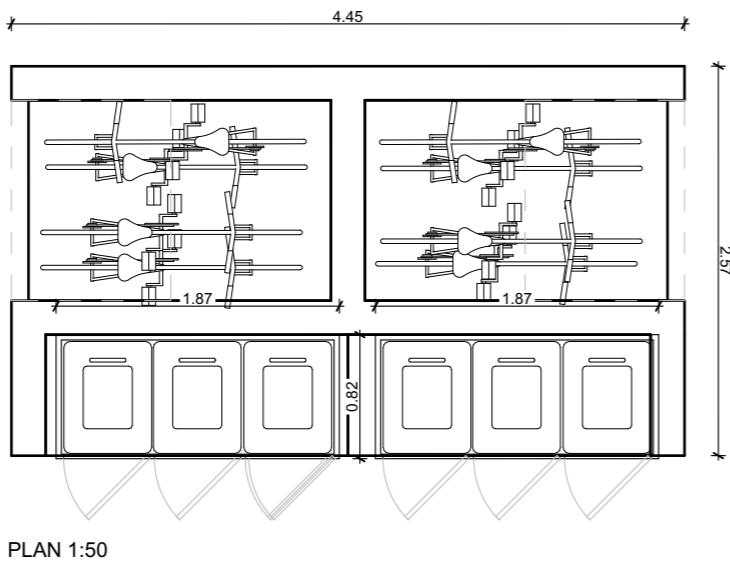
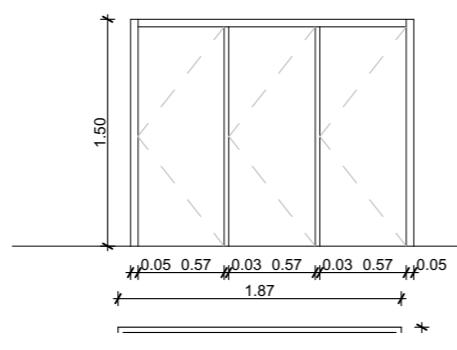


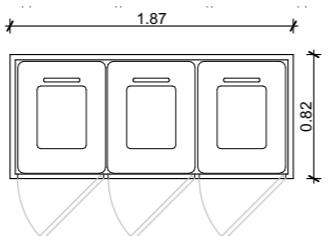
## 5.4 DETAIL OF BIKE STORE



PLAN 1:50



1:50 Front Elevation



1:50 Plan



## 5.5 APPLICATION OF PRINCIPLES OF UNIVERSAL DESIGN

In the proposed apartment blocks A & B, 4 no. units are designed in accordance with the requirements of the 'Universal Design Guidelines for Homes in Ireland' developed by the Centre for Excellence in Universal Design (National Disability Authority). Accessible parking spaces are located proximate to the front door of the units and universally designed to be accessible to all users with a range of disabilities.

The criteria addressing the design of the internal unit layout are summarised as shown below:

### KITCHEN/ DINING/ LIVING ROOM:

- Large and flexible room with ample unobstructed space to access all areas for everyone with ease of movement thought the kitchen
- (4) Minimum 800mm wide clear route between furniture and in front of windows and routes between doors.
- (3) 1200mm clear space on two consecutive sides of a table.
- Kitchen is not a thoroughfare. Cooker / hob and sink are in the same run of worktop.
- The kitchen space located next to the dining area to ease access for carrying food and crockery.

