



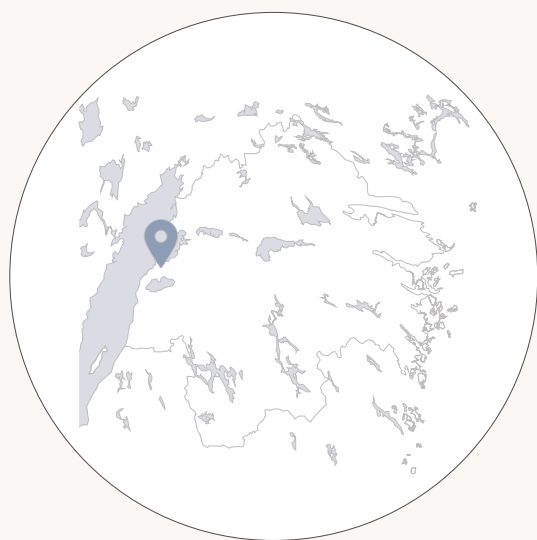
HEALTH HEART: VADSTENA FUTURE HEALTHCARE CENTRE

by

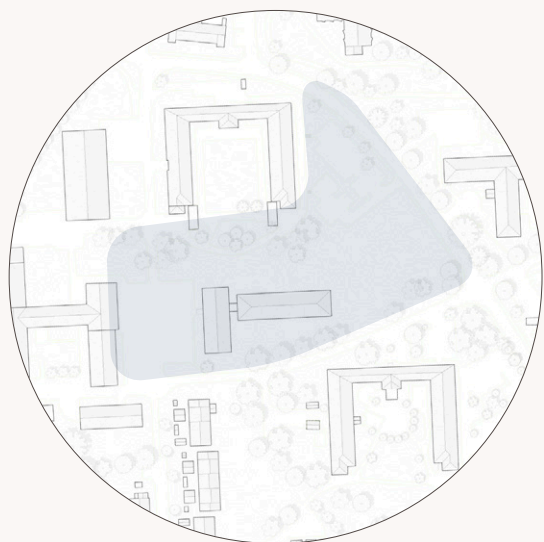
KELI KADRIU
CHAEWON HONG
ELI-ANNE GJØS



REGION ÖSTERGÖTLAND



VADSTENA




BIRGITTA SQUARE


INTRODUCTION	INTRODUCTION
STRATEGIES	SUSTAINABILITY GOALS DESIGN STRATEGIES CONCEPT DESIGN
SITE & ANALYSIS	WIDER CONTEXT EXISTING BUILDINGS AND SITE SITE PLAN
PROGRAMME	CHALLENGING THE BRIEF FLOOR PLAN CONCEPT
PROPOSAL	PLANS DEPARTMENT VIEW OF HEART SECTIONS ELEVATIONS STRUCTURE DETAIL SUSTAINABILITY PERSPECTIVE




ACTIVE USE OF THE SDGs IN
DESIGN STRATEGIES AND BRIEF


3


ENSURE HEALTHY LIVES AND PROMOTE WELLBEING FOR ALL AT ALL AGES


4


ENSURE INCLUSIVE AND EQUITABLE QUALITY EDUCATION AND PROMOTE LIFELONG LEARNING OPPORTUNITIES FOR ALL


5


ACHIEVE GENDER EQUALITY AND EMPOWER ALL WOMEN AND GIRLS


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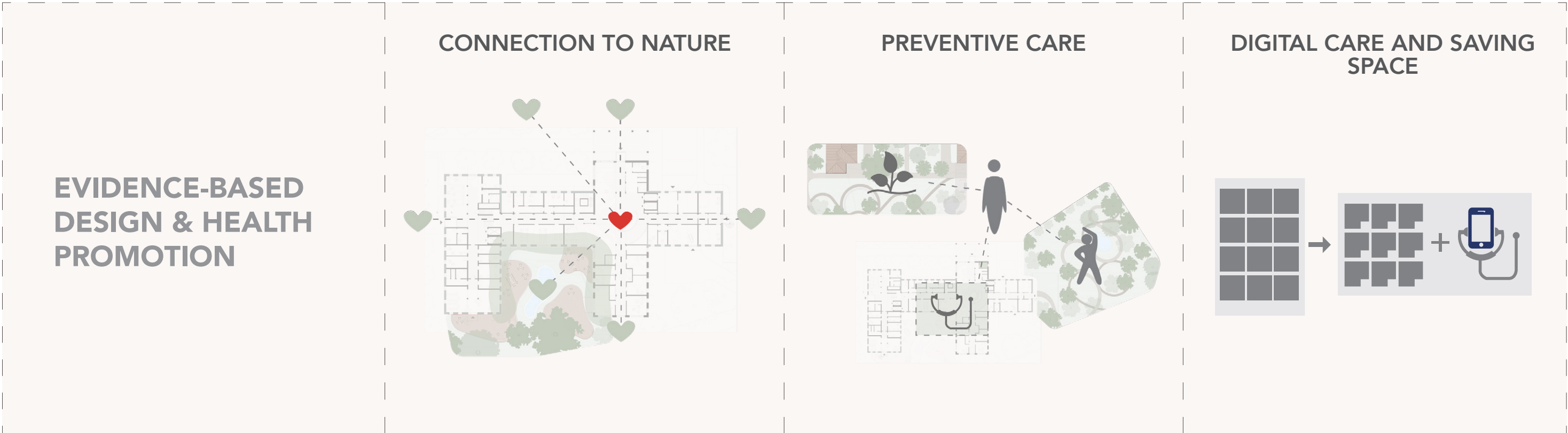
MAKE CITIES AND HUMAN SETTLEMENTS INCLUSIVE, SAFE, RESILIENT AND SUSTAINABLE

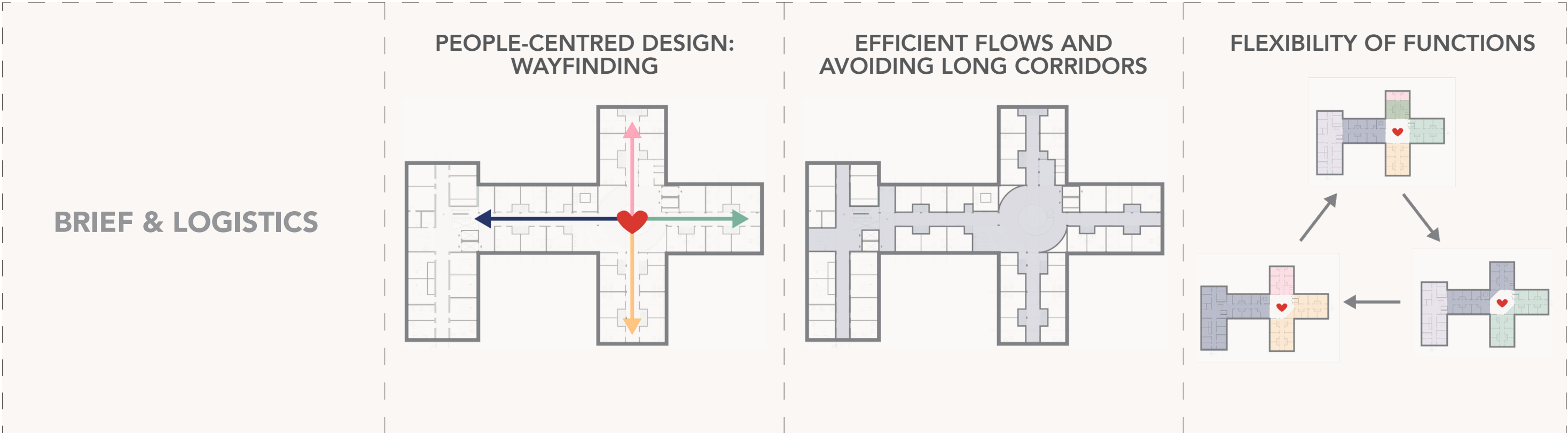

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ENSURE SUSTAINABLE CONSUMPTION AND PRODUCTION PATTERNS

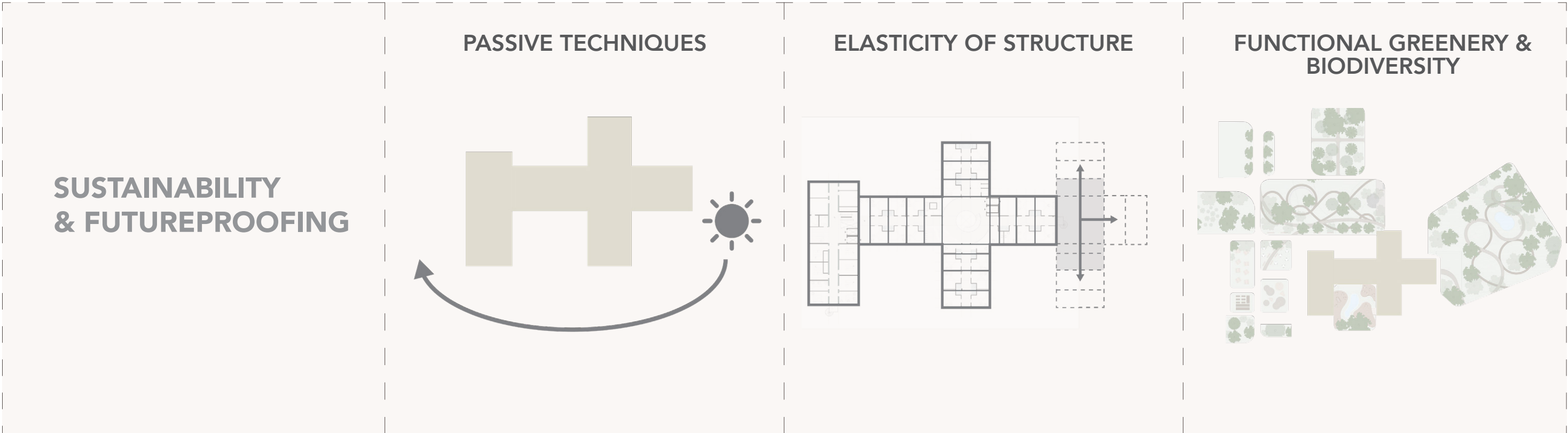

15

PROTECT, RESTORE AND PROMOTE SUSTAINABLE USE OF TERRESTRIAL ECOSYSTEMS, SUSTAINABLY MANAGE FORESTS, COMBAT DESERTIFICATION, AND HALT AND REVERSE LAND DEGRADATION AND HALT BIODIVERSITY LOSS



