

Clydesmuir, Cardiff

Design & Access Statement

Client: Pegasus Developments

12 January 2026

HolderMathias architects

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1.0 Introduction



- 1.1 This Design and Access Statement accompanies a full planning application for the demolition of those existing light industrial buildings of the Clydesmuir Industrial estate, Cardiff and for the construction of 96 new affordable homes, together with associated access, parking, landscaping, sustainable drainage and supporting infrastructure.
- 1.2 The applicant and site owner is Pegasus Developments who are an established Cardiff based housing developer. Wales and West Housing Association (WWHA) will be the end user. The proposed new development is for 100% affordable housing.
- 1.3 The site sits entirely within the city boundary of Cardiff. Therefore it is Cardiff Council who are the determining Local Planning Authority (LPA).
- 1.4 The proposal consists of 96 new affordable homes comprising of 18 x 1B2P apartments, 24 x 1B2P walk-up apartments, 6 x 2B3P Walk-up apartments, 36 x 2B4P Terrace housing and 12 x 3B5P semi detached housing. The scheme also includes new comprehensive soft landscaping and green infrastructure works, sustainable drainage, car parking and associated works.

2.0 Site Context Analysis

2.1 Culture and Community

Site Location

The application site is the current site for the Clydesmuir Industrial Estate, situated off of Clydesmuir Road within the Cardiff settlement boundary, on previously developed (brownfield) land in Tremorfa. The site measures 1.84ha.

The existing site operates as an industrial estate, occupied by a variety of light industrial and commercial businesses including warehouses, a flea market, self-storage facilities, and an upholstery company.

Planning Consent

The application proposals have been developed in close collaboration with a full consultant design team including transport planners, civil engineers and a landscape architect.

Surrounding Land and Building Use

Surrounding the site to the north and west are railway lines, while to the east lies St Catherine's Industrial Estate. The southern boundary is characterised by residential dwellings, marking a clear transition between employment and residential land uses.

Neighbourhood

The neighbourhood benefits from close links to public transport, local amenities, employment centres, and established residential communities.

From the site there is a 7-minute 0.3 mile walk to Tweedsmuir road, which provides a variety of local convenience and specialist shops, cafes, fast food and restaurants, and local services such as hairdressers, places of worship and community halls. With a local nursery and school a further 3 min walk.

Local green space and sports pitches (Tremorfa Park) can be found a short 8-minute walk via Clydesmuir Road and Taymuir road, with a local football club within the ground.

The area is reasonably well served by buses, with the number 11 route connecting Pengam Green via Clydesmuir road to Cardiff city Centre bus station and the number 2A on Pengam road (a 3-minute walk) connecting to the city circle route that connects the area to Cardiff Bay, Cardiff City Centre and Albany road.

Cardiff Central Train station is a 20-minute cycle, 30-minute bus journey or 50-minute walk from the site.