### BATHROOM:

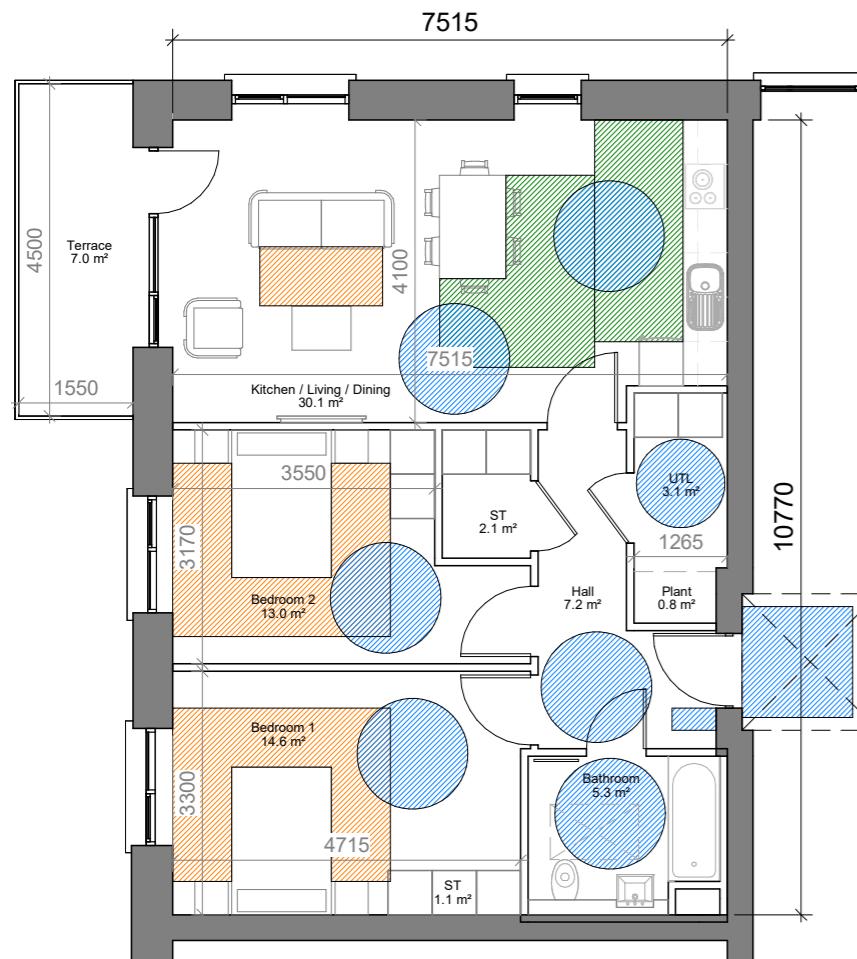
- Large and accessible family bathroom (minimum 2100 mm x 2500 mm) door opens outwards, sufficient space is allowed for the future adaptation to a shower room.
- (5) Bathroom adjacent to the main bedroom with flexibility to provide direct access from the bedroom.

### BEDROOM:

- (4) clear access space of 800mm on both sides and at the end of the double bed.
- (2) Provide a clear space for a turning circle of 1500mm in the double bedroom.

### OTHER:

- Utility room with space for washer and dryer adjacent to kitchen.
- Doors open into rooms (such as living rooms, bedrooms and kitchens) with hinge-side of the door is adjacent to a return wall and approx. 300mm clear space on the leading edge of doors.
- No single steps internally provided.