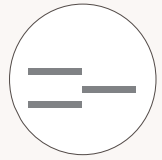




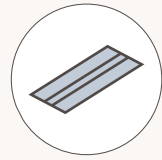


REUSING BUILDINGS

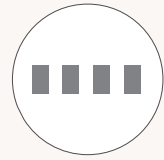
CHALLENGES OF RE-USE



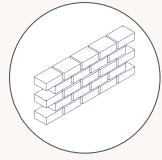
DIFFERENT LEVELS



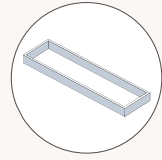
NARROW CORRIDORS



RESTRICTED WINDOW GRID



STRONG EXISTING CHARACTER



EXISTING WALL BOUNDARIES



RESTRICTED BUILDING HEIGHT

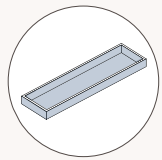


STRATEGY:
RESPECT THE
HISTORIC
CONTEXT

OPPORTUNITIES OF RE-USE



SUSTAINABLE REUSE



LOWER CO₂ FOOTPRINT BY REUSING BASEMENT AND FOUNDATION



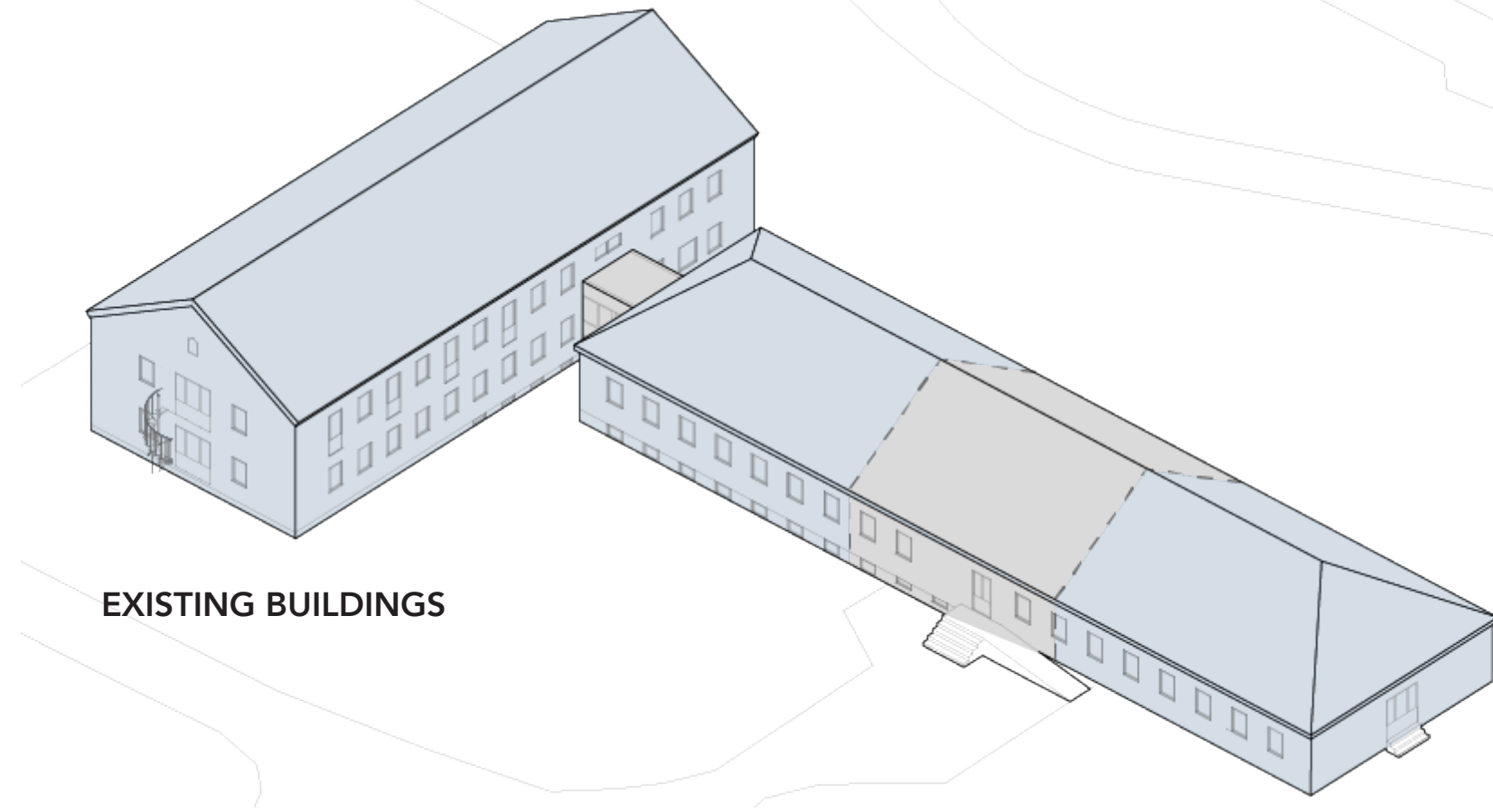
LOWER COST AND LESS CONSTRUCTION TIME



MATCHES THE HISTORIC GRID

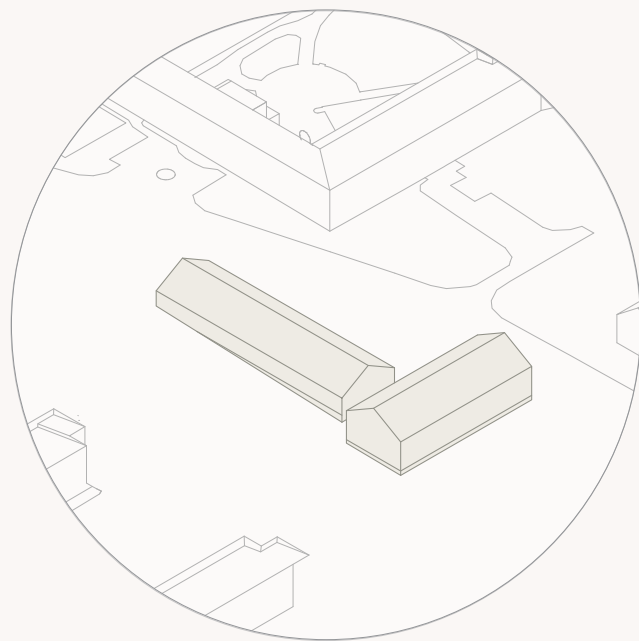


REUSED PARTS

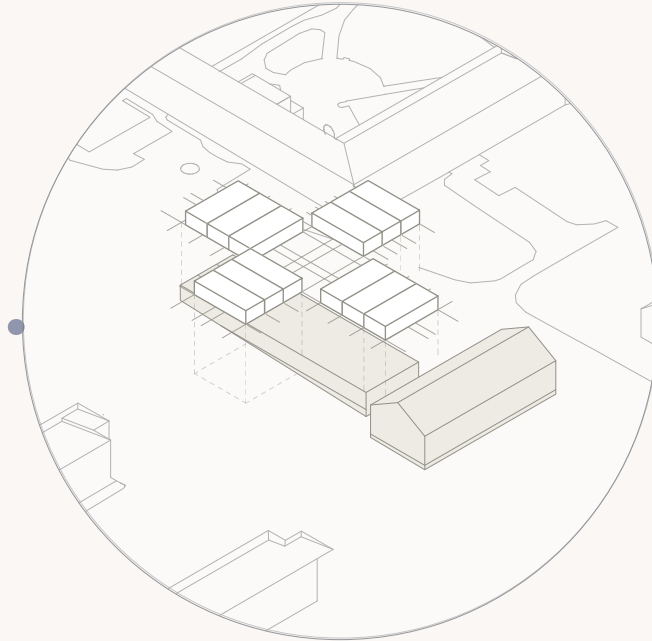


EXISTING BUILDINGS

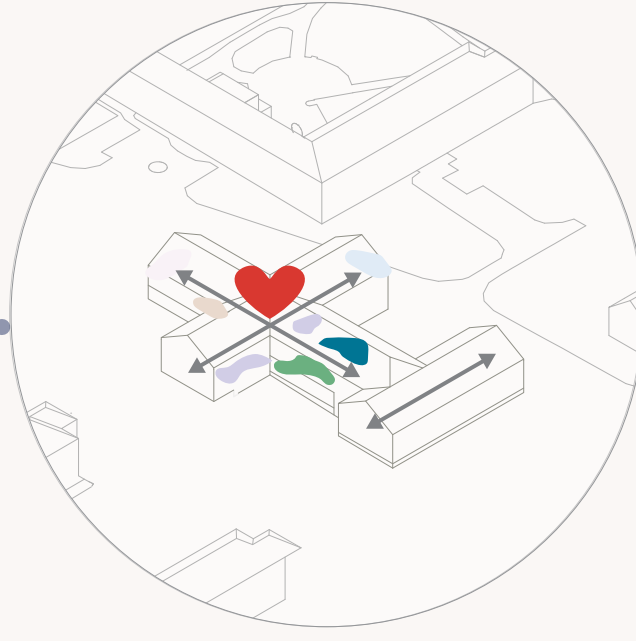
RE-USE EXISTING BUILDINGS



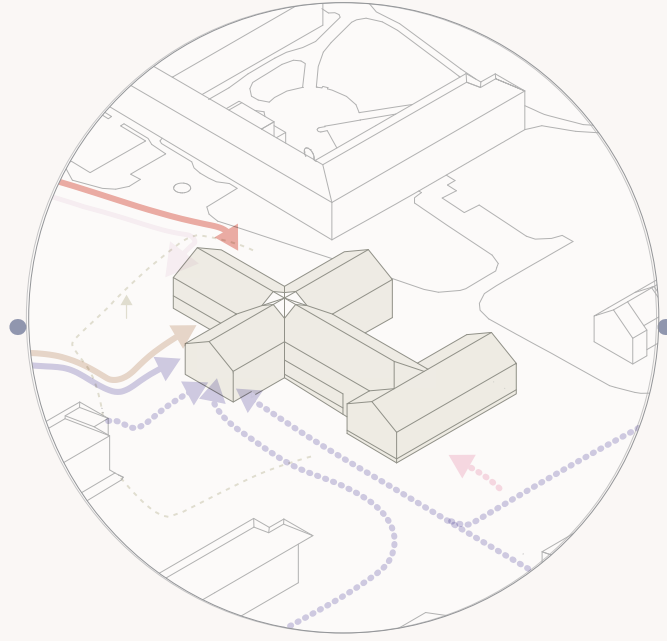
CREATE FLEXIBLE GRID



HEART AND BRANCHES

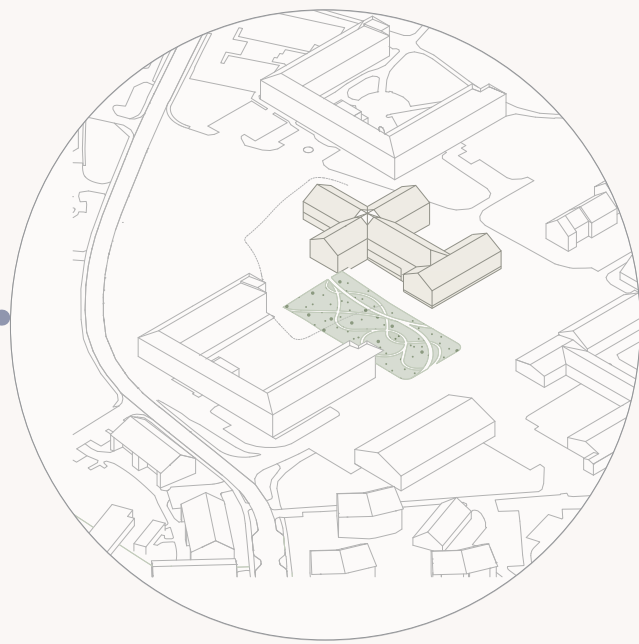


SAFE AND EFFICIENT ACCESS

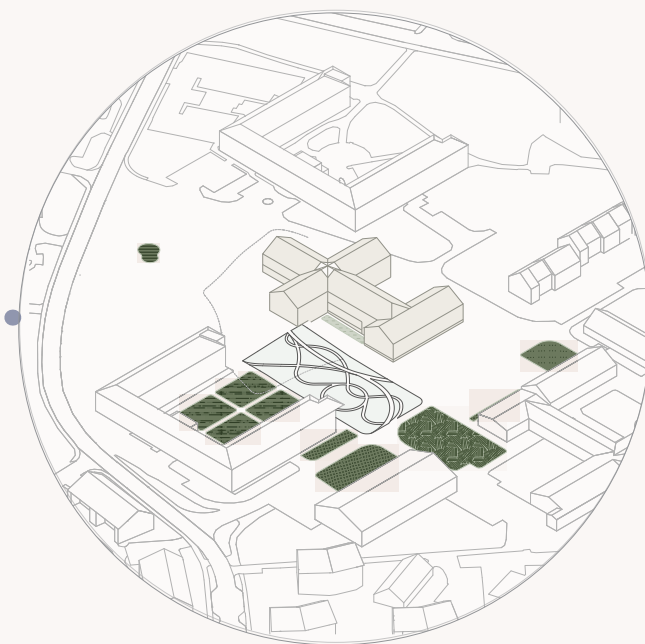


CONCEPT: GREEN HEART

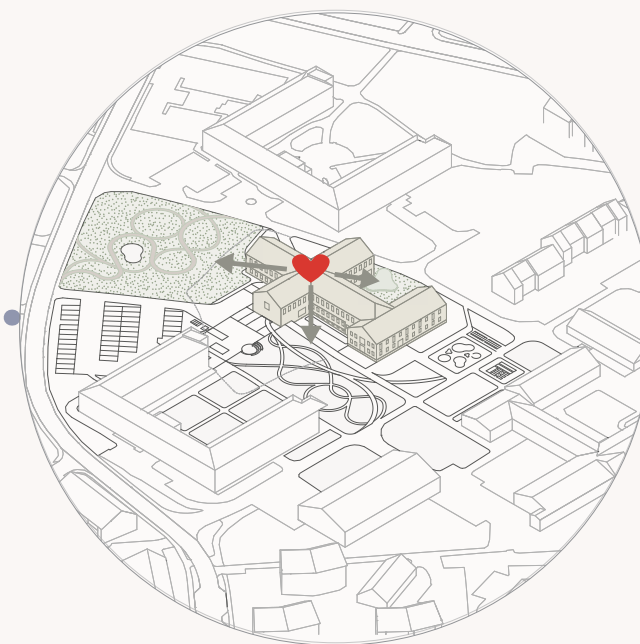
BIRGITTA PARK



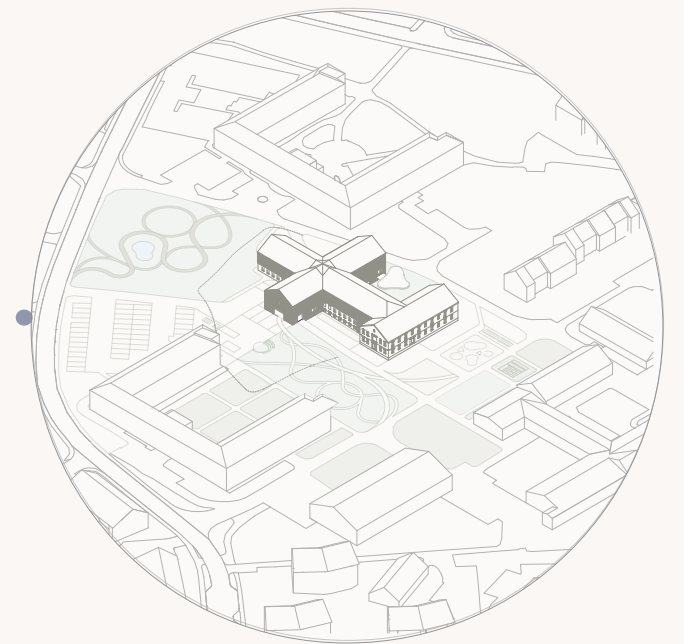
INCREASE BIODIVERSITY



HEALING NATURE



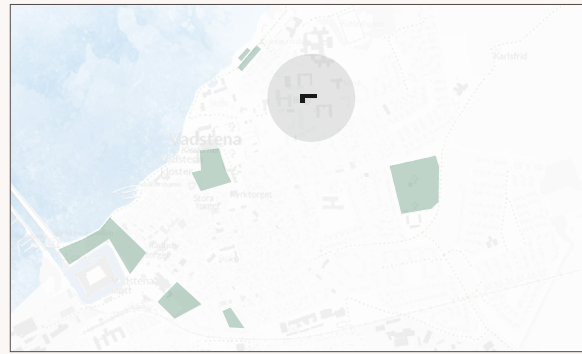
GREEN HEART OF VADSTENA



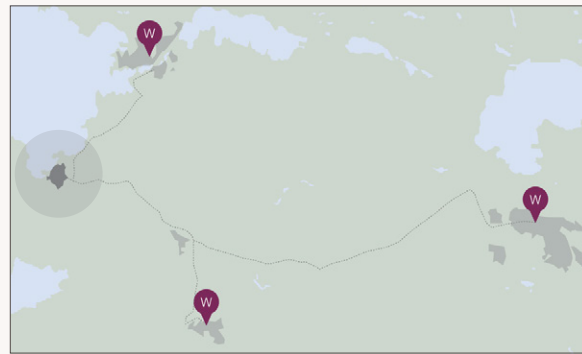


ANALYSIS

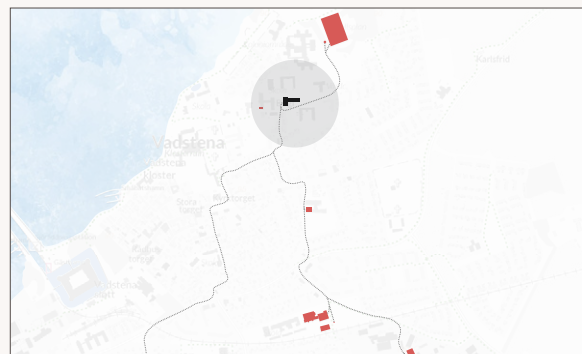
- HISTORY - BIRGITTA HOSPITAL
- CLEAR GRID AND AXIS
- GREEN SPACES WITHOUT FUNCTION