In terms of local amenity, the site is well provided for with



Site Location Plan



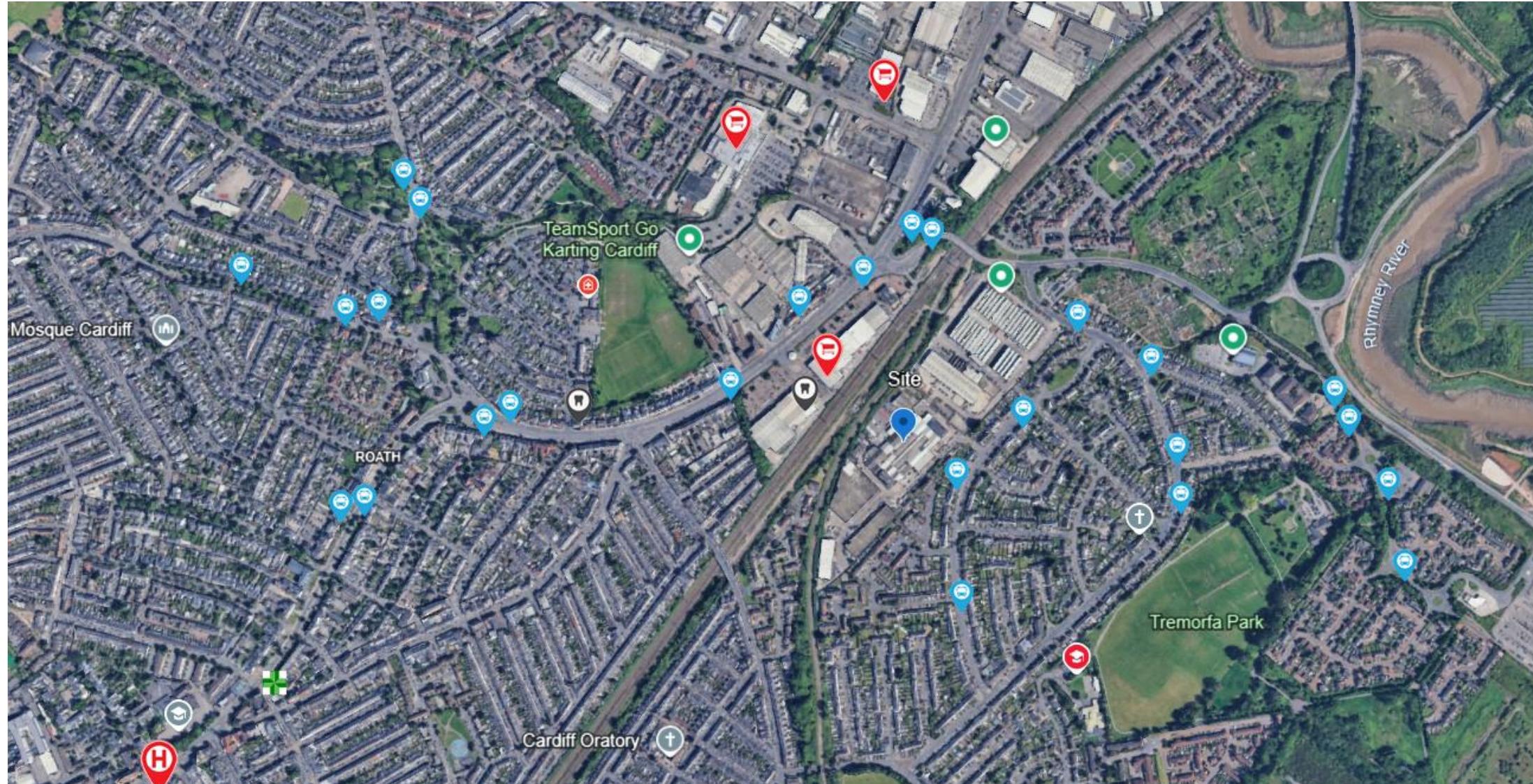
Existing Site Entrance



Aerial view from North



Site Location



Site



Hospital—Cardiff Royal Infirmary



Doctors Surgery—Minster Surgery



Pharmacy— Well Pharmacy



Dentist— My dentist City link/ Newport Road dental clinic



Supermarket—Aldi / Sainsbury's/ Lidl



Nursery— Tremorfa Nursery School



School—St Peter's Primary School



Bus Stop



Church



Mosque



View of access road from Clydesmuir Road
Tremorfa Park a short 10-minute walk, which includes a local football club. There are lots of local leisure activities found in the light industrial units to the east in St Catherine's park, including gyms, climbing walls & axe throwing. All a 5-minute walk from site.



Access road off of Clydesmuir road, looking east.

Socio – Economics

The scheme design has been based upon the local housing need and demographics, and responds to this in the type and tenure of the housing proposed.

Key Facilities Plan

2.0 Site Context Analysis

2.2. Landscape

Topography

The site is generally flat, with a legacy of hard standing and service infrastructure. Vegetation is limited primarily to the boundaries, and there are no significant ecological or archaeological constraints identified by initial surveys. Levels across the site range from circa +104.00 AOD in the North west corner falling to circa +95.20 AOD at the south east corner.

Green / Blue Infrastructure

The site is located within a pluvial Flood Zone 2 and is classified as a highly vulnerable development under national planning policy. However, it is also situated within a Defended Zone for this type of flooding, providing a degree of protection. It is considered low flood risk (source: Flood Risk Assessment Wales map). But for this area subject to flood risk, a robust drainage and sustainable urban drainage strategy is proposed.

Ecology

There are no known ecological habitats on the existing industrial estate, however a full Ecological Appraisal is being undertaken to establish what surveys maybe required.

Ground Conditions

The current industrial use, means the ground surface is mostly hardstanding concrete. But further investigation of ground conditions below the surface will be undertaken and used to inform the design of the drainage and SUDs strategy.



Site Topography



Existing vehicular access into site from secondary access road off Clydesmuir Road



Existing secondary access to rear of site, further down the access road

2.3 Movement and Infrastructure

Road Hierarchy and Access

The site is currently accessed via an existing unnamed adopted highway off of Clydesmuir Road which runs from the east to the west. There is also an additional access route to the rear via the network of internal service roads on the eastern side in the boundary of the adjacent industrial estate, but not within the site boundary.

The site benefits from on site parking for most of the businesses, but also unrestricted on street parking is currently used via the unnamed adopted access road.

Public Transport

Within walking distance there are two bus stops for the number 11 route from Pengam Green to Cardiff City centre. Approximately 6-minute walk is a second bus for route 2A connecting Cardiff City Centre with the surrounding areas. Areas such as Cardiff Bay, Grangetown, Canton, Llandaff & Cathays are within the bus routes available.

Cardiff Central Train station is a 20-minute cycle, 30-minute bus journey or 50– minute walk from the site.

2.0 Site Context Analysis

2.4. Built Form

Urban Form

The site is located within the well-established light industrial and residential mix of Tremorfa.

History and Archaeology

The site has comprised an industrial estate for a significant period of time. Historically it has been a biscuit factory. The broader history of the site, is aligned with the immediate area surrounding the site.

Originally a rural part of Cardiff, mostly farmland and was part Pengam Farm and would have been open fields. The farm closed in 1936. The area to the south of the site of what is now Pengam Green, was used as Pengam Moor airport, built in 1931, this was then developed into RAF Pengam Moors in 1938.

In the 1940's a growing industrial and commercial sector, a major housing programme began to transform the former farmland to a residential suburb. The housing was built to support the East Moor steelworks and their workers. This formed what is now the residential area of Tremorfa.

There is evidence in historical maps to show between the 1937 and 1961, there was already industrial buildings in the current site.



Historical map 1937 –1961, Tremorfa, Cardiff (National Library of Scotland map comparison)



Site Analysis



Aerial view of the sight from the south, showing the unnamed access road



View from the north showing various existing buildings



View of the site from the east, showing existing entrance and unnamed access road



View from the west showing the railway lines passing the site and the overgrown boundaries.

The current site shows industrial warehouses built around 1990. Since then, several planning applications for alterations and change of use within it, have been consented to form what exists today.

Building Scale, Height and Density

The existing buildings are generally two storeys, industrial sheds with pitched roofs, with ancillary flat roofed buildings alongside. There are also elements of more recent additions with flat roofs.

