

Architecture

Design Approach: Site Plan

Design Approach: Unit Layout

Proposed Site Plan Layout

Proposed Site Plan, Site Sections

Proposed Dwellings Plans

Materials and Massing Strategy

Materials: Elevations

Design Approach: Site Plan

Design Approach

In December 2023, Arcadis was appointed by B&NES to undertake RIBA Stages 2-3 for the development of the 2023 concept plan, as shown on the previous page, to a standard suitable for planning application submission. Arcadis, serving as a multidisciplinary team, was tasked with creating a landscape-led scheme that would serve as an exemplary community of purpose-built housing. The aim is to enable individuals with Autism, mobility issues, and other disabilities to live independently in their own homes while having access to necessary care and support.

As part of our brief, Arcadis also received pre-application comments from B&NES Planning Services, written on the 13th of October 2023, regarding the concept plan. These comments served as valuable input for our design development.

To begin our design process, we carefully examined the concept plan in 3D and took into consideration B&NES' request for split-level bungalows. Our initial plan retained the two clusters and focused on how the buildings could be integrated with the varying levels of the site.

North-East View



North-West View



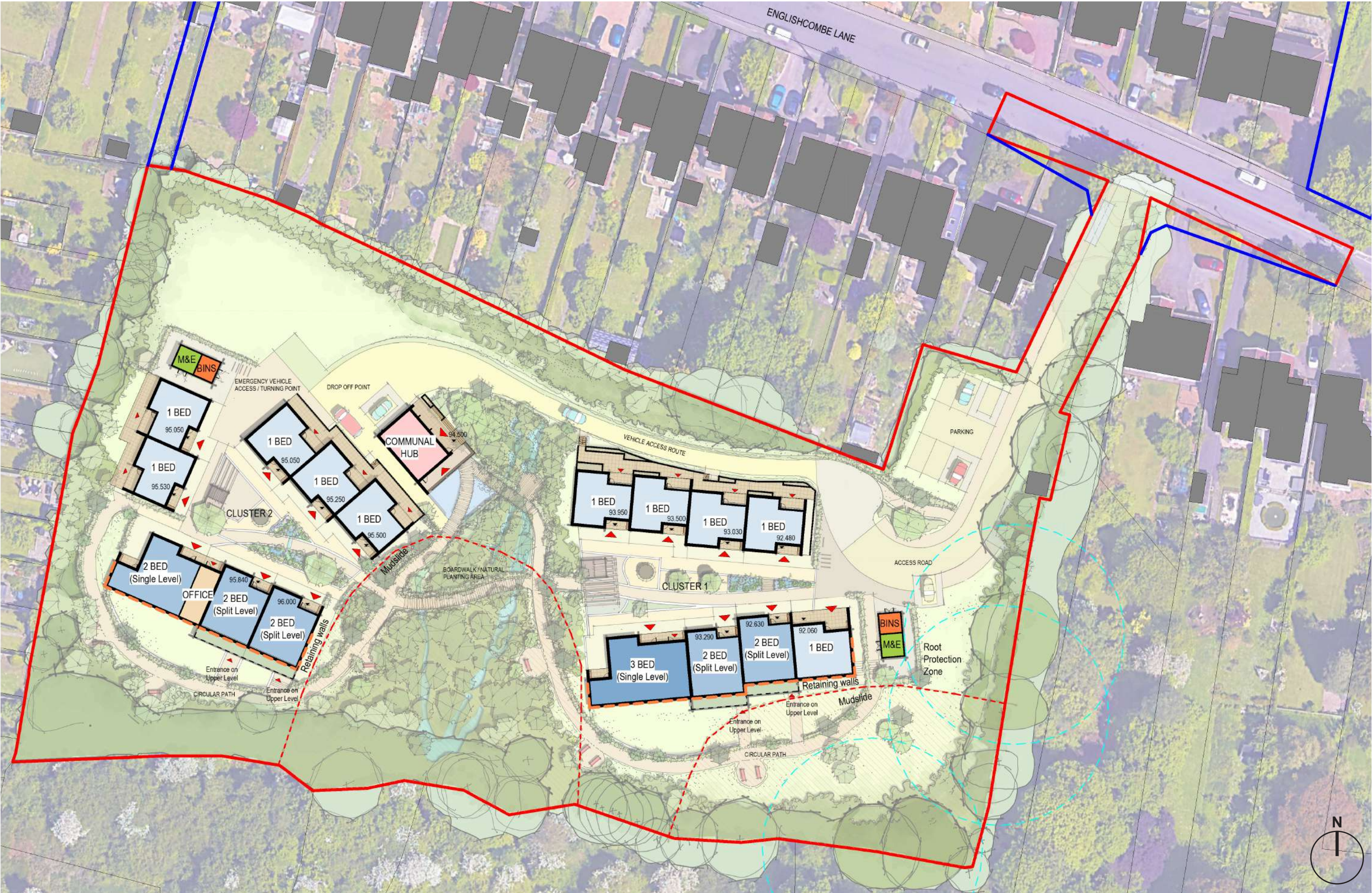
South-East View



South-West View



Proposed Site Plan Layout



Proposed Site Plan and Site Section

Proposed Site Plan

The Englishcombe Lane site possesses a number of characteristics which have been identified to be well suited for residents with special needs. The site offers a uniquely secluded, natural setting for residents who may require high and low stimulatory environments and otherwise benefit from connection to nature. At the same time, the site is situated in a mature residential neighbourhood and connected to amenities nearby and Bath City Centre.

The proposed site plan is organised into 2 clusters of bungalows, organised around an internal landscaped courtyard and connected via a footbridge over a watercourse and habitat area.

Cluster 1 is located closer to the Englishcombe Lane street access on the eastern half of the site and consists of 8 dwellings, including 2 2-bedroom units, 5 1-bedroom bungalows and a 3-bedroom unit.

