Land North of West Camp, Vale of Glamorgan
Master plan report and design and access statement

October 2019
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Planning Policy Wales

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Looking north west showing the construction work on Ffordd Bro Tathan
The Vale of Glamorgan Council has identified the need to deliver 9,460 new dwellings in the county between 2011 and 2026. In order to meet this need, the **Vale of Glamorgan Local Development Plan 2011-2026** (LDP) proposes a number of locations for housing development within or close to existing urban areas. St Athan is identified as one area where new development will take place to achieve the vision and objectives of the **LDP**. It is identified as a strategic opportunity area in the statutory national plan with the potential to offer significant regional benefits.

In September 2017, full planning permission was granted for a new access road, Ffordd Bro Tathan, to provide high-quality, direct access to existing and future employment development at Bro Tathan, including the new Aston Martin car manufacturing facility, and to two new housing sites proposed by the Vale of Glamorgan Council. One of these is the subject of this application and is intended to deliver up to 100 new homes over the **LDP** plan period, up to 2026 (See Figure 01 opposite). **WYG** has been appointed by the Welsh Government to promote the scheme through the planning process with the aim of obtaining outline planning permission.

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The Vision

“The vision is to create an attractive new neighbourhood, combining the charm and character of Vale of Glamorgan villages with contemporary best practice in design and architecture. A new community will benefit from living in a location which is well-connected to local commercial centres as well as the south Wales countryside and coastline.”
The proposed development

103 The planning application is submitted on behalf of the Welsh Ministers for consideration by the Vale of Glamorgan Council in its role as the local planning authority for the area in which the site is located.

104 The application seeks planning permission for the development described thus:

“Outline planning permission with all matters reserved (other than existing access from Ffordd Bro Tathan) for residential development of up to 100 homes and associated development”.

The application site

105 The application site is shown in Figures 01 and 02. It comprises 4.31 ha of land, which is wholly in the ownership of Welsh Ministers. The site comprises the entire strategic housing allocation MG2(6), plus two small areas of land, north and east of Froglands Farm (0.64 ha) and land to the east lying between Ffordd Bro Tathan and Egwlys Brewis Road, north of the former Carpenters Arms pub (0.47 ha).

Pre-application consultation

106 The master plan proposals for the site have been the subject of ongoing consultation with the Council in its multiple roles, including as local planning authority, highway authority and drainage authority. Other statutory bodies have also been consulted and a public consultation event was held to inform the preparation of the master plan at St Cattwg’s Village Hall, Llanmaes on the 26th July 2019.

107 The application seeks permission for development on a site over 1 hectare and is therefore classified as ‘major development’ under article 2 of the Town and Country Planning (Development Management Procedure) (Wales) Order 2012 (as amended). Before it was submitted, the application was therefore subject to statutory pre-application consultation in accordance with section 17 of the Planning (Wales) Act 2015.

108 Reports on the public consultations are included in the suite of documents that are submitted in support of the planning application.
Figure 02  Application site boundary (4.31 ha)
Purpose of the report

109 The purpose of this report is to explain the rationale on which the master plan design is based and to act as a design and access statement in compliance with the Town and Country Planning (Development Management Procedure) (Wales) Order 2012 (as amended). The design and access statement has been prepared in accordance with the guidance set out in the most recent edition of TAN 12: Design\(^3\) and the accompanying documents:

- Planning Policy Wales;\(^4\)
- Guidance on Design and Access Statements,\(^5\)
- Site & Context Analysis Guide: Capturing the value of a site\(^6\) and
- Design and Access Statements in Wales.\(^7\)

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View looking east across the site
The site as existing
BRISTOL CHANNEL

Rhoose
Llantwit Major
St Athan
Cowbridge
Pontyclun

10 km
20 km
30 km

Bridgend
Cardiff
M4 Motorway
Cardiff International Airport
Barry

5 km
10 km
15 km
20 km

The site
Llanmaes
Llanwit Major
Boverton

BRISTOL CHANNEL
The site as existing

201 The site is located in the Vale of Glamorgan, approximately 2.5 km inland from the Bristol Channel, 25 km west of central Cardiff and 15 km south-east of Bridgend (see Figure 03). The Vale of Glamorgan is a county primarily rural in character, with most of the population living in the towns of Penarth and Barry and the smaller settlements of Dinas Powys, Rhoose, Cowbridge and Llantwit Major.