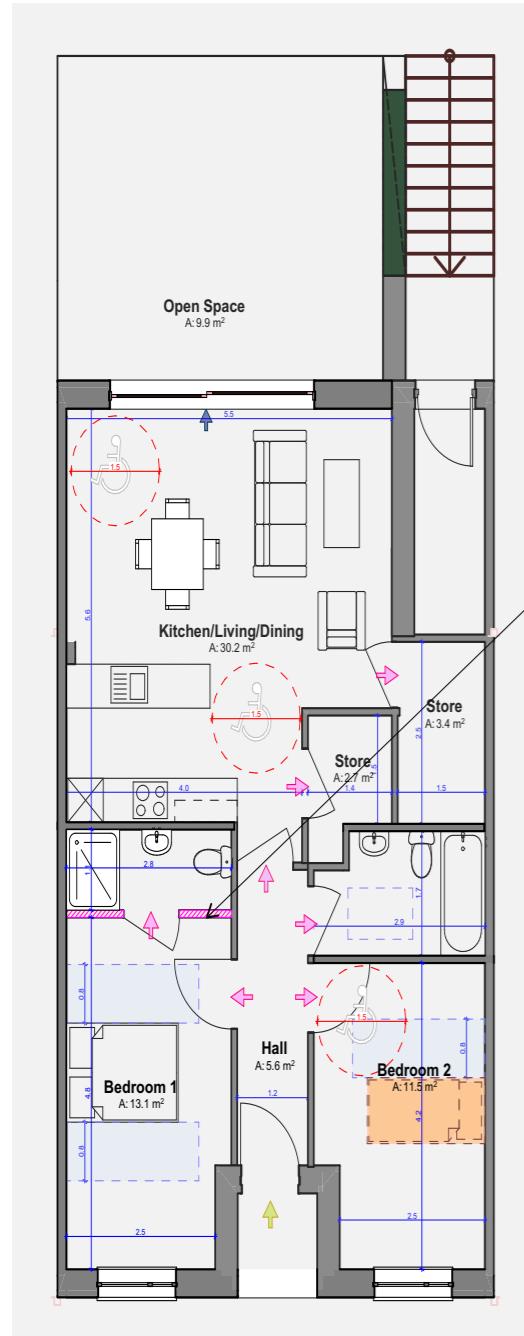


APT. 2C - 2B 4P

SCALE: 1 : 100

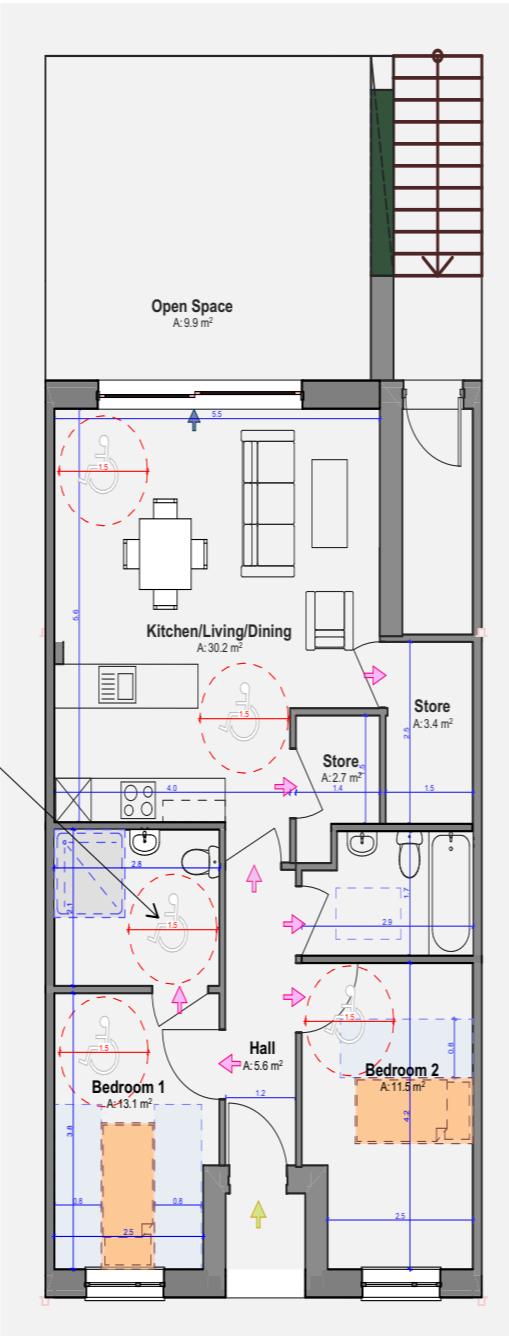
Figure 5-7. UD apartment layout - ground floor Apartment Block A & B.

## 5.6 UNIVERSAL DESIGN



Ground Floor UD Before  
1:100

Standard house layout with soft spots / non-structural walls allowing for future adaptation by the home owner.



Ground Floor UD After  
1:100

Potential layout for the future adaptation by the home owner to allow for an enlarged En Suite (incorporating level access shower).

### LEGEND

- External Level Access - minimum 800mm clear width
- Rear External Access - minimum 800mm clear width
- Internal Level Access - minimum 750mm clear width
- Internal clear width routes between items and in front of windows and routes between doors
- Clear space for 1500mm turning circle
- Provision to build a stud wall for future adaption to rooms
- Indicates 'soft spot' to walls for future adaption
- Indicates floor drain with cover flush to floor finish.
- Indicates complying clear width & room dimensions