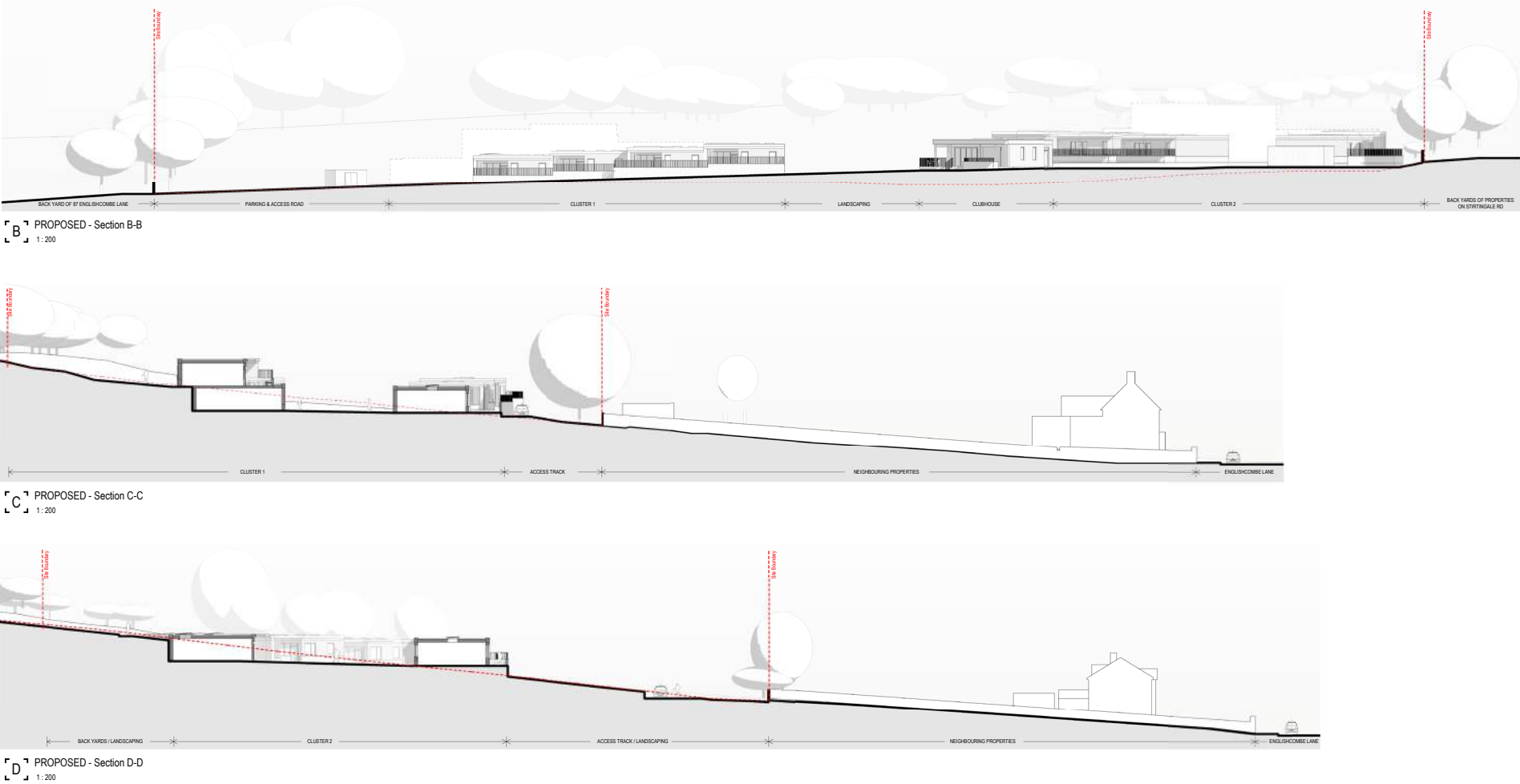
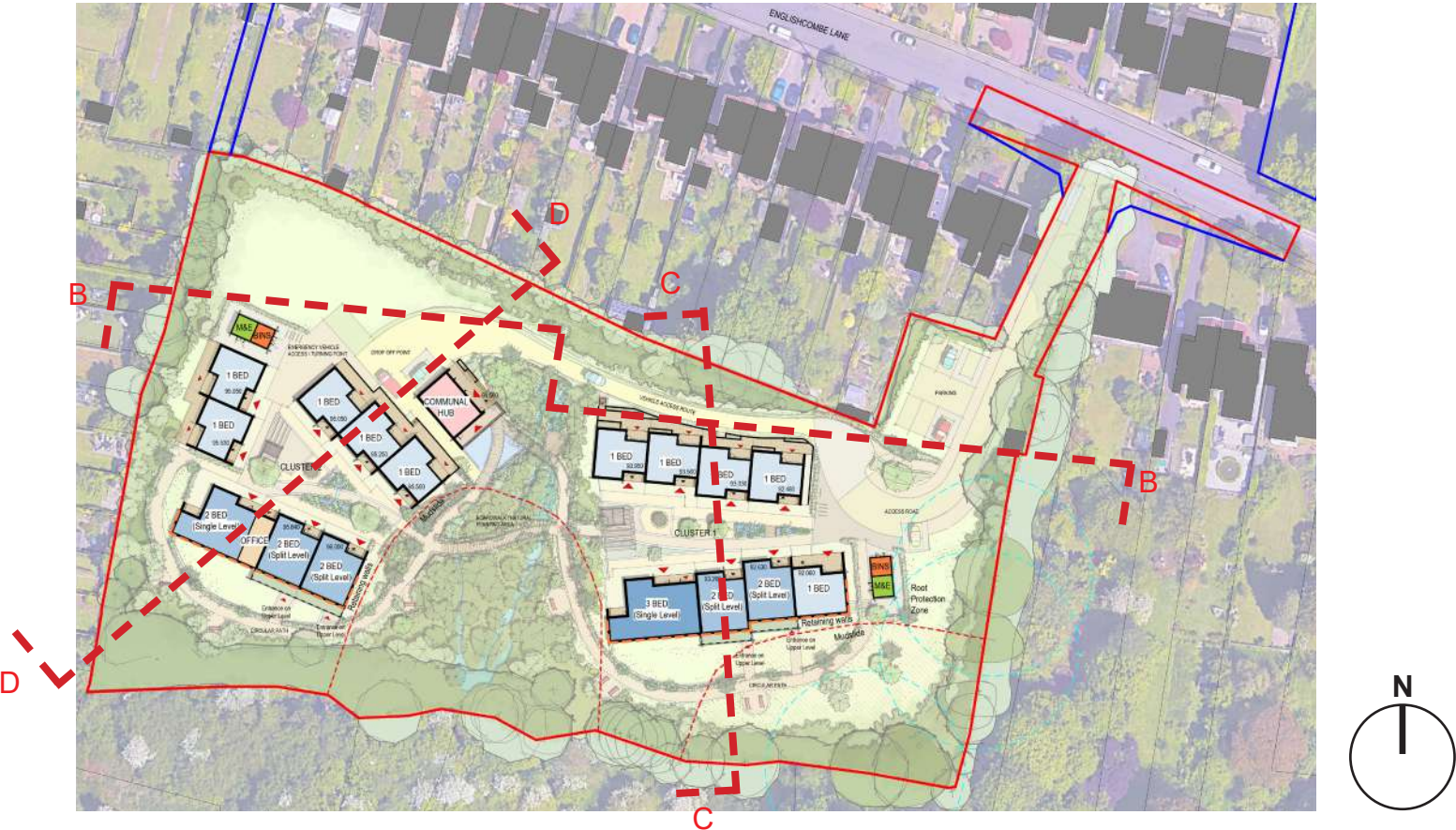
Cluster 2 will be located in a more secluded location towards the western half of the site, offering more privacy to its residents. It is also made up of 8 dwellings, including 3 2-bedroom units and 5 1-bedroom bungalows.

As a Landscape-lead development, the site design will concentrate on conservation and improvement, with emphasis on Wellbeing Water and Wildlife and integration of high quality green infrastructure into the built environment for the benefit of the community.

Additionally, specific areas of the site have been identified as areas of interest and additional remediation: the northwest corner of the site has been identified for grassland restoration. Incorporation of a managed meadow on the southern property line as an extension of the Stirtingale Woodland edge has been identified as a possibility. The watercourse dividing the site has been identified as an area of ecological interest and a habitat for wildlife.

Proposed Site Sections

Sections C-C and D-D (North- South through Clusters 1 and 2 respectively) demonstrate the significant grade change on the Englishcombe hillside, which in total amounts to around 15m from the lowest point on Englishcombe Lane to the highest point in the South-west of the site. The sectional studies also demonstrate the massing strategy wherein the proposed 1 and 2 bed, split level bungalows are nested into the topography of the hill site, integrating into the existing landscape with sensitivity, recalling the local character of the architecture and terrain at Bath.