202 The site comprises around 4.3 hectares of agricultural land plus a small number of agricultural buildings associated with Froglands Farm, which lies in the west of the site. The southern boundary of the site is defined by the course of Boverton Brook, beyond which is Egwlys Brewis Road and the St. Athan MOD base. The northern edge of the site is bounded by Ffordd Bro Tathan, which is currently being constructed to serve Bro Tathan. The site’s topography is also predominately flat, with a gentle slopes downward towards Boverton Brook. Figure 04 shows the site in relation to its wider context (See page 16).

Land ownership
203 The application site comprises 4.31 ha of land in the freehold ownership of the Welsh Ministers.

Current land uses
204 The site is currently in agricultural use with adjoining land to the north being used for the construction of Ffordd Bro Tathan. A range of services such as a convenience store, post office, pharmacy and public house are available in Boverton around 1.5 km to the south-west with additional facilities including a railway station available in the district centre of Llantwit Major, a further 1km west. Land to the south and east of the site has a pattern of land uses closely associated with St Athan’s role as a military air base.

205 An Agricultural Land Classification and Soil Resource summary report was prepared by WYG in September 2019. The report concludes that the majority of soil profiles across the site were found to have significant wetness and workability limitations and as such is characterised as comprising mostly subgrade 3b agricultural land and non-agricultural land.
Figure 04 Context
**Topography**

The land form of the wider area and slope analysis for the site are shown on **Figures 05 and 06**. The site is gently undulating, the majority of which comprises slopes of a gradient shallower than 1:20. The site slopes gently from a high point of around 44 m AOD in the north to around 39 m AOD in the south west corner of the site near Boverton Brook. More steeply sloping areas of the site are generally consigned to the banks of this watercourse.
Site in agricultural use in a highly rural area between the small settlements of Llanmaes and Boverton.

1877

1897

The Vale of Glamorgan Railway line has been constructed to the south of the site.

1938

RAF St Athan is established to the east of the site.

1972

RAF St Athan has expanded with service family housing located to the south of the site and there is increased suburban development in Boverton.

1982

The B4265 has been constructed west of the site and the surrounding area has seen a large expansion of suburban housing.

2018

Construction of Ffordd Bro Tathan commences

Figure 07 Historical ordnance survey maps
History of the site and the surrounding area

From earliest mapping dated 1877, the site and surrounding area is recorded as agricultural land. The Vale of Glamorgan railway line was constructed to the south-west of the site by 1899. Small historic settlements can be found to the north in Llanmaes and to the west in Boverton and Llantwit Major. The historic pattern of development in the area is defined by small dispersed rural settlements surrounded by agricultural land. The area remained rural in its character with little development up until the development of the RAF St Athan to the south, which opened in 1938 and the B4265, which was constructed by the early 1980s. Development associated with the airfield and the gradual expansion of Boverton and Llantwit Major since the 1970s has resulted in the site now having a context which is mixed between agricultural land and suburban housing development. A summary showing the historical evolution of the site alongside historical maps is shown opposite (see Figure 07).
Physical factors

Geology

208 WYG’s Ground Investigation Factual Report\(^2\) states that the site is underlain by the Porthkerry Member consisting predominantly of limestone and mudstone. Off-site sources of contamination include ground gas associated with made ground from the construction and operation of the airfield at St. Athan. The preliminary risk assessment identified a Low to Moderate risk to controlled waters and to future site users and to construction and maintenance workers associated with in-ground contaminants.

