

#### **Architectural Style**

**Architectural Details** 

The housing design takes their design cues from the existing farm buildings and draw inspiration from the local vernacular of the farmstead typology. Emphasis should be given to informal relationship between the frontage of homes and the street – avoiding a suburban character. Homes fronting The Village Common should be designed to form an attractive backdrop to this key space with attention given to creating a sense of enclosure.

Key details included in the design are expressed chimney stacks (where MVHR units are required those have to be integrated within chimneys), 45 degree roof pitch, natural materials, split materials between ground and first floor. Houses are to be set back from the road with a low hedge boundary treatment, or a low wall with small hedge above. Maximum two units of the same house type to be placed next to each other to encourage a rural feel. Guidance on paraphernalia is provided in Section 14.04 on page 287.





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## PART B CHARACTER

## WEST LANGARTH NEIGHBOURHOOD

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#### 4.01 West Langarth Neighbourhood

The West Langarth Neighbourhood is located along the new Langarth Park (refer to sections 2.08 & 2.27) and surrounding the new Stadium for Cornwall. The area adjacent to the stadium accommodates sport activity and community uses, with tree lined avenues and some mixed-use ground floor providing active frontages.

West Langarth Neighbourhood includes one of the main pedestrian routes from Threemilestone and a crossing of the A390. The character of this neighbourhood provides a contemporary interpretation of a garden suburb with development fronting Langarth Park and other elements of green infrastructure. The Avenue around the new stadium provides a focus for the social, cultural and commercial life of the new community.



Fig.137: School Precedent Image



Fig.138: Langarth Park Precedent Image

#### **Topography and Natural Features**

West Langarth spans over a north-east facing slope, at the bottom of which runs the Langarth Stream with important existing habitats such as salt marsh and broadleaved woodland. This arrangement provides this neighbourhood with open views to the valley and access to its habitats and wildlife. Directly east of the neighbourhood, a small stream flowing north towards Langarth Stream has modified the landform to form a 'bowl' that now accommodates the Langarth Park & Ride.

#### **Cultural Heritage Assets**

Records show that farming in the West Langarth area dates to the late eighteenth century, with a history of grazing, threshing of corn and arable farmland. The farms were accessed by a network of tracks, with wooded edges and these are still in evidence today. The tracks and wooded edges are retained where possible to maintain the link to the history of the site and to enhance biodiversity.

#### Aspects, Views and Vistas

A sequence of views of the wider Langarth Valley are retained along the length of Langarth Park and throughout the West Langarth Neighbourhood. At key intersections of heritage routes and non-motorised user paths, views towards the Bosvisack Scheduled Monument are to be maintained.

#### **Community Facilities**

A three form entry primary school lies at the north-west corner of the neighbourhood, immediately addressing the public open space of Langarth Park. A landmark building for the school is to be sited on the south-east corner of this plot in order to provide safe access along the heritage routes. Refer to section 2.31 for further information on schools.

#### **Commercial and Leisure**

An area of commercial and leisure activities surrounds the proposed Stadium for Cornwall. This Sports and Wellness Quarter (refer to section 4.04) accommodates areas of mixed use development with central access coming from the Avenue street, connecting Threemilestone with the development and wider Garden Village.



#### Key

Neighbourhood Boundary

AND THE PROPERTY

- Residential
- Community Facility
- Commercial / Leisure
- Green Infrastructure
- MAR Character Type 2

Primary NMU Path

- Heritage Route
- Main POS Amenity
- Mixed Use
- Development Frontage

Setter +

🖈 Landmark Building

#### Fig.139: West Langarth Neighbourhood - Design Framework Plan

## Langarth Garden Village

#### 4.02 Regulatory Plan





<u>PART B - West Langarth</u>



#### 4.03 Parameters

#### **Densities**

The West Langarth Neighbourhood generally contains medium density development. Medium-high densities front onto Langarth Park in the west and the NAR east of the Stadium for Cornwall to provide a more defined development edge. Medium-low development is sited along the northern edge in order to suitably address the woodland of the Bosvisack Corridor. South of the Stadium lie areas of lowest density to allow for the provision of commercial / leisure uses.

For further information regarding densities refer to the parameter plans (step 1).

#### Key

- Neighbourhood Boundary
- Lowest Density: up to 35 dph
- Medium-Low Density: up to 40 dph
- Medium Density: up to 50 dph
- Medium-High Density: up to 60 dph
- High Density: up to 140 dph
- Non-Residential / Retained Plot

#### **Building Heights**

The heights of buildings lower as the neighbourhood moves from south to north, acknowledging the sloping terrain and allowing for views to open countryside. Taller development is located in the South West to accommodate the mixed use commercial / leisure activities associated with the Sports and Wellness Quarter. Extra height is allowed on the site of the primary school in the north west to create a significant landmark building for the school.

For further information regarding building heights refer to the parameter plans (step 1).

#### Key

- Neighbourhood Boundary
- Up to 2.5 Storey\* (Up to 11m)
- Up to 3 Storey\*\* (Up to 13m)
- Up to 4 Storey\*\* (Up to 17m)
- Plot where no change proposed
- \* Extra +2m in height for main school buildings
- \*\* Extra +2m in height for mixed use and employment areas



Fig.141: West Langarth Neighbourhood - Density Plan



Fig.142: West Langarth Neighbourhood - Building Heights Plan

#### **Residential Grains**

In general, the residential grains of the West Langarth Neighbourhood loosen from south to north. Urban grains are situated close to the Stadium for Cornwall in order to provide strong development frontage to the large scale Stadium and nearby primary streets. Village grains address the northern edge of the NAR and the green lane. On the lowest areas of the neighbourhood in the north, settlement edge grains are proposed to transition from more built up development, out towards the existing countryside surroundings.

For further information regarding residential grains refer to section 9 of this Design Code.



The primary street (NAR) runs east west of West Langarth neighbourhood providing access to the urban areas around the Stadium to the south. A network of secondary streets provide access to areas south of the stadium fronting the A390. Three junctions provide access to the areas north of the NAR, secondary and tertiary streets provide access to the plots at bottom of the valley and the school.

For further information regarding street hierarchy refer to section 2.19 of this Design Code.



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Fig.143: West Langarth Neighbourhood - Residential Grain Plan



Fig.144: West Langarth Neighbourhood - Street Hierarchy Plan

#### 4.04 Sports and Wellness Quarter

Surrounding the south west boundary of the Stadium for Cornwall, plots B11, B12, B14, B15 and B16 make up the Sports and Wellness Quarter. This quarter accommodates areas of commercial / leisure as well as residential / mixed use development.

The area creates a pedestrian / cycle / equestrian gateway to the development from the adjacent A390, as well as promoting non-motorised user access to the development from the nearby Park & Ride to the east.

In this location, development creates a vibrant civic space, building upon the Garden Village principles and offering an attractive public realm to both residents, visitors and sports fans. Building frontages and the negative space that development creates, helps to create a dynamic place for people to visit and enjoy. The public realm also provides sufficient and attractive space and street furniture to enable inter-personal interaction.

Significant frontage towards the primary avenue street, the A390, the proposed Stadium for Cornwall and the Northern Access Road establishes a place generating sufficient footfall for mixed use businesses, not only on a match day, but also during usual business operational hours.

In close proximity to the local centre, users are provided with easy access to the nearby Langarth Park, which can be used during prospective street functions, such as market days, small festivals and days out.



Fig.145: Stadium for Cornwall Visual





Fig.146: Sports and Wellness Quarter - Precedent Images





#### 4.05 Summary Table

The opposite table outlines the applicable treatments within the West Langarth Neighbourhood and the below precedent images provide visual examples of how the appropriate character could be achieved. For further information refer to the pages of this Design Code indicated within the summary table.



Туре		Ref.	Description	Page
	Primary Streets	S1.1	Typical Section	76
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		S1.3	Avenue - Landscape Boulevard	77
-	Secondary Streets	S2.1	Typical Secondary Street	80
		S2.2	Reduced On-Street Parking	80
ets		S2.4	Green Space Crossing	81
Stre	Tertiary Streets	S3.1	Vehicular Access	82
		S3.2	Pedestrian & Cycling Only	82
		S3.3	Mews	83
	NAR	S4.2	NAR Character Type 2	61
		S4.3	NAR Character Type 3	61
	A390 Treatment	S7.3	Interim Junction to Langarth Park and Ride	72
aths	Primary NMU Paths	S5.2	On the Landscape	86
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ser F		S5.4	Between Plots (Along Swales)	86
d Us		S5.5	Cornish Row	87
orise		S5.6	Green Lane	87
Moto	Secondary NMU Paths	S6.1	On the Landscape	88
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	SuDS	E1.1	Swale Along Boundary Facing Hedge	285
		E1.2	Swale in the Public Realm with Crossing	285
SU		E1.3	Infiltration Trench Along Path Facing Hedge	285
ditio		E1.4	Attenuation / Detention Basin Along Path	285
Cone		E1.5	Wetpond Along Path	285
ge (	Cornish Hedge	E2.1	Cornish Hedge by Swale	51
Ēd		E2.2	Cornish Hedge as Retaining Structure	51
		E2.3	Cornish Hedge by Developable Plot Boundary	51
		E2.4	Cornish Hedge by Street / Cycleway / Footway	51
	On-Street Parking	P1.1	Parallel Parking	234
Parking		P1.2	Perpendicular Parking	234
	P	P1.3	Echelon Parking 60°	234
		P1.4	Echelon Parking 45°	234
	Communal Parking	P2.1	In Landscape	230
		P2.2	Courtyards	230
ary	Boundary Treatment	А	Post and Wire Planted - with native shrubs	204
Plot Bounda		В	Planted with Low Walls	204
		С	Railings with Planting	204

#### 4.06 Materials Palette

West Langarth is primarily a village settlement. Primary materials are to be mixed across the Urban, and Village and Settlement Edge grains but the one identified will be dominant in each area. Secondary materials can be used across Urban, Village and Settlement Edge grains but with a dominant secondary material in each area. No more than 2 or 3 materials to be mixed per building.

