Land off Spruce Close, Exeter

Design Compliance Statement

EDENSTONE HOMES

Prepared by Edenstone Homes

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1. INTRODUCTION & CONTEXT

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1.1 Purpose

1.1.1 This document has been prepared in support of a Reserved Matters Application for the development located on land adjacent to Spruce Close, Exeter.

1.1.2 In accordance with Section 9 of *The Town and Country Planning (Development Management Procedure) Order 2015*, this document aims to achieve the following :

- Explain the design principles and concepts that have been applied to the development.
- Demonstrate the steps taken to appraise the context of the development and how the design of the development takes that context into account.

1.2 Site Description

1.2.1 The site is located to the northen fringe of Exeter and is within the administrative area of Exeter City Council.

1.2.2 The site is currently greenfield which is privately owned and has no formal rights of way.

1.2.3 The site has a gross developable area of 3.9 ha with an addtional 9.13 ha allocated as new valley park.

1.2.4 The site is approx 3 km from Exeter City Centre.

1.3 Proposals

1.3.1 The proposed development will consist of 93 residential dwellings, associated infrastructure, public open space and landscaping.

1.3.2 Outline planning permission was granted for up to 93 residential units in august 2022.

1.3.3 Site access is approved in full

Figure 1: Site Location

Site Area

1.4 Outline Planning Approval

1.4.1 The site benefits from an Outline Planning Approval granted at appeal for 93 dwellings. Approval sought for details of access only, with scale, layout appearance and landscaping all reserved for future consideration (20/0538/OUT)

1.4.2 The outline parameter plans and Illustrative masterplan (see figure 2&3) and the supporting information in the Design & Access statement have been approved at appeal. The remaining information will be approved as part of a reserved matters application.

1.4.3 However, the outline design has been informed by engagement with the local community, local authority and key stakeholders. This in-built design knowledge within the outline plan has been used as a foundation to inform the design framework for the proposed development set out in this document. The key areas in which the Outline Planning Approval has guided the proposed development are as follows:

- Scale of the development
- Block & street structure
- Street Hierarchy

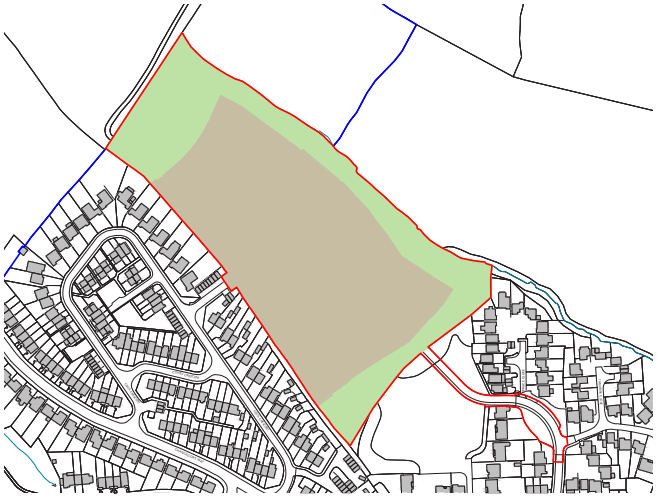

Figure 2: Outline Perameter Plan

Figure 3: Outline Illustrative Layout

1.5 Outline Planning Parameter Plans

1.5.1 The adjacent parameter plans were approved at the outline stage and serve as the foundation for our proposed development design. As evident on page 33, our proposed design closely aligns with the parameter plans, depicting the site's division into two distinct densities. Both site access points have also received full approval and our proposed design seamlessly incorporates this approval.

1.5.2 The land use parameter plan has also been accuratly followed allowing us to retain ecological areas within the exixting tree lines of the site.