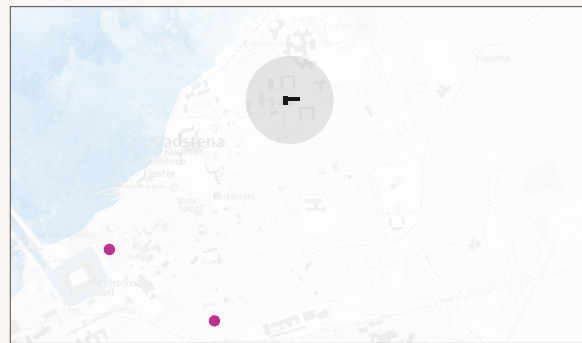
- NO WOMENS CLINIC



- LACK OF EXERCICE FACILITIES IN THE AREA



- LACK OF PLAYGROUNDS



- DENSE GREENERY
- HARD SURFACES
- OUTDOOR ACTIVITIES
- COMMUNITY GROWING
- ↔ MAIN AXIS






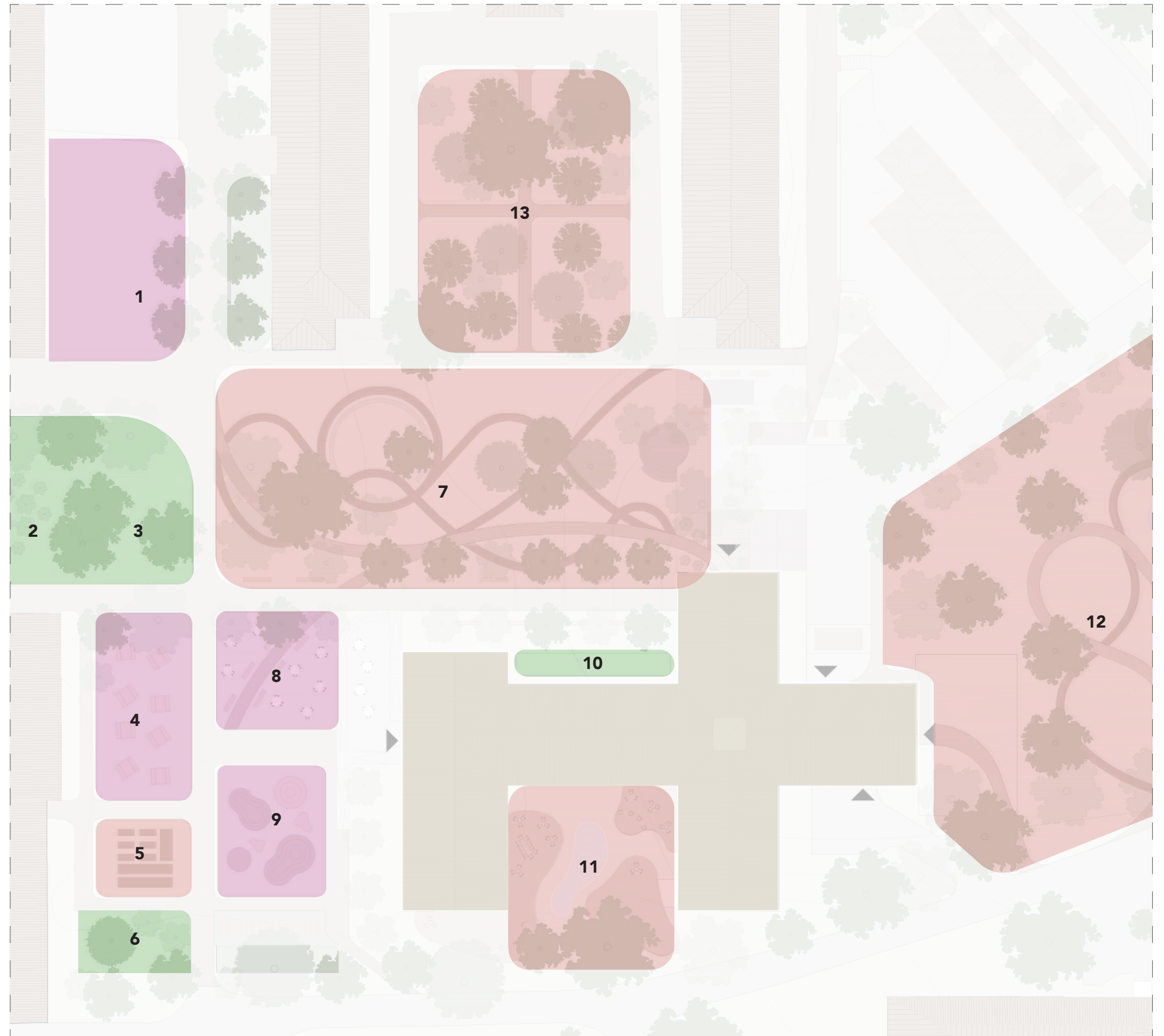
RESPONSE

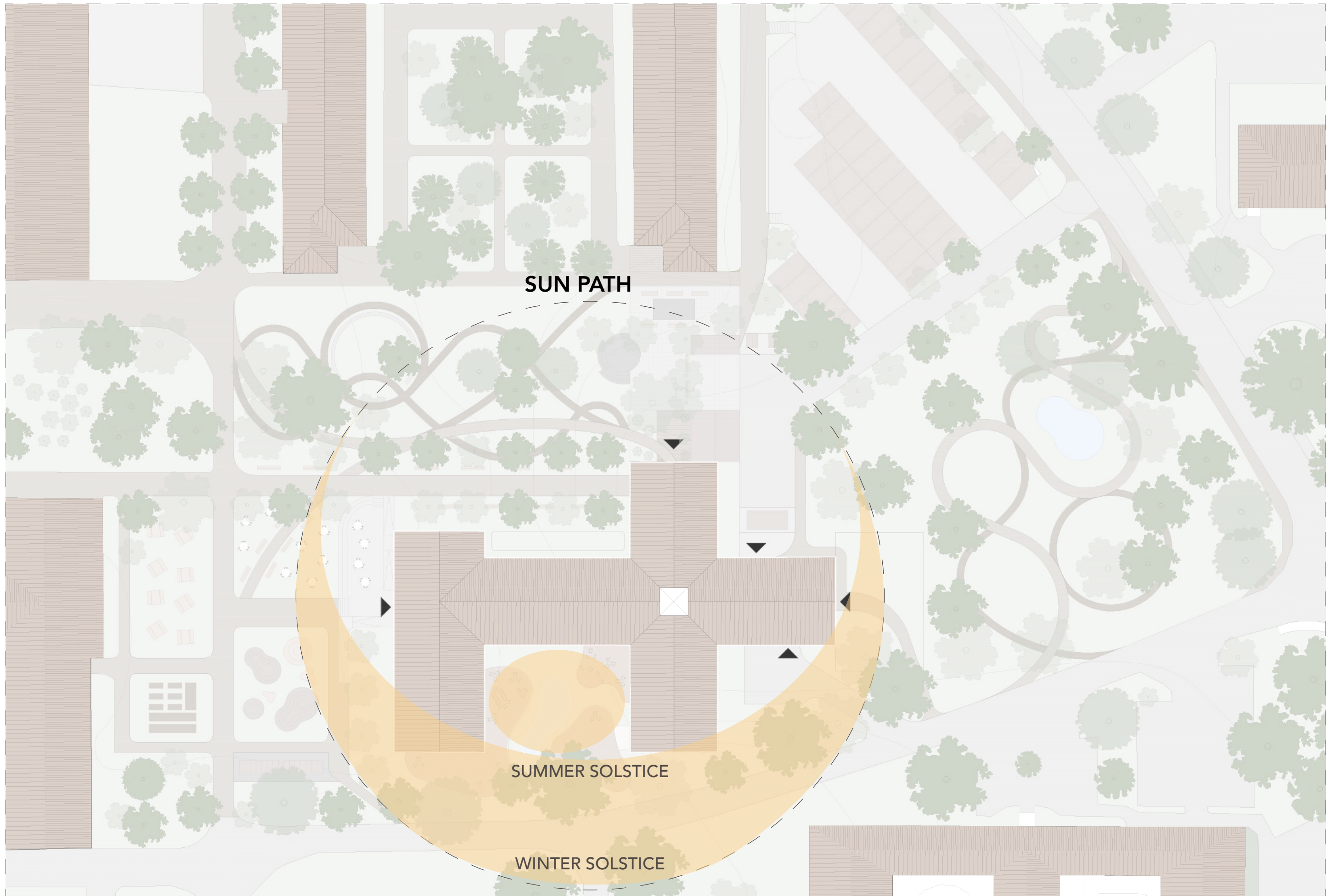
- REGENERATE GREEN SPACES WITH HEALTH-PROMOTING ACTIVITIES
- CREATE BIRGITTA PARK ALONG A GREEN CORRIDOR FOCUSING ON BIODIVERSITY AND SOCIAL VALUE
- CREATE A WOMENS CLINIC AT THE HEALTH CENTRE

FUNCTIONAL GREENERY

- 1 COMMUNITY GARDEN
- 2 RAIN GARDEN
- 3 BIRD HOUSES
- 4 PICNIC AREA
- 5 COMMUNITY GROWING
- 6 INSECT GARDEN
- 7 BIRGITTA PARK - SENSORY GARDEN
- 8 GATHERING
- 9 PLAYGROUND
- 10 WILD MEADOW
- 11 SUN GARDEN
- 12 EXERCICE PARK
- 13 ORCHARD

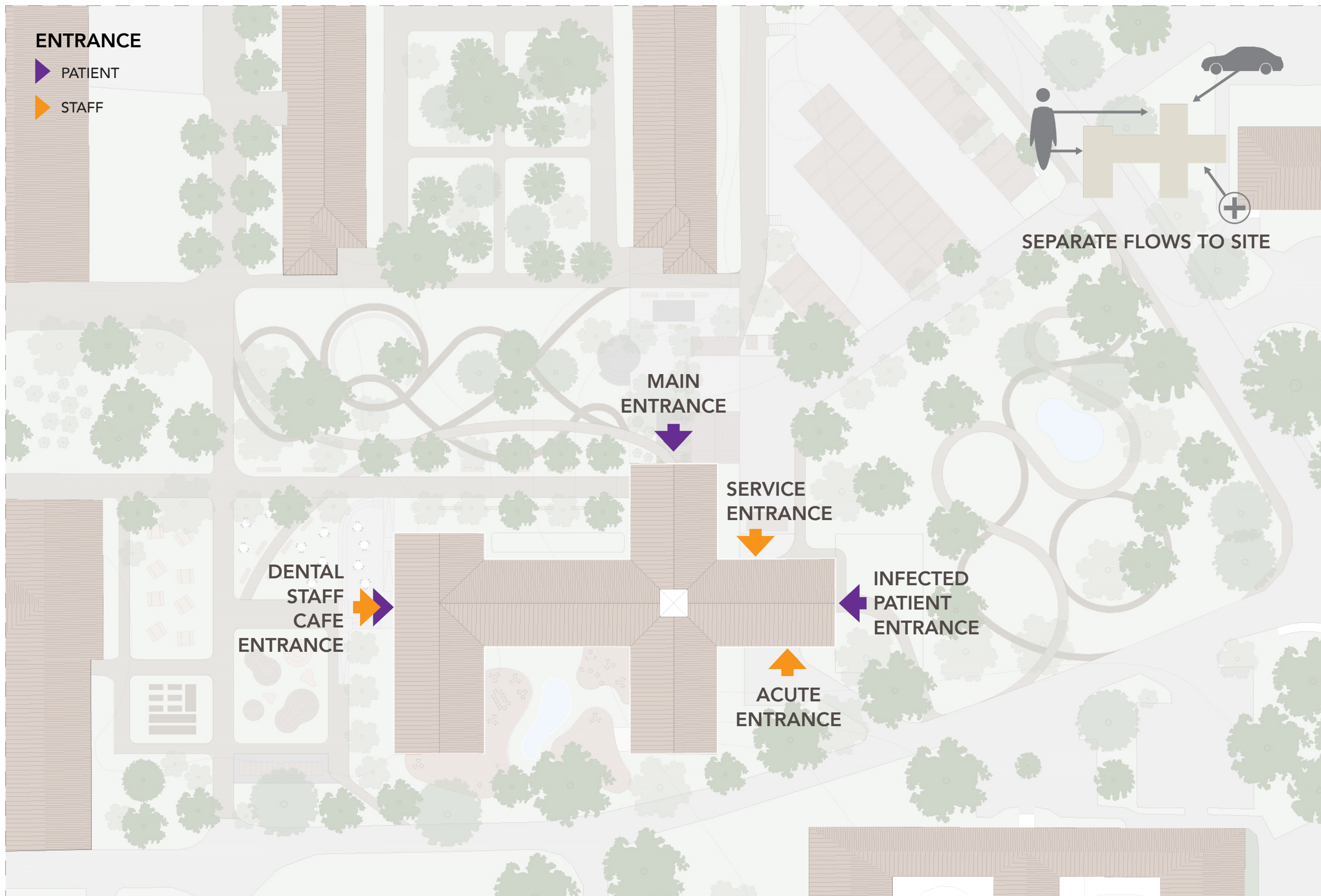
-  BIODIVERSITY
-  SOCIAL
-  HEALTH PROMOTING