Figure 4-9. Ground Floor units Duplex Blocks

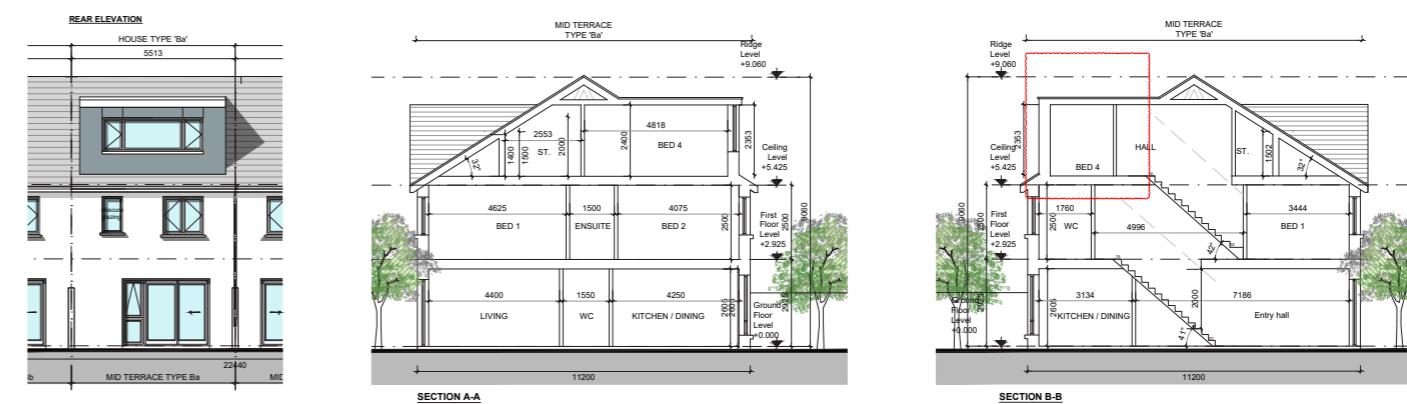
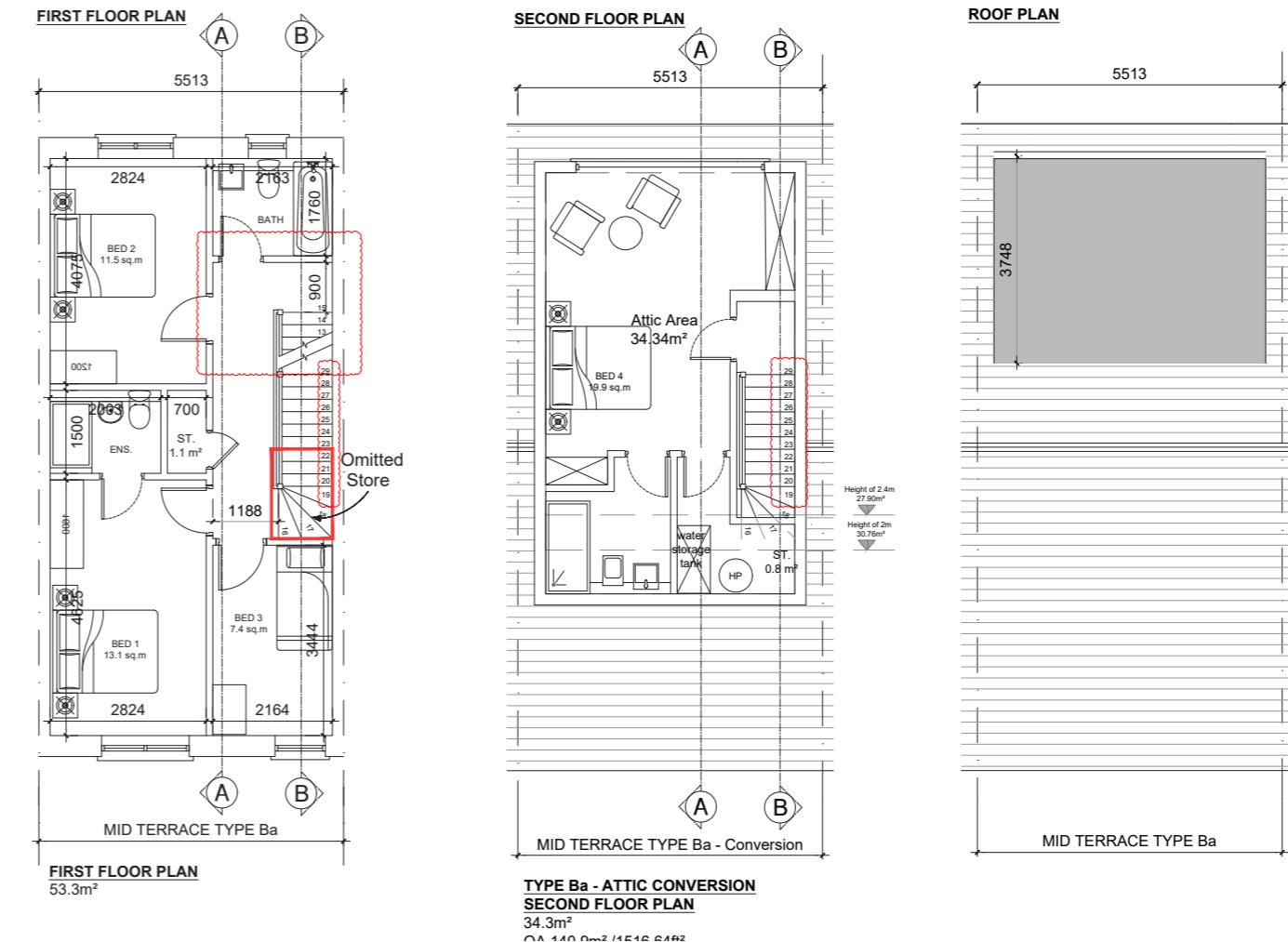
## 5.7 ADAPTABILITY