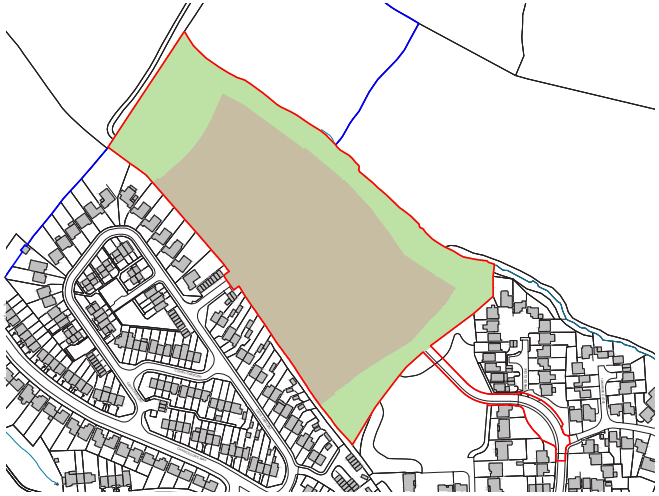

Figure 6: Parameter Plan - Land Use

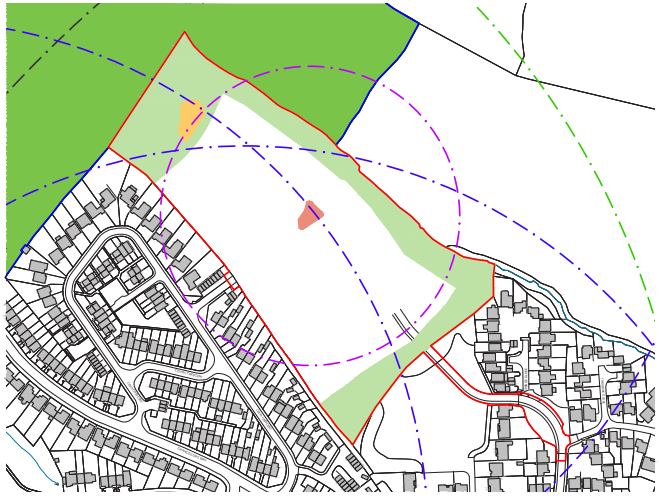

Figure 4: Parameter Plan - Open Space Provision

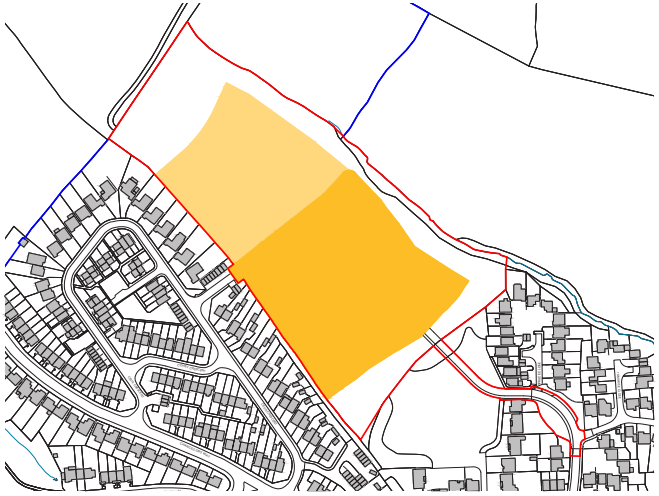

Figure 7: Parameter Plan - Density

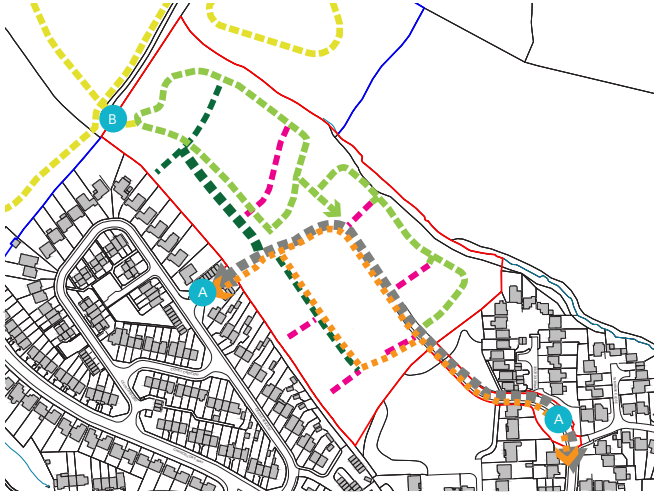

Figure 5: Parameter Plan - Access and Movement

Figure 8: Outline Illustrative Layout

1.6 Local Context

1.6.1 Spruce Close is located towards the North East of Exeter City. The site is located about 3 km north east of Exeter City Centre.

1.6.2 The site has good road links with Junction 29 of the M5, approximately 3 miles east of the site. The nearest station is Polsloe Bridge which is approximately 1.2 miles to the south of the site.

1.6.3 The site lies on the north eastern fringe of the existing built form of Exeter and is within the administrative area of Exeter City Council.

1.6.4 There is a regular bus service with the nearest bus stop located 200m from the site. The bus service has links to the City Centre

Figure 9: Pendragon Road Play Area

Figure 10: The Beacon Community Centre

Figure 11: Local Pub - The Devon Yeoman

Figure 12: Northbrook Swimming Pool

1.7 Facilities and Amenities

1.7.1 Spruce Close is located towards the North East of Exeter City. The site is located about 3 km north east of Exeter City Centre.

1.7.2 The site has good road links with Junction 29 of the M5, approximately 3 miles east of the site. The nearest station is Polsloe Bridge which is approximately 1.2 miles to the south of the site.

1.7.3 The site lies on the north eastern fringe of the existing built form of Exeter and is within the administrative area of Exeter City Council.

1.7.4 There is a regular bus service with the nearest bus stop located 200m from the site. The bus service has links to the City Centre

1.7.5 The facilities and amenities for the site are shown in figure 13.

Figure 13: Facilities and Amenities

1.8 Local Character

1.8.1 The development should demonstrate the distinctive characteristics of the local area in terms of scale, grain, architectural details, materials and the relationship of built form to landscape. All of these have historically contributed to the distinctiveness of place.

1.8.2 To help inform the design of the proposed development, an architectural appraisal of local design vernacular of the local conext has been conducted. This appraisal will form the foundation of the architectural language used through the development.

1.8.3 Exeter also boasts Georgian and Regency-era architecture, with elegant townhouses and crescents gracing its streets. These buildings are often characterized by their distinctive red-brick facades, sash windows, and wrought-iron balconies. Overall, Exeter's architectural character is a captivating mosaic of different styles, offering a visual journey through its rich past.

1.8.4 Exeter primarily consists of 2 storey dwellings with the ocasional use of 2.5 and 3 storey dwellings. The façades mainly consists of red brick, some render and a fairly minimal amount of stone.

1.8.5 In our opinion the design style of our house types and development structure are very much in keeping with the local vernacular and incorporate a variety of architectural design styles as well as meeting the requirements of a modern day development.

1.9 Local Character & House Type Comparison

1.9.1 A comparision of a selection of proposed house types against existing development provides a useful insite into how we've applied local architectural styles to our house types.

2. THE SITE

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2.1 Site Description

2.1.1 Figure 16. shows the extent of the site. The site comprises of

2.2 Site Photos

2.2.1 Photos 1- 6 illustrate key views of the site. The map presented on the right indicates the camera location and directional view of each photo.

View 1

2.2.2 View looking down towards Spruce Close

View 2

2.2.3 View up from Spruce Close POS looking at central tree belt.

View 3

2.2.4 View from south east corner of the site looking at tree belt at the western border.

View 4

2.2.5 View from Celia Cresent looking towards new valley park.

View 5

2.2.6 View from top of northen most boundary looking at celia crescent housing.

View 6

2.2.7 View from New Valley Park Area overlooking the surrounding landscape.

Figure 14: Photo Locations


3


5


4


6

2.3 Opportunities and Constraints

2.3.1 The key design opportunities and constraints on the site are shown on the next page and described below (for further details please refer to accompanying technical reports).

Opportunities

2.3.2 Provision of much-needed new homes, including a proportion of affordable homes and a variety of house types to support the creation of an inclusive community.