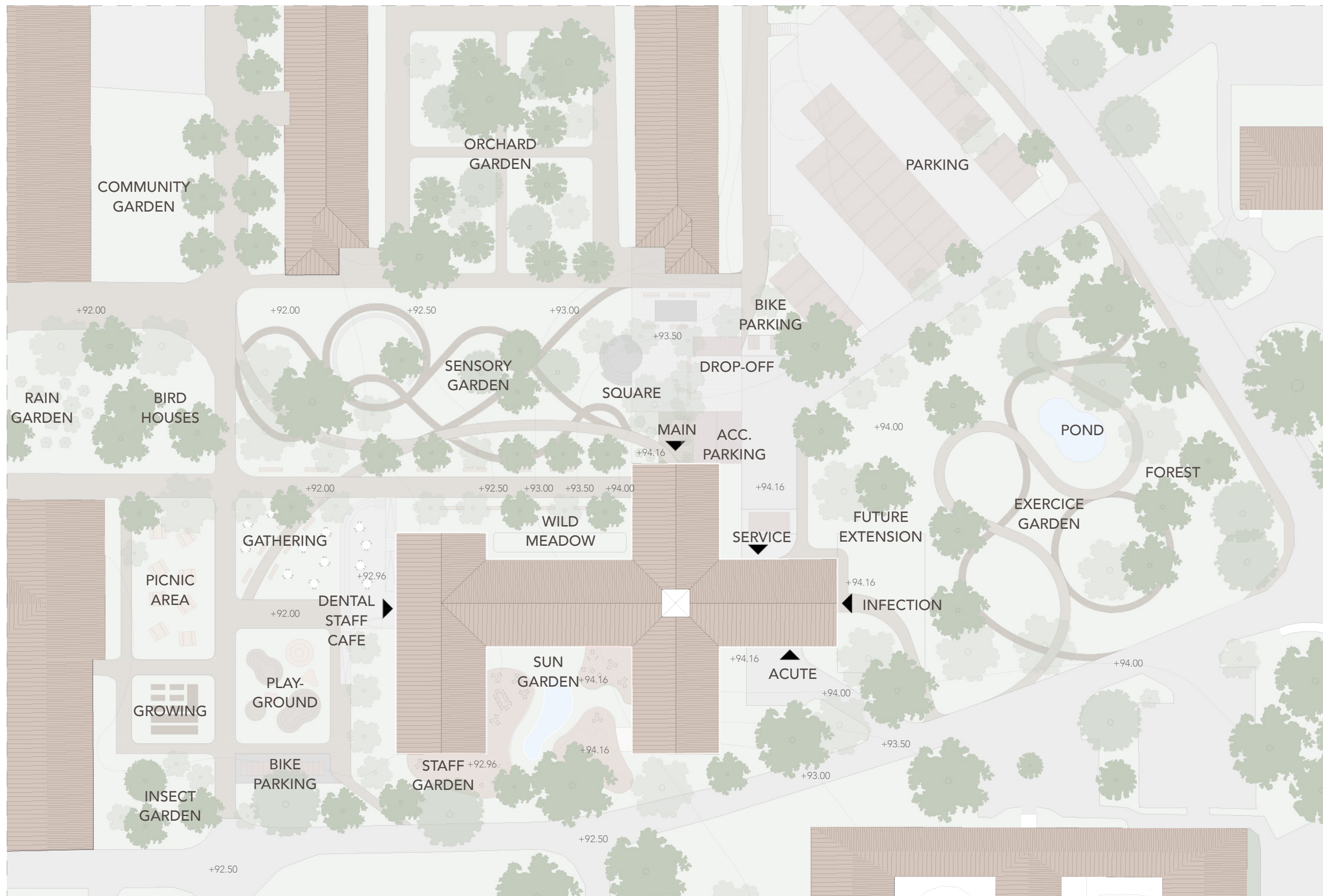
0 10 20 30 40 50 m





0 10 20 30 40 50 m

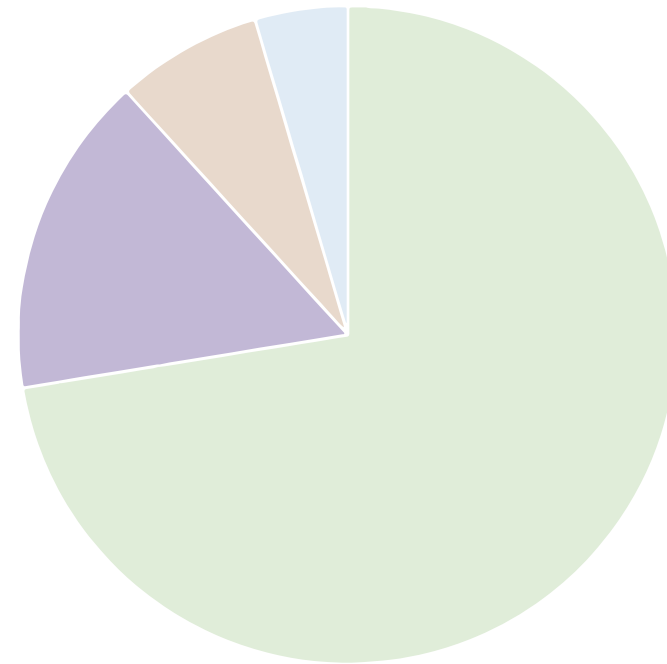




CHALLENGING THE BRIEF

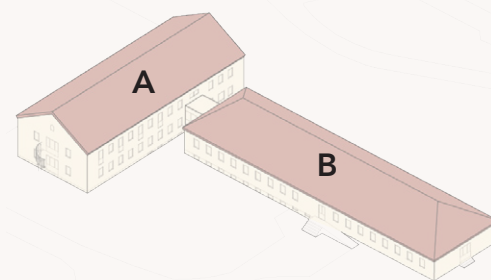
-  WOMEN'S CLINIC
-  COMMUNICATION CENTRE
-  DIGITAL CARE
-  PREVENTIVE CARE
-  MOBILE CARE HUB
-  INFECTION CARE
-  CAFÉ
-  STAFF WELLBEING

ORIGINAL BRIEF



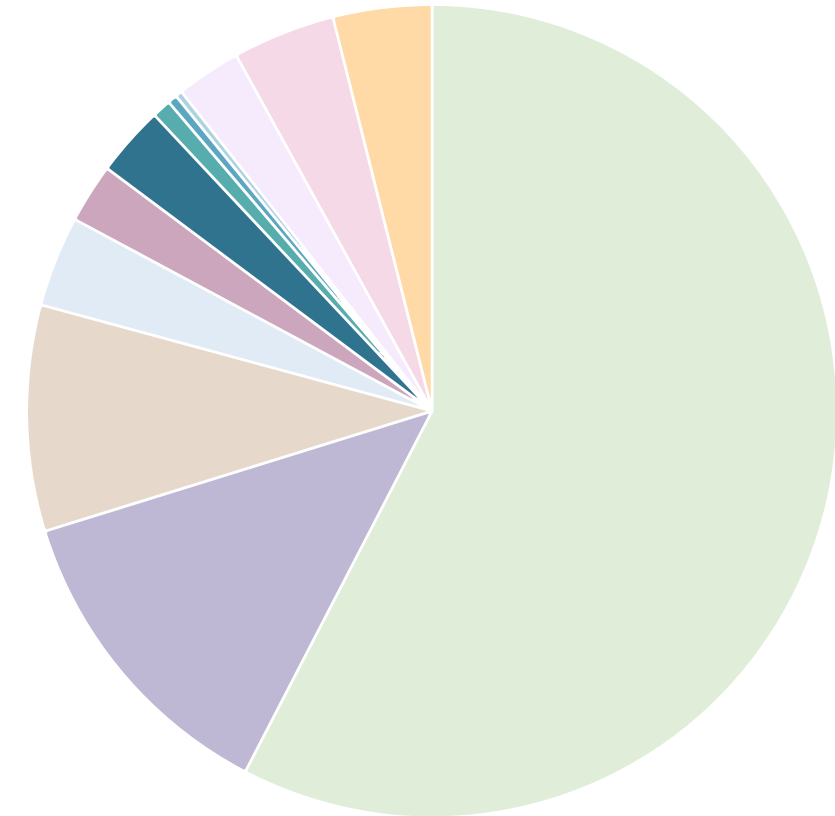
ORIGINAL BRIEF

● PRIMARY CARE	1098 m ²
● DENTAL CARE	240 m ²
● SERVICE SPACES	109 m ²
● FAMILY CENTRE	69 m ²
TOTAL	1516 m²



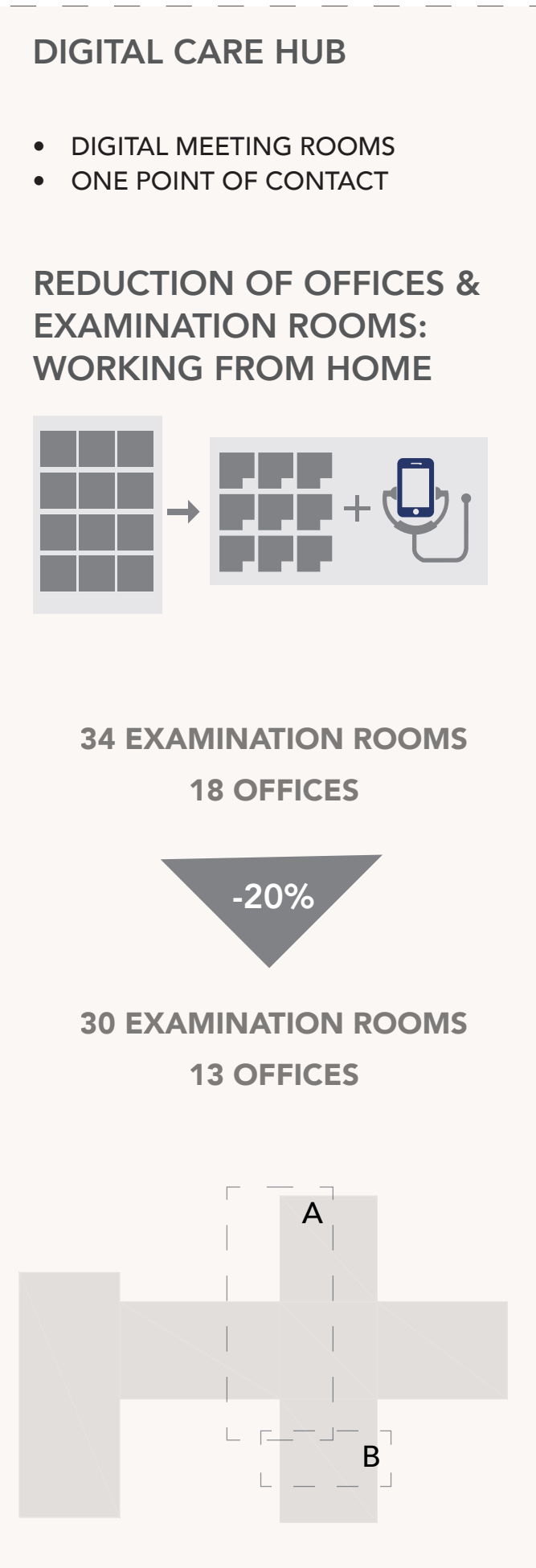
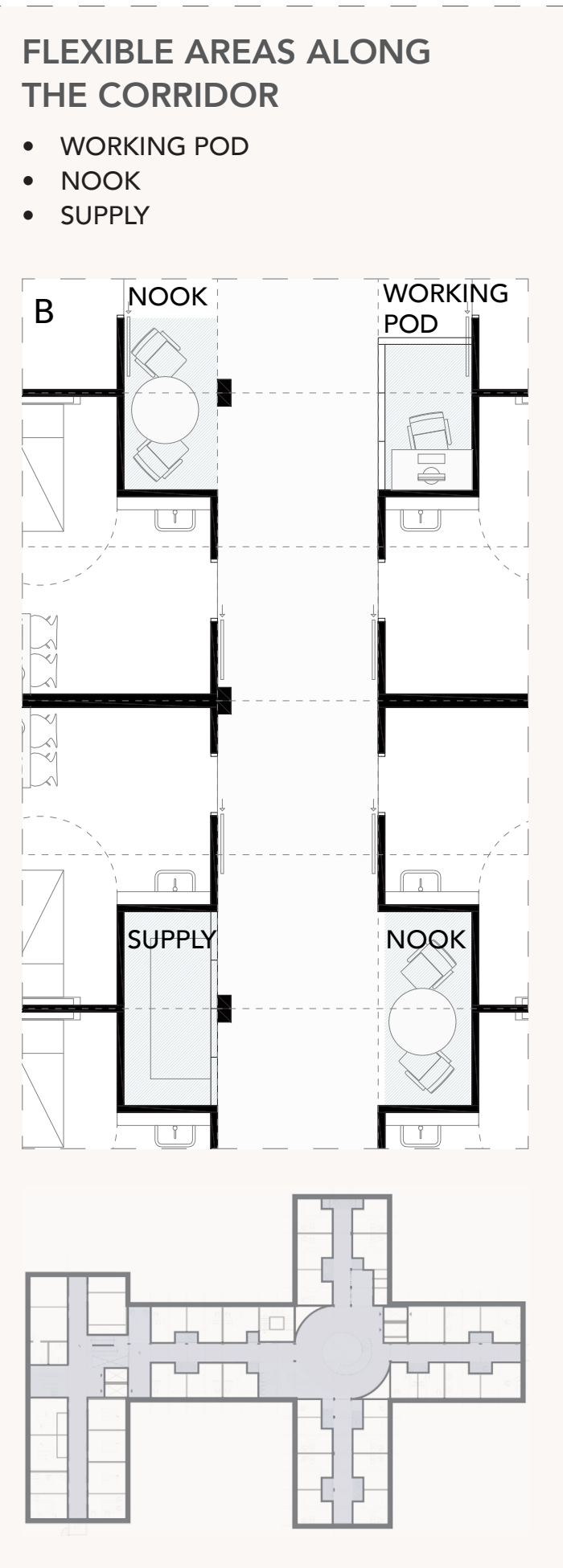
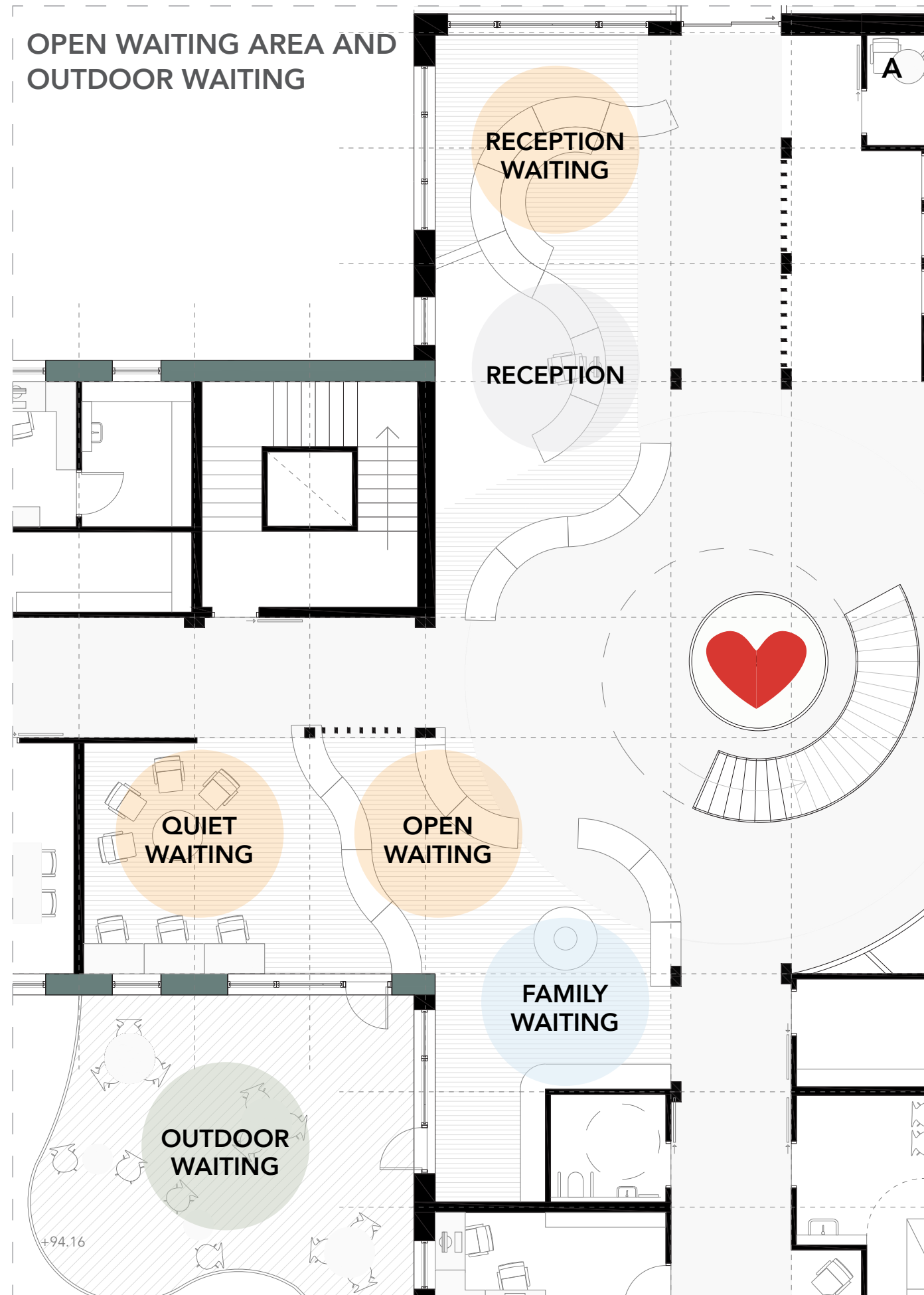
EXISTING BUILDINGS BTA: 2 457 m²
 BUILDING A: 417 m² x 3
 BUILDING B: 603 m² x 2
 NEW BUILDING TOTAL BTA: 3799 m²
 NEW ADDITION: 1341 m²