Hydrogeology and flood risk

209 A flood consequences assessment\(^3\) reports that the risk of fluvial, ground water and sewer flooding for the site is low and that the risk of flooding from surface water and artificial flooding is very low. The site is not considered to be of any risk from tidal flooding. There are areas within the site that coincide with Development Advice Map Zones C2 and B in close proximity to Boverton Brook and consequently development should be avoided in these areas (See Figure 09).

Climate

210 Wales has an essentially maritime climate characterised by weather that is often cloudy, wet and windy, but mild. Mean wind speeds are at their strongest between December and February and the dominant wind direction is from west-south-west: see Figure 08. The average annual rainfall in the site is between 1,000 mm and 1,500 mm\(^4\). The whole site is open to the sun and annual average sunshine duration in the locality is greater than 1,600 hours. Generally, temperatures are not usually excessively hot or cold with the annual mean temperature being 10.0°C to 11.0°C.

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2 Ground Investigation Factual Report, WYG, 29 March 2019
3 St Athan Northern Access Road Land Development, Flood consequences assessment, AECOM, August 2018
4 St Athan climate information, Met Office, 2018
Environmental factors

Trees

211 A tree survey report\(^5\) for the site identifies that the site supports one B category tree and three U category trees unsuitable for retention, with the remaining 18 trees being C category trees. Hedges and groups surveyed on both sites were assigned to categories B and C, being of moderate and low value (See Figure 09). None of the surveyed trees are subject to a Tree Preservation Order and the site is not located in a Conservation Area.

212 The site includes a woodland belt along the southern boundary, a distinctive row of Leyland cypress towards the west and a few scattered individual trees in the northwest. The woodland belt along the south is approximately 6-8 metres high and includes hawthorn, blackthorn, goat willow, crack willow, ash, field maple, sycamore, hazel, wild cherry and common alder. The row of Leyland cypress to the west is approximately 20 metres in height and provides a distinctive feature within the site. The individual trees in the northwest include Lombardy poplar, common walnut and horse chestnut.

\(^5\) Tree Survey Report, WYG November 2018

**KEY TO IMAGES**

1  View looking south across the site
2  Existing hedgerows
Figure 09 Natural environment
Ecology

213 The site comprises grassland pasture and arable fields with fencelines, hedgerows and broadleaved woodland. Boverton Brook passes along the southern boundary of the site. In addition, a barn associated with Froglands Farm is located in the west of the site.

214 The assessment of ecological impacts for the site has been based on the ecological surveys submitted for Ffordd Bro Tathan (full planning permission reference 2017/005654/FUL) with an update Ecological Appraisal, to confirm no significant changes and update badger, otter and bat activity surveys (due to the species highly mobile nature).

215 These surveys highlighted several issues a number of protected species constraints across the site as detailed below:

- Hazel dormice - the removal of hedgerows for Ffordd Bro Tathan was completed under NRW licence number 77740:OTH:EPS:2017 with additional mitigation including compensatory planting and a dormouse underpass associated with the agricultural vehicle underpass to the east of Llanmaes Brook. Woodland, hedgerow and scrub vegetation on the site is linked to the wider landscape and hazel dormouse are assumed present within all suitable vegetation.

- Badgers - During the phase 1 survey no badger setts were recorded onsite however the site is likely to be used by badgers known to be present in the wider area for foraging.

- Otters - although no definitive signs of otters were recorded during the surveys it is assumed that they occasionally use Boverton Brook for commuting purposes;

- Bats - A single ash tree of moderate suitability for roosting bats is present (TN2) to the south east of the site associated with Boverton Brook. All other trees on and directly adjacent to the site were assessed as having negligible suitability for roosting bats. The previous activity survey confirmed the site is used by a range of common species of bats and based on this survey the habitats onsite can be classified as ‘moderate’ suitability habitat for bats based on the continuous habitat connected to the wider landscape that could be used by bats for commuting such as lines of trees, hedgerows and watercourses.