Building Character and Appearance

The existing buildings offer a variety of finishes. Predominantly the warehouse type buildings are predominantly corrugated metal cladding panels. The same profile can be found for the pitched roofs. Red brick can be found for some of the more ancillary buildings around the site.

The buildings present a functional and simple architectural appearance. Windows are limited and usually small. Roof lights provide most of the light to some small parts of the warehouse roof.

To the site perimeter steel security fencing is extensively used to protect and form the boundary. Vegetation is limited primarily to the boundaries of the site.

3.0 Design Evolution

The design has developed from key principles used to define where and how the dwellings interact with the existing context:

- Terraces contain the site and shield the site from the neighbours.
- Suds features provide the separation to the road.
- Walk ups provide the frontage to the roads with parking courts behind them.
- Frame the entrance with buildings either side.
- All affordable housing
- Demolition of all buildings on site
- Onsite parking

All dwellings are designed to the same house types as the Tai ar y Cyd design guidance.

The site layout design was developed through multiple layout options. Each showcasing different house type combinations and road layouts. These are described below and shown on the next two pages:

Layout option 1 - The road layout creates a central island of semi detached houses with an central access highway and perimeter housing to shield the site.

Layout option 2 - The entrance road is to the right side of the development with a similar housing mix. Suds features pushes the housing back from the roadside.

Layout option 3 - Central highway access, with walk up flats creating a buffer to the railway and front road. Pedestrian links to main road.

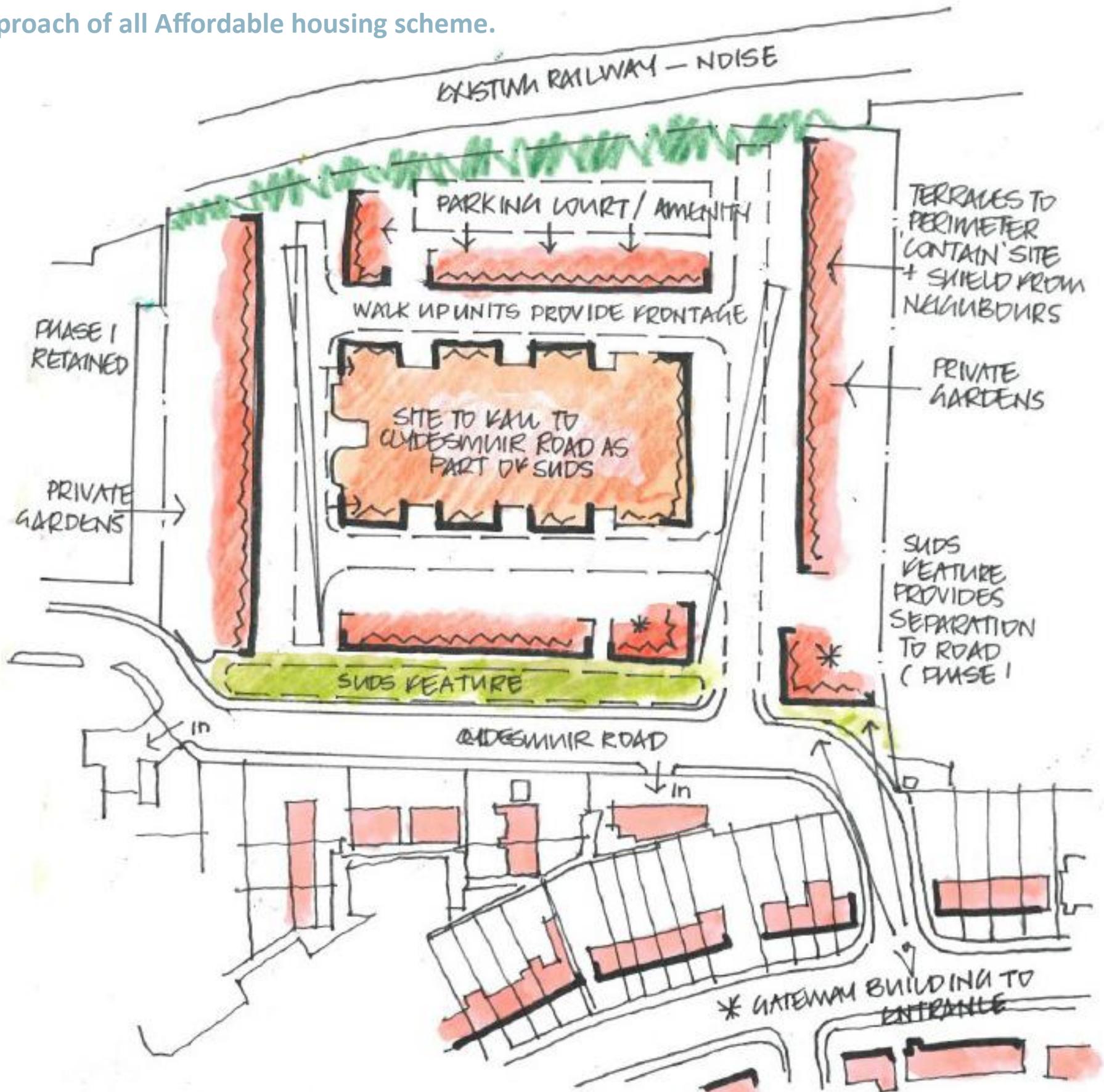
Layout option 4 - Central highway access between common access apartments framing the entrance road. Pedestrian access to main road.

Layout option 5 - Entrance highway to the right of the site with landscaped entrance feature. Walks ups to buffer the railway. Pedestrian links to main road

Layout option 6 - Central access highway with common access apartments buffering from the railway and walk-up flats fronting the road.

Layout option 7 - Central entrance highway, with walk-ups as a buffer to the railways and fronting the road. Pedestrian access to the main road.