PROPOSED BRIEF



PROPOSED BRIEF

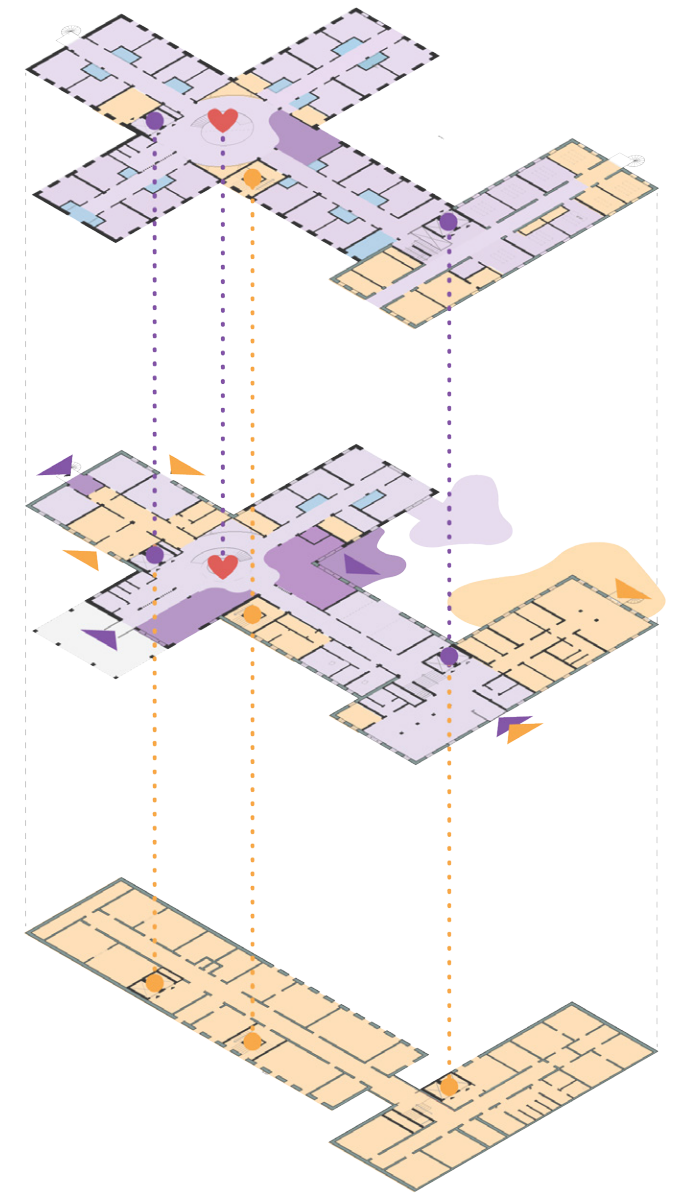
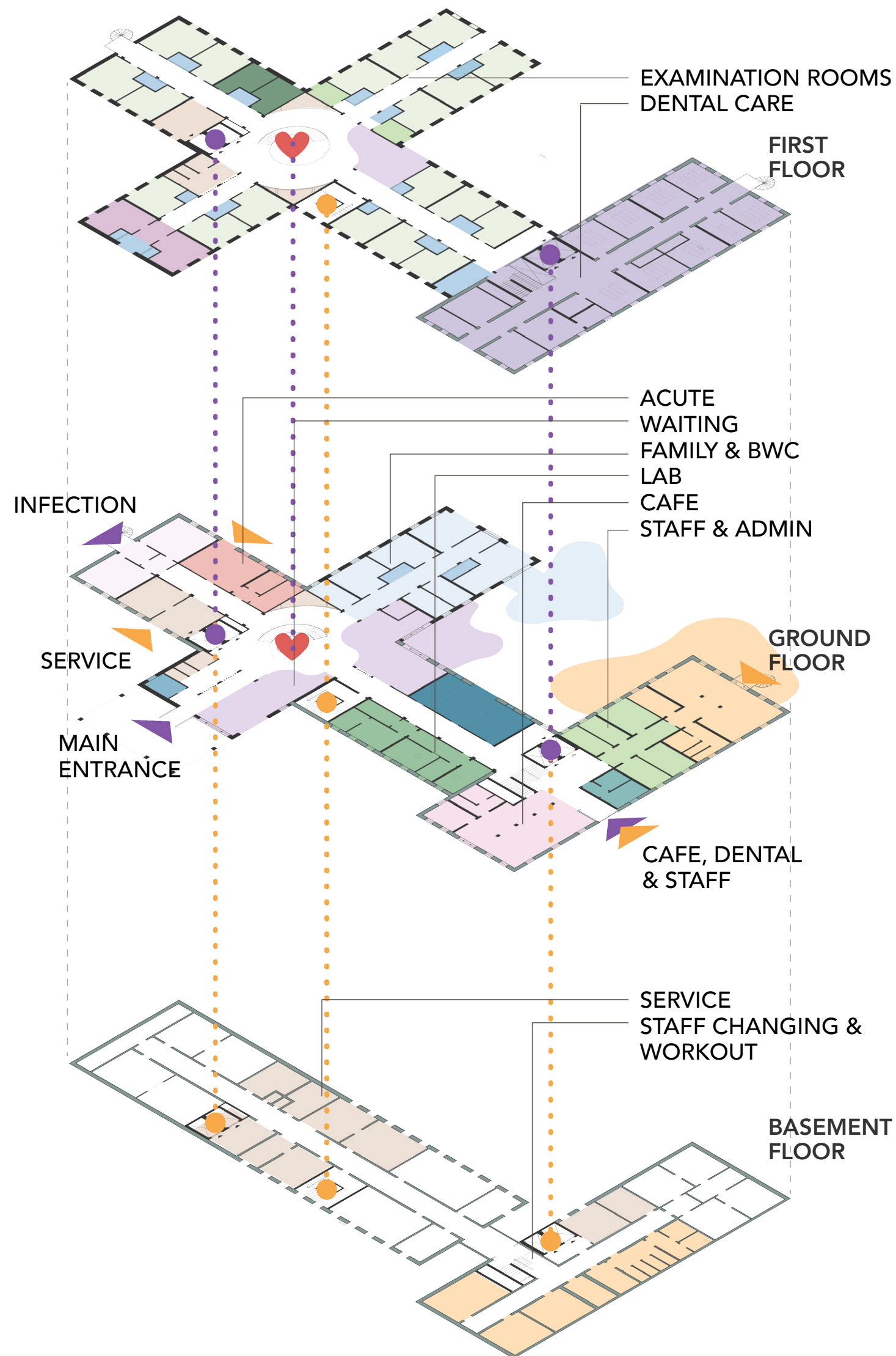
● PRIMARY CARE	1070 m ²
● DENTAL CARE	234 m ²
● SERVICE SPACES	167 m ²
● FAMILY CENTRE	67 m ²
● WOMEN'S CLINIC	44 m ²
● COMMUNICATION CENTRE	52 m ²
● DIGITAL CARE	14 m ²
● PREVENTIVE CARE HUB	7 m ²
● MOBILE CARE HUB	5 m ²
● INFECTION CARE	48 m ²
● CAFÉ	76 m ²
● STAFF WORKOUT AREA	73 m ²
TOTAL	1858 m²
+	342 m²



FLOOR PLAN CONCEPT

- ACCESS POINTS TO SITE AND ENTRANCES ARE SEPARATED FOR FLOW AND EFFICIENCY
- THE HEART AND DEPARTMENTS
- THREE CORES

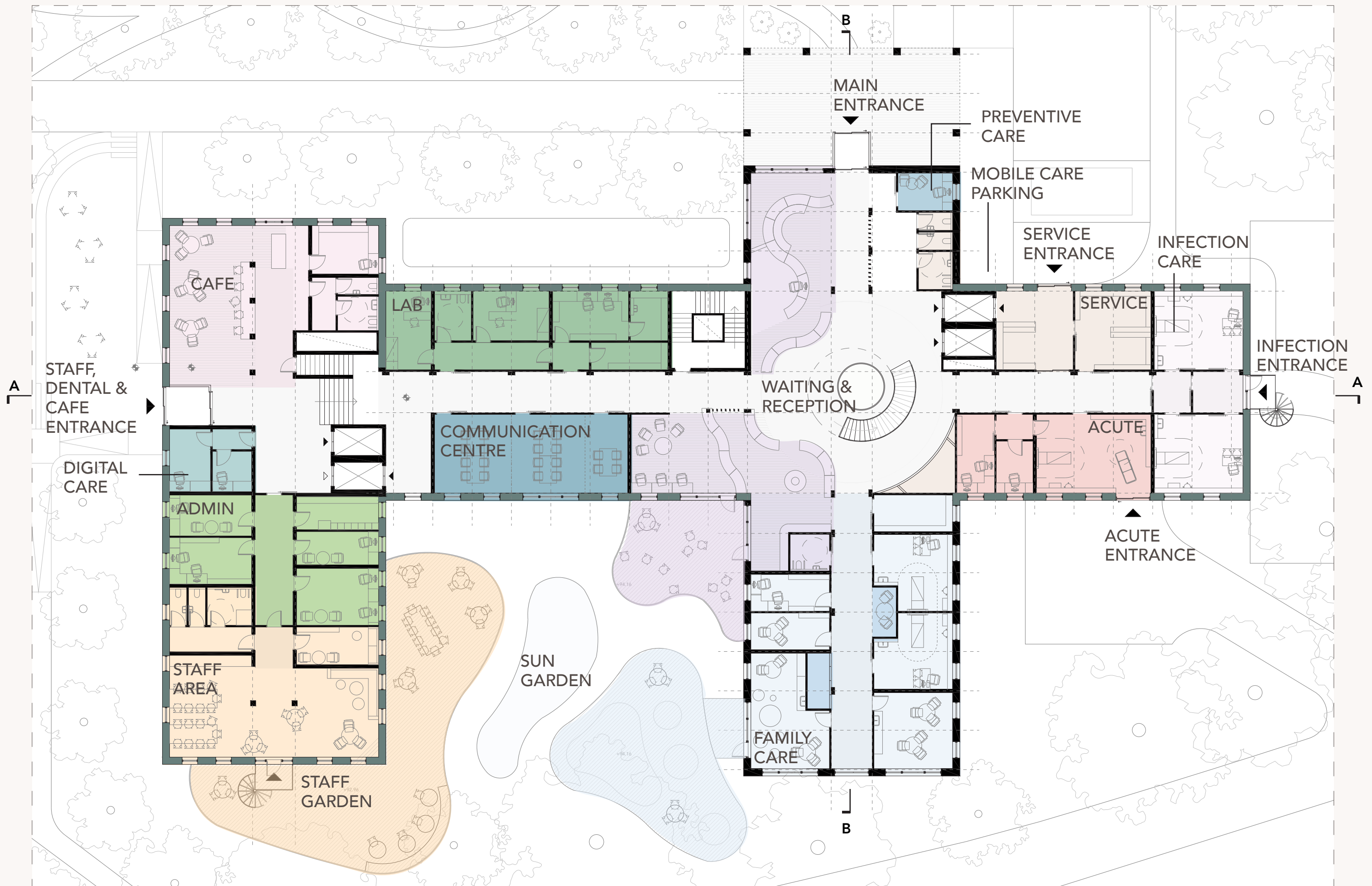
- ♥ HEART
- WAITING AREA
- EMERGENCY
- CAFE
- INFECTION CARE
- STAFF AREA
- SERVICE SPACES
- ADMINISTRATION
- LAB
- DIGITAL CARE
- PREVENTIVE CARE
- COMMUNICATION CENTRE
- FAMILY CENTRE WITH BWC
- FLEXIBLE AREAS
- DENTAL CARE
- EXAMINATION ROOMS
- PSYCHOSOCIAL RECEPTION
- WOMEN'S CLINIC