In response to the LRD Stage 2 opinion, we have demonstrated how a typical two storey house could be adapted to provide additional living space at third floor. This adaptability allows for the dwellings to grow and expand with resident's families or changing needs. The intention is that residents will invest in their community for generations and that the dwellings are designed to allow for families to grow.

By ensuring the roof pitch allows for habitable space to be provided at second floor level, the two-storey homes can be adapted (subject to planning permission where applicable) to provide an additional bedroom or study space.

In the proposed example, a mid terrace B type house, a new stair is provided to access the second floor. A new master bedroom with ensuite and plant/storage room are located at the new level. A dormer extension complying with the escape guidelines allows for appropriate head height.

In considering this design, we have complied with the requirements of the Loft Conversion Guidelines 2022.



## 5.8 PART V

A total of 123 units have been proposed for Part V allocation. These units range from one & three bed duplex units, three & four bed houses and one & two bed apartment units. The location of these units are located throughout the site, and indicated on the diagram to the right.

The units are split between Social & Affordable - 9.43% / 10.57% respectively.

### EVARA UNITS

Houses	4
Duplexes	48
Apartments	0
Social	16
Affordable	36

### KELLAND UNITS

Houses	5
Duplexes	40
Apartments	26
Social	42
Affordable	29

### OVERALL UNITS

Houses	9
Duplexes	88
Apartments	26
Total Units	123
Social	58
Affordable	65



## 5.9 DETAILS OF MATERIALS & FINISHES

- BRICKWORK:

The scheme will consist of 3 shades of clay bricks together with pale render. This complementary materials palette is employed as a coherent family of materials that will run through the different character areas and create a unique identity to Boherboy.

High quality buff, brown and red brick elevations align with the surrounding area. A varied built character will be achieved by using a combination of brick and render throughout the different character areas envisaged.

The strong distinctiveness of the scheme's higher density northern edge is reinforced with the design employed on the apartment block facades.

- WINDOWS:

Well considered wall openings balanced through different facades create rhythm.

Window proportion and style vary within the individual character areas to provide visual interest.

Throughout the site, the aesthetic aim is to play on the contrast & proportion between solid and void, and between the glass and brick.

- BALCONIES:

Cantilevered balconies will project from the apartment blocks with the balustrading to be metal with a thin profile to deliver a clean appearance to the overall facades, as shown in the opposite CGI.