216 No statutory designated sites are located within 2 km of the site, with the closest being East Aberthaw Coast SSSI located approximately 4.3km south-east. No statutorily designated sites for nature conservation or non- statutory sites are present within the site. The main site comprises habitats of relatively low conservation value including managed and agriculturally improved grasslands and arable fields with habitats of local value, including broadleaved woodland, hedgerows and running water (Boverton Brook), located to the south of the site. However, no habitats present are likely to qualify as Section 7 habitats of principal importance for the purpose of maintaining and enhancing biodiversity in relation to Wales or meet SINC selection criteria.

6 Site B (Land north of West Camp - "Eastern Parcel") Ecological Appraisal, WYG, October 2018
There are no designated landscapes of national importance within the site or the study area. However, there is a Special Landscape Area located around 1.5 km east of the site, which is described within the Local Development Plan as an area of ‘high value, which has outstanding geological features and includes some areas of high habitat value’. There is also a Heritage Coast which is approximately 360 m south of the site, at its nearest point, which stretches 14 miles from Aberthaw to Porthcawl with plunging cliffs, secluded coves and ‘breathtaking views’. The nearest designated woodland is located just over 1 km to the south-west of the site. There are no ecological designations within or close to the site.

Public Rights of Way within the wider area include public footpaths, restricted byways, coastal path and the Millennium Heritage Trail. Two public rights of way pass across the site from a point of access near the centre of the southern boundary. National Cycle Route 88 is currently a proposed coastal route between Newport, Cardiff, Bridgend and Margam Country Park and only short sections of the route are open. It is located at its closest point 710 m northwest of the site. National cycle route 888 is located north of the site and starts at Llanmaes village and continues northwards.

A Landscape and visual impact appraisal, following the LANDMAP methodology, has been undertaken using the Natural Resources Wales (NRW) / Wales Landscape Partnership Group approach which separates the defining aspects of the landscape into five categories, or aspects: geological, habitats, historic, cultural, and visual & sensory.

The LANDMAP methodology provides overall evaluations and justifications for each aspect area. The Geological Landscape aspect area surrounding the site is evaluated as outstanding and ‘includes part of Monknash Coast SSSI with Pleistocene-Holocene features but with no other recorded sites with significant geological exposures.’ For Landscape Habitats, the overall evaluation is Moderate because ‘the aspect area is defined as an area of moderately undulating and highly productive agricultural land. The area appears to be characterised by brown earth soils and supports a high concentration of land used to grow arable crops.’ The historic landscape is evaluated High because it is a ‘rich multi-period landscape with evidence of occupation from the Bronze Age, Iron Age, Roman, medieval and post-medieval periods.’ The Cultural Landscape is evaluated as high, and Visual and Sensory is moderate with ‘long views to the coast in places and to the hills over the pleasant landscape. The stone and render settlements are generally attractive and complement the surrounding landscape. The area is in generally good condition and has a fairly consistent character although fencing is eroding the field boundary pattern. The area is clearly a distinctively Vale landscape with plateau topography and limestone buildings.’

At a local level, the landscape fabric includes woodland belts, irregular agricultural fields, overgrown/gappy hedges, individual trees, watercourses and settlement. The topography is slightly undulating due to the watercourses which flow through the site. The topography is generally flat and open but St Athan to the south is prominent.
Views of the site

222 A visual appraisal has been carried out to assess the baseline visual amenity for the site and the potential effects on visual amenity as a result of the proposed development. Based on Zone of Theoretical Visibility Analysis and field survey, twelve representative views were taken to illustrate the Site. From the viewpoint studies, a representative selection of views were taken forward to the visual impact assessment.

223 Views from publicly accessible areas are possible from the north and south although views from the wider area are largely obscured by intervening vegetation, the relatively flat topography from the north and the undulating landscape in the south.