An example of proposed buildings within the West Langarth Neighbourhood can be found opposite.

Brown

Contrast

#### Tones



Granite Grey

#### **Texture and Materiality**

Primary:



PART B - West Langarth

#### **Architectural Style**

#### **Architectural Details**

This neighbourhood's village and urban form and architectural language should relate to the proximity to the new stadium and Langarth Park which forms a north to south open space corridor. Becoming more contemporary in form and bolder in colour with more texture introduced to materials such as projecting bricks. West Langarth needs to achieve coherence in architectural design, however given the size of the neighbourhood there needs to be sufficient variety to avoid repetition. The architectural details in this area should reinforce the predominantly village grain of the neighbourhood with a maximum of 40 degree roof pitches with subtle chimney details (where MVHR units are required those have to be integrated). Front gardens adjacent to the highway will be smaller than settlement edge. A mix of primary and secondary materials can be used with texture applied through panelling and protruding brickwork. Similar house types can placed in greater numbers to create a more formal streetscape. Guidance on paraphernalia is provided in Section 14.04 on page 287.





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Threemilestone

## PART B CHARACTER

## LANGARTH NEIGHBOURHOOD

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#### 5.01 Langarth Neighbourhood

The Langarth Neighbourhood forms the central part of the Garden Village, facilitating and enhancing community activity. The neighbourhood focusses on the local community with a parade of shops and potential for community facilities and employment uses clustered around the local centre.

Langarth Square is the focal point for the neighbourhood with retail and apartments defining a modest village square and accommodating a variety of uses and services within a liveable public space. The diversity of uses and spaces is used to activate the building façades and bring social dimension and urban vitality to the square.



Fig.150: Langarth Square Visual



Fig.151: Existing Langarth Park and Ride

#### **Topography and Natural Features**

The Langarth neighbourhood is on a 'spur' partly formed by the Rosedene watercourse to the west and the stream from East Langarth to the east. The spur provides a range of west, north and east facing slopes and the wooded nature of the watercourses helps to define the boundary of the neighbourhood. Cornish hedges and wooded embankments form the boundaries to the Quiet Lanes that intersect the neighbourhood.

#### **Cultural Heritage Assets**

Historic records show that the Quiet Lane rising up from Treworder Mill, passing to the north of Governs through the site, is one of the original medieval routes from Truro to Redruth. It formed the cross streets with the lane from Bosvisack and this intersection was the likely position of a large medieval Cornish cross.

#### Aspects, Views and Vistas

The 'spur' provides a range of west, north and east facing slopes with open views over the surrounding countryside. Along the Quiet Lanes, wooded edges tend to limit wider views, although when there are breaks in vegetation and topography permits, glimpses towards the Bosvisack Scheduled Monument to the north and the Governs Round Scheduled Monument to the east are available.

#### **Community Facilities**

Plots C9 and C12 accommodate the extension to the Park and Ride (P&R) with additional parking spaces as well as accompanying buildings and mobility hubs. At the curve of the NAR (plot C8) an office / commercial plot addresses both the southern edge of the street and the P&R extension. This building is to become a landmark building with views over the development and across the green corridor to the west. A new energy centre (plot C13) accommodates the increase in energy demand for the site and focuses on supporting renewable energy.

#### **Local Centres**

At the intersection of the NAR and historic routeways, lies the local centre, Langarth Square, fronted by active ground floor uses and enclosed building form, the area provides a memorable arrival space into the Garden Village. The centre is an important and vibrant meeting place contributing to developing a sense of community and adapting to changes in levels to create informal meeting spaces. Refer to section 2.28 for further information regarding Langarth Square.







Fig.152: Langarth Neighbourhood - Design Framework Plan

#### 5.02 Regulatory Plan





Fig.153: Langarth Neighbourhood - Regulatory Plan

PART B - Langarth





#### 5.03 Parameters

#### Densities

Areas of medium-high density are located fronting onto Langarth Square and the NAR in order to promote activity and define strong edges to the local centre and primary street. A high density plot (C14) allows for extra care / student accommodation units to overlook the square. Further from the square, medium densities soften the transition to the lower medium-low density plots to the north. The mediumlow plot on C16 helps provide a noticeable transition from the Langarth Neighbourhood to the Willow Green Neighbourhood.

For further information regarding densities refer to the parameter plans (step 1).

#### Key

- Neighbourhood Boundary
- Lowest Density: up to 35 dph
- Medium-Low Density: up to 40 dph
- Medium Density: up to 50 dph
- Medium-High Density: up to 60 dph
- High Density: up to 140 dph
- Non-Residential / Retained Plot

#### **Building Heights**

4 storeys around Langarth Square, with additional height given for mixed use development, create a sense of arrival into the space and enclosure to the square. 5 storey development is sited on C8 to allow for significant office / commercial buildings and address the level change between the NAR and P&R extension. The top storey is to be recessed to minimise the impact on the street elevation. Low level development on the northern fringes provide a softer transition to the countryside context.

For further information regarding building heights refer to the parameter plans (step 1).

#### Key

- Neighbourhood Boundary
- Up to 2.5 Storey\* (Up to 11m)
- Up to 3 Storey\*\* (Up to 13m)
- Up to 4 Storey\*\* (Up to 17m)
- Plot where no change proposed
- \* Extra +2m in height for main school buildings
- \*\* Extra +2m in height for mixed use and employment areas



Fig.154: Langarth Neighbourhood - Density Plan



Fig.155: Langarth Neighbourhood - Building Heights Plan



#### **Residential Grains**

A collection of urban grain development plots address the local centre at Langarth Square to provide high levels of activity and frontage. In the south east, an urban grain plot (C16) provides a similar style of urban development to that of the adjacent Willow Green Neighbourhood. Larger plots near to the Langarth and Governs Neighbourhoods are of the village grain to reflect said neighbourhoods. Settlement edge grains to the north address the countryside surroundings and Bosvisack Corridor.

For further information regarding residential grains refer to section 9 of this Design Code.



The NAR runs north-west to south east going through Langarth Square. It provides access to the employment parcel and park and ride extension to the west whereas residential areas to the south are accessed from a junction south of Willow Green Park limiting vehicular movement around Langarth Square. Areas north and east of the primary street are accessed from the NAR and linked via secondary street loop. A section of the existing quiet lane is incorporated as part of the network of secondary streets.

For further information regarding street hierarchy refer to section 2.19 of this Design Code.





Fig.156: Langarth Neighbourhood - Residential Grain Plan



Fig.157: Langarth Neighbourhood - Street Hierarchy Plan

#### 5.04 Summary Table

The opposite table outlines the applicable treatments within the Langarth Neighbourhood and the below precedent images provide visual examples of how the appropriate character could be achieved. For further information refer to the pages of this Design Code indicated within the summary table.



Туре		Ref.	Description	Page
	Primary Streets	S1.1	Typical Section	76
		S1.2	Interim Link Junction	76
		S1.3	Avenue - Landscape Boulevard	77
	Secondary Streets	S2.1	Typical Secondary Street	80
Ŋ		S2.2	Reduced On-Street Parking	80
Streets	Tertiary Streets	S3.1	Vehicular Access	82
		S3.2	Pedestrian & Cycling Only	82
		S3.3	Mews	83
	NAR	S4.2	NAR Character Type 2	61
		S4.4	NAR Character Type 4	63
	A390 Treatment	S7.4	Threemilestone to Maiden Green	73
ed User	Primary NMU Paths	S5.1	On the Quiet Lanes	86
		S5.2	On the Landscape	86
		S5.3	Between Plots	86
toris		S5.4	Between Plots (Along Swales)	86
Von-Mot P	Secondary NMU Paths	S6.1	On the Landscape	88
		S6.2	Between Plots	88
_		S6.3	Between Plots (Along Swales)	88
	SuDS	E1.1	Swale Along Boundary Facing Hedge	285
		E1.2	Swale in the Public Realm with Crossing	285
suo		E1.3	Infiltration Trench Along Path Facing Hedge	285
nditi		E1.4	Attenuation / Detention Basin Along Path	285
Col		E1.5	Wetpond Along Path	285
Edge	Cornish Hedge	E2.1	Cornish Hedge by Swale	51
82E		E2.2	Cornish Hedge as Retaining Structure	51
		E2.3	Cornish Hedge by Developable Plot Boundary	51
		E2.4	Cornish Hedge by Street / Cycleway / Footway	51
	On-Street Parking	P1.1	Parallel Parking	234
		P1.2	Perpendicular Parking	234
Parking		P1.3	Echelon Parking 60°	234
		P1.4	Echelon Parking 45°	234
	Communal Parking F	P2.1	In Landscape	230
		P2.2	Courtyards	230
ary	Boundary Treatment	А	Post and Wire Planted - with native shrubs	204
Plot Bounda		В	Planted with Low Walls	204
		С	Railings with Planting	204



#### 5.05 Materials Palette

Langarth is primarily a urban settlement grain. Primary materials are to be mixed across the Urban and Village grains but the one identified will be dominant in each area. Secondary materials can be used across Urban and Village grains but with a dominant secondary material in each area. No more than 2 or 3 materials to be mixed per building.

An example of proposed buildings within the Langarth Neighbourhood can be found opposite.

#### Tones



Granite Grey

#### **Texture and Materiality**

Primary:

Smooth, textured and tumbled brick within tone range; render.

Secondary:

Cedar shingles; metal cladding.

#### Roofing:

Clay tiles; shingles; green roof.

Contrast:

Patinated copper; render.



PART B - Langarth



#### **Architectural Style**

**Architectural Details** 

Langarth contains more civic buildings which have a more modern character. Dwelling character style will adopt a similar approach with more modern form and materials. The predominately urban design grain terraced housing and groups of semi-detached. The roof pitch should be a maximum of 40 Degrees, with greater variation, Mono/ Flat/Saw Tooth. The buildings should be characterised by formal arrangements and repetition of elements Mullions emphasizing verticality; Projected balconies and bay windows; and dormers integrated within the elevation. Guidance on paraphernalia is provided in Section 14.04 on page 287.