Design Approach: Unit Layout

Design Approach

The dwelling's plan is designed with consideration for resident's experience and comfort, addressing diurnal and seasonal cycles. It is also designed to allow adaptability for a variety of user requirements.

Bedroom(s), Bathroom(s), Kitchen & Dining and Living spaces are located to the perimeter of the plan with access to natural daylight, while a clear interior circulation path is provided around a central storage space. 2 means of egress are provided for safety.

This design approach allows for the space to be open in the day time: the circulation path is designed to allow the resident to move around the flat. Corners are rounded for resident's safety. The openness of the plan allows for efficient surveillance by caregivers when required.

Points of control allows for the space to be closed. A series of sliding doors provide privacy at night, and can separate Kitchen, Living and Bedroom spaces. Spaces can be closed off to create a sense of safety. The spaces are designed to provide barrier free access and retrofit to bariatric care requirements if necessary.

North Light, Views and Permeability

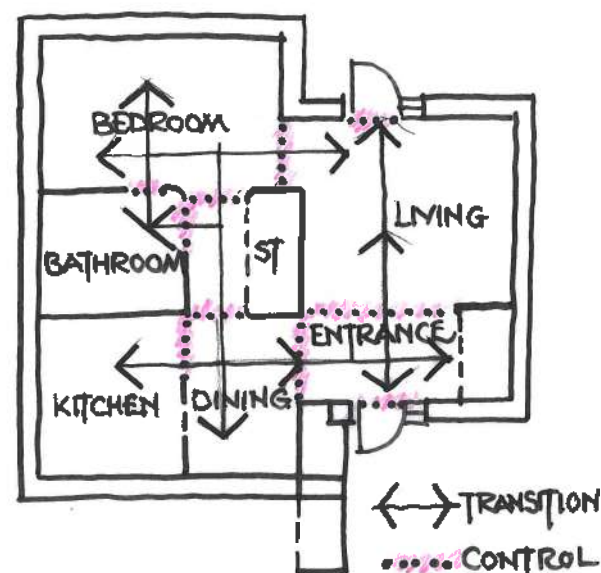
Solar orientation and natural daylighting strategies are provided to enhance the quality of light for the resident. The placement of light shelves modulate and enhance daylighting. Semi-shaded transition spaces are provided at two entries. Views to the natural landscape beyond are provided in multiple orientations on site, while establishing micro-climates in each space.

Liminal Spaces

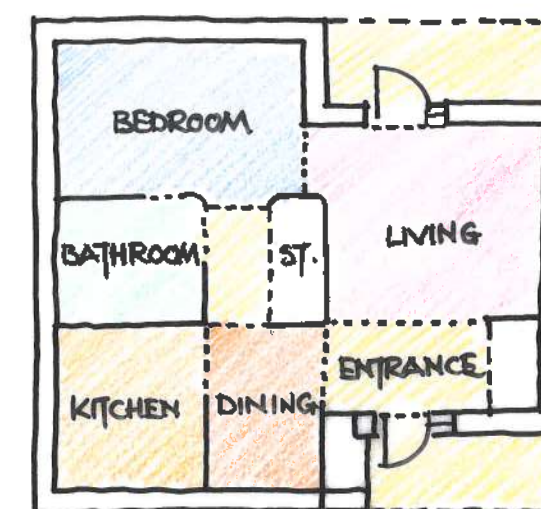
The design of the dwelling spaces also considers how the residential spaces can be integrated with the natural environment and wider community.

Liminal space design provides for a front and back garden, conservatory or growing space for each unit, bringing nature to the doorstep. Green roofs and walls are also integrated into the exterior design, reinforcing the connection between architecture and landscape lead design, and the natural heritage of the site.

Sheltered seating is provided at the front of the bungalow to provide spaces to encourage and facilitate social visits, recalling the Japanese concept of the Engawa porch. Passive shading solutions are provided to address climactic changes. Sheltered seating is provided at the rear in a more private setting.

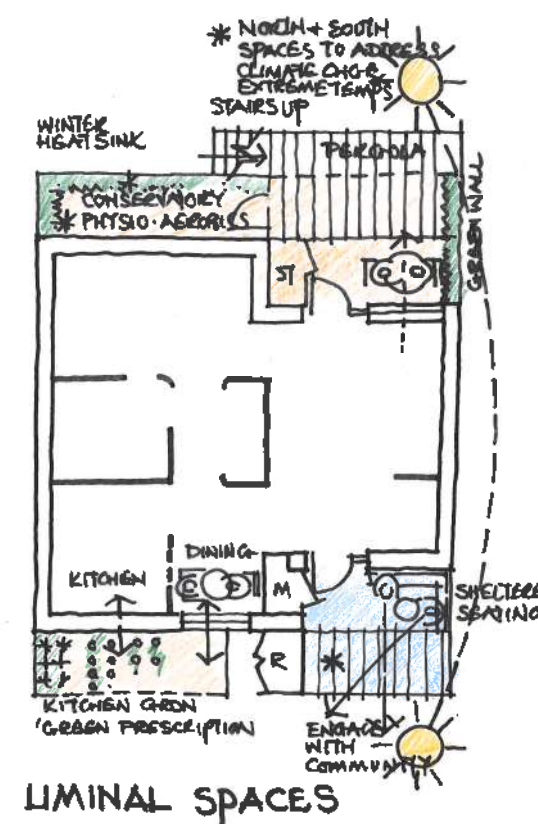
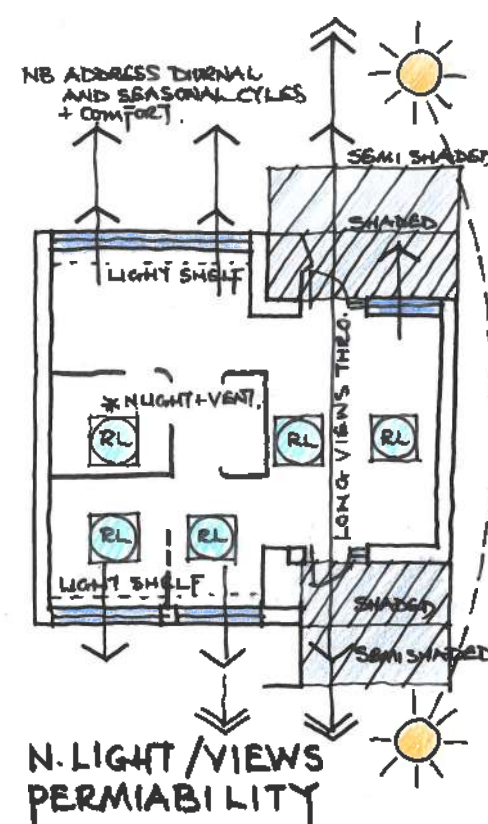