224 Due to the screening features of the surrounding landscape (the hedges defining the edge of agricultural fields) built development and blocks of trees, most surrounding properties would not have open views of the proposed development, particularly from the north, although some roofs may be visible in the background. There is likely to be filtered views of the proposed development from the existing properties on the western boundary. However, the proposed landscape masterplan shows mitigation planting between the existing and proposed buildings. Other views from residential properties from the west, at Llanmaes, are not available. From the south, there is limited visibility of a small part of the site, which would be visible from the residential properties within Eglwys-brewis. The tree belt along the southern boundary of the site is a screening feature which would obscure views towards the site. Views from the east are not available.

KEY TO IMAGES
1 View west towards Froglands Farm from the east of the site
2 View west looking along the edge of Ffordd Bro Tathan (now constructed)
3 View east along the southern boundary
4 View towards Froglands Farm
Figure 10  Movement
Cultural heritage and archaeology

225 An archaeological desk-based assessment prepared by WYG® reports that the application site does not contain any scheduled ancient monuments and does not form part of a conservation area. The nearest conservation areas to the application site are located in Boverton and Llanmaes. There are 26 Listed Buildings within 2 km of the site, most of which are situated to the south-west of the site, within the Boverton Conservation Area, and to the north-west in the Llanmaes Conservation Area. Two Grade II Listed structures are located directly to the south of the site off Eglwys Brewis Road; Bethesda’r Fro Chapel built in 1840 (13242), and the associated forecourt and graveyard gates, gate piers and walls of Bethesda’r Fro Chapel (83388).

226 A geophysical survey identified a great deal of modern debris across the majority of the site. The survey revealed a possible demolished building and a ditch of possible archaeological origin. Subsequent trenching across the anomalies highlighted during the survey revealed limited archaeological remains, and there is considered to be limited potential for any further surviving archaeology here. The archaeologists on site were notified that the area was filled with the previous remains of the runway at RAF St Athan which is located to the south-east of the site. No further investigations have been identified as necessary for the site.

Infrastructure

Access and movement

227 Ffordd Bro Tathan, which defines the northern boundary of the site is now nearing completion and will provide direct access to existing and future employment development at Bro Tathan, including the new Aston Martin car manufacturing facility, and to the currently proposed development. Ffordd Bro Tathan joins the B4265 1km to the west and runs between Cardiff and Bridgend enabling good accessibility to the wider area.

228 The nearest bus stops to the site are located along Eglwys Brewis Road. These are the ‘North Gate’ bus stops which are located adjacent to the southern boundary within a 5-minute walking distance. These buses provide a regular services between Bridgend and Barry where connecting services are available to Cardiff. Additional bus services can be accessed within Llantwit Major and Eglwys Brewis and are also proposed to run along Ffordd Bro Tathan once complete.

229 The nearest train station is in Llantwit Major approximately 2.5 km to the west, with a regular service running between Cardiff and Bridgend on the Vale of Glamorgan line. Several pedestrian rights of way lie within the area which provide access to the wider countryside including two, which pass through the site. Pedestrian accessibility is limited along Eglwys Brewis Road towards the east of the site. A shared footway/cycle way provided access to the north of the site along Ffordd Bro Tathan.

230 Broad movement issues are illustrated on Figure 10 opposite. Full details of public transport accessibility are set out in the supporting Transport Assessment prepared by WYG®.
Utilities

Existing utilities constraints are shown on Figure 11. A surface water sewer crosses the site from north to south between Ffordd Bro Tathan and Boverton brook. There is an 11 kV overhead power line and a foul sewer main passing near the west and south boundaries of the site. The 11 kV overhead power line passing across part of the south of the site may need to be diverted to accommodate some of the attenuation features proposed in the south of the site. A surface water sewer passes directly across the western part of the site from north to south to discharge surface water from an attenuation basin associated with Ffordd Bro Tathan.