## PART B CHARACTER

## GOVERNS NEIGHBOURHOOD

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#### Langarth **Garden Village DESIGN CODE / GOVERNS**

#### 6.01 Governs Neighbourhood

The area is defined by the ridge between the Langarth and Treliske valleys, with strong historical and cultural links to the Governs Round Scheduled Monument. The Governs neighbourhood straddles part of the two valley systems and an extensive area of open space is retained to the east to maintain the setting for the Governs Round. The retention of the large area of open space to Governs Round provides a highly distinctive environment for development proposals.

As part of the new development there is a new primary school located at the north-eastern edge towards the scheduled monument, a community hall / library by Willow Green Park and a community farm by the Bosvisack Corridor.



Fig.160: Governs Round Scheduled Monument



Fig.161: Community Farm Precedent Image

#### **Topography and Natural Features**

As the neighbourhood straddles the two valley systems there are discrete north and south facing slopes, with the ridge between the slopes. At the north eastern edge of the neighbourhood is the Governs ancient woodland, with the Governs Round Scheduled Monument to the immediate south. The wooded Treliske stream forms the bottom of the Treliske valley.

#### **Cultural Heritage Assets**

It is assumed that the prehistoric Governs Round was positioned at a strategic location overlooking the Kenwyn and Treliske valleys. A ring of mature trees help to define Governs Round and ensure its prominence in nearer views from the south and east. A central heritage route connects the open space surrounding the Round to Willow Green Park along the neighbourhood's ridge.

#### Aspects, Views and Vistas

The ridge is on some of the highest ground within the Garden Village site and this enables open views towards the Langarth valley to the north, the Kenwyn valley to the east and the Treliske valley to the south. The ring of mature trees to Governs Round creates distinctive views from the south, east and west subject to topography and vegetation. There are also views north west from the ridge towards the wooded edge to the Bosvisack Scheduled Monument.

#### **Community Facilities**

In the north east of the neighbourhood, near to the Governs Round SANGs and new forest (refer to section 2.04), sits the second school site for the Garden Village. The proximity of this two form entry primary school to areas of park and nature provides opportunities for outdoor learning. Easy access to other community facilities promotes generational interaction and further extra curricular opportunities.

Other facilities include a community hall / library and a community farm. The hall / library site fronts onto the local centre at Willow Green Park (refer to sections 2.09 & 2.29), helping to create a sense of community and learning in and around the park. The community farm in the north has direct access to the allotments and the Bosvisack Corridor woodland in order to promote sustainable food production and a healthy and active lifestyle, in keeping with the Garden Village principles.







#### Langarth Garden Village DESIGN CODE / GOVERNS

#### 6.02 Regulatory Plan





PART

- B - Governs







#### 6.03 Parameters

#### Densities

Given its sensitive setting and proximity to the Governs Round Scheduled Monument, only the lowest and medium-low densities are situated within the Governs Neighbourhood. The medium-low densities are positioned towards the Langarth and Willow Green Neighbourhoods, with the lowest density development by areas of open space associated with Governs Round SANGs. This creates a gradual transition from the more built-up development in the adjacent neighbourhoods, out towards the more open areas to the north and north-east.

For further information regarding densities refer to the parameter plans (step 1).

#### Key

- Neighbourhood Boundary
- Lowest Density: up to 35 dph
- Medium-Low Density: up to 40 dph
- Medium Density: up to 50 dph
- Medium-High Density: up to 60 dph
- High Density: up to 140 dph
- Non-Residential / Retained Plot

#### **Building Heights**

4 storeys of height is provided around Willow Green Park to achieve good frontage and surveillance. Lowest level 2.5 storey development is situated towards Governs SANGs and the bottom of the two valleys in order to reflect these areas of countryside. Extra height is permitted for the school building to accommodate a landmark building addressing the heritage route. Elsewhere, 3 storey development aids the transition from areas of more built-up development to open space.

For further information regarding building heights refer to the parameter plans (step 1).

#### Key

- Neighbourhood Boundary
- Up to 2.5 Storey\* (Up to 11m)
- Up to 3 Storey\*\* (Up to 13m)
- Up to 4 Storey\*\* (Up to 17m)
- Plot where no change proposed
- \* Extra +2m in height for main school buildings
- ### Extra +2m in height for mixed use and employment areas





Fig.165: Governs Neighbourhood - Building Heights Plan



#### **Residential Grains**

Settlement edge grain development addresses the Governs SANGs and lower levels of the valleys with Clusters along the top of ridge and Hillside development on the valley slopes. Village grains surround Willow Green Park and the community hall / library in order to provide a stronger development edge and reflect the residential grains within the nearby Langarth Neighbourhood. No urban grain plots are proposed within the Governs Neighbourhood.

For further information regarding residential grains refer to section 9 of this Design Code.

#### **Street Hierarchy**

Two junctions north of the NAR provide access to Governs. These two access points are connected with a secondary street that loops around the neighbourhood and the school site. Another secondary street connects the community farm, allotments and residential areas at the bottom of the valley. A network of mews and tertiary streets provide access to the rest of the plots. Tertiary streets provide frontage to areas of the East and West Willow Green Park.

For further information regarding street hierarchy refer to section 2.19 of this Design Code.





Fig.166: Governs Neighbourhood - Residential Grain Plan



Fig.167: Governs Neighbourhood - Street Hierarchy Plan



#### 6.04 Summary Table

The opposite table outlines the applicable treatments within the Governs Neighbourhood and the below precedent images provide visual examples of how the appropriate character could be achieved. For further information refer to the pages of this Design Code indicated within the summary table.



Fig.168: Governs Neighbourhood - Precedent Images
## Langarth Garden Village DESIGN CODE / GOVERNS

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Ŋ		S2.5	Governs Lane	55
ireet	Tertiary Streets	S3.1	Vehicular Access	82
۵. ک		S3.2	Pedestrian & Cycling Only	82
		S3.3	Mews	83
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		S4.3	NAR Character Type 3	62
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toris Path:		S5.5	Cornish Row	87
-Mo	Secondary NMU Paths	S6.1	On the Landscape	88
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		S6.3	Between Plots (Along Swales)	88
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		E1.3	Infiltration Trench Along Path Facing Hedge	285
		E1.4	Attenuation / Detention Basin Along Path	285
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	Communal Parking	P2.1	In Landscape	230
		P2.2	Courtyards	230
ary	Boundary Treatment	А	Post and Wire Planted - with native shrubs	204
Plot Bound		В	Planted with Low Walls	204



#### 6.05 Materials Palette

Governs is primarily a settlement edge grain. Primary materials are to be mixed across the Village and Settlement Edge grains but the one identified will be dominant in each area. Secondary materials can be used across Village and Settlement Edge grains but with a dominant secondary material in each area. No more than 2 or 3 materials to be mixed per building. Best quality materials are to be used in sensitive areas relating to the Governs Round Scheduled Monument and views to open countryside.

An example of proposed buildings within the Governs Neighbourhood can be found opposite.





#### **Architectural Style**

#### **Architectural Details**

The housing design takes their design cues from the existing farm buildings and draw inspiration from the local vernacular of the farmstead typology. Emphasis should be given to informal relationship between the frontage of homes and the street – avoiding a suburban character. Homes fronting The Village Common should be designed to form an attractive backdrop to this key space with attention given to creating a sense of enclosure. Key details included in the design are expressed chimney stacks (where MVHR units are required, those have to be integrated), 45 degree roof pitch, natural materials, split materials between ground and first floor. Houses are to be set back from the road with a low hedge boundary treatment, or a low wall with small hedge above. Maximum two units of the same house type to be placed next to each other to encourage a rural feel. Guidance on paraphernalia is provided in Section 14.04 on page 287.





# PART B CHARACTER

## WILLOW GREEN NEIGHBOURHOOD

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#### 7.01 Willow Green Neighbourhood

The Willow Green Neighbourhood has a prominent position on the A390 and is close to the Royal Cornwall Hospital (RCHT), Truro College Campus, Treliske Industrial Estate, Richard Lander School and the existing neighbourhood at Threemilestone. With its proximity to these uses and activities, the focus of the neighbourhood is on research and learning and the area accommodates facilities supporting this. For people travelling west from Truro and north from Threemilestone, this neighbourhood provides a first impression of the Langarth Garden Village.

Given its proximity to the A390, the NAR, RCHT and Truro City Centre, the Willow Green Neighbourhood contains a Blue Light Services site (E7) that provides ambulance, police and fire services with good connectivity to primary streets. The Blue Light Services plot could be adapted to commercial / mixed use if their provision cannot be achieved elsewhere.





#### **Topography and Natural Features**

There is a gentle slope down from the A390 northwards, with wooded edges to the fields and the track heading towards the Willow Green farm house. This area also features the source of the watercourse near to East Langarth. The neighbourhood is the gateway into the new development and focusses on the new park with strong links and vistas into and across the site.

#### **Cultural Heritage Assets**

Cultural heritage assets are limited in this neighbourhood, with field enclosure dating back to the 19th Century. There is opportunity for public art to focus on the Garden City theme in order to reinforce this concept. The urban grain of Willow Green Neighbourhood draws inspiration from the town plans of Letchworth and Welwyn Garden Cities where the town centres have a formal composition and are approached along tree-lined avenues.

#### Aspects, Views and Vistas

The neighbourhood is north facing although on gently sloping land. It could be perceived as discrete from the neighbouring Langarth and Treliske valleys due to the sense of enclosure experienced from the wooded field boundaries and the screening of wider views. The eastern boundary of the neighbourhood is defined by the opening / gateway between Treliske and Threemilestone and offers views over the Treliske Valley towards the Governs Round Scheduled Monument in the east.

#### **Public Open Spaces**

Willow Green Park (refer to sections 2.09 & 2.30), north of the NAR, acts as the focal point for the Willow Green Neighbourhood with strong connections across the primary street and into the main public open space.

#### **Local Centres**

The local centre contained within Willow Green Park is easily accessible from the neighbourhood. Strong urban development to the southern edge of the NAR provides an active frontage to the park with good surveillance and connectivity.