Original Design Approach of all Affordable housing scheme.





3.0 Design Evolution

Retention of Existing Villas - mix of private and affordable units



Accommodation Schedule	
House Type	Unit Count
1B Walkup	22
2B Walkup	20
2BAP House	32
3BSP House	6
Total	80

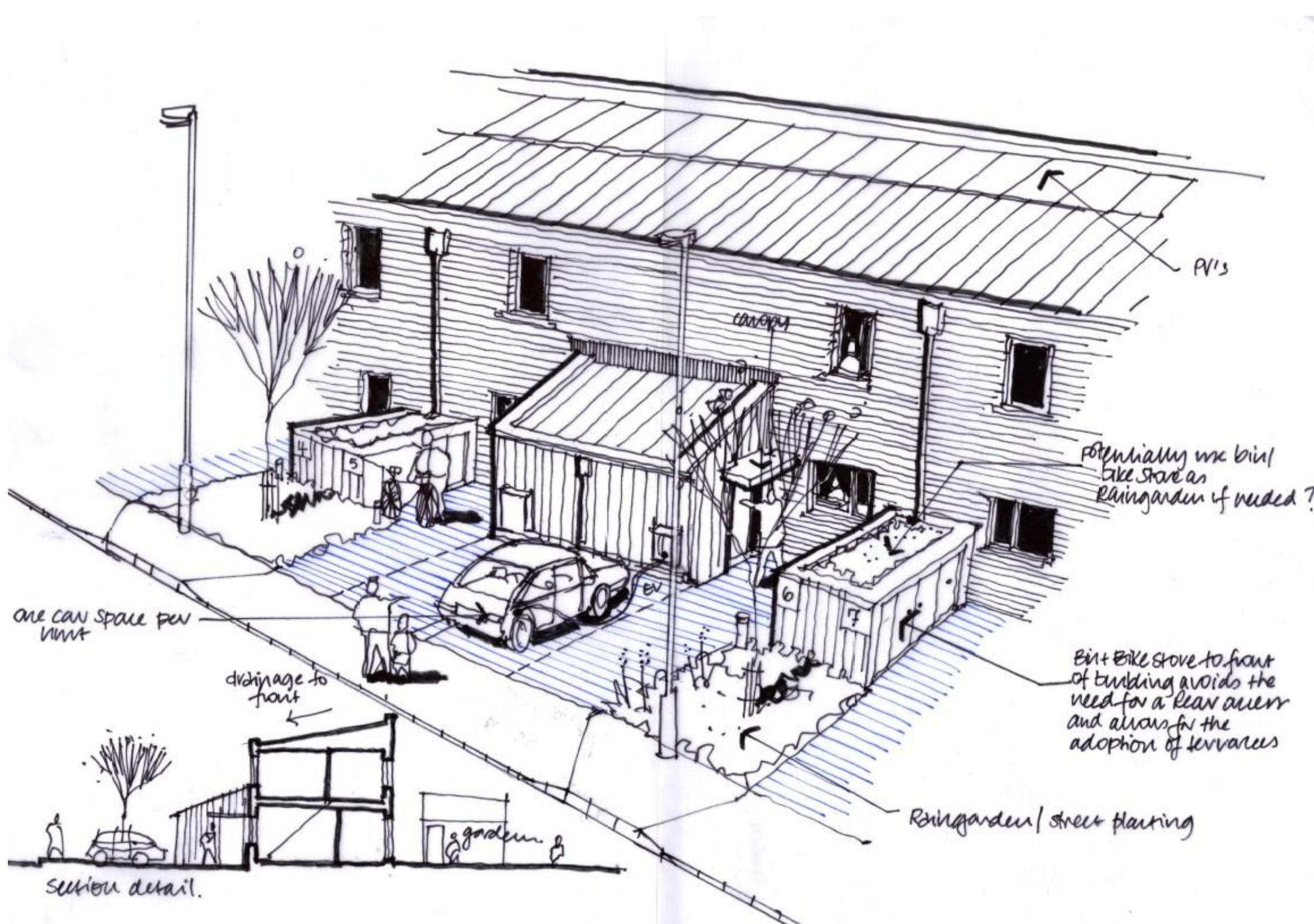


Accommodation Schedule	
House Type	Unit Count
1B Walkup	28
2B Walkup	24
2BAP House	16
3BSP House	20
Total	88



Accommodation Schedule	
House Type	Unit Count
1B Walkup	16
1B Common Access	18
2B Walkup	8
2B Common Access	18
2BAP House	16
3BSP House	20
Total	96

4.0 Brief & Vision



Early concept sketch of terraces

The design brief and vision has evolved over the course of the last few months, developed from the original sketches and options shown, but the principal aims remain the same.

The brief aims to introduce a blend of affordable residential unit types, ranging from three bedrooomed semi-detached housing, to one bedroom apartments, which will help cultivate a diverse and mixed community.

The design proposal adopted looks to take the current site and propose a form of development that is well integrated within the wider context, providing a much needed affordable residential provision within the area whilst being sensitive to the existing residential context.

The application proposal has gone through a significant level of design development to arrive at the proposed solution which balances a level of design ambition, that fully exploits the opportunities presented by the site and its location, with the need to deliver a development that is both viable and deliverable and which if constructed would secure the future of what is a challenging site.

The proposal requires the demolition of all existing industrial buildings and the delivery a of new balanced mix of affordable housing.

5.0 The Proposal

5.1 Quantum and Mix

The proposal consists of the complete demolition of the existing structures and consists of 96 new affordable housing units. Including 18 x 1B2P apartments, 24 x 1B2P walk-up apartments, 6 x 2B3P Walk-up apartments, 36 x 2B4P Terrace housing and 12 x 3B5P semi detached housing. The scheme also includes new comprehensive soft landscaping and green infrastructure works, sustainable drainage, car parking and associated works.