2.3.3 Retention and strengthening of all ecology corridor along the existing boundaries of the site.

2.3.4 The form of the development and the integration of green infrastructure will help to break up the mass of the development.

2.3.5 Create a strong positive frontage overlooking all public open spaces and all primary access routes into the site.

2.3.6 Deliver SuDS basin to manage on site surface run-off and to provide new wildlife habitat.

2.3.7 Create new areas of public open space as an extension of spruce close park spreading onto southern section of POS.

2.3.8 Create an off set public open space to compensate for the loss of POS through creation on access road from Spruce Close.

2.3.9 Creation of new valley park and new wildlife habitat.

2.3.10 Stong views for properties on majority of the site the northen parcel of housing has good sea views.

2.3.11 Deliver bus route for locals and solve bus turning around problem.

2.3.12 Creation of link to access New Valley Park from both Celia Crescent and Spruce Close.

2.3.13 New community infrastructure in the form of public open space, LEAP & LAP and EV charging for most homes.

Constraints

2.3.14 Good quality trees and hedgerows to be retained and enhanced where possible. Root protection areas to be respected.

2.3.15 Orientate buildings in such a way as to limit any potential impact of the privacy and amenity of houses surrounding the site.

2.3.16 Ecology corridors to be created along the routes of the eastern and western boundary hedgerows/ the site boundaries.

2.3.17 Access routes are fixed for accessing the site as per the outline parameter plans.

2.3.18 Approved bus route fixed running up primary street starting from spruce close and exiting at Celia Crescent.

2.3.19 Steep gradients across the site force us to design the site to with the contours.

Figure 15: Opportunities and Constraints NTS

3. EVOLVING THE CONCEPT

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3.1 Design Aspirations & Principles

3.1.1 The development will be designed in accordance with the following design principles:

- Create a sense of place, with an identity sympathetic to surrounding residential area.
- Select a materials palette and architectural details that works with the existing character of Exeter.
- Organise the built form and landscaping into a pattern of streets and perimeter blocks that respond to existing streets, landscape features and buildings.
- Design a street structure that works with The Sites topography.
- Provide a Hilltop Play area (LEAP)
- Local area of play central to the site and runs along the primary street.
- Retain green belt land to be classified as new valley park and open to the public.
- Create a clear hierarchy of streets and spaces, including a well-defined primary street.
- Create a green gateway into the development.
- Create a legible, permeable layout that allows people to easily access and navigate through the development to the wider area
- Design streets to encourage low traffic speeds.
- Provide direct physical pedestrian links to surrounding urban area and the surrounding countryside.
- Make policy compliant provisions for car parking without adversely dominating street design.
- Provide a mix of dwelling types to create a balanced community.
- Use buildings, materials and landscaping to create new focal points which enhance legibility and distinctiveness.
- Support and enhance biodiversity by creating new wildlife habitats, as well as linking to the wider green network.
- Provide attractive, accessible public open spaces and green corridors that connect to the wider green network.
- Use Sustainable Drainage Systems to control surface water run-off.
- Ensure that public routes and spaces are well overlooked.
- Provide new tree and hedge belts to visually buffer the development.
- Two defined character areas within the site, to the north of the site (hilltop fringe) consisting of a lower density with more detached homes and some semi deached. The southern area consisting of mostly semi-detached/ terraced houses.

Landscape

Access points

Primary Route through The Site

Public open space

Green Corridor

- Main vehicular access via Spruce Close
- A green gateway into the site is created with an additional landscaped SUDs basin.
- Green corridors frame the site and provide a strong landscape buffer.
- Network of open spaces across the site.

Links

Access points

Primary Route through The Site

Private mews

Development area

- Permable built form supports ease of movement through the development and to the wider area.
- Movement through the open space designed to offer connectivity to the wider area.

Blocks

Blocks

Attenuation

Footpath

- Build torm is arranged to create well defined perimeter blocks, with active frontage facing onto key focal points and the wider public realm.
- Higher density development has been located along the primary street, with lower density lanes branching off.

3.2 Design Review Panel

3.2.1 As a component of the preliminary application engagement process, we were invited to showcase our proposals before a Design Review Panel (DRP). On June 13, 2023, an on-site visit occurred, followed by our presentation at the Exeter City Council offices. This afforded both the council and the design panel the opportunity to provide formal comments before we submitted our application.

3.3 Draft Site Layout Feedback

3.4 The panel welcomed a number of aspects such as the retention of existing hedgerow, green space to the north, tree lined streets, the bus loop and the seperation of footpaths and roadways.

3.4.1 Country and hilltop park was welcomed and understood that it will be a great community gain.

3.4.2 The scheme has been designed in relation to the approved parameter plans, the panel thought that some flexability in the deviation from these plans was acceptable in order to bring forward a better scheme.

- We have largely stuck to the parameter plans but adjusted to benift the layout where appropriate.

3.4.3 Contours was identified as a key constraint and their understanding of the proposal lead them to believe that levels were not thought of as part of the design of the scheme.

- We look at the engineering as soon as a preliminary layout has been drawn, the layout is then adjusted to suit any problems.

3.4.4 The panel were keen to see a development that was more distinctive and attactive and previous developments over the decade.

- We believe our house types address this as we have added Exeters local architectural features into our houses.

3.4.5 They were keen to more terraced housing as there were keen on this form factor.

- We've since spoken to the Urban Design Officer at the council who felt less terrace housing would be more benifical and was preffered from a functionality perspective.

3.4.6 The cross road a the center of the site could be more of a tigher space with more retained hedgerow.

- We have to be able to fit a wide enough road to enable the approved bus route to funciton, this road also has to work with the difficult contours on the site.

3.4.7 Hard and soft landscaping should be considered to incorporate bin and cycle stores.

- Cycle & Bin store location have been considered and have allocated areas for them. They are in compliance with the exeter SPD.

3.4.8 They encouaged adjusting house types at key points to contribute to landscape character. These should include bays, gables and other varients.

- These features have been considered and design in accordingly.