T



#### Key

- Neighbourhood Boundary
  - Residential
- Blue Light Services / Commercial
- Green Infrastructure
- Primary NMU Path
- Heritage Route
- Local Centre
- Main POS Amenity
- Development Frontage
- Fig.172: Willow Green Neighbourhood Design Framework Plan

## Langarth Garden Village

#### 7.02 Regulatory Plan



- Neighbourhood Boundary
- Park, Amenity & Civic Space
- Natural Open Space
- Hedge
- Hedge Enhancement
- Retained Tree
- Local Play Space
- Swale
- Residential Medium Density
- Residential Medium-High Density
- Blue Light Services / Commercial
- Ledge Conditions
- Development Frontage
- Street Hierarchy
- Access Point Fixed
- ---- Secondary Street Indicative
- Tertiary Street Indicative
- A390 Threemilestone to Maiden Green
- ---- Primary NMU Path Indicative
- Secondary NMU Path Indicative
- Bus Stop Indicative



PART B - Willow Green



#### 7.03 Parameters

#### Densities

Medium-high and medium density development is appropriate for the Willow Green Neighbourhood and in keeping with its urban form. The higher of the two densities (medium-high) fronts onto the south side of the NAR to provide strong building frontage along the primary street. Medium density development is located along the A390, providing a defined edge with active frontage and prominence when approaching from Threemilestone to the south.

For further information regarding densities refer to the parameter plans (step 1).

#### **Building Heights**

The Willow Green Neighbourhood accommodates up to 4 storeys on all plots, including the blue light services site. This reflects the scale of development within the nearby Langarth Neighbourhood plots and helps to provide enclosure and good levels of surveillance around Willow Green Park. Taller development here also gives the neighbourhood prominence on the A390, particularly when approaching from Truro City Centre in the east.

For further information regarding building heights refer to the parameter plans (step 1).









#### **Residential Grains**

The relatively small scale of this neighbourhood and the need to provide a strong development edge to both the NAR and the A390 means the only residential grain within the Willow Green Neighbourhood is the urban grain. This also continues a similar language to the urban grain plots in the Langarth Neighbourhood, wrapping around the southern edge of Willow Green Park and the NAR.

For further information regarding residential grains refer to section 9 of this Design Code.

#### **Street Hierarchy**

Willow Green sits between the A390 and the NAR. Main vehicular access is provided from two junctions south of the NAR. A secondary street loops these to access points facilitating vehicular access in this area. The structure of streets in this area is more regular and rectilinear.

For further information regarding street hierarchy refer to section 2.19 of this Design Code.







Fig.177: Willow Green Neighbourhood - Street Hierarchy Plan

#### 7.04 Summary Table

The opposite table outlines the applicable treatments within the Willow Green Neighbourhood and the below precedent images provide visual examples of how the appropriate character could be achieved. For further information refer to the pages of this Design Code indicated within the summary table.



Fig.178: Willow Green Neighbourhood - Precedent Images

PART B - Willow Green

Туре		Ref.	Description	Page
	Primary Streets	S1.4	Maiden Green Link	77
	Secondary Streets	S2.1	Typical Secondary Street	80
		S2.2	Reduced On-Street Parking	80
	Tertiary Streets	S3.1	Vehicular Access	82
ets		S3.2	Pedestrian & Cycling Only	82
Stre		S3.3	Mews	83
	NAR	S4.2	NAR Character Type 2	61
		S4.3	NAR Character Type 3	62
		S4.4	NAR Character Type 4	63
	A390 Treatment	S7.4	Threemilestone to Maiden Green	73
	Primary NMU Paths	S5.2	On the Landscape	86
Jser		S5.3	Between Plots	86
ed L		S5.4	Between Plots (Along Swales)	86
toris		S5.5	Cornish Row	87
M-	Secondary NMU Paths	S6.1	On the Landscape	88
Non-		S6.2	Between Plots	88
		S6.3	Between Plots (Along Swales)	88
ns	SuDS	E1.1	Swale Along Plot Boundary Facing Hedge	285
ditior	Cornish Hedge	E2.1	Cornish Hedge by Swale	51
Conc		E2.2	Cornish Hedge as Retaining Structure	51
lge (		E2.3	Cornish Hedge by Developable Plot Boundary	51
Ш		E2.4	Cornish Hedge by Street / Cycleway / Footway	51
	On-Street Parking	P1.1	Parallel Parking	234
		P1.2	Perpendicular Parking	234
king		P1.3	Echelon Parking 60°	234
Park		P1.4	Echelon Parking 45°	234
	Communal Parking	P2.1	In Landscape	230
		P2.2	Courtyards	230
ary	Boundary Treatment	В	Planted with Low Walls	204
Plot Bounda		С	Railings with Planting	204

#### 7.05 Materials Palette

Primary materials are to be mixed across the Urban, Village and Settlement Edge grains but the one identified will be dominant in each area. Secondary materials can be used across Urban, Village and Settlement Edge grains but with a dominant secondary material in each area. No more than 2 or 3 materials to be mixed per building.

An example of proposed buildings within the Willow Green Neighbourhood can be found opposite.

#### Tones



Granite Grey

#### **Texture and Materiality**

Primary:

Textured brick within tone range; render.

Secondary:

Bronze colour metal cladding; timber cladding.

#### Roofing:

Clay tiles; standing seam metal; green roof.

Contrast:

Render.



PART B - Willow Green



#### **Architectural Style**

#### **Architectural Details**

The Willow Green neighbourhood is characterised by high-quality, contemporary design reflecting the proximity to the urban context along the A390 and Threemilestone. The design individual buildings responds to the degree of formality within the overall neighbourhood block composition – more formal along the NAR and A390 and less formal towards the Valley. The predominately urban design grain terraced housing and groups of semi-detached. The roof pitch should be a maximum of 40 Degrees, with greater variation, Mono/ Flat/Saw Tooth. The buildings should be characterised by formal arrangements and repetition of elements Mullions emphasizing verticality; Projected balconies and bay windows; and dormers integrated within the elevation. Guidance on paraphernalia is provided in Section 14.04 on page 287.





# PART B CHARACTER

## PENVENTINNIE NEIGHBOURHOOD

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#### 8.01 Penventinnie Neighbourhood

The Penventinnie Neighbourhood extends across the upper southern slopes of the Treliske valley and provides a sensitive transition from the Royal Cornwall Hospital and Treliske employment area into the valley area retained as open space.

The interface with the hospital and employment area is key and the urban form and architectural language of the neighbourhood responds appropriately in terms of scale and density. Development near to the edge of the Treliske valley open space reflects the more open and natural setting. The Penventinnie Square forms a new centre for the neighbourhood, connecting the new development with strong links into the hospital, employment & retail area.



Fig.180: Penventinnie Park Precedent Image



#### **Topography and Natural Features**

The Treliske valley is physically discrete from Langarth valley. It has steeply sided slopes and a stream and wooded corridor in the valley bottom. There is a network of hedges enclosing the fields on the southern slopes. A hedge defines an otherwise abrupt edge with the hospital and employment area.

#### **Cultural Heritage Assets**

The field pattern to the eastern part of Treliske valley dates back to medieval times. The system included smaller strip fields with a mix of arable land, orchards and pasture. Although more associated with the Governs Neighbourhood, the Governs Round Scheduled Monument is prominent on the northern side of the Treliske valley.

#### Aspects, Views and Vistas

The location of the neighbourhood on the upper southern slopes of the Treliske valley enables open views to the north and east. The extent of the valley is perceptible in views, including the link to the Kenwyn valley to the north east and there are prominent views towards the ring of mature trees at Governs Round. The wooded edge to the Bosvisack Scheduled Monument is also visible from the eastern edge of the neighbourhood.

#### **Public Open Spaces**

The main public open space at Penventinnie Park provides the neighbourhood with amenity and civic space, areas for informal sports and a children's play area. The park is closely linked with the local centre and has strong connectivity coming from the NAR to the south and non-motorised user paths to the north-east. For further information regarding Penventinnie Park refer to section 2.10.

#### **Local Centres**

Penventinnie Square acts as the main local centre for the neighbourhood with potential to host community functions and events. High levels of mixed use, commercial and employment activity around the square make this an attractive meeting space for residents and visitors with close links to office / commercial areas, Penventinnie Park and areas beyond the site boundary such as the Royal Cornwall Hospital and the Treliske employment area. For further information regarding Penventinnie Square refer to section 2.30.





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## Langarth Garden Village

#### 8.02 Regulatory Plan



Fig.183: Penventinnie Neighbourhood - Regulatory Plan

- Neighbourhood Boundary Г Park, Amenity & Civic Space Natural Open Space Hedge Hedge Enhancement **Retained Tree** Outdoor Sport Local Play Space Neighbourhood Play Space Swale Infiltration Basin NAR Infiltration Basin 1111 Residential - Lowest Density Residential - Medium - Low Density Residential - Medium Density Residential - Medium-High Density Residential - Highest Density Office / Commercial Public Art ☆ Mixed Use Edge Conditions L **Development Frontage** Public Open Space Frontage Street Hierarchy Primary Street - Fixed ¢ Access Point - Fixed Secondary Street - Indicative Tertiary Street - Indicative NAR Character Type 2 NAR Character Type 4 Primary NMU Path - Indicative .... Secondary NMU Path - Indicative Quiet Lane Bus Stop - Indicative
  - E-Car & E-Bike Hare Hub Indicative

PART B - Penventinnie



#### 8.03 Parameters

#### Densities

Medium-high and medium density development is appropriate for the Penventinnie Neighbourhood and in keeping with its urban form. The density increases towards Penventinnie Square as the central point of the Neighbourhood, where apartment blocks and mixed use development is encouraged.

For further information regarding densities refer to the parameter plans (step 1).

#### **Building Heights**

The Penventinnie Neighbourhood accommodates up to 5 storeys within Penventinnie Square plots, with residential plots ranging from up to 2.5 to 4 storeys in height. Residential development at the southern boundary of this Neighbourhood and in proximity to the existing developments at Langarth Farm should be sympathetic in height and scale to the existing settlements.

For further information regarding building heights refer to the parameter plans (step 1).