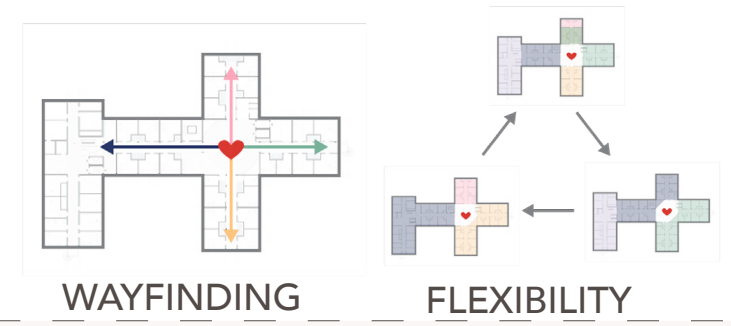
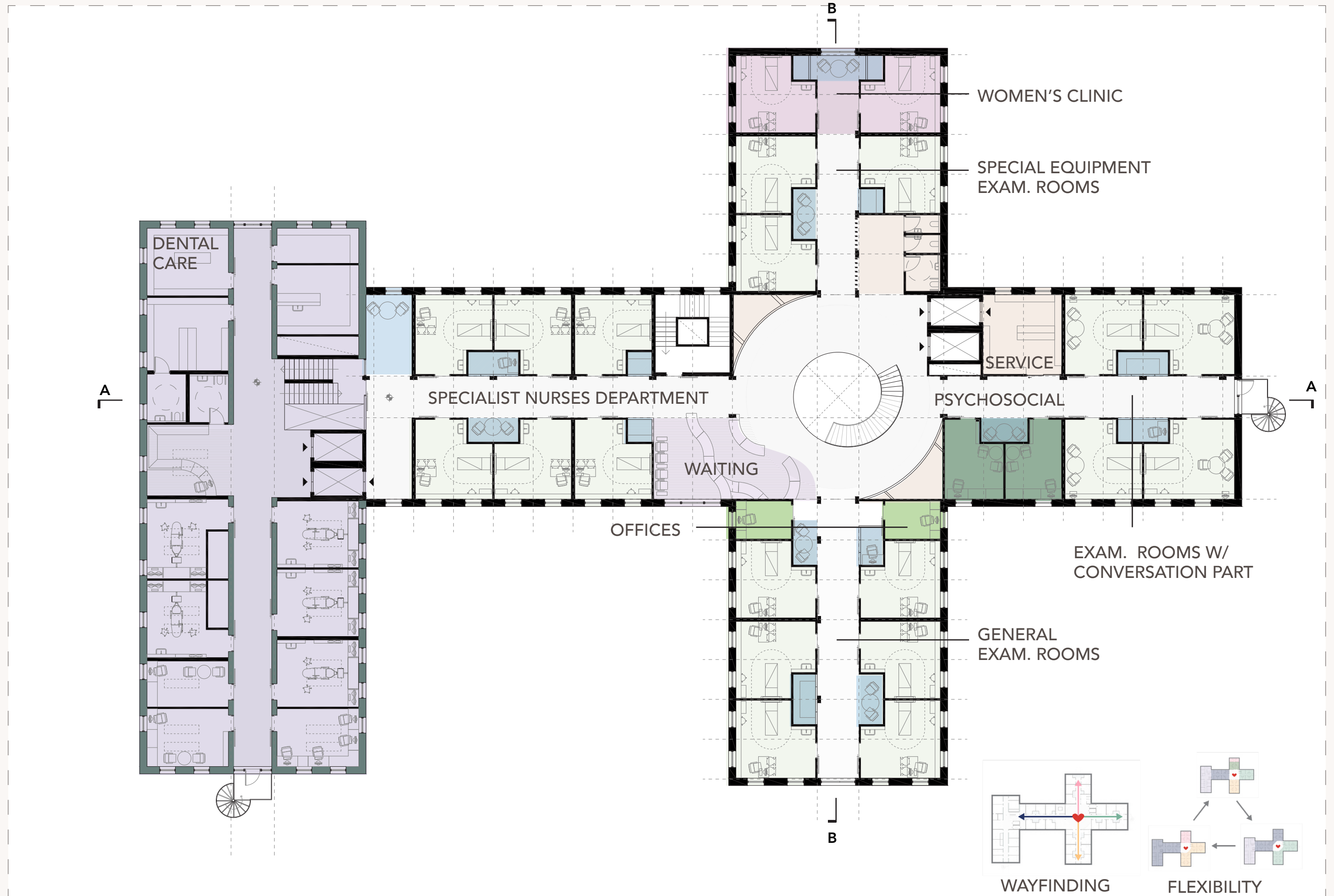


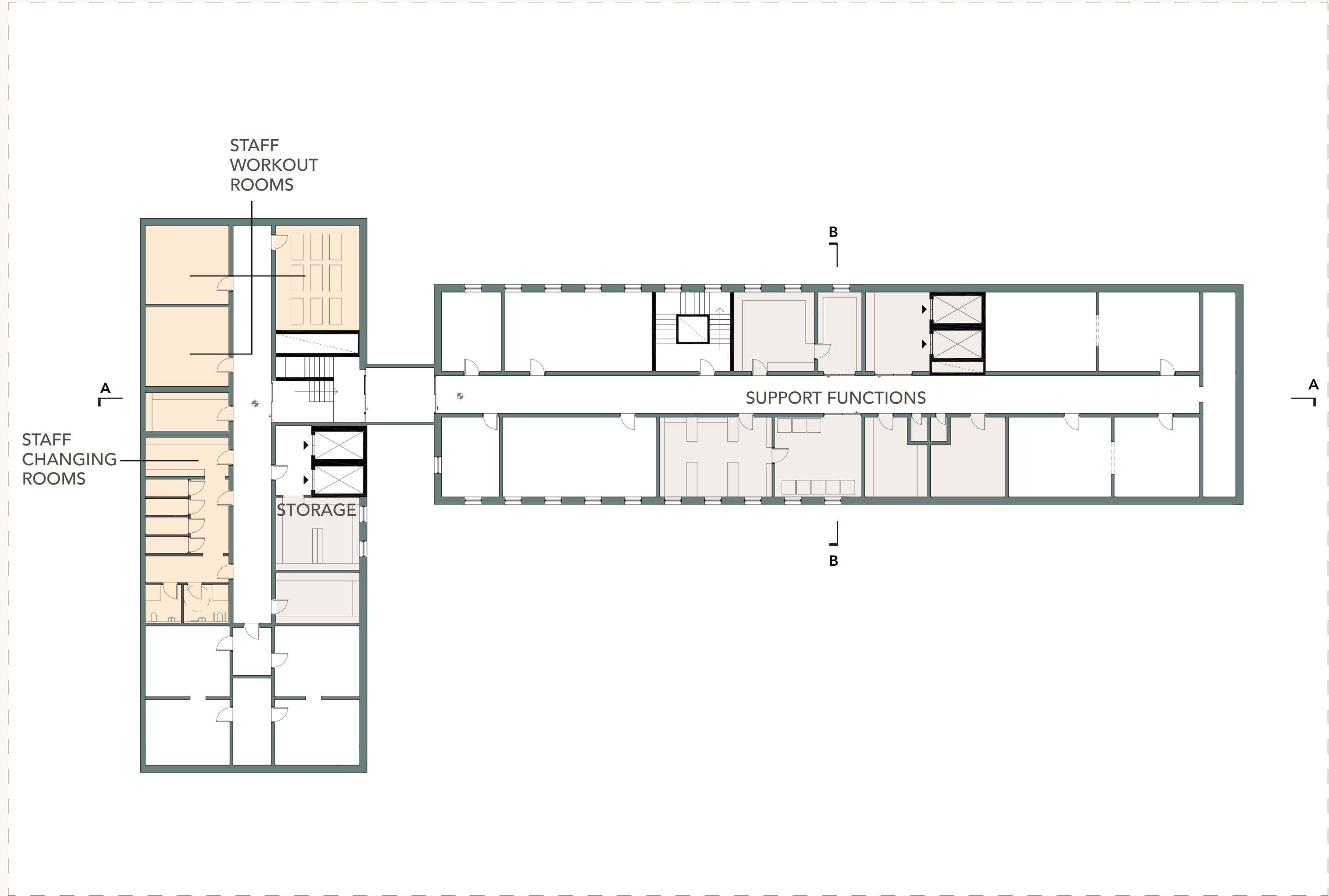
ZONES

- SHARED CORRIDOR
- STAFF
- SHARED CORE
- STAFF CORE
- ▶ ENTRANCE PATIENT
- ▶ ENTRANCE STAFF AND SERVICE









0 5 10 15 20m

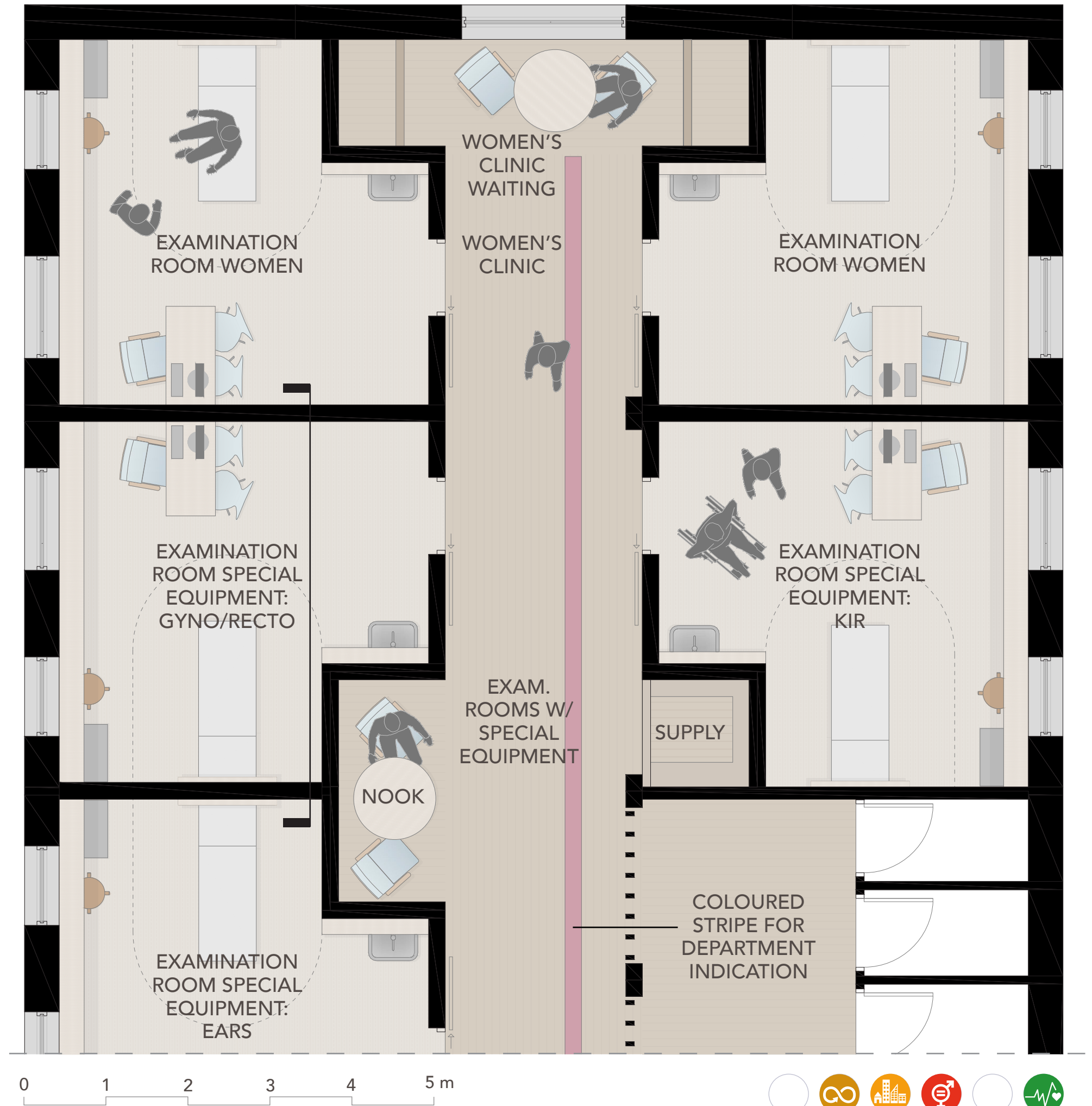
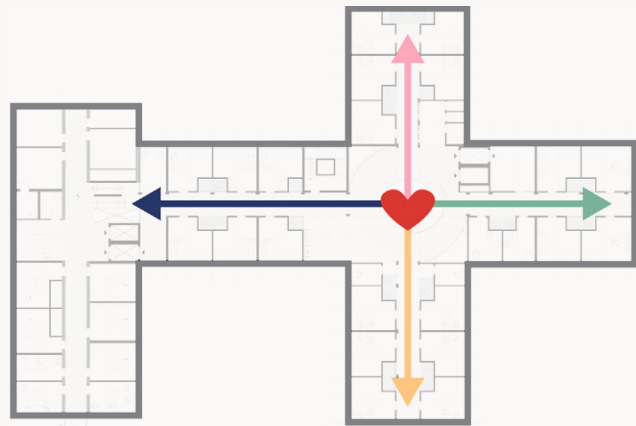


DEPARTMENTS

SECTION - EXAMINATION ROOM

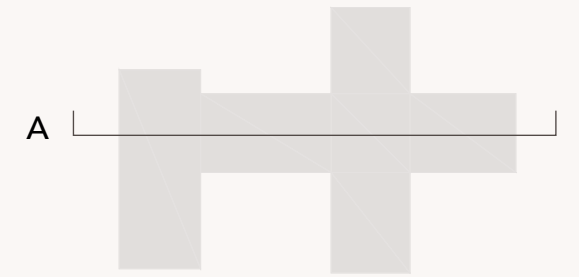
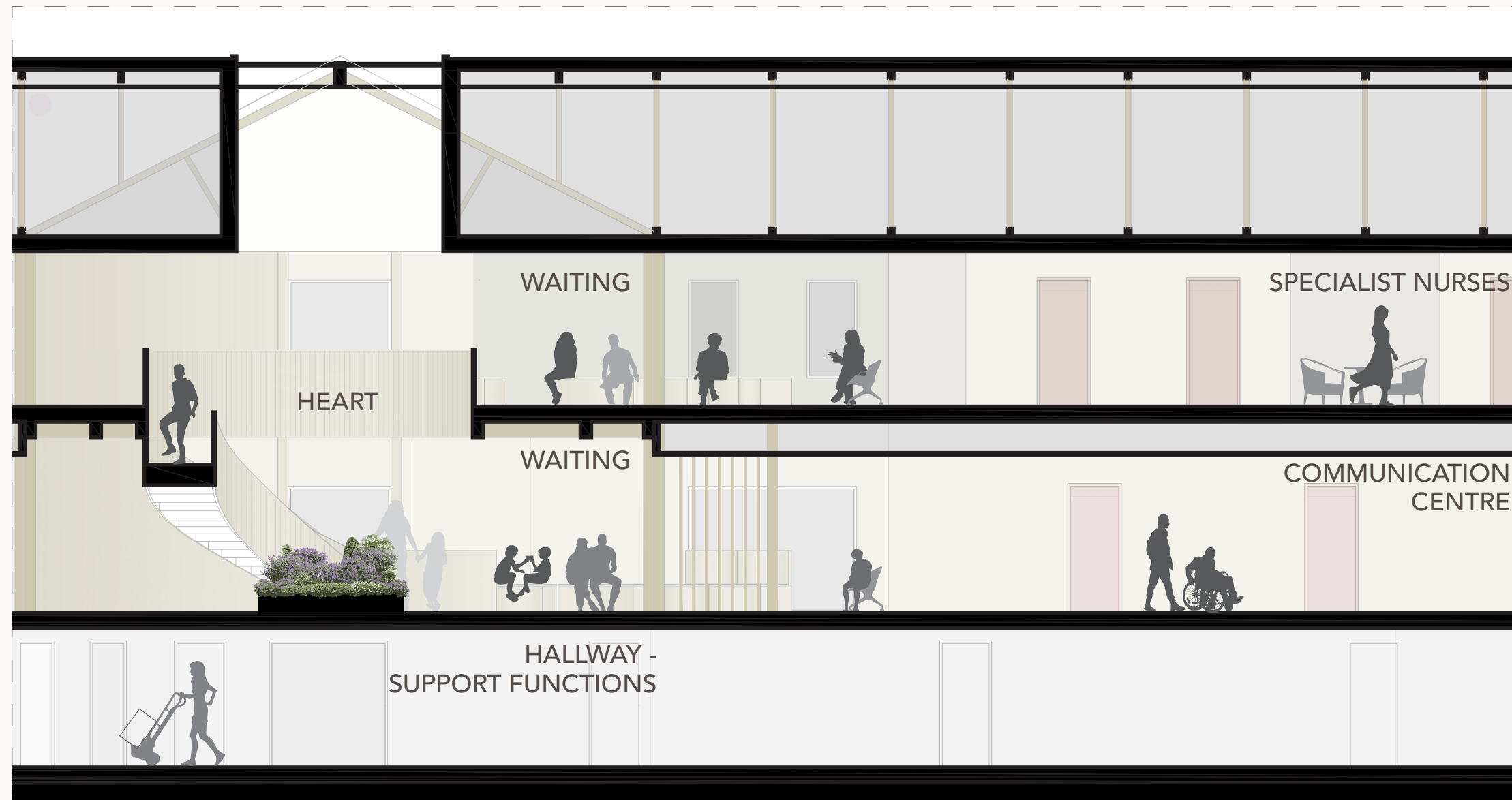
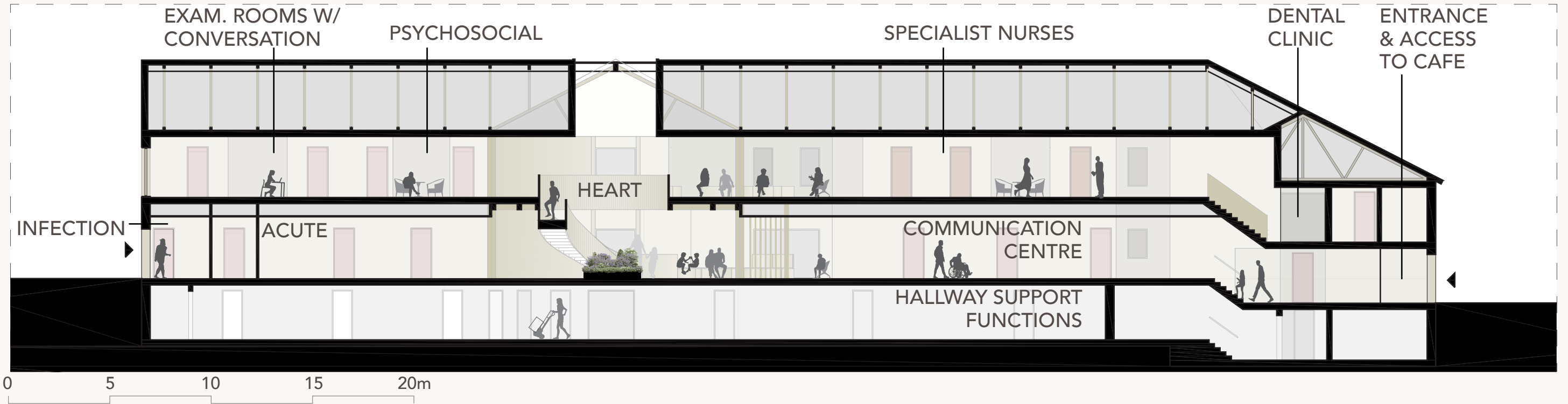