SPACE DEFINITION
PERMIABILITY + CONTROL
FLEXIBILITY + ADAPTABILITY



• CIRCADIAN LIGHTING
• RGB SIGNATURES

NIGHT-TIME DEFINITION



LINGUAL SPACES

1 Bed Unit - Single Level - Cat 3 / 2 - 65-70m²

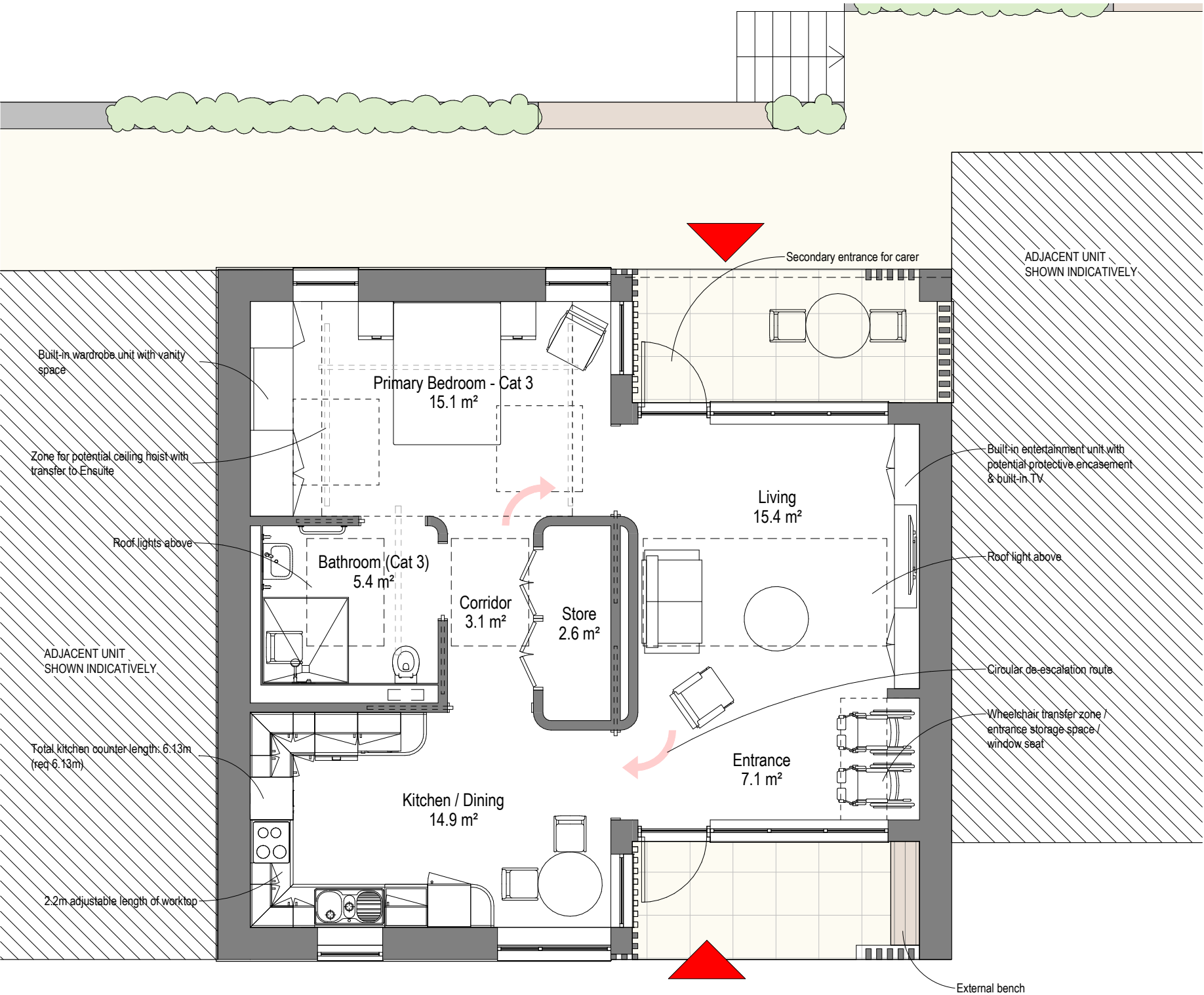
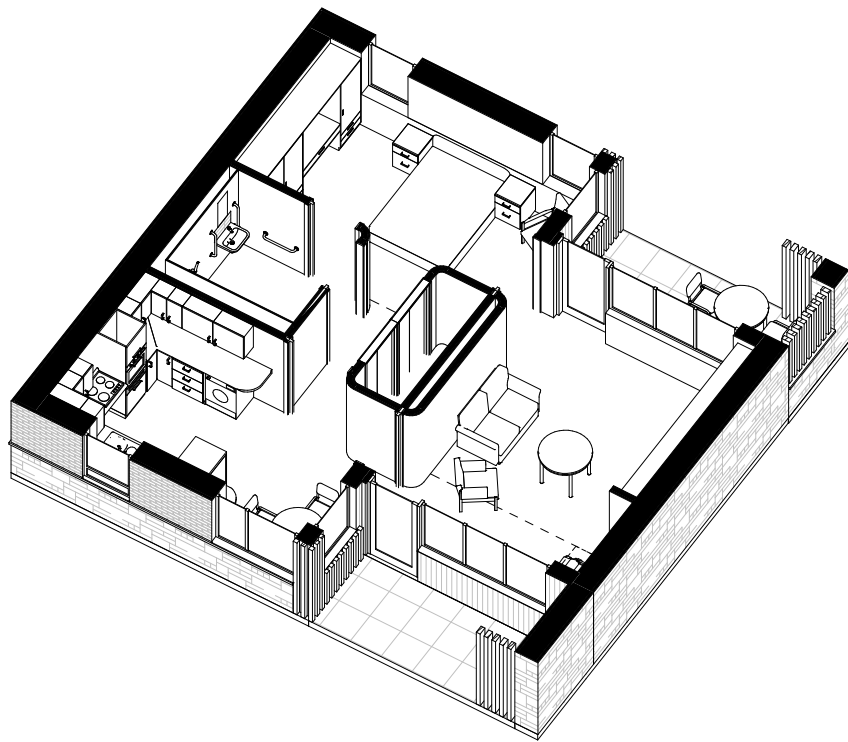
The 1 Bed Unit, single level bungalow plan is 65-70 m² and is designed based on the principles outlined in the Design Approach and with consideration for the resident's experience and comfort and adaptability for a variety of user requirements.

The Bedroom, Bathroom, Kitchen & Dining and Living spaces are located to the perimeter of the plan with access to natural daylight to the north and south, addressing diurnal and seasonal cycles. A clear interior circulation path is provided around a central storage space, which creates a circulation path for residents to move around the flat. Points of control allows for the space to be closed. A series of sliding doors provide privacy at night, and can separate Kitchen, Living and Bedroom spaces. Spaces can be closed off to create a sense of safety and protection for the resident.

Corners are rounded off for safety considerations. The open plan configuration also allows for caregivers to maintain visual contact and surveillance. 2 means of egress are provided for safety.

The spaces are designed to anticipate wheelchair access and retrofit to bariatric care requirements if necessary. The Primary Bedroom and Bathroom is designed to Cat 3 standards.

Sheltered seating is provided at the front of the bungalow to provide spaces to encourage and facilitate social visits, recalling the Japanese concept of the Engawa porch. Passive shading solutions are provided to address climactic changes. Sheltered seating is provided at the rear in a more private setting.



2 Bed Unit - Split Level - Cat 3 / 2 - 95-100m²

The 2 Bed Unit, split level dwelling plan is 95-100 m² and is designed based on the principles outlined in the Design Approach and with consideration for the resident's experience and comfort and adaptability for a variety of user requirements.