#### Key Key Neighbourhood Boundary Neighbourhood Boundary Lowest Density: up to 35 dph Up to 2.5 Storey\* (Up to 11m) Up to 3 Storey\*\* (Up to 13m) Medium-Low Density: up to 40 dph Up to 4 Storey\*\* (Up to 17m) Medium Density: up to 50 dph Medium-High Density: up to 60 dph Plot where no change proposed High Density: up to 140 dph \* Extra +2m in height for main school buildings Non-Residential / Retained Plot \*\* Extra +2m in height for mixed use and employment areas





Fig.185: Penventinnie Neighbourhood - Building Heights Plan



#### **Residential Grains**

Close proximity to Governs Round and development boundary makes this Neighbourhood unique in character by providing all four of residential grains. Settlement edge features areas of higher sensitivity where village and urban grains are located closer to the central point of Penventinnie Square.

For further information regarding residential grains refer to section 9 of this Design Code.

#### **Street Hierarchy**

The primary streets in this location (NAR and Oak Link) connect Langarth Garden Village to the hospital and the Treliske Industrial Estate. These two primary streets meet at Penventinnie Square. Most of the neighbourhood sits north of the NAR and Treliske Hospital, these extensive area is accessed from three junctions north of the NAR through a network of secondary streets. Areas of employment and residential are connected with tertiary streets

For further information regarding street hierarchy refer to section 2.19 of this Design Code.







Fig.187: Penventinnie Neighbourhood - Street Hierarchy Plan

#### 8.04 Health and Research Quarter

As an important part of the Penventinnie Neighbourhood, the Health and Research Quarter is located within plots F10, F11 and F12, abutting the site boundary and close to the Royal Cornwall Hospital Trust to the south-east.

Uses within the quarter predominantly focus on office / commercial space, reflecting the uses present outside of the side boundary and allowing for a complimentary relationship between the two areas to occur.

Creating connections for non-motorised users between Penventinnie Square and the Health and Research Quarter, as well as uses outside of the site boundary, are key to the success of the quarter. This allows for an opportunity to create an interesting and attractive civic space based on the negative space generated by building frontages that is wellconnected to the neighbourhood and wider Garden Village.

The visual connection is also kept with the local centre at Penventinnie Square. This enables a transition from a more public open space, to the one focusing on employment, office and commercial activities within the boundary of the quarter.







#### 8.05 Summary Table

The opposite table outlines the applicable treatments within the Penventinnie Neighbourhood and the below precedent images provide visual examples of how the appropriate character could be achieved. For further information refer to the pages of this Design Code indicated within the summary table.







PART B - Penventinnie

Туре		Ref.	Description	Page
	Primary Streets	S1.4	Maiden Green Link	77
	Secondary Streets	S2.1	Typical Secondary Street	80
		S2.2	Reduced On-Street Parking	80
Ś		S2.6	Penventinnie Lane	53
treet	Tertiary Streets	S3.1	Vehicular Access	82
St		S3.2	Pedestrian & Cycling Only	82
		S3.3	Mews	83
	NAR	S4.2	NAR Character Type 2	61
		S4.4	NAR Character Type 4	63
	Primary NMU Paths	S5.2	On the Landscape	86
Jsel		S5.3	Between Plots	86
sed l		S5.4	Between Plots (Along Swales)	86
toris Path <sub>a</sub>		S5.5	Cornish Row	87
-Mo F	Secondary NMU Paths	S6.1	On the Landscape	88
Non		S6.2	Between Plots	88
		S6.3	Between Plots (Along Swales)	88
Conditions	SuDS	E1.1	Swale Along Boundary Facing Hedge	285
		E1.2	Swale in the Public Realm with Crossing	285
		E1.3	Infiltration Trench Along Path Facing Hedge	285
		E1.4	Attenuation / Detention Basin Along Path	285
		E1.5	Wetpond Along Path	285
dge	Cornish Hedge	E2.1	Cornish Hedge by Swale	51
Ш		E2.2	Cornish Hedge as Retaining Structure	51
		E2.3	Cornish Hedge by Developable Plot Boundary	51
		E2.4	Cornish Hedge by Street / Cycleway / Footway	51
	On-Street Parking	P1.1	Parallel Parking	234
Parking		P1.2	Perpendicular Parking	234
		P1.3	Echelon Parking 60°	234
		P1.4	Echelon Parking 45°	234
	Communal Parking	P2.1	In Landscape	230
		P2.2	Courtyards	230
ary	Boundary Treatment	А	Post and Wire Planted - with native shrubs	204
Plot Bounda		В	Planted with Low Walls	204
		С	Railings with Planting	204

#### 8.06 Materials Palette

Primary materials are to be mixed across the Urban, Village and Settlement Edge grains but the one identified will be dominant in each area. Secondary materials can be used across Urban, Village and Settlement Edge grains but with a dominant secondary material in each area. No more than 2 or 3 materials to be mixed per building. An example of proposed buildings within the Penventinnie Neighbourhood can be found opposite.

#### Tones





White

#### **Texture and Materiality**

Primary:

Textured brick within tone range; render.

Secondary:

Natural timber cladding; dark granite; cedar shingles.

#### Roofing:

Standing seam metal; slate effect clay tiles; green roof.

#### Contrast:

Natural colour timber cladding; render.







#### **Architectural Style**

#### **Architectural Details**

The form of development in the neighbourhood should respond creatively to the built and cultural heritage assets within the locality to emphasise the distinctiveness and identity of the new place. The architectural style in this should reflect the proximity to the urban development at Treliske. The architectural details in this area should reinforce the predominantly village grain of the neighbourhood with a maximum of 40 degree roof pitches with subtle chimney details. Front gardens adjacent to the highway will be smaller than settlement edge. A mix of primary and secondary materials can be used with texture applied through panelling and protruding brickwork. Similar house types can placed in greater numbers to create a more formal streetscape. Guidance on paraphernalia is provided in Section 14.04 on page 287.





# **TECHNICAL**

#### 9.00 Neighbourhood Transitions

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#### 9.00 Neighbourhood Transitions

Transitions between different neighbourhoods allows for seamless cross-over between different building types and materiality used in their design.

Locations specified in the diagram below largely cover areas of public open space, the rules of which (in terms of materiality and the space they generate) are set out within the Common Domain section of this document.

Each neighbourhood has specific rules set out in terms of style, density, height, public realm, street design, car-parking standards etc. Transitional spaces allow for a degree of flexibility in those rules, which increases the legibility of Langarth Garden Village as a interconnected network of spaces. As part of the Building with Nature Accreditation Scheme, one of the principles is to create a well connected and intertwined community. As part of the development at Langarth Garden Village, an opportunity to use materiality and transition between each of the Neighbourhoods is seen as a way of achieving this.



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- The rules referring to combination of specific house types, roof forms, architectural styles and details, edge conditions, parking standards, materials and tones must be followed as set out in each Neighbourhood Area;
- Street furniture, planting and design must follow the guidelines set out within Technical Section of this document;
- Massing, height and density must follow guidelines set out as part of the Regulatory Plan and additional emphasis should be given to generation of public realm and building legibility;
- Transitional spaces should enhance the public realm further, by creating seamless connections between different spaces; and
- All users must be able to move from one space to another in an uninterrupted manner - this is to be done by employing appropriate measures to Non-Motorised User Paths, as well as Street Design which follows Inclusive Design principles.





## **RESIDENTIAL GRAIN**

#### 9.01 Residential Grains

One way in which plots are characterised within the developable area is described as a residential grain. The category the land will be placed depends on the plot density, layout and characteristics it aims to achieve.

These patterns or grains, will set the feel of the place in terms of levels of public realm versus private space, the level of permeability in a particular area and the patterns of streets in relation to buildings. (In most towns, the pattern of streets and paths has evolved over a very long period of time.) For example in more central locations patterns will have a more fine grain, as level of movement is higher. The more compact the grain, the more dense and intimate the environment generated. Creating a sense of place is at the heart of the Garden Communities philosophy, therefore residential grains are a tool which enable the design of integrated and accessible multi-purpose spaces with high-quality and mixed-tenure homes.

The design principles of garden communities and Building with Nature Accreditation Scheme place a firm focus on creating self-contained communities surrounded by green infrastructure and comprising residential, commercial and agricultural zones. A balanced lifestyle is put into practice through active, healthy spaces embodied through walking and cycling areas which are embedded within each grain.



ECHNICAL



The residential grains are a key element to create a successful place that voids homogeneity.

The scale of Langarth Garden Village provides the opportunity to create a varied yet cohesive pattern across the site.

Four residential patterns have been identified:

- Settlement Edge Grain Clusters;
- Settlement Edge Grain Hillside;
- Village Grain; and
- Urban Grain.

In this chapter we provide guidance on the characteristics of each grain in order to achieve this distinctive level of variation. This includes guidance on internal movement within a developable plot, landscape structure, frontages and legibility. These rules are grouped as:

Plot Assembly - The way buildings should be put together,

Roofscape - The scene created by varying roof design.

Building Form - The volumetric elements of buildings in relation to their grain.

The grain characteristics are described in the following pages.



## Langarth Garden Village **DESIGN CODE / TECHNICAL**

#### Plot Assembly - Settlement Edge Grain - Clusters

This grain will capture the character of the surrounding natural areas and local farmsteads. It has an intimate feel set around courtyards, featuring informal alignment of houses and routes through. Below is a case study for one plot with key design principles on the following page.