5.2 Layout

The proposed site layout arranges residential blocks along a clear internal street network with direct links to Clydesmuir Road. The design provides legible movement routes for vehicles, pedestrian and cyclists, incorporating traffic calming and safe crossings.

The layout responds to environmental receptors and constraints identified in supporting studies, including noise, air quality, ecology and existing utilities. Dwellings are oriented to optimise sunlight and privacy, with communal green spaces and play areas located centrally for ease of access and supervision.

The design allows for substantial provision of soft landscaping, tree planting and biodiversity habitat zones around the perimeter and within internal courtyards. These areas create natural screening, visual interest and space for informal recreation.

The final layout is illustrated in the submitted site plans, showing the arrangement of residential blocks, associated parking, cycle storage, bin stores and landscaped amenity spaces. Secure boundaries are provided where appropriate, ensuring privacy and safety for residents.

Access is from the south east, which is framed by two apartment blocks, on one each side. The internal road layout is simple and creates the opportunity for each dwelling to be serviced by refuse and emergency vehicles alike.

The housing units are used to help envelop the site creating a protected internal environment. There are two rows of terraces on the East and West boundary that enclose the site. There are also walk-ups to the north of the site that buffer the site from the railway lines. The parking courts are used to create a zone between the buffer zone. To the south of the site, the SuDs feature will provide the buffer to the frontage created by the walk-ups. The central block of housing is a mix of terrace and semi detached units, helping provide a healthy mix of housing types to the proposal.



Design Proposal



The architectural language is shared between all house types, with brick as the primary material and accented with timber or standing seam ancillary buildings.

- The apartments are common access from a central core, via the pedestrian path adjacent to the dedicated parking spaces. Extruded forms highlight the importance of the kitchen/living/dining areas of the apartments, creating a hierarchy. The extrusions and ancillary buildings such as bin stores are shown in the standing seam material to accent from the brick façade.
- The 1B2P & 2B3P Walk-ups provide the north and south boundary housing. There are two entrance doors on each unit type, accessed by a communal path from the dedicated car parking. The block of walk-ups creates the feature façade of double gables in a rhythm seen from the road. The walk-ups pick up on the language of the apartment, with an extruded standing seam bay window to the ground floor flat. Gables on both front and back of the unit continue this rhythm along the length. Large windows to the front gables highlight the main habitable rooms.
- The terrace of 2B4P houses are shown running north to south on the site plan. The roofs create a concertina rhythm along the road with the buildings themselves creating the site enclosure. Each terrace has a dedicated parking space and bin/bike store to the front. Raingardens are positioned in front of the store in the same rhythm down the street.
- The 3B5P Semi detached units are positioned on the central block within the site, each with dedicated car parking to the side or rear and an enclosed garden for each plot. The design uses the same brick as the other units and access colours picked up in the windows, doors and rainwater goods.

All units are designed using the Tai ar y Cyd design guidance from Welsh government and satisfy the requirements to meet WDQR/WHQS and Lifetime homes guidance.

Proposed Development Layout Plan Showing Unit Type

5.0 The Proposal

5.3 Access

Access to the site is via the existing adopted road network, with improvements to internal circulation and connections to public transport and pedestrian links. The transport statement provides full details of proposed access arrangements. Permeable footpaths and cycle routes are provided throughout, enhancing accessibility for all users. No public rights of way traverse the site, and none will be adversely affected by the development during construction.

5.4 Car Parking

A total of 86 car parking spaces are proposed including provision for disabled users and electric vehicle charging. Parking is arranged either to the front of units or in small parking blocks adjacent to dwellings and amenity spaces with secure cycle storage. The layout ensures parking will not dominate the street scape and landscaping is used to screen and soften paved areas. There is one space per house or walk up and a total of 4 spaces per apartment block.

5.5 Bicycle Parking

There are communal secure bicycle storage spaces to the apartments and walk-ups. The terrace housing and semi detached have dedicated secure storage to the front or side of the unit.

5.6 Architectural Language

The scale of the proposed development is determined by the need to deliver a mix of affordable homes that respects the local character and context. Buildings are typically 2 storeys, with the apartments blocks to the site entrance reaching 3 storeys.

All buildings are designed with a contemporary architectural approach, using brickwork and metal cladding in muted tones to complement the surrounding development. Rectilinear forms and simple rooflines are used to limit visual intrusion, while articulation and detailing provide interest and identity.

Ancillary structures such as waste and bike stores are single storey and shown to be subservient to the housing itself. Boundary treatments include railings and hedges and are designed for security and integration with landscaping. Material details colours and finishes will be confirmed at the detailed design stage and secured by planning condition. All external treatments are selected for durability, sustainability and visual harmony.



Design Proposal - Terrace Sketch



Sketch View of Proposal

5.7 Photovoltaic cells

Where the new development is for all affordable units then what is constructed will need to meet the onerous sustainability targets which are contained within the Welsh Government Design Guidance (WDQR) governing new grant funded development. In order to meet an EPC Energy Performance Certificate rating of A then PV cells are required in order to deliver an element of renewable energy and these are proposed as "in line" panels set within the plane of the roof.

5.8 Secured by Design

To meet WDQR funding requirements, all development would need to meet a Secured By Design Gold Standard. Initial application for discussion with Mike Harvey the Designing Out Crime Officer (DOCO) have been made. Once on board there will be a series of measures required for the scheme. Some have already been incorporated such as 1.8m gold standard fencing the boundaries. Further measures will be incorporated once feedback has been received.