3.4.9 The inspectors verdict that even where the site is percepable from nearby and longer distances.

- Appropriate materials and landscape screening has been incorporated to limit the visual impact.

3.4.10 At the entrance to the scheme, there was concern that the approach looked like a gated community from imagery: we would seek to increase the hedge frontage and replace the wall.

- Further discussion with the councils urban design officer has concluded the walling will be a devon bank type wall with a softer and natural appealing look.

3.4.11 Some attenuation is proposed to be provided underground. This is less than ideal for ecological disturbance and carbon cost.

- Unfortunly the drainage strategy would not be feasible as the attenuation basin would not be sufficent enought.

3.4.12 The ecology within the site should be put first where practicable, in line with the mitigation hierarchy. The retention of the northern hedgerow with substantive greenspace buffer, including consideration of lighting, is important.

- Appropriate screening from car lights, street lighting and internal light spill has been considered and the design adjusted to mitigate.

3.4.13 Information on how the Park contributes to wider, strategic wildlife enhancement schemes would be welcome.

- A New Valley Park specification will be submitted as part of the RM.

3.4.14 We were unable to gather from the presentation how far and in what ways environmental sustainability had informed the design.

- Our sustainability strategy is outlined on pages 52-53.

Figure 16: Layout Presented to Design Review Panel

4. DESIGN PROPOSALS

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4.1 Final Masterplan

4.1.1 The Final Planning Layout (see Figure 17) is the result of an evolutionary process that started with an understanding of the outline application and the policy background, informed by the suite of design guidance offered by the supporting approved parameter plans, conceived with an understanding of the site constraints and supporting technical work and evolved via an interative design process through Exeter City Council & DRP.

Layout & Scale

- Strong desire lines through the scheme, helping to link with the town centre and POS to the north of the site.
- New valley park to the north of the site provides additonal POS area and can be used by all.
- Development has been split into two character areas Hilltop Fringe and Urban core. Hill top fringe consisting of lower density and larger plots and urban core consisting of a denser form and majority semi detached.

Landscape & Biodiversity

- Significant amount of new tree / hedge / shrub planting will ensure a green leafy residential environment is achieved.
- A community green space has been provided as per the approved parameter plans at the north of the site with viewing areas across the channel, and containing a LEAP.
- Landscape buffers have been provided to existing tree lines surrounding the site for added ecological protection and management.
- The development has been split into two parcels by a landscape tree lined green corridors running along the centre of the site. These green corridors have the effect of breaking up the visual massing of the development.

Streets & Connectivity

- Primary Route provides access to all three development parcels with a series of secondary routes branching off.
- Creation of a clear street hierarchy that aids legibility.
- High levels of pedestrian inter-connectivity, with the surrounding built and rural environments .

4.2 Ownership

Private Individuals

4.2.1 65% of the dwellings will be sold as open market housing.

Registered Providers

4.2.2 35% of the dwellings will be affordable.

Management Company

4.2.3 A suitable Management Company will own and be responsible for areas of hard-standing / informal green spaces which are not adopted. In addition, the Management Company will also take ownership of shared private drives.

Multiple Ownership

4.2.4 Some areas of path and driveways provide shared access to a limited number of properties. These will be owned jointly by the properties these areas serve. Such routes are generally areas of land which would not be routinely accessed by the public.

4.3 Housing Mix

2.3.1 A detailed breakdown of the proposed affordable and open market housing mix is set out on the proposed schedule below.

Spruce Close, Exeter (93 Units)

Open Market - 61 Units

House Type	Ref	Storey	Beds	No. Units
Ashmore	Am	2	1B	10
Ashford	Af	2	2B	15
Telford	Tf	2.5	3B	5
Stanton	St	2	3B	4
Dartford	Df	2	3B	6
Malhern	Mh	2.5	3B	6
Sampford	Sa	2	4B	7
Monmouth	Mm	2	4B	3
Monmouth Corner	Mmc	2	4B	5
			Total	61

Affordable - 32 Units

House Type	Ref	Storey	Beds	No. Units
Monnow GF	Mo	2	1B	4
Monnow FF			1B	4
Tamar GF	Tm	2.5	1B	2
Tamar FF		2.5	2B	2
Tamar SF		2.5	2B	2
Frome	Fr	2	2B	2
Ogmore	Og	2	2B	3
Wye	Wy	2	3B	11
Idris	Id	2	4B	2
			Total	32

Figure 17: Block Plan

4.4 Scale

4.4.1 The scale of the development is informed by the surrounding residential context, the illustrative outline parameter plans and by the need to create successful streets and create a sense of place. The majority of the dwellings on the site are 2 storey houses, 2.5 storey apartments have been used in the centre of the site and facing the primary street to re-enforce this key route and to aid legibility.

4.5 Density

4.5.1 The development has been designed as per the outline parameter plans with the southern parcel of the site being of higher density and the northen hilltop area consisting of lower density to reflect a more rural space. The development has also been designed represent an efficient use of land. The development consists of terraced, semi-detached and detached houses, which is the prevailing characteristic of the built environment of Exeter.

Figure 19: Storey Heights Plan

Figure 18: Village Core

4.6 Green Infrastructure

4.6.1 The built form is organised into a pattern of streets and perimeter blocks that work with the topography of the site. The perimeter blocks are clearly defined, with rear gardens securely enclosed, and frontages facing streets /public realm clearly defining public and private spaces.

4.6.2 The primary street has been framed by strong frontage, with a clear built line. Additionally, key buildings have been located at the entrance to The Site and around key spaces of public realm.

4.6.3 The street structure has been designed to reference the loose grid pattern use around Exeter. This design feature helps to link the character of the development back to Exeter creating a strong sense of place.

4.6.4 Green corridors break the site into two parcels. Where these green corridors interact with the primary street this creates a number key movement nodes.

Green Corridor

Tree lined Primary Street

Public Green Space

Figure 20: Block Structure Plan

4.7 Character Areas

4.7.1 A shared architectural language throughout the development will create a cohesive identity and sense of place, which has been based around the local vernacular of Exeter and nearby villages (see section 1.5). Within this shared language, the development has been split into two character areas. Variations in landscape treatment, street types, density and a differing palette of materials in each will create a distinct identity to each of these areas.