Fig.195: Settlement edge - clusters grain aerial view - Plot A7

Concept	• Buildings organised around a communal green space and courtyards.
Alignment	Plots aligned with existing Cornish hedges, then secondary streets and courtyards.
Grouping	<ul> <li>Predominantly detached and semi-detached groupings;</li> <li>Maximum of 2 no. same unit types next to each other;</li> <li>Single aspect row onto secondary streets or courtyard / mews arrangements.</li> </ul>
Frontages	<ul> <li>Addressing secondary streets, green corridors, primary pedestrian routes and areas of open space;</li> <li>Side windows on key corners and secondary pedestrian routes to provide natural surveillance.</li> </ul>
Key Corners	<ul> <li>Located on secondary street entrances to developable parcel and public open space.</li> </ul>
Roofscape	<ul> <li>Higgledy piggledy roofscape;</li> <li>No dominant direction, variation is welcome.</li> </ul>
Communal Gardens	<ul> <li>Focal or static spaces that create emphasis with good pedestrian connectivity;</li> <li>Relate to existing or proposed landscape features and sit alongside internal pedestrian routes;</li> <li>Accommodate areas of micro allotments and orchards;</li> <li>Can be combined with small areas of parking.</li> </ul>
Private Gardens	<ul> <li>Gardens facing public park and pedestrian routes for good surveillance;</li> <li>Medium size gardens that transition to community gardens, maximum 6m if the back to a communal garden or open space;</li> <li>Minimum front gardens 2.5m.</li> </ul>
Parking	<ul> <li>Predominantly on-plot or in small and well-overlooked courtyards;</li> <li>Communal surface parking should be well detailed and landscaped and must be overlooked by adjoining properties;</li> <li>1 and 2 bedroom dwellings should provide 1 no. parking space per dwelling;</li> <li>3 and 4 bedroom dwellings should provide 2 no. parking spaces per dwelling;</li> <li>Additional 10% parking for visitors must be provided;</li> <li>Further guidance is provided within section 9.07 Car Parking Standard.</li> </ul>
Garages	<ul> <li>Recessed to back of garden creating a break on the elevation line (mainly on secondary streets); or</li> <li>Aligned with the front of the unit to create a more continuous frontage on courtyard arrangements.</li> </ul>

**TECHNICAL** 

#### Plot Assembly - Settlement Edge Grain - Hillside

This grain provides a transition between open green space and more densely developed central areas of the masterplan. It features informal house alignments and routes through, with central courtyards allowing for residents' interaction.









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FIG 197	Settlement	enne -	niliside	drain	aeriai	VIEW -	PIOTING
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Concept	Transition from natural to built environment with soft edges that blur with nature.
Alignment	<ul> <li>Accentuate the grain with houses aligned to contours and existing Cornish hedges;</li> <li>On streets running perpendicular to contours building alignments to deflect from back of pavement;</li> <li>Edge of development with informal alignment of buildings.</li> </ul>
Grouping	<ul> <li>Predominantly detached and semi-detached groupings;</li> <li>Maximum of terrace of three houses;</li> <li>Minimum of two of the same house type together unless on public open space frontage or key corner.</li> </ul>
Frontages	<ul> <li>Fronts to secondary and tertiary streets and courtyards;</li> <li>Sides to hedges running perpendicular to the contours;</li> <li>Backs to communal back gardens.</li> </ul>
Key Corners	Detached units used at key corners and marker locations.
Roofscape	Roofscape to accentuate the topography, following the contours.
Communal Gardens	<ul> <li>Plots organised around a communal green space;</li> <li>Link to existing green corridors.</li> </ul>
Private Gardens	<ul> <li>Gardens facing public park and pedestrian routes for good surveillance;</li> <li>Provide a blur edge transitioning into the landscape.</li> </ul>
Parking	<ul> <li>Predominantly on-plot with some provision for parking on-street and in small and well-overlooked courtyards;</li> <li>1 and 2 bed dwellings should provide 1 no. parking space per dwelling;</li> <li>3 and 4 bed dwellings should provide 2 no. parking spaces per dwelling;</li> <li>Additional 10% parking for visitors must be provided;</li> <li>Further guidance is provided within section 9.07 Car Parking Standards.</li> </ul>
Garages	• Recessed from the front line of the elevation creating gaps in the frontages particularly on the edge of the development and areas facing open space.

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#### Plot Assembly - Village Grain

The grain features more dense arrangement of houses, with some back-to-back and terraced layouts. Generally higher in density this area intends to capture the character of village living with prominent community spaces throughout.







Fig.199: Village grain aerial view - Plot F14

Concept	Street continuity on secondary streets.
Alignment	<ul> <li>Semi-formal arrangements with buildings aligned to streets and pedestrian routes;</li> <li>Development of split level housing in steep locations to adapt building to challenges of topography.</li> </ul>
Grouping	<ul> <li>Groups of house types and repetition encouraged to create a formal feel;</li> <li>Semi-detached and short runs of terraced housing;</li> <li>Back to back arrangements;</li> <li>Minimum of repetition of house types as groups of two (this rule can be broken on key corners and markers).</li> </ul>
Frontages	<ul> <li>Uniform building line steps back from street at regular intervals and at road junctions creating expansion and visual interest;</li> <li>Well defined plot / street boundary.</li> </ul>
Key Corners	<ul> <li>Detached units can be used at key corners and marker locations;</li> <li>Small apartment blocks located in central or key corners to emphasise legibility.</li> </ul>
Roofscape	<ul> <li>Roofscape parallel to contours on steep sites with mono pitch forms;</li> </ul>
Communal Gardens	<ul> <li>Community space opening up junctions;</li> <li>Good pedestrian permeability to increase surveillance.</li> </ul>
Private Gardens	<ul> <li>Minimum 1.5m deep front gardens;</li> <li>Minimum 4.0m deep rear gardens.</li> </ul>
Parking	<ul> <li>Mix of parking on-plot, on-street or in small and well-overlooked courtyards;</li> <li>1 and 2 bed dwellings should provide 1 no. parking space per dwelling;</li> <li>3 and 4 bed dwellings should provide 2 no. parking spaces per dwelling;</li> <li>Additional 10% parking for visitors must be provided;</li> <li>Further guidance is provided within section 9.07 Car Parking Standards.</li> </ul>
Garages	Generally aligned to built line creating a strong frontage.

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#### Plot Assembly - Urban Grain

Located predominantly around local centres, and between the two main arteries, NAR and A390, this grain features denser development with multiple courtyards located inbetween more formally arranged streets.







#### Fig.201: Urban grain aerial view - Plot E3 & E4

0 0	
Concept	Continuous strong frontages with clear separation public / private boundary.
Alignment	<ul> <li>Main entrances to apartments should be in the facade facing the highest grade road;</li> <li>Streets aligned to plot boundaries and building frontages rather than contours.</li> </ul>
Grouping	<ul> <li>Minimum of two of the same unit type unless on key corners;</li> <li>Predominately terraced housing and groups of semi-detached.</li> </ul>
Frontages	<ul> <li>Distance between rear elevations must be &gt;20.0m;</li> <li>When distance between rear elevations is &lt;23.0m windows are to be staggered to avoid overlooking.</li> </ul>
Key Corners	Corner buildings must address both streets.
Roofscape	<ul> <li>Repetition encourage at formal intervals;</li> <li>Mono-pitch to be utilised to emphasise steep streets.</li> </ul>
Communal Gardens	Plots organised around a communal green space.
Private Gardens	• Min 4.0m deep private rear gardens with access to communal green space / gardens.
Parking	<ul> <li>Mix of parking on-street or in small and well-overlooked courtyards;</li> <li>Surface car parking should be well detailed and landscaped and must be overlooked by adjoining properties;</li> <li>1 and 2 bed dwellings should provide 1 no. parking space per dwelling;</li> <li>3 and 4 bed dwellings should provide 1.5 no. parking spaces per dwelling;</li> <li>Additional 10% parking for visitors must be provided;</li> <li>Option for under-croft parking beneath first floor.</li> <li>Further guidance is provided within section 9.07 Car Parking Standards.</li> </ul>
Garages	No garages allowed.
Bin / Bicycle Stores	Access to bin storage should be separated from bike storage in apartments.



#### 9.02 Residential Density, Mix and Heights

Density in planning terms is defined as 'the number of residential units per a certain area of land'. In this particular case the number of residential units (either houses or apartments) per a hectare of land (dwellings per hectare or dph).

Density is a key parameter to define the feeling of a new community. Lower densities (15 to 40dph) are identified with more rural or suburban environments and higher densities (above 60 dph) with town centres or areas of mixed use.

With an equal mix of housing and apartments, a lower density generally means having more area for open space (either public or private gardens). Within a fixed density, a different ratio of houses to apartments (100% houses, 60 - 40% or 20 - 80% houses to apartments) will have a great impact on the amount of open space left as apartments naturally have smaller footprints and land take than houses.

A lower ratio of apartments to houses is associated with a rural or suburban feel. A higher percentage of apartments is generally found in town centres and areas of mixed use.

Naturally, a higher number of units in one particular location means more residents, more activity and more movement which is desirable in centres to have an adequate mix of retail, employment, good access to public transport and community facilities.



Fig. 202: Extract from Langarth Garden Village Density Study. 60 / 40 per cent split between houses / apartments, examples of different densities.





#### Examples around Langarth Garden Village

Penventinnie Lane - Density: <15 dph





Hillcrest Avenue, Truro - Density: <35 dph



Penwethers Crescent, Truro - Density: <50 dph



Kenwyn Street, Truro - Density: <65 dph





#### Examples within Langarth Garden Village

Plot D6 - Density: <35 dph



Plot C2 - Density: 40 dph



Plot A16 - Density: 50 dph



Plot B6 - Density: 60 dph



There are variety of different maximum plot heights specified within Building Height Parameter Plan. Those building heights are further specified with a set of rules set out in this chapter to ensure varied and mixed approach to the new development.



Fig.204: Building Heights Parameter Plan

No. of Storeys	Min % of Storeys (of total plot units)	Max % of Storeys (of total plot units)
2.5 Storeys		
1	-	-
2	-	-
2.5	20%	30%
3 Storeys		
1	-	-
2	-	-
3	30%	50%
4 Storeys		
2	-	35%
3	-	-
4	-	25%

 Table on the left hand side sets the rules in terms of percentages of units heights which must be followed when designing houses and layouts of each plot according with Building Heights Parameter Plan;

- Highest buildings need to be located at key corners in order to build site presence;
- Legibility of the layout should be built by careful consideration of Non-Motorised User Paths and vehicular routes to allow for a seamless transition of all users;
- Variety of building heights should be employed in the remainder of buildings lower than plot height limit to avoid homogeneity;
- Consideration must be given to the surrounding landscape, existing trees and their heights as well as hedgerows where development is proposed including ensuring any shadowing effect on mature trees and Cornish hedges of biodiversity value is avoided;
- Formal shadow / daylight assessment at Reserved Matter Planning Application stage is required; and
- Development must follow the rules set out in Residential Grain section of the Technical Chapter.