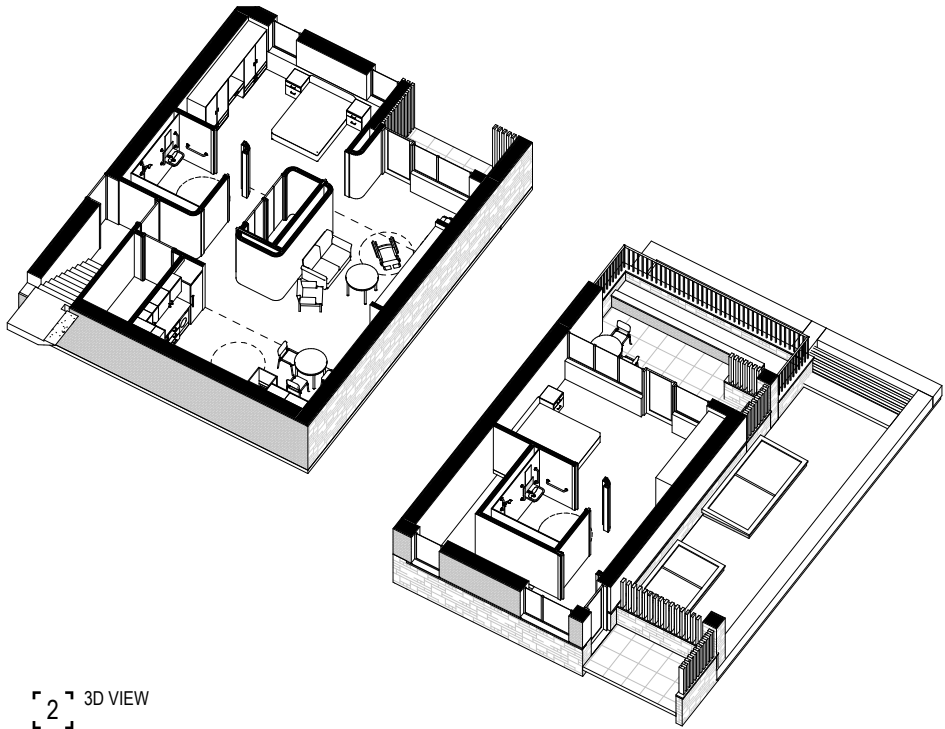
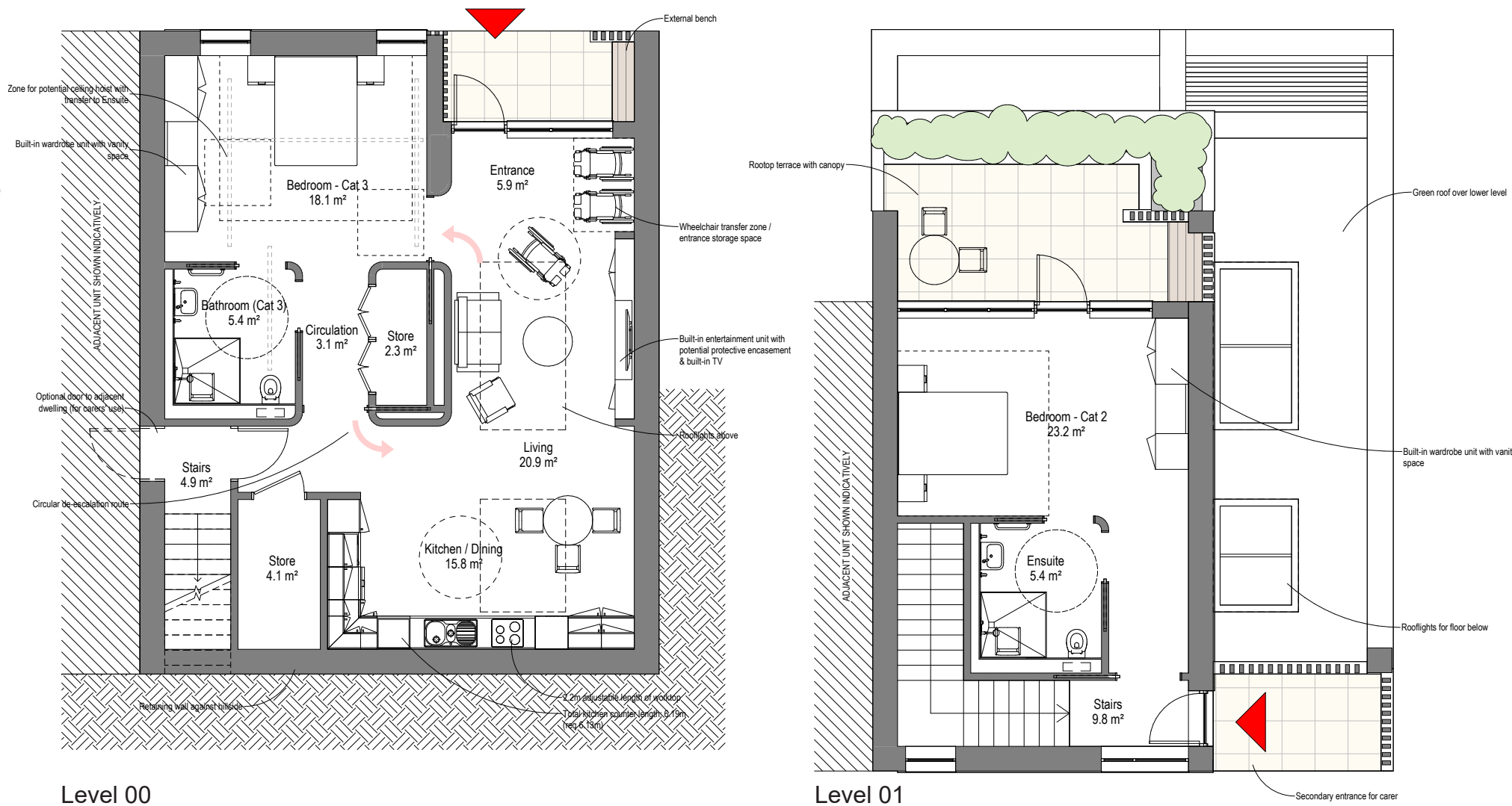
On Level 00 the Primary Bedroom and Living spaces are located on the perimeter of the plan with access to natural daylight to the north. The Kitchen & Dining and Bathrooms are located deeper in the plan, and are lit by rooflights. A clear interior circulation path is provided around a central storage space, which creates a circulation path for residents to move around the flat. Corners are rounded off for safety considerations. The open plan configuration also allows for caregivers to maintain visual contact and surveillance. Points of control allows for the space to be closed. A series of sliding doors provide privacy at night, and can separate Kitchen, Living and Bedroom spaces. Spaces can be closed off to create a sense of safety and protection for the resident.

The spaces are designed to anticipate wheelchair access and retrofit to bariatric care requirements if necessary. The Primary Bedroom and Bathroom is designed to Cat 3 standards.

On Level 01, a separate Cat 2 Bedroom and Bathroom is provided for a caregiver or visitor.

2 means of egress are provided for safety, with one located on each level.

Sheltered seating is provided at the front of the bungalow to provide spaces to encourage and facilitate social visits. Passive shading solutions are provided to address climactic changes. Sheltered seating is provided on the roof terrace in a more private setting.