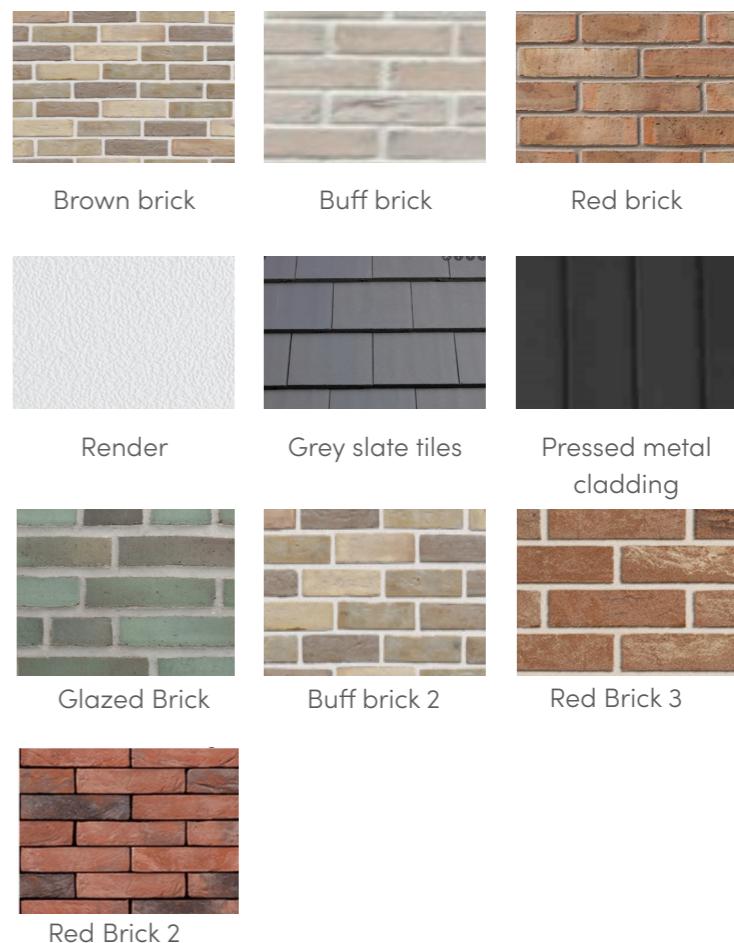


Figure 3-30. Scheme material palette.



Figure 5-8. Apartment block CGI.

