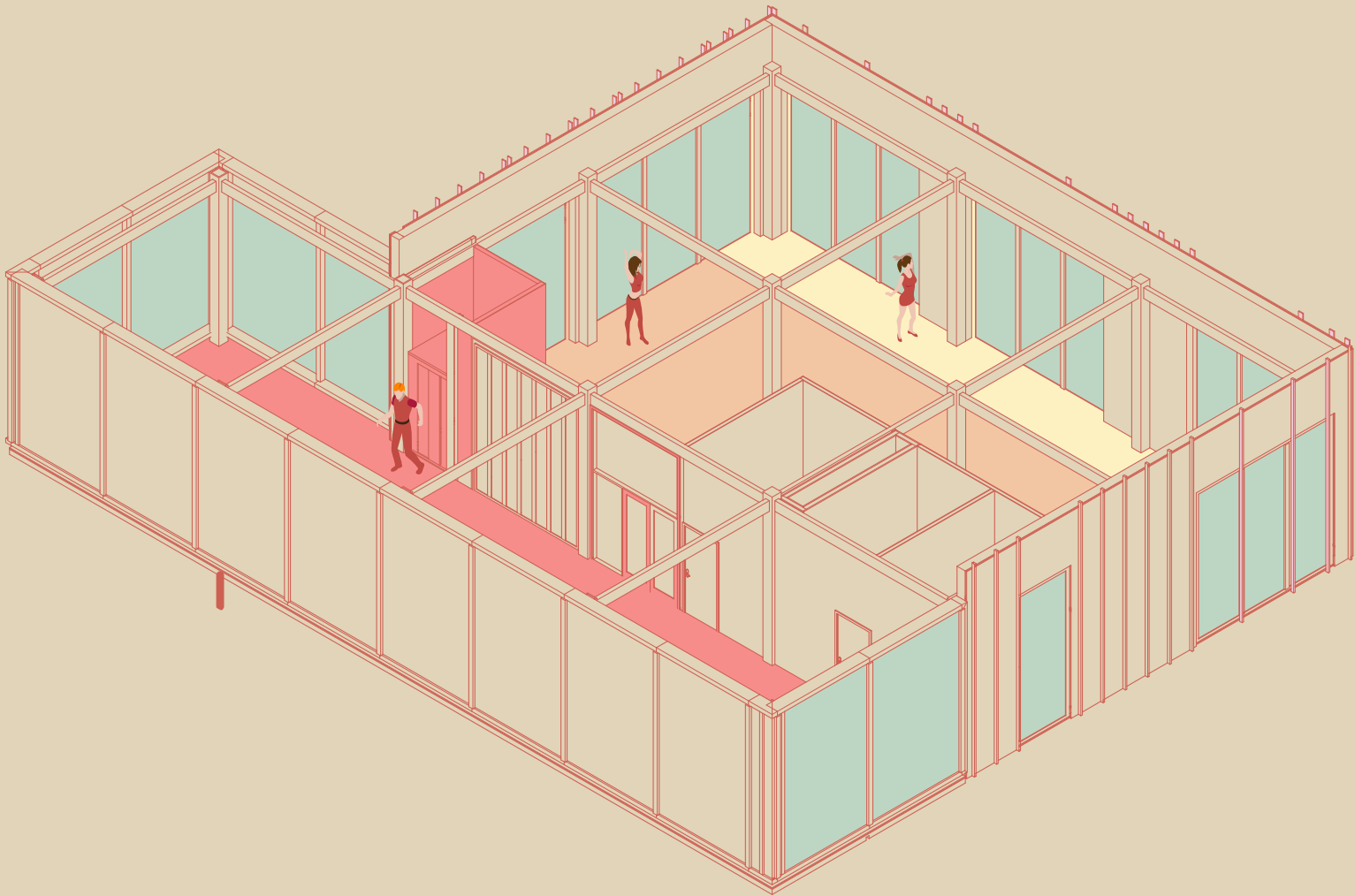
Six Stories, Six Sensibilities

Green, Blue, Active, Sensory, playable, inclusive
across the floors



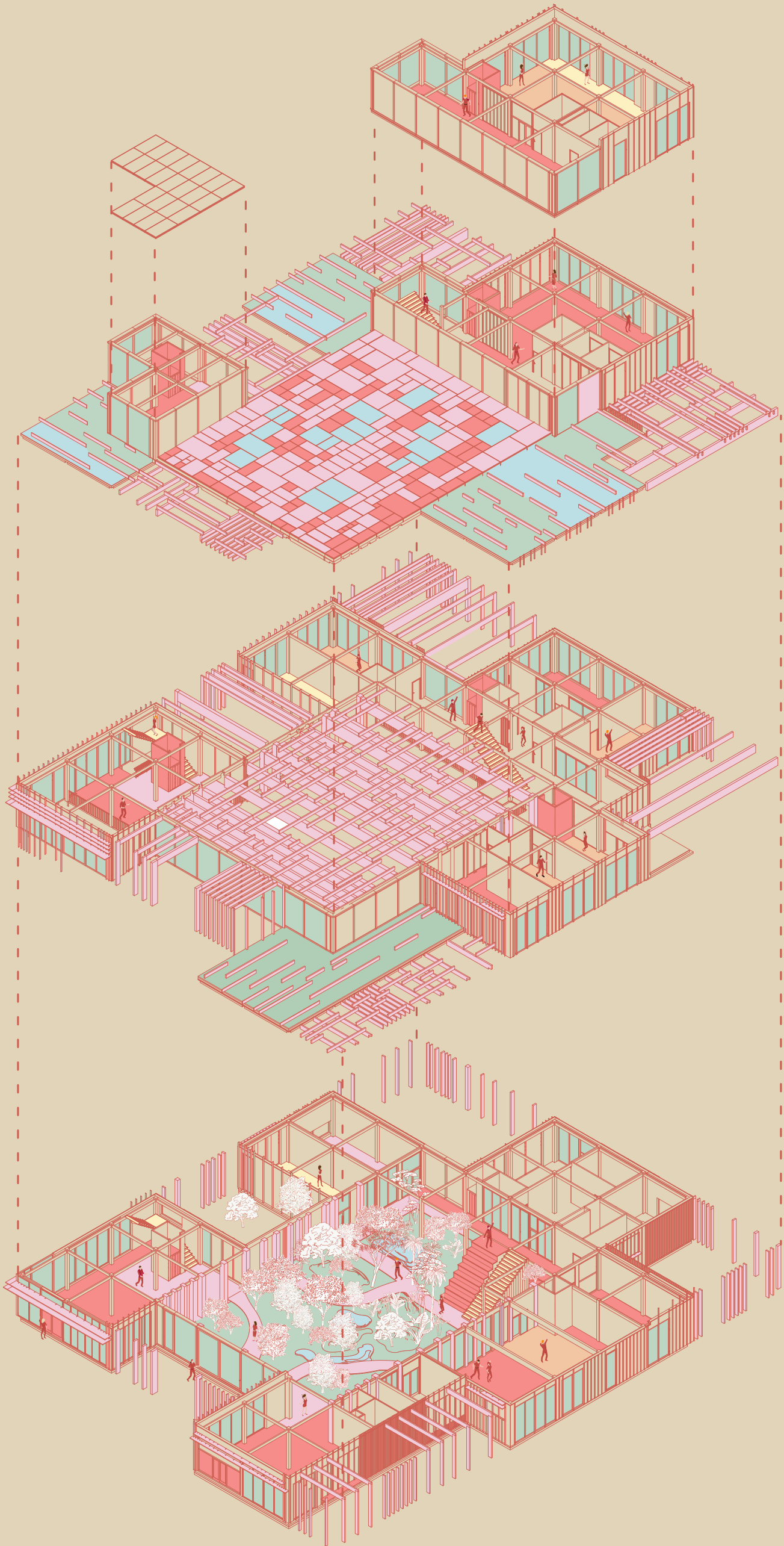
Six Stories, Six Sensibilities

Green, Blue, Active, Sensory, playable, inclusive
across the floors



Six Stories, Six Sensibilities

Green, Blue, Active, Sensory, playable, inclusive
across the floors



Six Stories, Six Sensibilities

Green, Blue, Active, Sensory, playable, inclusive
across the floors





Legeområde
playzone

Erhvervshub
business hub

Uddannelse
education

Køkken
kitchen

Café
café

Marked
market

Værksted
workshops

Velvære
wellness



ARCHITECTURE CAN'T HEAL. BUT IT CAN HELP



THANK YOU