Noise

Measures to mitigate noise as part of plans for the Ffordd Bro Tathan have resulted in 2.5 m acoustic barriers being placed along some parts of its southern edge. These are mainly located to the west of the site and will not affect development proposals for the application site. WYG’s 'noise assessment report' has identified that some areas of the site directly adjacent to Ffordd Bro Tathan fall within noise exposure categories B and C and recommends that development along this boundary will require additional mitigation in the form of enhanced glazing and an alternative means of ventilation, along with good acoustic design.

10 Noise assessment report WYG, October 2019
Surrounding context – local facilities

233 The site is closely related to the suburban edges of Llantwit Major, Boverton and Eglwys-Brewis. The nearest local facilities to the site are primarily located to the west of the site in Boverton or further to the west in Llantwit Major. Figure 12 on the following page summarises the range of different facilities available in the area surrounding the site.

Retail
234 Boverton is located approximately 1 km of the site and offers a range of services mainly within a small parade of retail premises including a post office, takeaway and hairdressers. A pub is also available in Boverton. A wider range of retail outlets are available in the district centre of Llantwit Major approximately 2.5 km to the west or also in St Athan, 2.5 km to the east.

Health care
235 Doctors and dental surgeries are available both within Llantwit Major and St Athan. The nearest hospital is the Princess of Wales hospital located in Bridgend.

Education
236 In respect of primary schools, the following are within close proximity of the site:
- Ysgol Y Ddraig Primary School lies 2.65 km from the site.
- Ysgol Gymraeg Dewi Sant (Welsh Medium) lies 2.25 km from the site.
In respect of secondary schools,
- Llantwit Major School lies 2.45 km from the site.

Recreation and sport
237 The nearest recreation and sports grounds can be found at Llantwit Major. A leisure centre, rugby club and bowls club are located within 1.5 km of the site.

Employment
238 The site is located within close proximity to Bro Tathan, formerly known as the St Athan Aerospace Business Park, at which there are a wide range of employment opportunities available.
Facilities

1. Boverton post office
2. Dewi Sant primary school
3. Llantwit Major leisure centre
4. Llantwit Major school
5. Ysgol Y Ddraig primary and nursery school
6. Llantwit Major rugby football club
7. Llantwit Major bowls club
8. Llantwit Major library
9. St Illtyd primary school
10. Fire station
11. Llantwit Major railway station
12. Cemetery
13. Our Lady & St. Illtyd church
14. Bethesda'r Fro church

North
Local facilities

KEY TO IMAGES
1  Town hall and public houses in Llantwit Major
2  Parade of local shops in Boverton
3  District shopping centre in Llantwit Major
4  Llantwit Major railway station
5  Public house in Boverton
Surrounding context – character

239 The villages within the Vale of Glamorgan have an intrinsic quality and character that gives them a recognisable identity: they have a distinctive ‘sense of place’. It is important to explore this character so that the proposals can respond to and integrate with their surrounding context. Three historic Vale of Glamorgan villages are described over the following pages before looking more generally at some of the elements which contribute to the quality and character of the area and generate this particular ‘sense of place’.

240 The first of these is the relationship between the village and the surrounding landscape; how it interacts or is influenced by its surroundings. Then the spatial arrangements within the villages are explained; for example, how spaces are created, where activities occur and how the landscape permeates into the villages. Finally, the buildings are reviewed, including a consideration of their scale, positioning and materiality.

241 The map opposite (Figure 13) shows the position of some of the area’s rural settlements which have been referred to as part of the character assessment.
Llanmaes is located around 0.5 km to the north of the site and lies beside Llanmaes Brook and a triangle of roads with the church at the southern apex. The historic core of the village is a narrow lane leading from the old village pump to the church. This curving lane, with a dog-leg around the church, is enclosed by walls and frontages, providing a varied sequence of views. The church and adjacent Llanmaes house form the architectural centrepiece of the village and their setting is enclosed by groups of cottages laid out informally to the north and north-west.