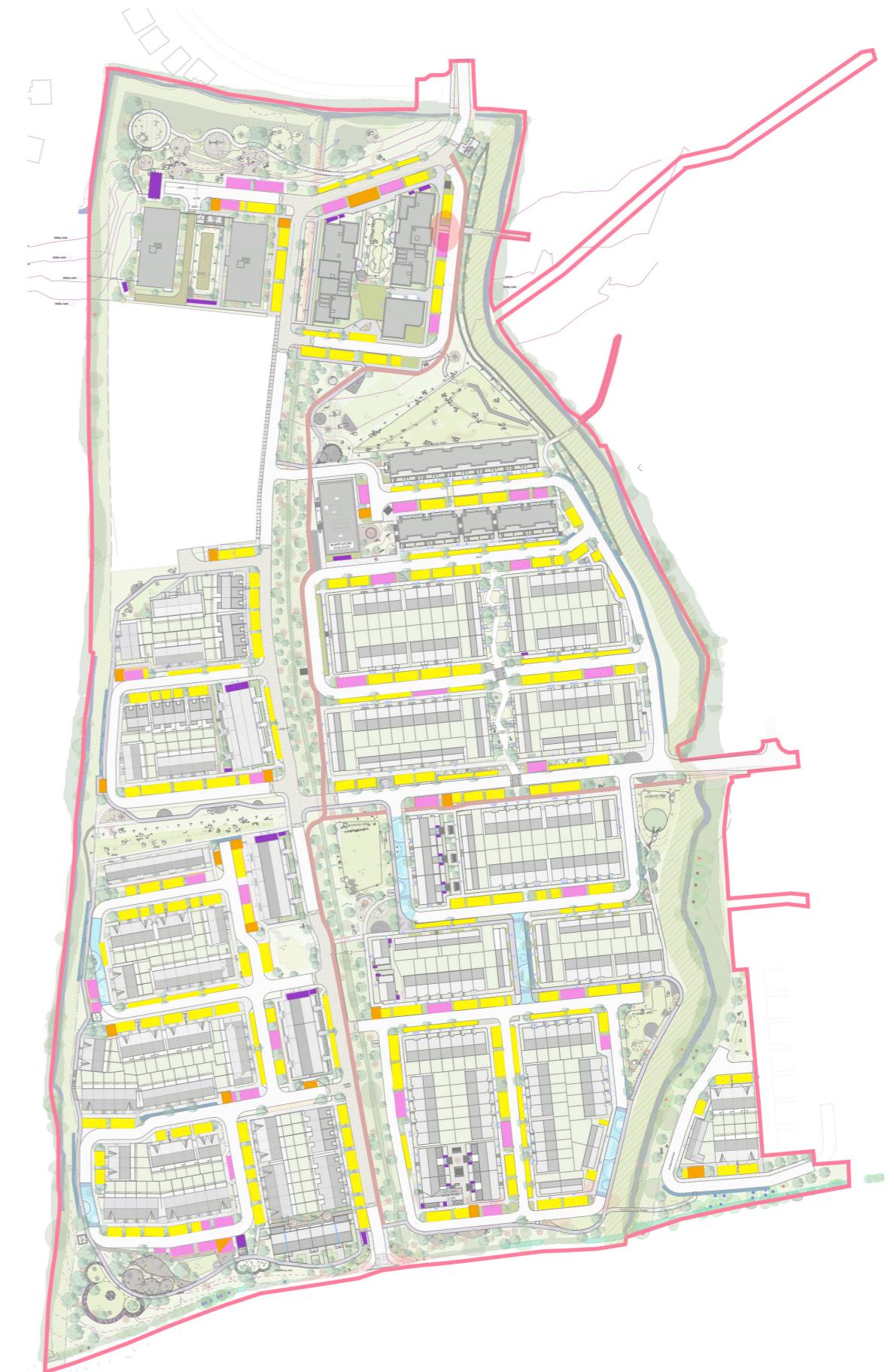
## 5.10 CAR & BICYCLE PARKING

The car parking as proposed has been designed so as not to dominate the street scene. In all cases where either on street or on curtilage parking has been proposed, a strong street planting scheme has been designed by Gannon & Associates Landscape Design. This will ensure that the development prioritises pedestrian and active travel. The residential streets have all been designed to ensure slow vehicular movements. This is detailed further in Pinnacle's Traffic and Transport Assessment.

Cycle parking throughout the scheme has been provided in different configurations depending on the necessity of each area to provide regular and constant opportunities to choose an active form of travel. Long and short stay numbers comply with the Sustainable Residential Development and Compact Settlement Guidelines (2024). These ensure ample cycle parking for duplex and apartments users in contained secure cycle parking facilities and a dispersed network of visitor cycle parking throughout the site.

### KEY LEGEND

- Car Parking spaces (Overall total): 861
- EV Car Parking Spaces: 164
- Accessible Spaces: 24
- Bike Parking Spaces: 711



## 5.11 NON - RESIDENTIAL SPACES

Proposed School Site (proposed layout does not form part of the application):

- A site area of 10,311m<sup>2</sup> (1.02 ha) has been indicated on the proposed site plan to be developed in the future as a primary school. An indicative school site layout plan has been provided which allows for a two storey, 16 classroom school of 2412m<sup>2</sup>. The massing for this school was based on using Presentation Convent Primary School in Portarlington, Co Laois as a precedent (Planning Ref: 061183).

The layout provides:

- 16 car parking spaces, based on one parking space per classroom
- 17 car drop off / collection spaces, and 1 accessible parking space
- 100 short term bicycle parking spaces / 20 long term parking spaces
- 2 no. playing pitches (40x20m)
- 1 no. basketball court (28x15m)
- 329m<sup>2</sup> junior play area

It should be noted that 2121m<sup>2</sup> of the proposed site is within an Irish Water wayleave, however, no permanent structures are located within this area on the indicative site layout plan.



## 5.12 SUSTAINABILITY

### OVERALL STATEMENT:

All of the units will be subject to the NZEB (Nearly Zero Energy Building) requirements of the updated Part L Regulations, from 2021 that are in effect. In terms of energy ratings all of the units on site will have a Building Energy Rating (BER) of A2 / A3.

The measure of compliance with Part L of the Regulations is demonstrated using the Dwelling Energy Assessment Procedure (DEAP) software.

### RENEWABLE ENERGY:

Since 2008 and the introduction of the European Performance of Building Directive it has been mandated that each dwelling unit must generate a portion of their energy demand. The proposed buildings supply the renewable energy contribution in order to meet the Energy Performance Criteria of 0.3 as compliance hinges around either the ability to generate hot water (for sanitary purposes) using a heat pump with a related COP of over 230% or providing sufficient photovoltaic capacity to lower the imported energy into the unit.

A summary of the renewable solutions to be adopted on site are:

- Solar Photovoltaic (PV) where required
- Heat pumps

All components proposed to achieve the renewable energy requirements were considered from the early stages of the design process and incorporated within the landscaping and built fabric to minimise any negative visual impact.



Figure 5-9. Sample image of biodiversity at sedum roof. Source MCORM 2024.



Figure 5-10. Sample image of biodiversity. Source MCORM 2024.

### U-PVC WINDOWS:

PVC framing is proposed at Boherboy for its energy efficiency and low maintenance characteristics compared with aluminium windows.

When assessing the energy efficiency of a window the frame has a bigger impact on the U value than the glass, effectively it is the weakest link in the thermal performance of the overall assembly. PVC framing material performs better than aluminium, having improved insulation qualities. At the point of manufacture the embodied energy of uPVC is 80 MJ/kg whereas the equivalent aluminium figure is 170 MJ/kg, a reduction of over 50%. Although the lifespan of both aluminium and PVC is similar at circa 35 years, aluminium frames depend on their paint cover, minimum of 70 microns, for protection whereas the PVC frame material is designed to be exposed and does not require an outer protective layer, and therefore require less up-keeping.