EASY WAYFINDING

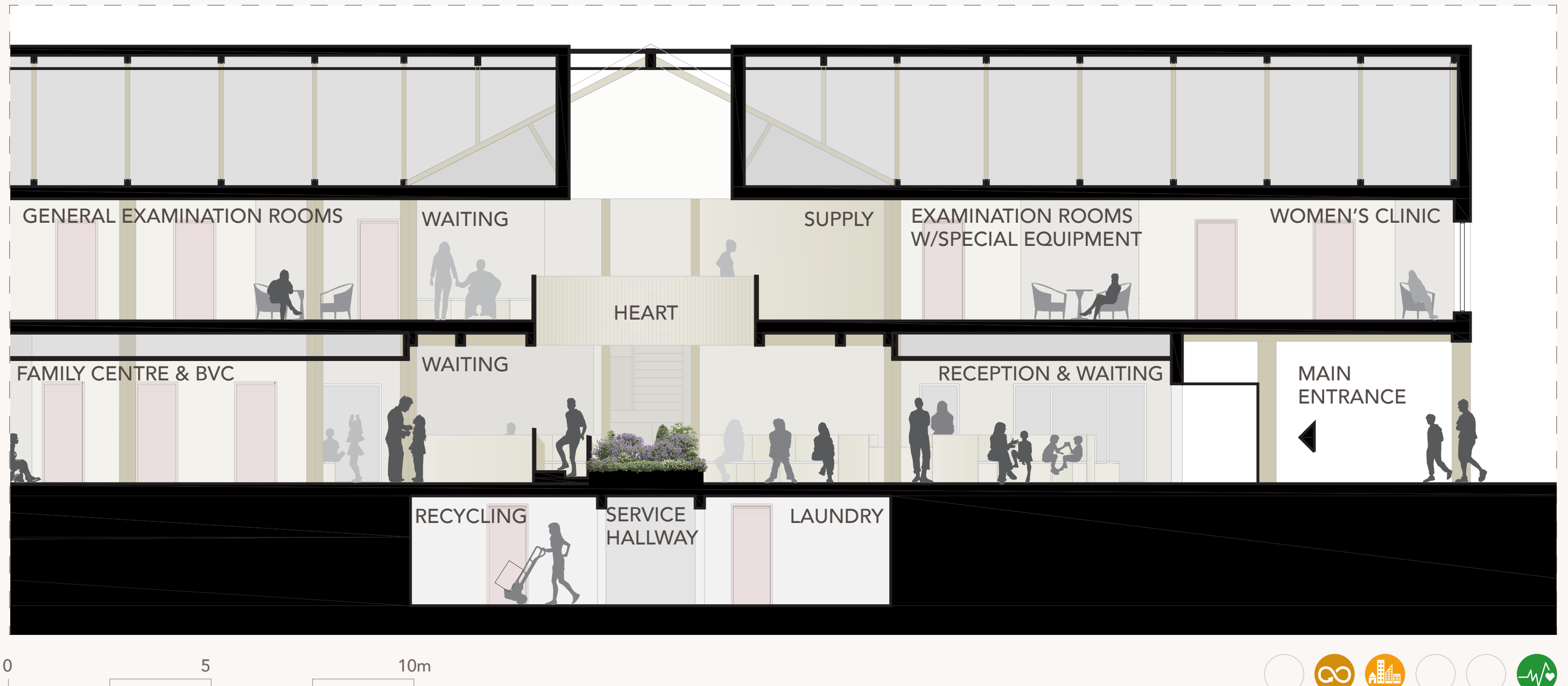
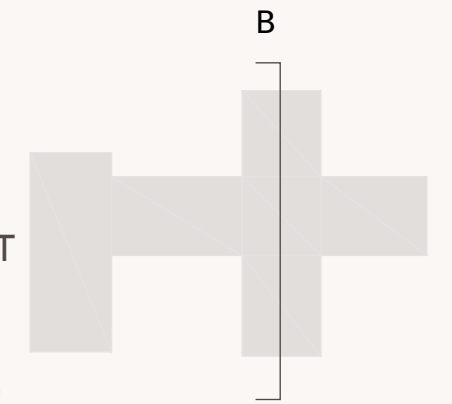
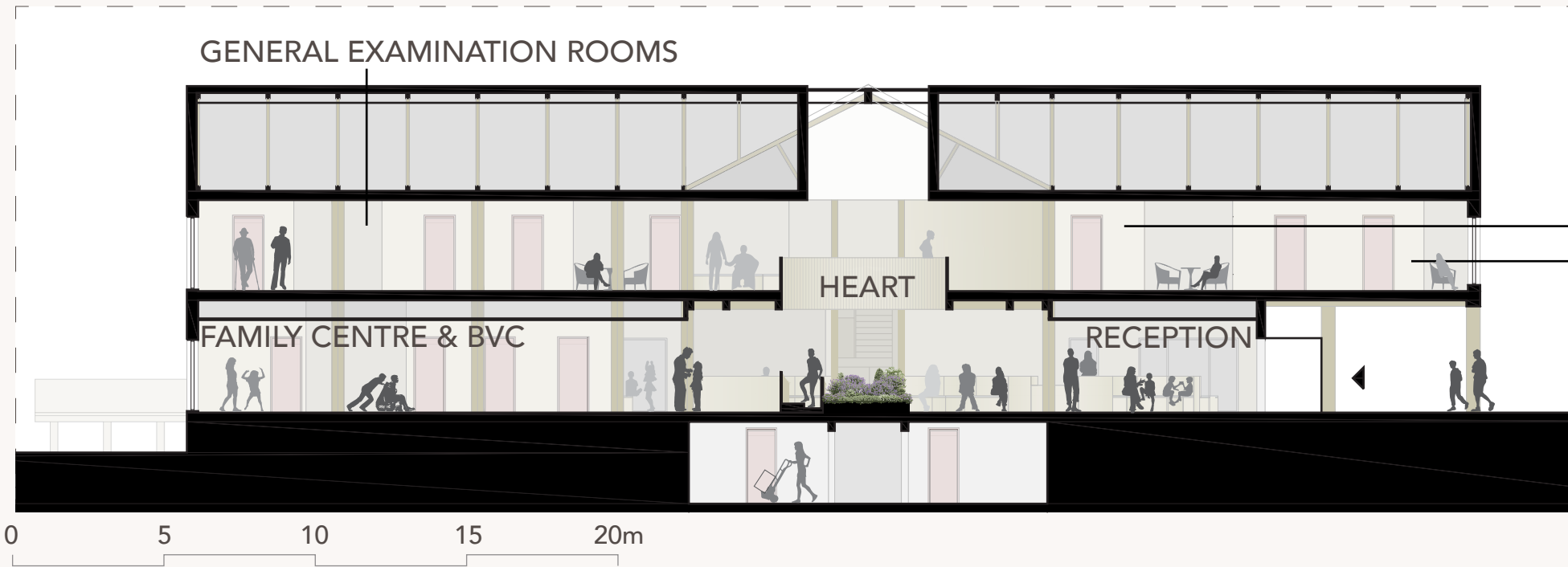