4.7.2 The character areas are reinforced by street hierarchy, landscape and boundary treatments. The two character areas are described below.

Urban Core

4.7.3 This character area is formal in its characteristics and is framed around the tree lined primary street. The character area has been designed to respond to this key movement corridor and is defined by the features set out below:

- Higher density development consisting of primarily of terraced, semi-detached houses and some apartments.
- Use of 2 storey houses 2.5 storey apartments ensures a sense of enclosure and a strong built edge along the primary street.
- Boundary treatments primarily consist of estate railing along the primary street and low level planting on secondary routes
- The primary street within the Urban Core has been lined with formal tree planting located within a verge.
- Predominantly the use of red brick for façades along the Primary Street, with the occasional use of render.
- Parking within the Urban Core will be provided in the form of: on-street parking bays, rear mews courts and off-street parking to the side of the dwelling.
-

Hilltop Fringe

4.7.4 This character area is more relaxed in its characteristics and is framed around the tree lined primary street. The character area has been designed to respond to this key movement corridor and is defined by the features set out below:

- Lower density development consisting of primarily of detached houses with a some semi detached.
- Use of reasonably spaced out 2 storey houses ensures a sense of enclosure and a strong built edge along the primary street.
- Parking within the hilltop fringe all located to the side with most houses owning garages to the side of properties.

Figure 21: Character Areas

4.8 Materials

4.8.1 The houses on the Site are predominantly brick to the southern parcel with a mix of render houses and a mix of stone brick and render has been used in the northen parcel.

4.8.2 Primary and all secondary street will be all tarmac with a number of raised tables throughout. Some block paving will be used on the main footpath up toward the play area and on nothern most private drives.

Materials Legend:

Render

Walls:
Render - Parex Athen Sands - Smooth J39
Below DPC:
Brick - AAB Red Multi Handmade
Roof:
Grey Tile - Redland Duoplane Charcoal Grey
Fascias & Rain Water Goods:
White PVCu
Black Rainwater goods
Canopes:
GRP - White
Windows:
UPVC White with Woodgrain finish
Cills - Smooth Recon Stone
All above similar or approved

Brick

Walls:
Red Brick - AAB Red Multi Handmade
Below DPC:
Red Brick - AAB Red Multi Handmade
Roof:
Tile - Redland Duoplane Charcoal Grey
Fascias & Rain Water Goods:
White PVCu
Black Rainwater goods
Canopes:
GRP - White
Windows:
UPVC White with woodgrain finish
Cills - Smooth Recon Stone
Voussoir - Red Brick -AAB Red Multi Handmade
All above similar or approved

Stone

Walls:
Reconstituted Rough Dressed Stone - Keinton
Below DPC:
Reconstituted Rough Dressed Stone - Keinton
Roof:
Grey Tile - Redland Duoplane Charcoal Grey
Fascias & Rain Water Goods:
White PVCu
Black Rainwater goods
Canopes:
GRP - White
Windows:
UPVC White with Woodgrain finish
Cills - Smooth Recon Stone
All above similar or approved

Paving Slabs
Tobermore - Rough dressed Buff(450x450 slabs)
(similar or Approved)

Tarmac

Block Paving
Tobermore Block Paving Grey
(similar or Approved)

Rumble Strip
Tumbled Tegula Charcoal Block Paving
(Similar or Approved)

Bin Collection Points
Tobermore - Rough dressed Buff (450x450 slabs)
(Similar or Approved)

Grass Crete

Bound Gravel (Buff)

Garages to be brick

Notes :

Figure 22: Materials Plan

4.9 Boundary Treatments and Landscaping

4.9.1 Ownership boundaries and boundaries between public and private spaces will be clearly defined.

4.9.2 Adjacent rear gardens will be divided using 1.8m high timber fencing. Where rear gardens adjoin the public realm, the boundary treatment will be a 1.8m walling.

4.9.3 Low stone devon hedge banks walling will be used to articulate key nodes within the street-scape, creating a clearly defined spaces within the development.

4.9.4 Front gardens will generally be defined by soft landscaping in the form of shrub planting and / or hedge planting and clear boundaries defined with estate railings.

4.9.5 Where gardens side / back onto the existing hedgerows, a 1.8m timber close board fence will form the boundary with a new hedgerow located outside the ownership of the dwelling to provide privacy.

Figure 23: Proposed Enclosures Plan

Figure 24: Landscape/ Green Infrastucture MasterPlan

Urban Core: Elevation

Urban Core: Elevation

Urban Core: Apartment Block Elevation

Hilltop Fringe: Elevation

Hilltop Fringe: Elevation

4.10 Roofing Materials & Photovoltaic Panels

4.10.1 As part of our sustainability and energy strategy, we plan to incorporate inset photovoltaic panels (PV) into our buildings. While these panels may not always be aesthetically pleasing, we are committed to integrating them seamlessly with the building's materials to maintain a harmonious and appealing architectural design.

4.10.2 After much debate with Exeter City Council, it was agreed that the development should blend harmoniously with the surrounding landscape, minimizing its visibility from the city. The choice of materials was carefully considered to achieve this objective. Our team believes that grey-colored roofs are more discreet and allow the site to integrate seamlessly within its boundaries compared to red-colored roofs, which tend to stand out prominently. Incorporating PV panels onto red roofs may lead to an aesthetically unappealing appearance when viewed from a distance. Therefore, we aim to utilize grey roofs with PV integration to maintain a more subtle and aesthetically pleasing approach.

4.10.3 From a construction perspective, installing inset PV panels is generally easier on slate or concrete roof tiles, mainly because the flat shape of these tiles provides a more suitable surface. In contrast, red-colored roof tiles often have irregular shapes, which can present challenges during the installation process and functionality of the roof.

4.10.4 The illustrative examples below distinctly demonstrate the contrast between the two options, with the grey roof appearing significantly more subtle in comparison.