5.9 Waste Management

The waste collection strategy has been designed to ensure effective and convenient waste management. For houses, each dwelling will be provided with private dedicated waste storage areas. The storage spaces are located within the curtilage of each property, allowing each resident to securely store refuse and recycling bins away from public display, whilst ensuring easy access.

For apartments, communal waste storage facilities will be provided. These secure, purpose built communal stores are located within close proximity to the apartment entrances and are easily accessible to all residents. The Communal stores have been sized to accommodate the required number of bins for general waster, recyclables and food waste.

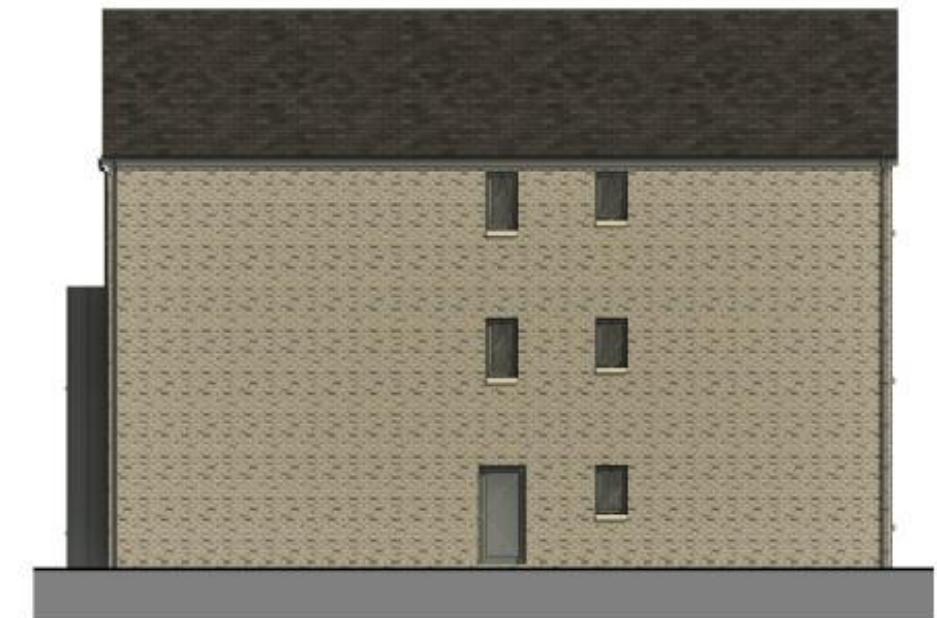
5.0 The Proposal