3 Bed Unit - Single Level - Cat 3 / 2 - 140-145m²

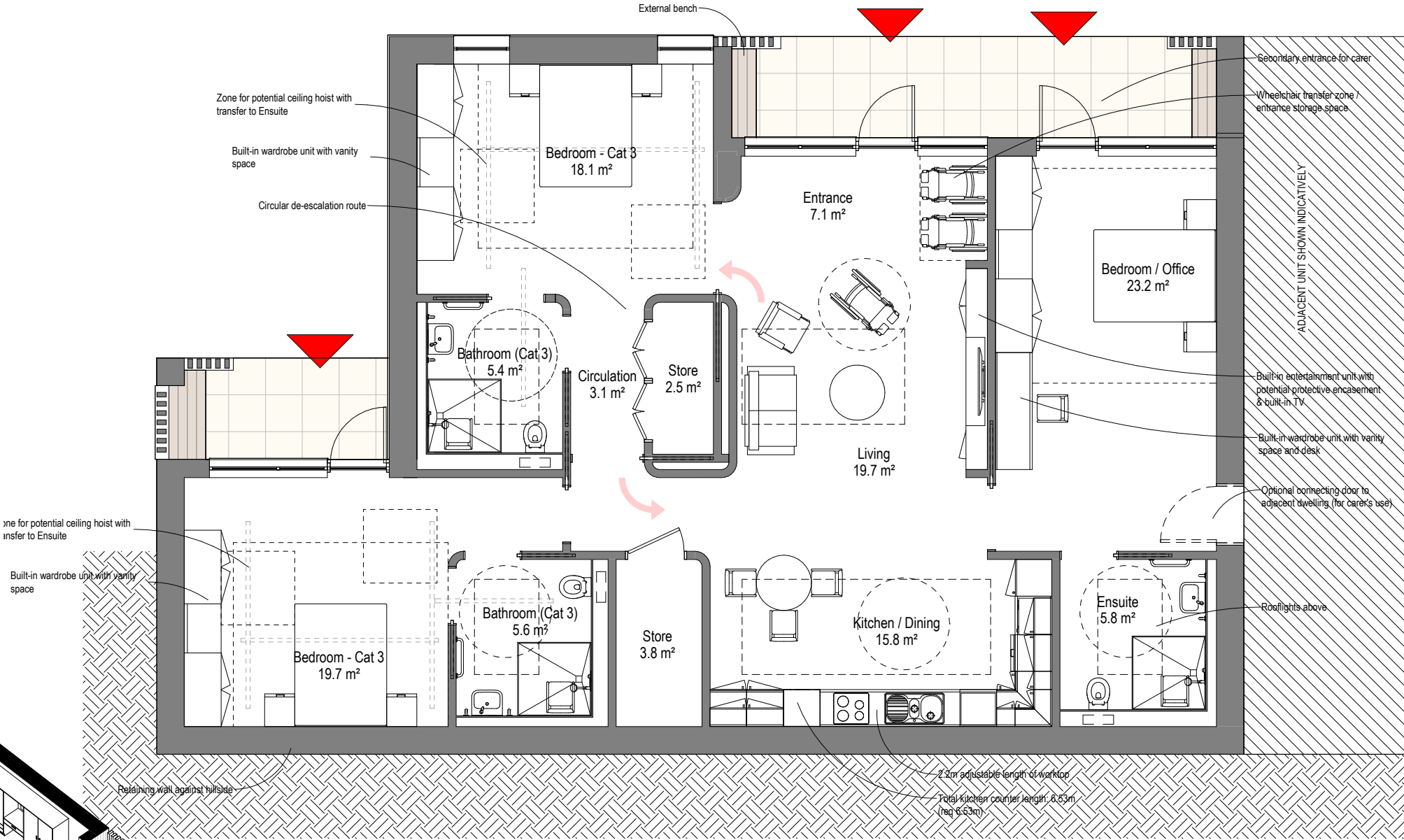
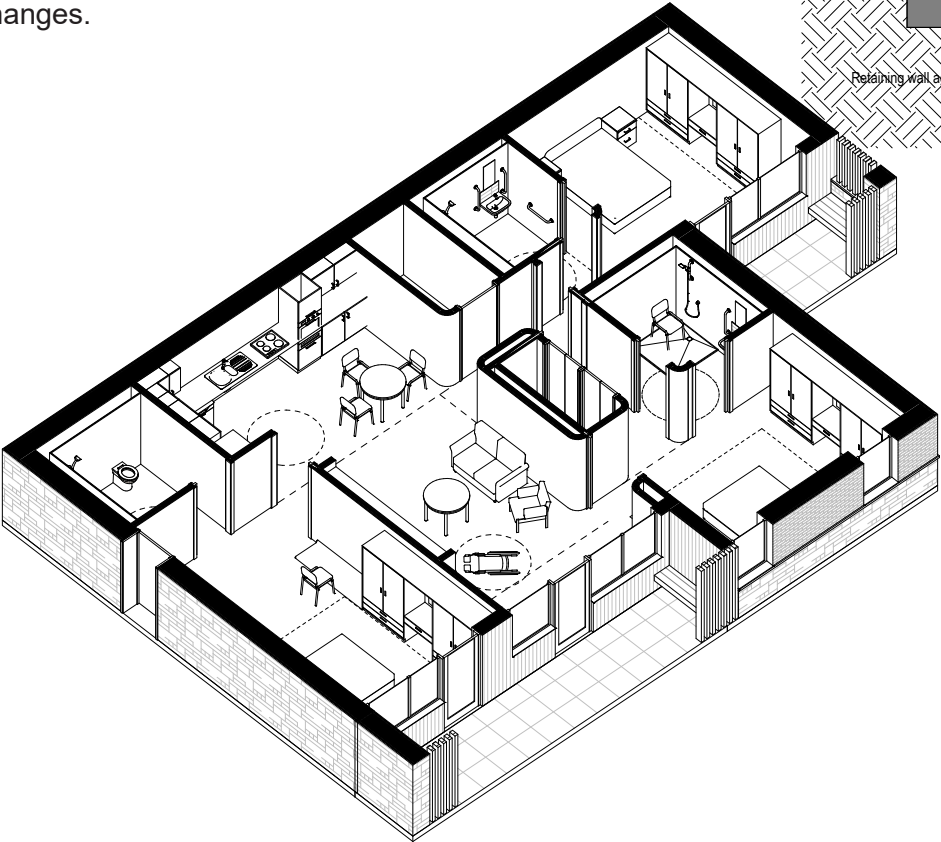
The 3 Bed Unit (or 2-Bed with an Office), single level bungalow plan is 140-145 m² and is designed based on the principles outlined in the Design Approach and with consideration for resident’s experience and comfort and adaptability for a variety of user requirements.

The Bedrooms and Living spaces are located along the front-facing facade, benefitting from views out into the communal garden and natural lighting. The Bathrooms, Kitchen and Dining spaces are located deeper within the plan and are lit via south-facing rooflights. A clear interior circulation path is provided around a central storage space, which creates a circulation path for residents to move around the flat. Points of control allows for the space to be closed. A series of sliding doors provide privacy at night, and can separate Kitchen, Living and Bedroom spaces. Spaces can be closed off to create a sense of safety and protection for the resident.

Corners are rounded off for safety considerations. The open plan configuration also allows for caregivers to maintain visual contact and surveillance. 2 means of egress are provided for safety.