Fig.205: Unit height percentage rules table





No. of Storeys	Min No. of Units	Max No. of Units		
1 2	Other quantiti constrained, there decided as appro	es are not efore split can be priate.		
2.5	9	15		
Total Units:		47		

Fig.206: Example calculation for plot A7 - Plot height up to 2.5 storeys



Fig.207: Example layout for plot A7 - Plot height up to 2.5 storeys



Fig.208: Example layout for plot D9 - Plot height up to 2.5 storeys



Fig.209: Example layout for plot F14 - Plot height up to 3 storeys



#### 9.03 Plot Assembly

A set of rules have been set per each residential grain, these are described as part of the residential grain. Two other rules relating to plot assembly are described below, these rules affect all residential grains and help creating a legible hierarchy of spaces and streets.



- A maximum of 2 no. same type units together on Settlement Edge Grain;
- A minimum of 2 no. same type units together on Village and Urban Grains;
- Key corners identified in the Regulatory Plan must be created with distinctive buildings, either of larger scale, breaking materiality rule or with the incorporation of a distinctive building element; and
- More dominating buildings must be placed at the end of views and aligned to centreline of streets and mews to ensure good legibility;





#### Settlement Edge Grain

Maximum of two of the same house type together.



Village Grain

#### Urban Grain

Minimum of two of the same house types together, unless on a key corner or fronting public open space.

Minimum of two of the same house types together, unless on a key corner or fronting public open space.



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#### 9.04 Boundary Set Backs

Minimum distances for back to back units are set to avoid overlooking issues and provide privacy.

A minimum of 23 meters back to back distance between dwellings has been reviewed and is in line with Cornwall Council guidance. A minimum of 21 meters back to back distance between dwellings is in line with national standards.

- A new minimum standard will be set for back to back distances, this new distance should be achieved in most cases;
- When the minimum standard back to back distance cannot be achieved, some rules must be followed:
- 1. Alternate windows on opposite units can minimise overlooking issues; and
- 2. On steeper parts of the site (over 5% slope) minimum distances can be reduced to 19 meters as windows will not be directly opposite due to the changing level.



#### Back to back <23m - Staggered windows



#### Back to back minimum 19m, >5% slope



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## Regular back to back, >23m



9.05 Boundary Treatments

**Front Garden** 

A - Post and wire planted - with native shrubs



Back Garden

D - Post and wire planted - with native shrubs



**B** - Planted with low walls



E - Planted with low walls



C - Railings with planting



F - Timber between plots







- Boundary treatments must follow the biodiversity enhancement table in section 13.03;
- Minimum and maximum dimensions as per diagrams on this page;
- Boundary treatment at front gardens must be consistent along the street, variations must happen as part of green break, change of direction or public / arrival space treatment;
- Corner units must continue the front boundary treatment to the side garden if this is visible from areas of public realm;
- Timber fencing only allowed between properties if not visible from streets, public routes and spaces;
- All new landscape must be predominantly native shrubs and species.
- Rules can be broken in areas of mixed use to non or minimal garden;
- Gates must be provided to all private drives to delineate private to public space; and
- Gates must be timber for boundary types A, B, D, E and F; and metal railings for type C.



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#### 9.06 Roofscape

Due to the steep and undulating nature of the site, views from higher ground will often look down onto the roofs of nearby development. Therefore, creating variety and intrigue through interesting roof design is integral to the successful development of Langarth.



**Settlement Edge Grain - Clusters** 

- 1. Higher pitches at 45 degrees minimum;
- 2. Mainly gabled and dual pitched;
- 3. Higgledy piggledy arrangements and groupings with no dominant direction blending with the strong landscape; and
- 4. For terraces dropping with the contour, the exposed wall finish needs to be low maintenance (not render), to avoid discolouring.

See Built Form section 10 below for more guidance on roof forms and the integration of solar panels, dormers and roof openings.



#### Settlement Edge Grain - Hillside

- 1. Higher pitches at 45 degrees minimum;
- 2. Mainly gabled and dual pitched; and
- 3. Gables follow or sit perpendicular to contours;
- 4. Higgledy piggledy arrangements at the fringes of the development with no dominant direction blending with the strong landscape; and
- 5. For terraces dropping with the contour, the exposed wall finish needs to be low maintenance (not render), to avoid discolouring



Fig.215: Settlement Edge Grain - Clusters - Roofscape



Fig.216: Courtyard Arrangement Example



Fig.217: Settlement Edge Grain - Hillside - Roofscape



Fig.218: Drewenthorpe





#### Village Grain

- 1. Pitches at 40 degrees;
- 2. Mono-pitches can increase the pitch angle to emphasise roofscape on steep locations ;
- 3. Mainly dual pitched and mono-pitched;
- 4. Generally gables sit perpendicular to contours; and
- 5. For terraces dropping with the contour, the exposed wall finish needs to be low maintenance (not render), to avoid discolouring.



- 1. Pitches at 40 degrees;
- 2. Mono-pitches can increase the pitch angle to emphasise roofscape on steep locations;
- 3. Higher degree of variation of height and roofscape, including flat roofs, sawtooth, mono-pitch; and
- 4. For terraces dropping with the contour, the exposed wall finish needs to be low maintenance (not render), to avoid discolouring.





Fig.220: Prisks Cottages - Redruth





Fig.222: New built apartment bloc on a steep street

## Langarth Garden Village

Langarth Garden Village promotes the use of sustainable modes of transport and is designed to facilitate walking and cycling. Four different parking standards are identified in response to the nature of the particular location, neighbourhood grain and proximity to amenities. It is encouraged to accommodate visitor and additional parking spaces on-street and courtyards areas dotted throughout the site.

### 9.07 Car Parking Standards

#### Settlement Edge Grain - Clusters





## Settlement Edge Grain - Hillside

• 1 a

- 1 and 2 bed dwellings should provide 1 parking space per dwelling;
- 3 and 4 bed dwellings should provide 2 parking spaces per dwelling;
- Additional 10% parking for visitors must be provided;
- Parking should be predominantly on-plot or in small and well-overlooked courtyards;
- On-plot parking to the frontage should be avoided, and should be situated at the side / rear;
- A flexible room should be provided, which can be used as a garage / storage space or extra room; and
- Provision should be made for the future conversion of parking spaces for alternative functions. See below for further details regarding future adaptability of car parking space.



- 1 and 2 bed dwellings should provide 1 parking space per dwelling;
- 3 and 4 bed dwellings should provide 2 parking spaces per dwelling;
- Additional 10% parking for visitors must be provided;
- Parking should be predominantly on-plot with some provision for parking on-street and in small and well-overlooked courtyards;
- On-plot parking to the frontage should be avoided, and should be situated at the side / rear;
- A flexible room should be provided, which can be used as a garage / storage space or extra room; and
- Provision should be made for the future conversion of parking spaces for alternative functions. See below for further details regarding future adaptability of car parking space.



Settlement Edge Grain - Clusters

ers

Village Grain



Urban Grain

Settlement Edge

Grain - Hillside



#### Village Grain





#### Urban Grain



# 1 -2 & 3 - 4 Bedroom Houses with on-street parking



- 1 and 2 bed dwellings should provide 1 parking space per dwelling;
- 3 and 4 bed dwellings should provide 2 parking spaces per dwelling;
- Additional 10% parking for visitors must be provided;
- Parking should be provided through a mix of parking on-plot, on-street or in small and welloverlooked courtyards;
- On-plot parking to the frontage should be avoided, and should be situated at the side / rear; and
- Provision should be made for the future conversion of parking spaces for alternative functions. See below for further details regarding future adaptability of car parking space.



- 1 and 2 bed dwellings should provide 1 no. parking space per dwelling;
- 3 and 4 bed dwellings should provide 1.5 no. parking spaces per dwelling;
- Additional 10% parking for visitors must be provided;
- Parking should be provided through a mix of parking on-street or in small and well-overlooked courtyards;
- On-plot parking to the frontage should be avoided, and should be situated at the side / rear; and
- Provision should be made for the future conversion of parking spaces for alternative functions. See below for further details regarding future adaptability of car parking space.

## **BUILT FORM**

#### **10.01 Building Elements**

Accent architectural features are suggested to create character and interest in the development buildings. Guidance on the use of features is given to create a degree of regularity in the appearance of buildings to give an overall coherence to the development. Guidance is given to avoid poor examples of features being proposed.