HOUSING TYPES

Proposed Apartment Elevations



① Front Elevation
1 : 100



③ Side 01 Elevation
1 : 100



② Rear Elevation
1 : 100



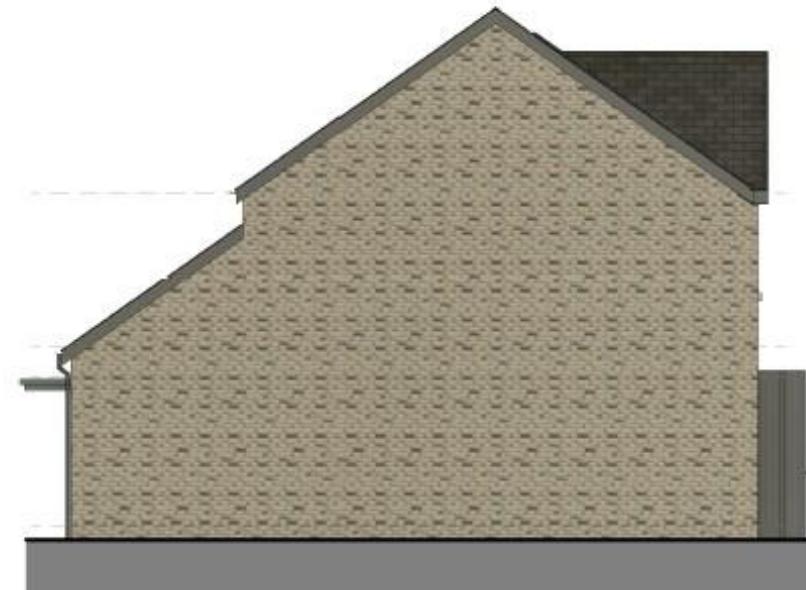
④ Side 02 Elevation
1 : 100

HOUSING TYPES

Proposed 1B2P Walk-up Elevations



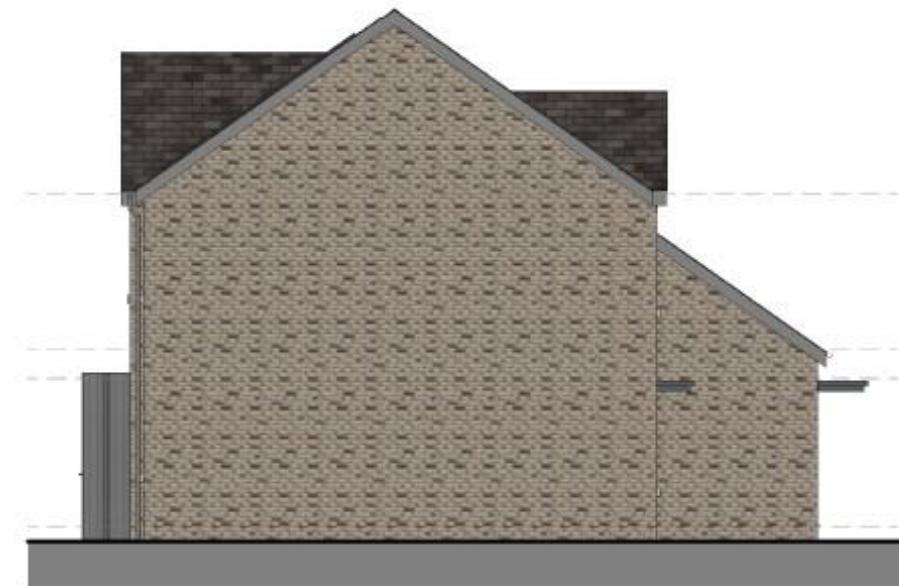
Front Elevation
1 : 100



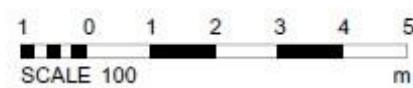
Side 01 Elevation
1 : 100



Rear Elevation
1 : 100



Side 02 Elevation
1 : 100



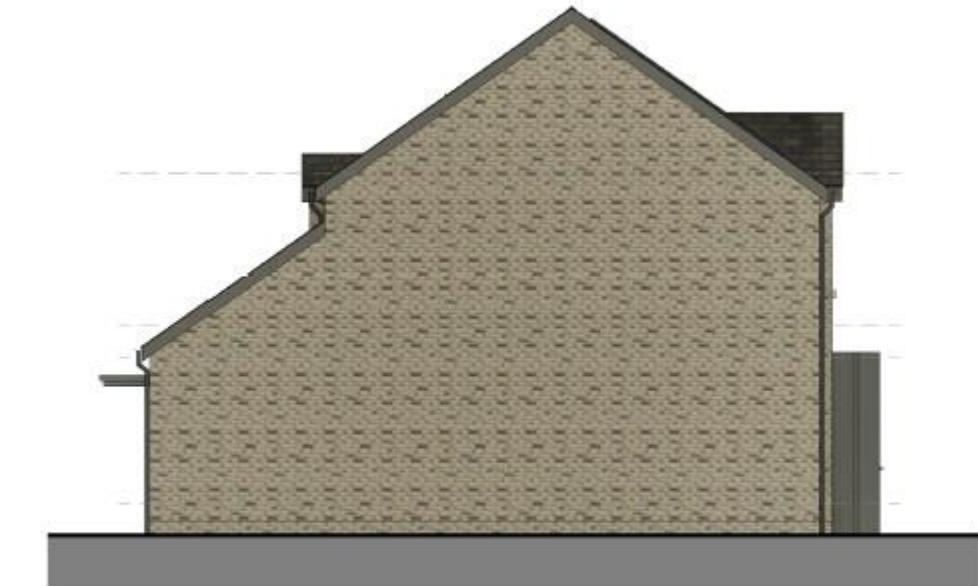
5.0 The Proposal

HOUSING TYPES

Proposed 2B3P Walk-up Elevations



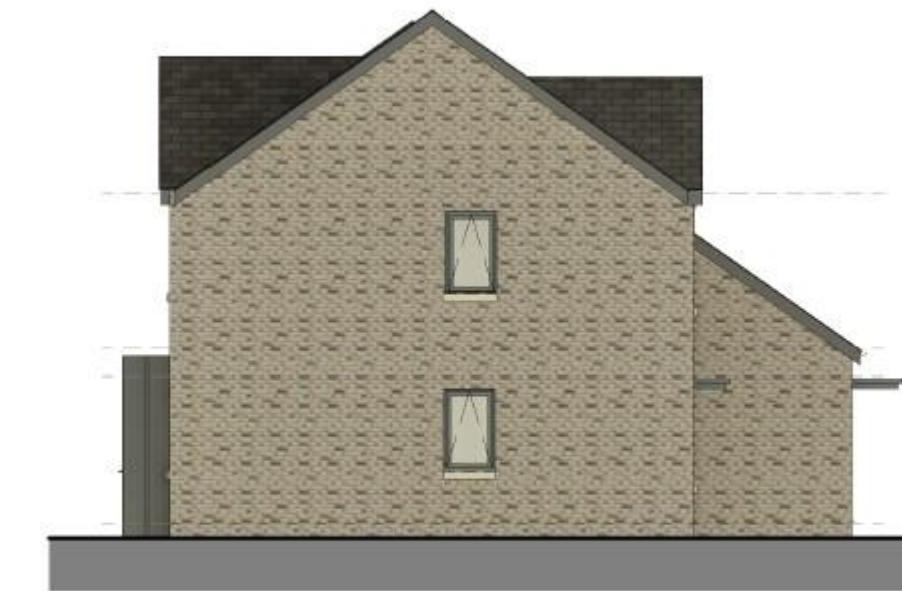
Front Elevation
1 : 100



Side 01 Elevation
1 : 100



Rear Elevation
1 : 100



Side 02 Elevation
1 : 100

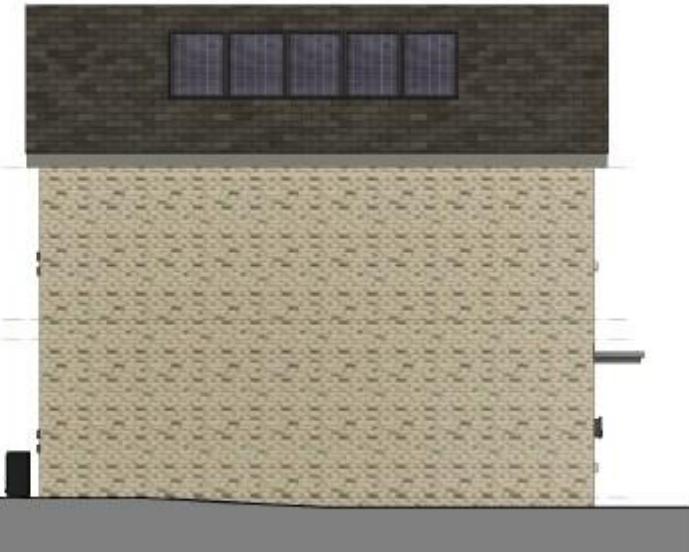
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SCALE 100
m