The spaces are designed to anticipate wheelchair access and retrofit to bariatric care requirements if necessary. All the Bedrooms and Bathrooms are designed to Cat 3 standards to give residents and carers the freedom of choice.

Sheltered seating is provided at the front of the bungalow to provide spaces to encourage and facilitate social visits, recalling the Japanese concept of the Engawa porch. Passive shading solutions are provided to address climactic changes.



Materials

Historic references.



The iconic stone of the baths.



The heritage of the locally made bricks.



The Somerset Brick & Tile Museum

Modern materials to compliment the sites wider historical context.



Brick of varying shades to reflect the historic bricks



Natural Stone & Reconstituted Stone.



The layer of materials



The natural treed backdrop

Stone

- Coping/Caping
- Cills

Timber

- Windows
- Solar shading
- Landscape furniture

Brick

- Bungalow elevations

Stone / Reconstituted Stone

- Landscape walls
- Bungalow elevation features

Use the existing contours and retaining as much of the natural landscape as possible.

Single-Level Dwellings - Perspectives

Material and Massing Strategy

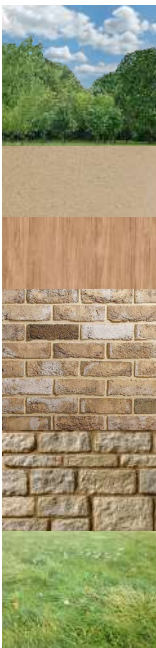
The proposed Englishcombe Lane bungalows have been designed with a sensitivity to City of Bath traditions, reflecting many of the material and massing strategies found locally, and highlighted in this Design and Access Statement.

The proposed 1 Bed or 3 Bed Bungalow types are one storey buildings with a flat roof, parapet and extensive green roof. Although modern in form, the elevation treatment uses variations of buff brick deployed in bond and brick lattice. This material choice references heritage Bridgwater brick, which was locally produced in Bath and is still ubiquitous to the built form in the area

Iconic Bath limestone found at the Roman baths and Georgian civic architecture, and locally along Englishcombe Lane is used extensively at the site base, landscape walls, and as coping, sills and parapets.

Timber elements are used extensively on the design of the “Liminal Spaces” as outlined in the Design Approach. Vertical sun shade louvres, site furniture and window sills add an element of tactile warmth. Large format, modern picture windows also feature prominently on the elevational design, creating visual links to interior and exterior spaces.

On the theme of “layering” architecture and landscape, the bungalow clusters are nested into undulating hill site, maintaining the character of the grassy paddock. The green roof is intended to reflect the existing ground plane, while the stand of trees to the north frame the architecture in landscape, with the blue sky beyond This establishes a material strata that reflects the iconography of the Bath built form.





Split-Level Dwellings - Perspectives

Material and Massing Strategy

The proposed Englishcome Lane bungalows have been designed with a sensitivity to City of Bath traditions, reflecting many of the material and massing strategies found locally, and highlighted in this Design and Access Statement.

The proposed 2 Bed Dwelling type is split level with a lower terrace, flat roof, parapet and extensive green roof planting, modern in form and similar to the 1 Bed Bungalow.

Like the 1 Bedroom Bungalow type, variations of buff brick deployed in bond and brick lattice. This material choice references heritage Bridgwater brick, which was locally produced in Bath and is still ubiquitous to the built form in the area. Iconic Bath limestone found at the Roman baths and Georgian civic architecture is used extensively at the site base, landscape walls, and as coping, sills and parapets.

Timber elements are used extensively on the design of the “Liminal Spaces” as outlined in the Design Approach. Vertical sun shade louvres, site furniture and window sills add an element of tactile warmth. Large format, modern picture windows also feature prominently on the elevational design, creating visual links to interior and exterior spaces.

On the theme of “layering” architecture and landscape, the dwelling clusters are nested into undulating hill site, maintaining the character of the grassy paddock. The green roof is intended to reflect the existing ground plane, while the stand of trees to the north frame the architecture in landscape, with the blue sky beyond. This establishes a material strata that reflects the iconography of the Bath built form.





Communal Hub

Material and Massing Strategy

The proposed Communal Hub has been designed to provide a visual contrast with the surrounding residential units through its material choices and permeable architecture, while maintaining the low-rise vernacular appeal of the development.

The proposed materials take inspiration from the surrounding context on Englishcombe Lane, where some of the residential buildings have begun incorporating darker accent colours to create a visual contrast with the traditional Bath brick and stone (example below). The bulk of the external cladding is proposed to be formed of charred timber panelling, a Japanese technique for preserving timber from the elements, parasites and fire, while giving it a signature blackened colour.

In addition, secondary materials will create a visual link to the residential units on site, through the use of Bath stone walls, timber decking and gabion wall plinths or retaining walls.

The Communal Hub is proposed to be single-level, flat roof with extensive green roof planting and modern in form. There would be a mixture of external and internal multi-purpose areas, as well as a staff area. The external areas are split into an open area with built-in external seating and space for outdoor cooking, and a shaded area, overlooking a water feature.





Materials - Elevations - Dwellings



Materials Key

- 1. Buff bricks
- 2. Weathered reconstituted stone
- 3. Cast Stone capping / detailing
- 4. Timber cladding
- 5. Vertical timber screening / louvres
- 6. Horizontal timber louvres / solar shading
- 7. Aluminium-faced windows / doors
- 8. Aluminium window header details
- 9. Railings
- 10. Extensive green roof
- 11. Aluminium-faced rooflights



01 - Buff bricks



02 - Weathered reconstituted stone



03 - Cast Stone capping / detailing



04 - Timber cladding

Materials - Elevations - Communal Hub



Materials Key

- 1. Weathered reconstituted stone
- 2. Cast Stone capping
- 3. Charred timber cladding
- 4. Charred timber screening / louvres
- 5. Aluminium-faced bi-folding doors
- 6. Aluminium-faced windows / doors
- 7. Composite decking
- 8. Aluminium parapet capping
- 9. Aluminium window header details
- 10. Railings
- 11. Extensive green roof
- 12. Aluminium-faced rooflights



01 - Weathered reconstituted stone



02 - Cast Stone capping



04 - Charred timber cladding



05 - Bi-folding doors

Landscape Strategy

Landscape Strategy

The Landscape Strategy for Englishcombe Lane has been produced to support the planning application for the Development. The full report has been submitted separately (30210292-AUK-XX-XX-RP-LA-0001) and the following pages provide a summary to the landscape design proposals for Englishcombe Lane.

The Landscape masterplan has been developed as part of an iterative design process, developed and coordinated with the design team consultants and informed by the client and stakeholder engagement feedback. The landscape vision for Englishcombe Lane is to create an exemplary peaceful and landscape-led place to live, that responds the sites unique characteristics to enhance the natural environment and provide a renewed sense of vitality and well-being to the residents. The design will be inclusive, accessible and adaptable to support the lives of adults with learning disabilities and/or autism.