SECTION A-A



SECTION B-B





0 5 10 15 20m





0 5 10 15 20m



STRUCTURE

EXISTING & MODULAR

- MODULAR CLT-STRUCTURE
- REUSE THE EXISTING FOUNDATION, BASEMENT AND STRUCTURAL WALLS
- ADDITIONAL STRUCTURAL COLUMNS

CLT: ELASTICITY & FOOTPRINT

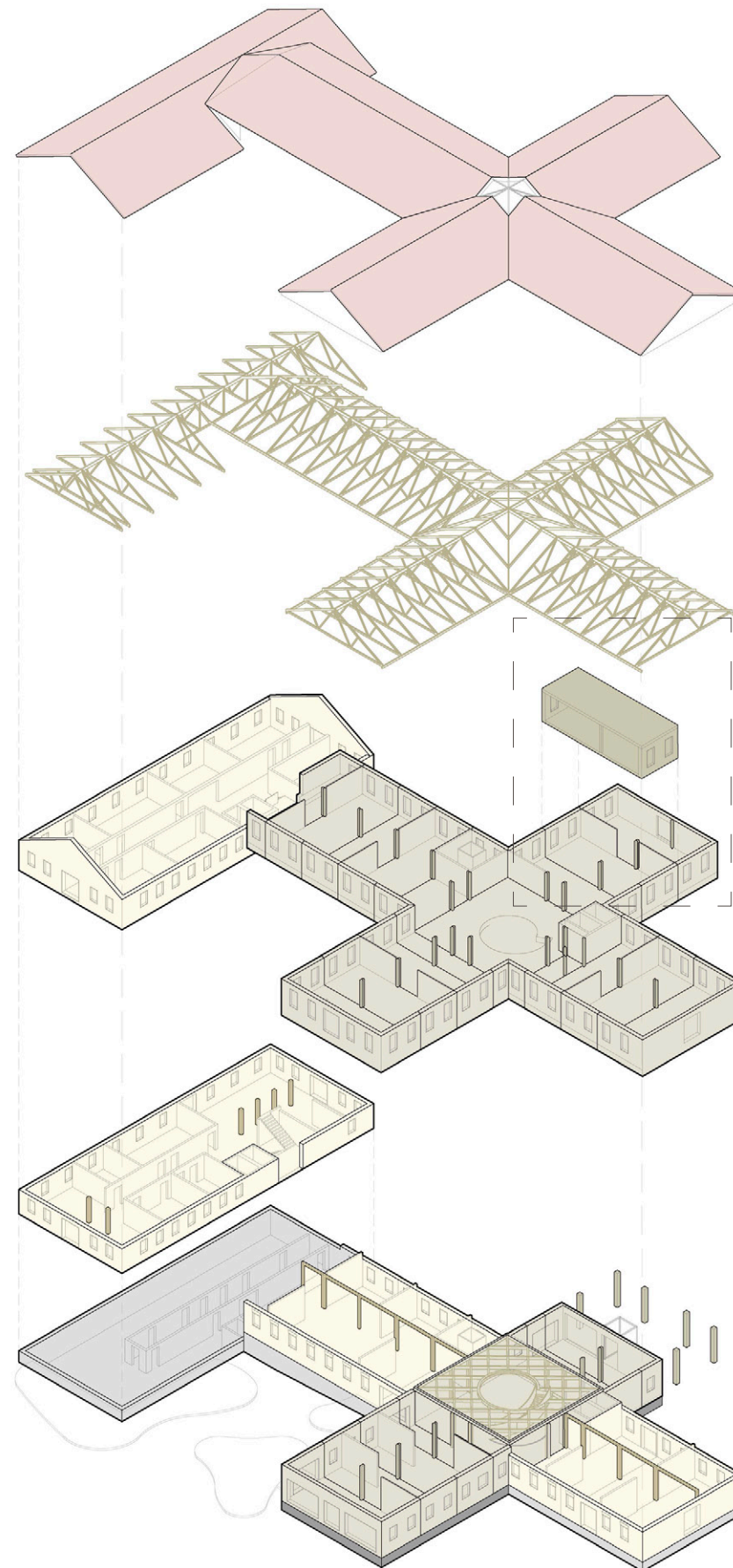
- POSSIBILITY FOR EXPANDING OR DECONSTRUCTION
- LOW CARBON FOOTPRINT



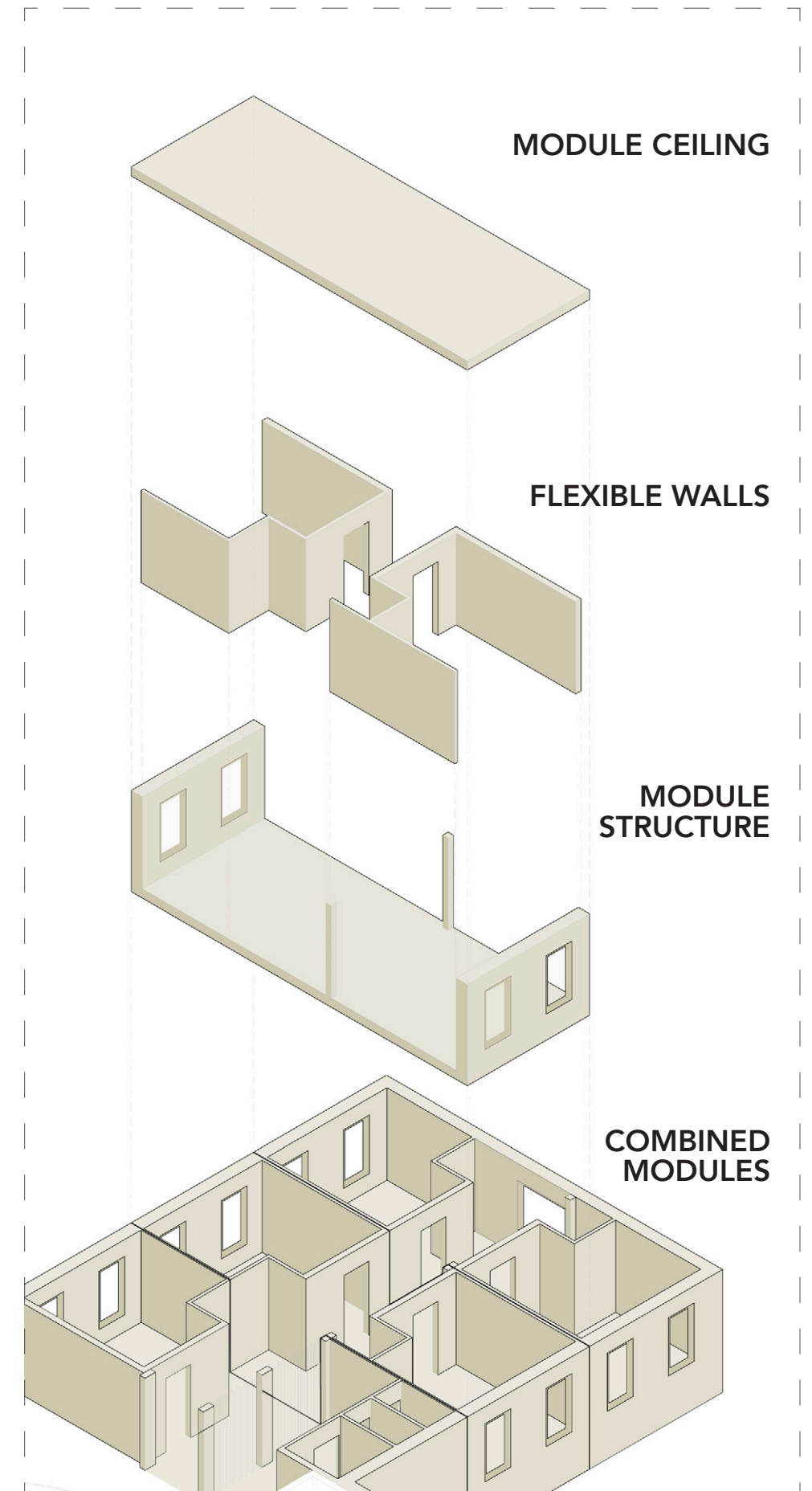
STRUCTURAL ELEMENTS

- REUSED AND NEW ROOF TILES
- ▧ TIMBER TRUSS STRUCTURE
- EXISTING LOAD BEARING BRICK WALLS
- NEW CLT MODULES
- EXISTING CONCRETE FOUNDATION
- NEW CONCRETE FOUNDATION
- ▮ ENGINEERED TIMBER COLUMNS

STRUCTURAL AXONOMETRIC

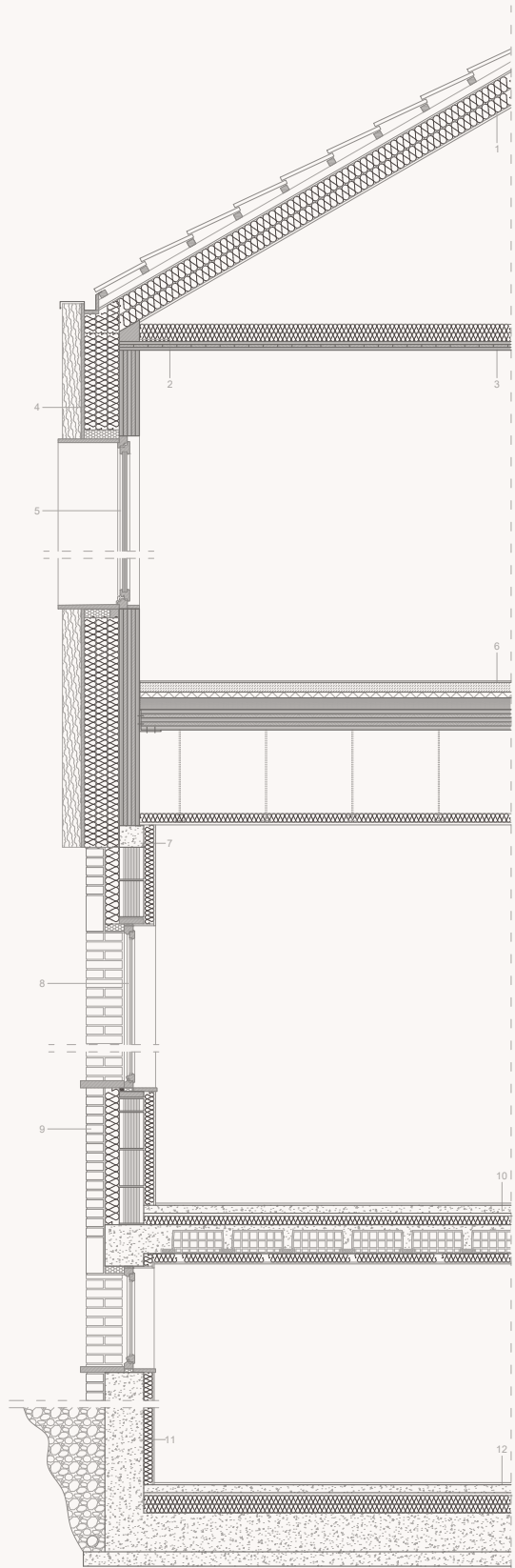


MODULE AXONOMETRIC

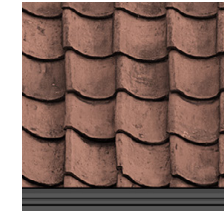
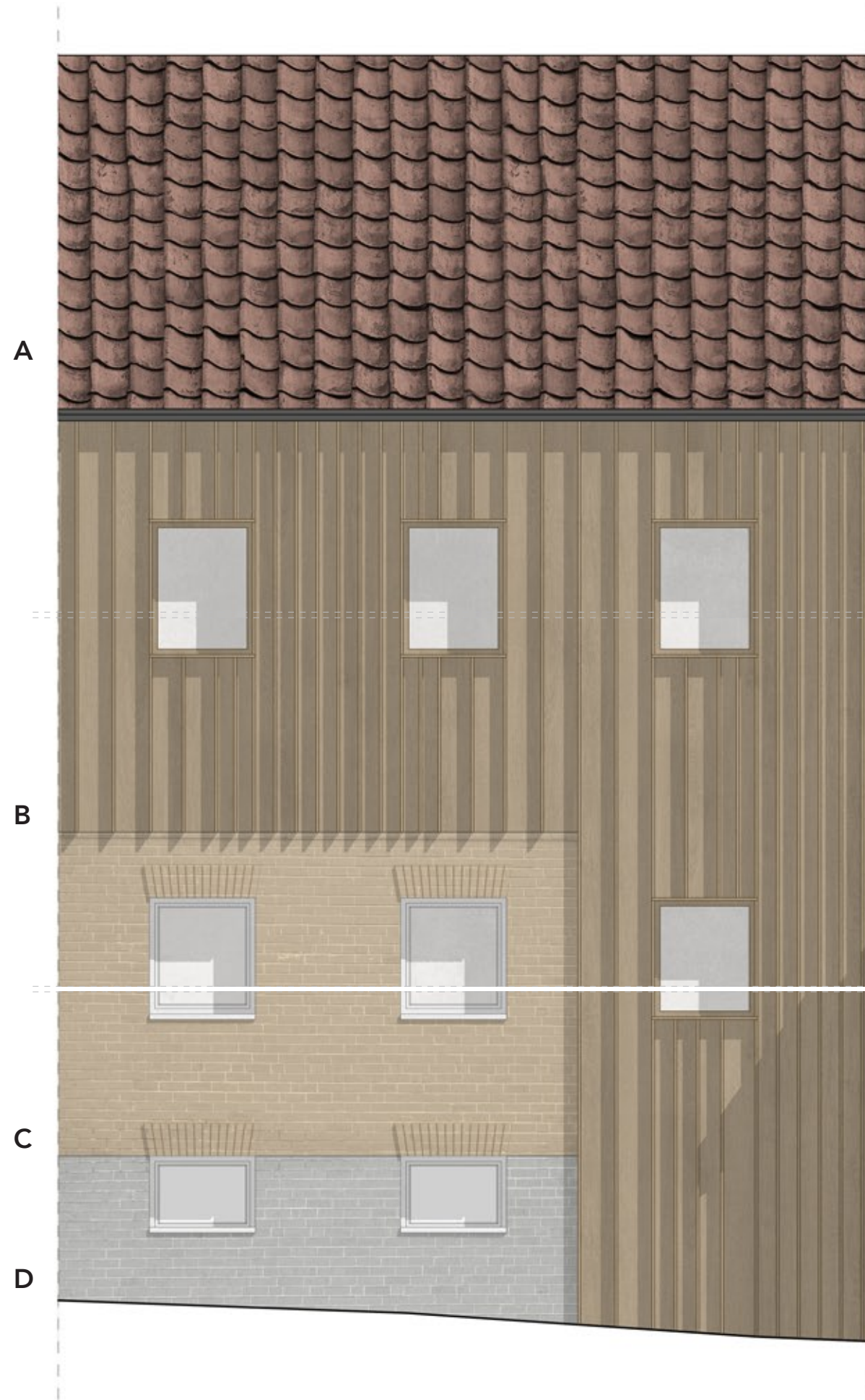


STRUCTURAL DETAIL

- MODULAR STRUCTURE ADDED ONTO THE EXISTING BRICK WALL



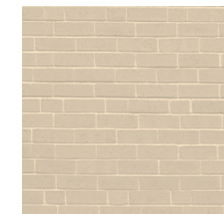
ELEVATION DETAIL



A SINGLE-CUP BRICK



B LARCH TIMBER



B BRICK WITH MUD PLASTER, COLOURED IN YELLOW



B CONCRETE AND STONE BRICK, MOLDED AND PAINTED GREY

SUSTAINABILITY

ECONOMIC

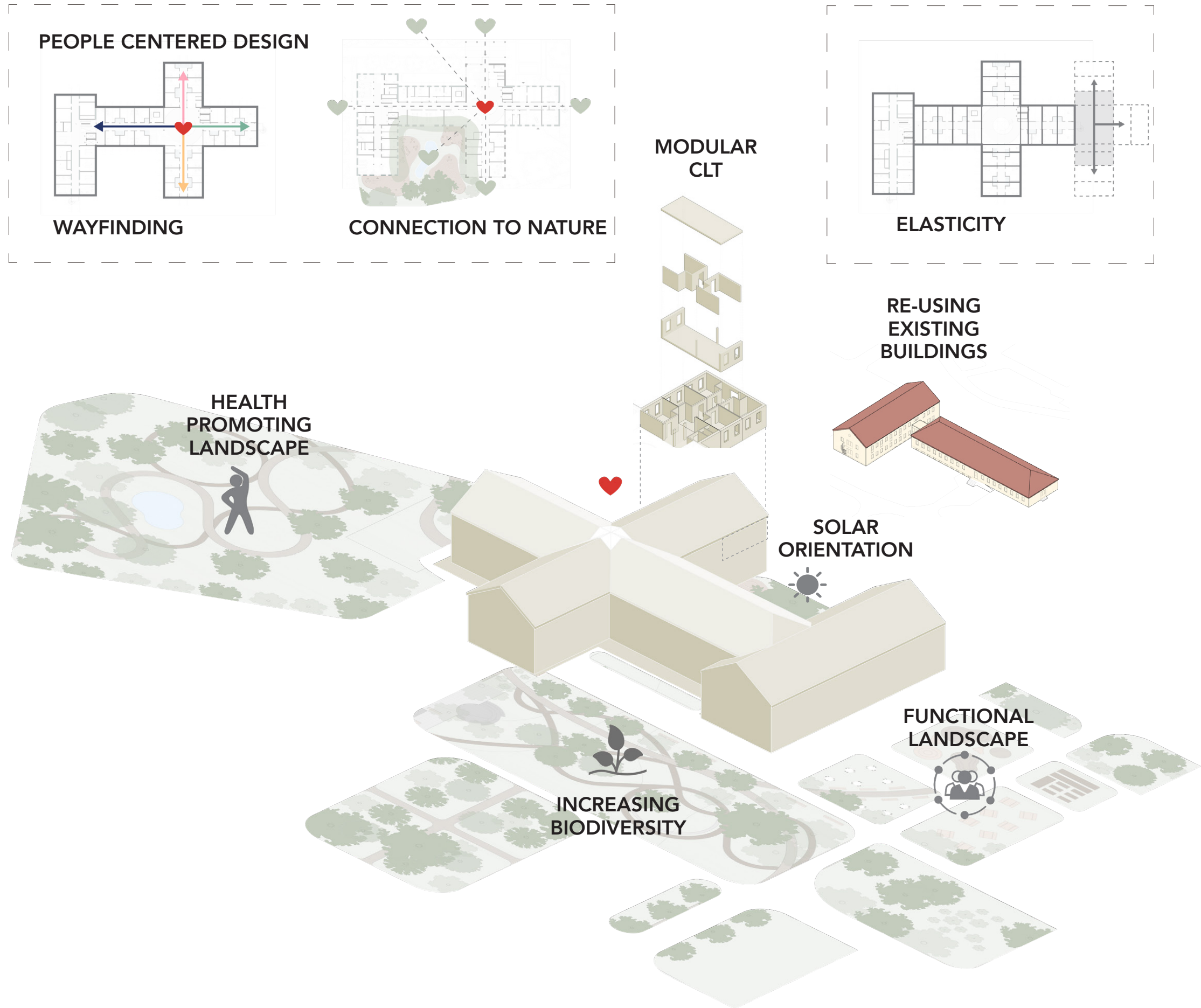
- REUSING EXISTING BUILDINGS
- MODULAR STRUCTURE
- ELASTICITY

SOCIAL

- FUNCTIONAL GREEN SPACES
- COMMUNITY FUNCTIONS
- WOMEN'S CLINIC
- PERSON-CENTERED DESIGN
- STAFF WELLBEING

ECOLOGICAL

- INCREASING BIODIVERSITY
- LOW CARBON FOOTPRINT



SUN GARDEN



VADSTENA FUTURE HEALTHCARE CENTRE