#### 1 - Vertical break in volume





#### 2 - Arcade to Street Edge





3 - Corner Element / Recess



#### 4 - Bay / Corner Window







- Vertical breaks can be subtle, but must be formed by distinct changes in building form rather than solely material changes;
- Arcades must be created by recess to the ground floor edge of larger buildings, with the potential of creating covered public space to shelter from weather;
- Arcades are suggested for use to create public walkways integrated into buildings in areas of mixed use;
- Positive corner accents such as increases in height or negative corner accents such as recesses, enhance building character and creates legible and recognisable focal points using architectural form and are encouraged in key corner locations;
- Corner elements must be formed with subtle geometries and forms rather than complex poor renditions of modern architecture;
- Bay window width will not exceed 1/2 the width or be less than 1/3 the width of the facade of a single fronted dwelling;
- On double fronted dwellings the width must not be less than 1/5 the width of a facade on bay windows;
- Bay window features will maintain the internal room ceiling height and floor level out into the bay;
- Corner / Bay windows must provide multiple angled views giving natural surveillance of spaces adjacent to dwellings, whilst creating interest on building façades and should be located in areas with less natural surveillance;
- Overlooking into adjacent dwellings from corner windows must be avoided and needs carefully consideration;
- Buildings and their roofs will ideally be designed to provide South facing roof slopes for the installation of solar and photovoltaic panels;
- Regular arrangements of panels will be located on the centreline of the roof and on the lower part of the roof to minimise visual impact and aid maintenance;
- PV arrays on flat roofs should be concealed behind parapets such that their supporting framework is not visible;



#### 5 - Solar panels integration





6 - Dormer





#### 7 - Feature Entrance





8 - Textured window surround





9 - Chimney (Ventilation)





- Recessed trays containing the PV panels must be used to minimise the visual impact of installations. Anti glare coatings to PV panels and PV tiles must be considered in very sensitive locations, such as in the vicinity of the scheduled monument at Penventinnie;
- The geometry of dormer windows needs to align with the geometry of windows in the building facade;
- Ridges of dormer windows need to sit lower than the main building ridge line;
- The total width of all dormers on a single roof plane must not exceed 1/2 the width of that roof plane;
- Small and poorly proportioned dormers must be avoided;
- Entrances to buildings must be celebrated within the building form to allow easy legibility and avoid the requirement of cluttering signage marking entrances;
- Entrances should be designed into the form of the building to provide shelter. Suggested details include modest porches integrated into the building and architectural fanlights or sidelights to entrance doors;
- · Bolt on canopies must be avoided;
- Surrounds using a different texture of the same main facade material to add interest to the building appearance and create opportunities for introducing subtle geometries or patterns in buildings, beyond their basic form must be incorporated as per building form rules;
- Textures must be applied to avoid over-cluttering façades;
- Multiple materials or colours in a small area of facade should be avoided;
- Whilst chimneys form an important reference to the local vernacular, their use in a zero carbon development shifts towards being a tool as part of a natural or mechanical ventilation strategy; and
- A chimney is to be used as an architectural tool to enhance form, rather than a bolt on element, and its material finish should match the main building material.



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#### 10.02 Apartments and Landmark Buildings

Buildings which contribute significantly to legibility of the place are defined as landmark buildings. They enable wayfinding within public realm and contribute to establishing a sense of place.

#### **Accent Buildings**











#### **Gateway Buildings**





Fig.224: Gateway Building Precedent Images









They are further divided into accent and gateway buildings.



- Accent buildings throughout the site should reflect the character of the area in which they are located;
- They should present recognisable forms that help with wayfinding within the development;
- They should be located around squares and public spaces, in key corners and at the end of key views;
- The building form should be recognisably different in scale to surrounding dwellings;
- Accent buildings located within Edge of Settlement grain should seek influence from agricultural buildings. Simple forms of a similar scale and arrangement to traditional farmstead barns are recommended;
- Accent buildings located within Village grain areas of the development should seek influence from traditional local village halls, smaller church buildings and larger end of terrace properties;
- Accent buildings located in Urban grain areas of the development should present a civic presence seeking influence from small town halls;
- Building forms of community buildings in urban grain areas can be more varied to suit their use, with mixed use buildings offering adaptable settings for multiple functions;
- Gateway buildings should be of greater scale to the surrounding building; and
- Prominent façades should have an enhanced material treatment to reflect the change in neighbourhood.



#### 10.03 Building Materials

Material palettes are designed to ensure that Langarth Garden Village has a distinctive character that draws inspiration from the vernacular architecture of the locality as well as a series of clearly distinguishable character areas.

The code does not seek to prescribe a particular architectural style, but rather to develop a distinctive Langarth Garden Village colour and materials palette that can be used on different styles of building as the place grows over time.

The palette includes enough variety to create unity without uniformity, allowing each character area and key grouping to develop an individual identity but still be recognisably of Langarth Garden Village.

Material colour tones are shown to guide material choices and finishes, to create distinct characters in each area of the masterplan. The same material could therefore be used in multiple areas, but with a different colour tone in each.

Materials are proposed to help create areas of distinct character or neighbourhoods, and contrast materials proposed for architectural accents to key buildings or key elements within buildings.

Within each palette a primary and secondary base materials are proposed to enable variation. Base materials have been selected to suit multiple construction methods and types, including off site fabrication and other modern methods of construction.

When choosing materials it is important to identify opportunities for recycling and reusing materials to minimise waste and environmental impact.

Langarth Garden Village should be a place that ages well with carefully detailed and durable exterior finishes that will continue to look good as they age. To achieve this it is important to consider the long term maintenance regimes from the outset and select materials appropriately. It is desirable for materials to be sourced locally, where possible, to improve embodied carbon, but the overarching principle of high quality and durable materials is paramount.

#### Old and New

Materials at Langarth Garden Village must blend with the history and the palette of tones existing on site. There is an opportunity to use modern materials in form that relates to existing and more traditional language and equally the opportunity to use traditional materials in a modern way.



#### **Use of High Quality Materials**

The use of high quality materials is required throughout the masterplan area. Prioritisation of higher quality materials is recommended for the principle façades of buildings where they provide frontage to roads and public spaces.

Good quality materials with the right specifications will avoid future maintenance cost for residents.

The appropriate use of brick in particular should be carefully considered by designers. Brick products displaying subtle variation in colour with softer edges should be used in preference to single colours and sharp edges. Furthermore, brick red in tone must be avoided.





#### 10.04 House Types

A bespoke range of houses is encouraged at Langarth Garden Village.

#### T1 - Narrow Frontage Terrace



- Principal frontage width of dwelling is less than depth of primary building;
- Individual principle frontage is less than 7m; and

 Mass of secondary building form is less than 60% of the mass of the primary

• Overall frontage width is more than 200%

• Must consist of at least 3 dwellings.

building form; and

of the depth of dwellings.

#### T3 - Stepped / L-Shaped Terrace



T4 - Side Terrace



#### T5 - Rear Terrace



- Principal frontage width of each dwelling is greater than the depth of the primary building form; and
- Overall frontage width must consist of at least 3 dwellings.
- Principal frontage width of each dwelling is less than the depth of the primary building form; and
- Overall frontage width must consist of at least 3 dwellings.











#### **SD1 - Narrow Frontage**



#### **SD2**-Wide Frontage



#### SD3 - L-Shaped



#### A1 - Mixed Use Apartment



#### A2 - Typical Apartment

• The combined principal frontage width is less than 15m wide.

- The combined principal frontage width is greater than the depth of the primary building form; and
- The combined principal frontage width is more than 15m.
- The dwellings have two principal frontages at 90 degrees to one another; and
- The combined principal frontage width is more than 15m.
- The block is at least 3 storeys;
- · Mixed uses provided at ground level; and
- · Communal parking and recycling facilities.
- The block is at least 2 storeys; and
- · Communal parking and recycling facilities.





#### 10.05 Roof Forms

Roofscape variation is encourage at Langarth. A coherent application of roof forms throughout the development creates a strong sense of place and character.

#### **Regular Pitched (Eaves to front)**



#### **Regular Pitched (Gable to front)**



#### Regular Pitched (Low Eaves to both sides)



#### Green / Blue Flat Roof (Parapet)



#### Hipped





- Roofs must follow rule described in Roofscape section 9.06;
- A minimum pitch of 35 degrees should be used for pitch roof forms, to maximise future adaptability and the efficiency of integrated Solar Panels;
- A transition from more variation to more uniformity of roof pattern should be followed from settlement edge areas to urban areas;
- In urban grain locations, multiple gabled dwellings repeated along a terrace should be of equal size to create a very strong sense of place;
- Gabled forms on the street edge should be used to create a stronger built presence to public spaces and movement routes;
- Mono-pitched roof should be used in steep and exposed areas to minimise visual impact. Roofs should be oriented parallel to the slope;
- Where buildings are located in highly sensitive areas of the development, such as adjacent to existing farmland or historic features, low eaves roofs should be used to minimise the impact of buildings on its surroundings;
- Saw tooth roofs can be used to create interesting roof forms to larger buildings, to help break down their apparent scale and where flat roofs may not be appropriate;
- Green / blue flat roofs should be used throughout to maximise the biodiversity gain of the development;
- Careful attention should be paid to roof edge depths of green roofs to avoid visibly thick roof build ups. A maximum recommended perceived depth is 250mm;
- Hipped roof forms can be used to soften the appearance of the end of pitched roof forms, allowing natural light penetration into adjacent buildings where issues may occur. Hipped ends should be an identical pitch to the main roof;
- Flat roofs are encourage particularly in urban grain locations as they can incorporate roof terraces to increase private amenity space.



#### **10.06 House Requirements**





- All new homes must have solar PV installed in order to achieve the net zero carbon goal;
- All buildings to be provided with an air source heat pump;
- Each building must incorporate a bird or bat brick in the fabric to recreate the natural cavities found in older properties;
- Bee bricks incorporated into buildings at a minimum ratio of one bee brick in every other dwelling;

- Incorporate green roofs on flatter roofs and key locations as a feature for buildings;
- Holes to be incorporated in fences to allow hedgehogs and other small mammals to easily move between gardens;
- All dwellings should have the facility for electric car and bicycle car charging points to allow adoption of a low carbon transport strategy;
- Bin & cycle store integrated as part of the main building form or incorporated as part of garages;
- Each dwelling is to be served by a private soakway and driveways are to be formed from permeable paving, which can also connected to the same private soakway; and
- All buildings must achieve Silver sustainable design standards as a minimum. Refer to section 14.02.

#### 10.07 Building Form

The following pages highlight the key distinctive features for each grain, in order to create a rural to urban feel within the different neighbourhoods.

#### **Building Form - Settlement Edge Grain**

House typologies in the settlement edge grain will have a more traditional form due to their location on the fringe of the new development area. Traditional elements such as chimneys and different sized windows must take inspiration from original farm houses and barns and adapt to contemporary language and living lifestyles.

- Horizontal split in materials at first floor level picking up more traditional 'cottage' feel, this can be broken on key corner locations;
- 2. Monolithic single materials, flat form with accent;
- 3. 45 degree pitched roof, to resemble traditional form;
- 4. Expressed chimneys to incorporate house services;
- 5. Modern style side shutters;
- 6. Windows with deep reveals;
- 7. Solar panels to follow roof pitch angle (southern side);
- Bin & cycle store integrated in the building, direct access to main vehicular access point to facilitate recycling and waste management and collection; and
- 9. For terraces dropping with the contours the exposed wall above must be a low maintenance finish which will minimise discolouring.