The landscape masterplan is shown on the right, it encompasses 9 key areas including:

- 1

The Approach and Car Park
- 2

The Country Lane and Drop-off
- 3

The Communal Facility
- 4

The Forest Garden
- 5

Cluster 1 Gardens
- 6

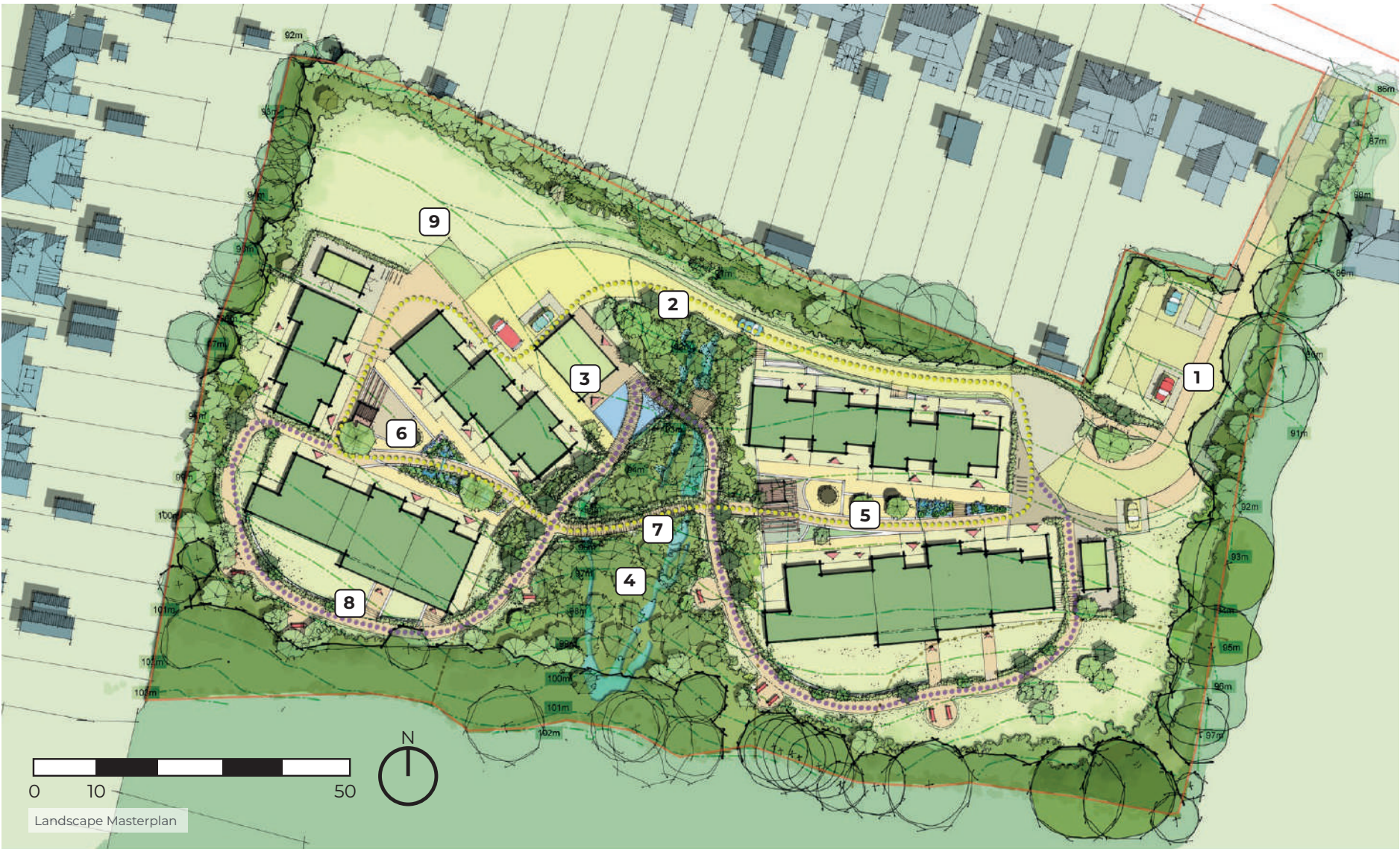
Cluster 2 Gardens
- 7

The Accessible Walkway
- 8

The Recreation Walkway
- 9

The Meadow

The hard and soft landscape design for each of the areas is site-specific and has been developed in careful consideration of the existing site characteristics and the functional needs of the development and future residents.



Key

- All Access Walkway Max gradient 1: 21
- Recreational Walkway (includes ramps/steps)
- Active / Passive EV charging point

Landscape Features

Species rich grassland Managed for biodiversity	Green roof & defensible space offset Residential and Communal Facility /service areas
Existing and proposed trees - Refer to Landscape General Arrangement Drawing for details	Reinforced grass 0.8m strip to lane and turning space in reinforced grass to enable emergency vehicle access and movement
Understorey shrub/herbaceous planting Native species managed for biodiversity	Existing contours
Resin bound gravel walkway Buff to lower/level access paths, light grey higher/steeper paths	Proposed contours
Permeable paving Permeable paving allowing for surface water drainage	SuDS features Suggested scrapes, swales and perched ponds within wet woodland area

Landscape Strategy

The key aims for the landscape design and place-making are set-out below. These have informed the key design principles and are outlined in more detail in the Landscape Strategy (Section 3.1).

- An inclusive and accessible design for neurodiversity;
- A development that responds to the site's characteristics, townscape character and visual receptors;
- Biophillic design approach to connect people and nature;
- High quality green and blue infrastructure network;
- A resilient sustainable urban drainage strategy (SuDS)
- A network of private, semi-private and communal spaces;
- A legible access and movement strategy;
- Utilise the Building with Nature Framework;
- Incorporates exemplary sustainability elements;
- Achieves longevity and future proofing; and
- Achieves biodiversity net gain

The hard landscape material palette aims to compliment the historical setting of the area. Paving and edge material will be suitable for their external use whilst reflecting the heritage of the area through materiality and colours e.g. use of the local brick and natural tones and colours. Different natural finishes and textures will be detailed throughout the scheme to provide a varied sensory experience for users. For more detail, refer to the Landscape Strategy (Section 6.9.)

For the soft landscape, the existing landscape structure of the site along the site boundaries has been protected and enhanced where possible including the ecological dark corridor and species-rich grassland. The proposed naturalistic planting design compliments this with organic forms and shapes to replicate nature and create a sensory experience (for all five senses). Care has been taken to not include any planting that could be toxic or harmful to any residents.

For more detail, refer to the Landscape Strategy (Section 6.7.)

Fundamental to the Landscape Strategy, has been the incorporation of best practice guidance and that we have applied to the masterplan as part of the design process. This includes Building with Nature, Biodiversity Net Gain and Mitigation in the LVA and RVVA. Refer to Landscape Strategy (Section 8) for more information on this.

Townscape and Visual Amenity Assessments

A Townscape and Visual Appraisal (TVA) as well as a Residential Visual Amenity Assessment (RVAA) has been undertaken to support this planning application. The purpose of the TVA is to identify and assess the likely effects of the proposed Development on the surrounding townscape and visual amenity. RVAA is concerned specifically with the effects of change to the views and visual amenity available to people at their place of residence. The key difference between the RVAA and TVA is that the RVAA focuses on private visual amenity at individual properties, whilst the TVA focusses on public amenity and views.

As part of the iterative design process, the townscape and visual amenity of the Site has been considered and incorporated as part of the landscape masterplan refer to Section 8.2 of the Landscape Strategy for more detail. For the full detailed documents refer to TVA (ref 30210292 - TVA -01) and RVAA (ref 30210292 - RVAA -01).