Inset Photovoltaic Panels with Red Roof

Inset Photovoltaic Panels with Grey Roof

4.11 Proposed Street Scenes

4.12 3D Visual 1

Figure 25: Illustrative Visual - View From Spruce Close Access Looking up Primary Street.

4.13 3D Visual 2

Figure 26: Illustrative Visual - Viewed from Ceilia Crescent Access looking up towards New Valley Park.

5. ACCESS & MOVEMENT

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5.1 Vehicular & Pedestrian Access

5.1.1 Two vehicular access points have been provided onto the site via Spruce Close and Celia Cresent.

5.1.2 An existing footpath runs both access roads Road linking the site to surrounding area. The site has excellent pedestrian permeability providing convenient access via existing links to shops, public house, schools & public open space.

5.1.3 A variety of pedestrian routes within the site are available. These footpath are either integral with the street or segregated in areas of public open space.

5.2 Community Safety

5.2.1 Community safety is an integral part of the design creation. The design incorporates the principles of 'Secured by Design' to create an environment which discourages crime and anti-social behaviour.

5.2.2 The proposal incorporates two main access points and internal road which will act as the developments focal point and foster natural surveillance.

5.2.3 The public realm will be designed to ensure good levels of natural surveillance. House elevations will be designed to provide active frontages to streets, footpaths and public spaces.

5.2.4 An appropriate level of pedestrian connectivity has been provided, to create convenient routes and encourage walking without excessive permeability.

5.2.5 Front gardens between the front of dwellings and back of pavement will create clear defensible space, with boundaries clearly defined by a variety of boundary treatments.

5.2.6 Rear gardens will generally be protected by the enclosed perimeter block structure. Where rear gardens adjoin the public realm, they will be securely enclosed by a 1.8m brick screen wall or a 1.8m fence and hedgerow. Access to all rear gardens will be controlled by lockable gates.

5.2.7 Streets have been designed to reduce traffic speeds, through the use of surface materials, raised tables, horizontal and vertical geometry as well as integrated tree planting.

5.3 External Surfaces

5.3.1 The adoptable highway will comprise a mix of tarmac, concrete kerbs, block paving and a mix of kerb sizes.

5.3.2 Rumble strips have been used to break up lengths of tarmac and provide a physical response to drivers when the car passes across them in order to reduce vehicle speed.

5.3.3 Landscape elements such as hedges, trees and shrub planting are integrated within the public realm to soften the impact of the development.

5.3.4 Pedestrian connections will be finished using a tarmac treatment & some block paved.

5.4 Street hierarchy

5.4.1 The Primary Route is clearly the highest category street within the design proposals and links the site from spruce close to Celiea Crescent. The hierarchy transforms to lesser categories of street as they branch off from the Primary Route.

5.4.2 The primary route will comprise: a dedicated 2m wide footpath on both sides; a highway ranging between 5.5m to 4.8m; variable height kerbing; and be predominantly tarmac with raised tables. The character of the street has been reinforced though the use of formal tree planting along the verge.

5.4.3 The secondary and mews streets are much more informal in their character. The secondary and mews streets widths are between 4.0m and 4.8m, with pinched carriageways at the entrances. These streets use tarmac or block paving as surface material, and only service a small number of units.

Figure 27: Street Hierarchy Diagram (NTS).