HOUSING TYPES

Proposed 2B4P Terrace Elevations



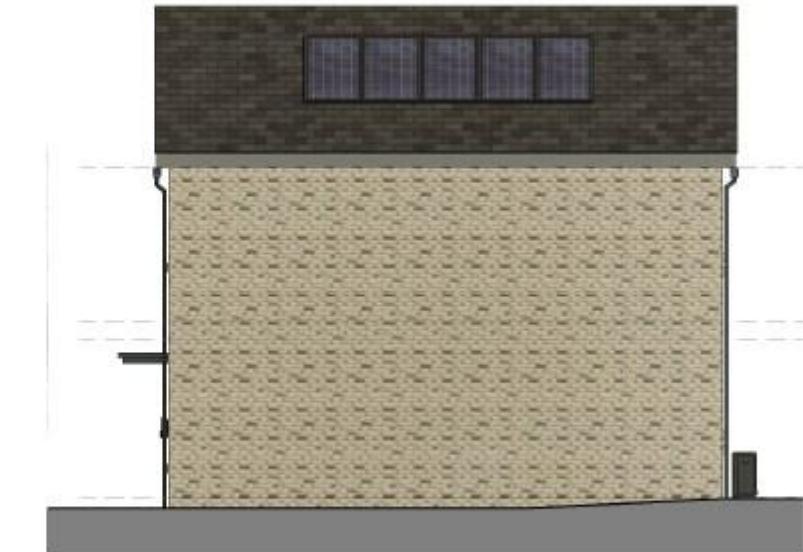
1 : 100



1 : 100



1 : 100



1 : 100

1 0 1 2 3 4 5
SCALE 100 m

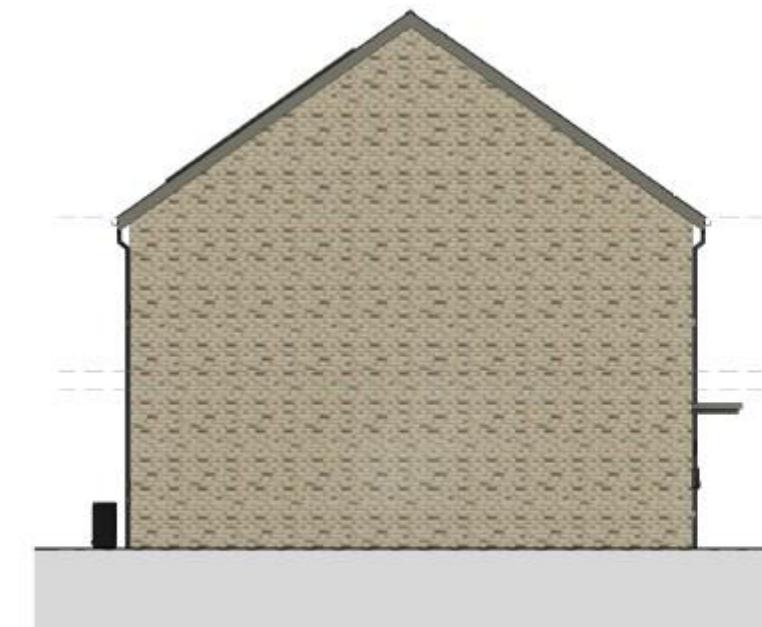
5.0 The Proposal

HOUSING TYPES

Proposed 3B5P Semi Detached Elevations



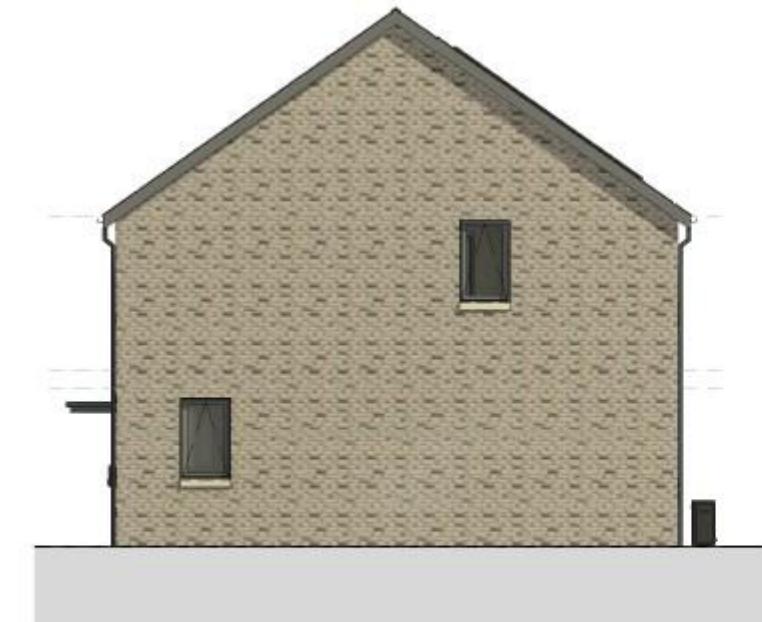
Front Elevation
1 : 100



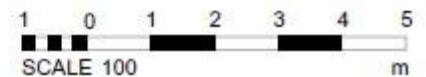
Side 01 Elevation
1 : 100



Rear Elevation
1 : 100



Side 02 Elevation
1 : 100





3D Site view from South



3D Site view from east