### BUILDING FABRIC:

The building fabric elements that will be used in the construction of the dwellings will achieve a high level of performance meeting the current Part L standards.

The specified air tightness for the unit is to achieve an air tightness level of 3 air changes an hour or better. Based on previous project experience and approved and tested detailing, we expect that this figure will be comfortably exceeded within the houses and duplex types proposed.

### GREEN ROOFS:

We are providing green Sedum roof on all flat roofs. This type of green roof requires little maintenance compared to other green roofs as they have shallow roots and only need a small amount of rain water and nutrients to survive. Upkeeping is mostly related to periodic gutters and edge cleaning but the meadow itself requires little attention.

Sedum roof systems have been shown to have benefits for a range of insects. Sedum flowers do provide foraging for pollinators, especially bees in late June, providing much needed habitats and food sources for wildlife and insects.

## 6. CONCLUSION

ARCHITECTURAL AND URBAN DESIGN STATEMENT  
BOHERBOY LRD

DAVEY + SMITH  
ARCHITECTS

M'CORM  
ARCHITECTURE  
AND URBAN DESIGN

## 6.1 CONCLUSION

The proposed design for the lands at Boherboy has responded to the unique characteristics of the site in a way that will deliver high quality housing with a varied mix of typology and size at a location where there is a demand in the County. From the outset, the design approach to the site was driven by the intention to deliver a residential scheme that would integrate seamlessly into the sloping topography and connect well with the existing residential built form of the existing neighbouring developments.

The retention and enhancement of existing biodiverse elements of the site including dry ditches, the Corbally stream and hedgerows add to the Landscape design in order to deliver a distinctive sense of place. These natural features all follow the natural slope downhill from the southern site boundary at the Boherboy Road to the Carrigmore Park at its northern end. The layout of the site reflects a clear north/south axis established by the existing retained hedgerow with clear links traversing the proposal west to east linking the site in a legible way with the neighbouring developments at Corbally and Carrigmore. The exiting hedgerow bounding the site along its western flank will also be preserved and augmented. The provision of these buffers along these three main spines of biodiversity protects the existing ecology and allows the newly proposed residential buildings develop in a very natural existing landscaped environment.

Character areas with individual distinctive design aesthetics can be developed using the natural divisions of the land and clear urban structure of the proposed development, considering main frontages, prominent locations and cohesive diversity of finishes, architectural languages and street scapes.

A strong street hierarchy is proposed across the scheme. The provision of the north-south link road with secondary streets running East / West sets up a legible and fully permeable street network. The introduction of shared surface homezones adds a tertiary layer of quieter less trafficked streets where cycling and walking can be prioritised providing a safe environment for all residents particularly the younger ones to use. The scale of buildings proposed mirrors the importance of the streets they face with lower scale 2 storey units located in homezone locations with 3 storey buildings facing the more primary streets. In the northern part of the site, blocks up to five storeys and a childcare facility are proposed providing higher density cells within walking distance of the Luas. This legibility will provide a strong urban form that will allow the development to integrate into the built environment of the area. The mix of housing typologies provided for within the site will allow for a diverse population to add to and enhance the wider community of South County Dublin. This integration is further enhanced by the extensive network of open space and green infrastructure to be enjoyed by the wider community,

In designing the scheme to integrate into the natural confines of the site, we respectfully submit that the scheme represents a considered and thoughtful response to the natural elements of the site while at the same time ensuring connections from and through the site allow for an integration of the scheme into the wider area. This thoughtful design response will ensure a high quality of life for future residents and only serve to add to a thriving residential community in South County Dublin.



## 6.2 CGIs



Figure 4-10. North-west facing CGI of Character Area 5



Figure 4-12. East facing CGI of Character Area 2



Figure 4-11. East facing CGI of Character Area 2



Figure 4-13. North facing CGI through the center of the site at the Boherboy entrance to the site, showing Character Area 3

### 6.3 CGIs



Figure 4-14. South-west facing CGI of Character Area 1



Figure 4-16. South-west facing CGI of Character Area 3 & 5



Figure 4-15. North facing CGI through the center of the site at the Boherboy entrance to the site, showing Character Area 3



Figure 4-17. West facing CGI of Character Area 1