Figure 28: Street Hierarchy Diagram

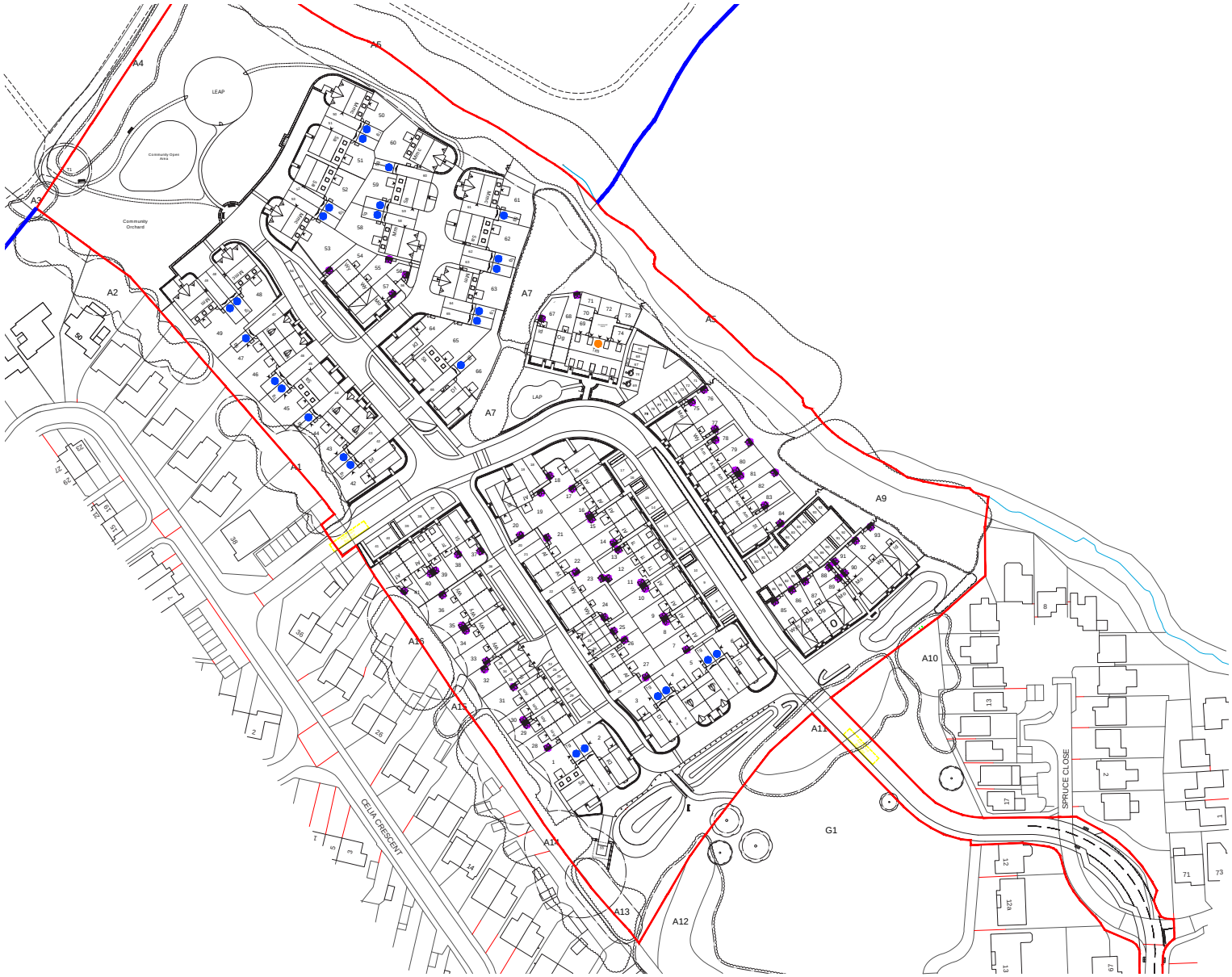
5.5 Car & Cycle Parking

5.5.1 Car-parking provision follows the guidelines established in Exeters Design Guide. For housing developments, it suggests the following amount of space per units:

- 1.5 Spaces Per Dwelling

5.5.2 Car parking provision has been catered for in a variety of ways, including on plot via driveways, on-street and small mews courts.

5.5.3 Cycle storage has been located within either the garages or separate secure rear gardens storage.



Parking & Cycle Strategy Legend:

- Cycle Store Location
- Cycle Store Location in Garage
- Cycle Store within apartments

Notes:

- Parking spaces on proposed layout is policy compliant as per Exeter Design Guides 1.5 spaces per dwelling

Electric Charging Provided to all plots with assigned parking. Fully Compliant with building regulations part S.

- All Chargers 7.4kwh

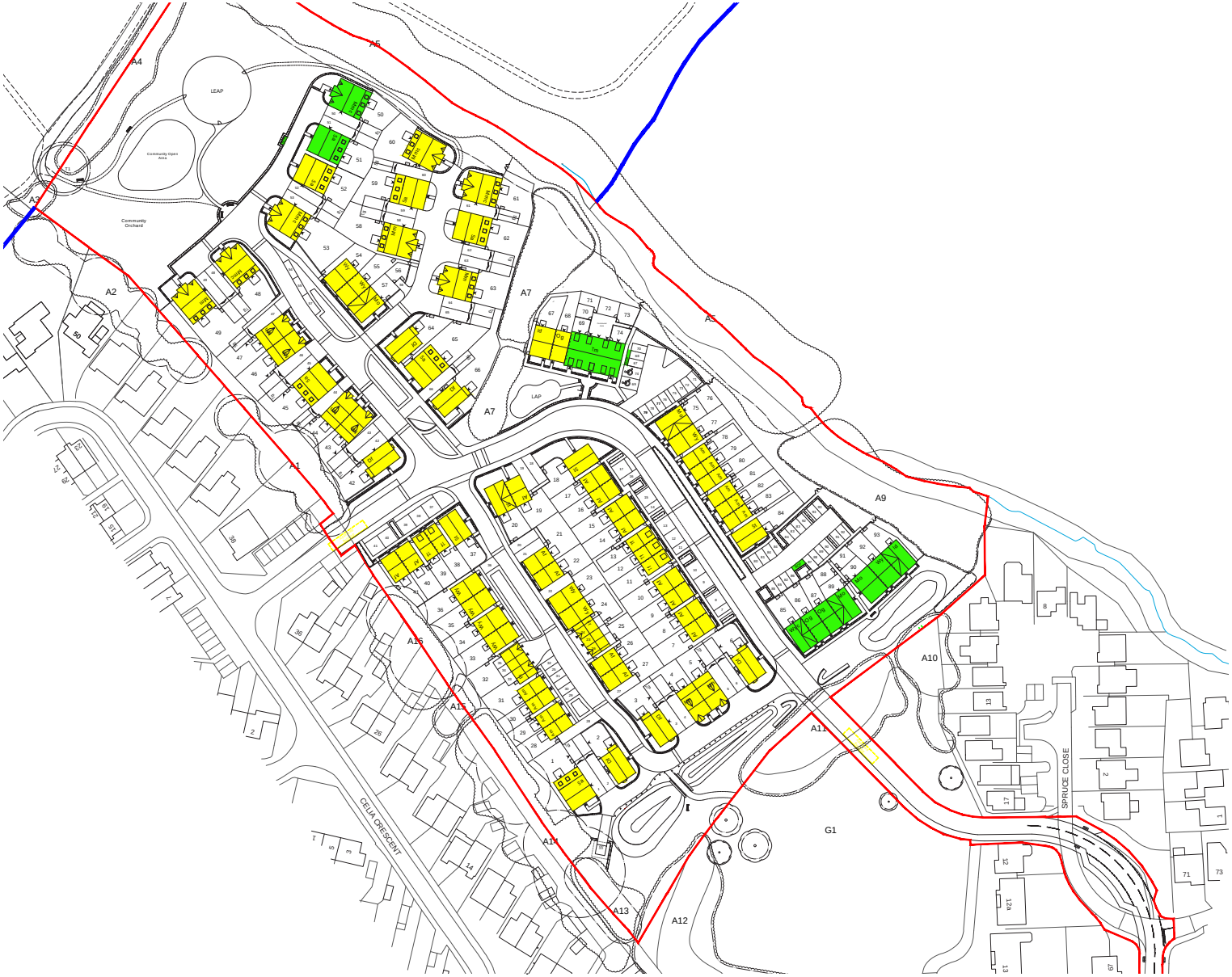
5.6 Refuse Storage

5.6.1 All units will be provided with secure access to rear gardens for bin storage.

5.6.2 The development will comply with local waste collection strategies with bins collected on adopted highways or the edge of the property on the day of collection. At all other times, bins will be stored within the gardens of each property.

5.6.3 The distance between waste storage areas and waste collection points has been kept to a minimum.

5.6.4 Tracking diagrams have been provided as part of the application to demonstrate that refuse / fire trucks can safely navigate the development.



6. NET ZERO ENERGY STRATEGY

6.1 Net Zero Energy Strategy

6.1.1 Edenstone Homes is seeking to elevating the standards of sustainability by embracing the challenge of constructing net-zero homes.

6.1.2 In pursuit of this goal, the concept is to produce more energy than is utilized within each property. To realize this objective, are seeking to provide the following essentials to every residence:

- Improved Building Fabric
- Air Source Heat Pumps (ASHP)
- Photovoltaic Panels (PV)
- Battery Storage & Inverter
- Smart Meters
- Gigabit Ready Broadband
- No properties connected to the gas mains network

6.1.3 Every one of our homes is already equipped with an EV Charging point.

6.1.4 Green infrastructure will play a pivotal role in shaping the design of our developments, seamlessly integrating into the community fabric. It will not only serve as an essential component of our scheme design but will also establish vital connections within the development itself, enhancing accessibility for the neighboring communities.

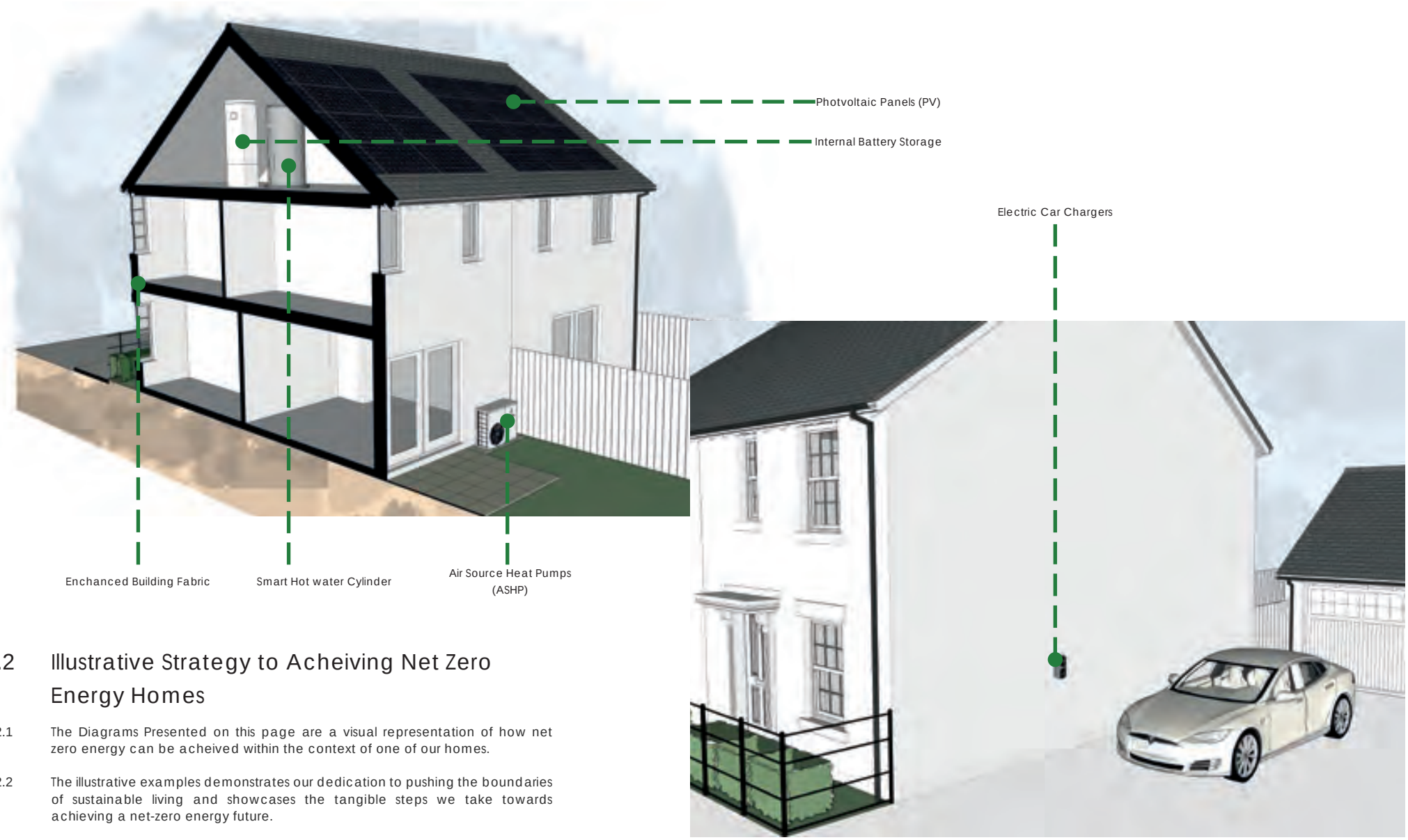
6.1.5 Community Food Production areas (orchards) feature in the majority of our proposals.

6.1.6 Sustainable Urban Drainage Systems (SUDS) are incorporated into layout design from inception.

6.1.7 We are committed to avoiding residential development in flood-prone areas. Any land susceptible to flooding within our sites will be earmarked for alternative purposes, such as the creation of parks, wildlife habitats, and open spaces.

6.1.8 All of our sites are situated in sustainable locations which offer easy access to local facilities on foot or by bicycle or public transport, where possible we will encourage and promote connection to active Travel Networks.

6.1.9 The above methods are Edenstones current approach to exceeeding the latest Part L building regualtions and acheiving net zero energy homes.



6.2 Illustrative Strategy to Acheiving Net Zero Energy Homes

6.2.1 The Diagrams Presented on this page are a visual representation of how net zero energy can be acheived within the context of one of our homes.

6.2.2 The illustrative examples demonstrates our dedication to pushing the boundaries of sustainable living and showcases the tangible steps we take towards achieving a net-zero energy future.

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