There is a close relationship between buildings and surrounding countryside with the northern part of the conservation area having a more spacious arrangement than the relatively dense older developments to the south. The open rural atmosphere of the southern part of the village is further enhanced by open fields which directly abut the west side of the road. The uniform layout, density and spacing of more modern dwellings contrast with the informal orientation, plot width and size of the historic village. Two storeys is the norm, the exception being Llanmaes House, a prestigious building overlooking the churchyard.

The most prevalent historic building material is local lias limestone. Many buildings, including Llanmaes House are rendered, some are colour washed. Welsh slate roofs are the norm.
KEY TO IMAGES
1 Single sided development facing the surrounding countryside on the edge of Llanmaes
2 Homes with wide frontages and areas of semi-private space set behind stone walls
3 Meandering roads creating limited forwards visibility for motorists
4 More modern homes located in the north in Llanmaes
5 A cottage positioned to terminate a view looking down the street
Historically, St. Hilary was loosely centred on St. Hilary's Church where The Manor House, The Rectory (now called The Grange) and a collection of cottages. A farm with associated farm buildings, and The Bush Inn, make up the other more substantial historic buildings in the village. St Hilary has been extended over time, mainly during the 1960s and 1970s, on the northern side of the village.

The village sits on an undulating slope which provides changes of level within the settlement, particularly to the west and south. This situation provides views to the south with occasional glimpses of the sea, and historic photographs confirm that most of the buildings in St. Hilary are deliberately located to take advantage of the southerly aspect and are located within relatively spacious gardens.

Of note is the convoluted street pattern with narrow, winding lanes surrounding the church with high banks on each side, tightly enclosing the road. There are two roughly circular routes, one of which surrounds the church although the western side is now a pathway through private land. Limestone walls, grass verges of varying widths, and many mature trees, all add to the rural qualities of the conservation area.

Around the village in general, the fields intermingle with the buildings so that in some places these fields form part of the ambiance of the settlement and are included within the conservation area boundary for that reason. Overall, farming land with open fields and low hedges, with further clumps of woodland, are typical of the surrounding landscape.

Most buildings are built using limestone with slate roofs although there are still a number of remaining examples of thatch in the area.

St Hilary

Figure 15 St Hilary figure ground plan
KEY TO IMAGES
1  A stone built thatched home facing on to a village green near St Hilary Church
2  A mixture of boundary treatments including hedgerows and stone walls meeting the edge of the carriageway
3  Variation in building orientations in relation to the carriageway
4  Image illustrating the close visual connection to the surrounding countryside
5  Narrow lanes with small grass verges and homes built right to the edge of the street
Llancarfan is a rural village enclosed by fields and woodland which is located in the valley of the Nant Llancarfan which flows in a north to south direction through the village. The settlement pattern is defined by its location in a narrow valley along the stream, allowing roads to enter from these directions where they are then focused on St. Cadoc’s Church and its churchyard. This is the village’s principal open space, with the medieval church acting as a key focal point for the village. Tree cover is a defining element of the village’s rural character.

Most of the surviving historic buildings are located close to this central core around the church. Otherwise, the remaining historic buildings are an assortment of mainly 19th century houses and cottages, principally built from stone, sometimes with brick dressings, or rendered and painted. Some of these, such as Chapel Cottage, are built end-on to the road, a typical Glamorgan arrangement. The highest concentration of historic buildings is to the south of the church. All of these buildings are very simply detailed, with little ornament apart from their windows, front doors and chimney stacks. Their general form is vernacular, with most of the buildings being two storeys high, rectangular in shape, with end gables either facing the street or at right angles to it. In the past many of the roofs would have been covered in thatch, although today slate predominates.
KEY TO IMAGES
1 Relationship between Llancafarn and its landscape setting
2 A mixture of building relationships with the road, some with gable ends, others directly fronting.
3 St Cadoc’s church dating from the 13th century
4 The Fox and Hound public house orientated at an irregular angle to the road
5 A home marking the intersection of two roads near St Cadoc’s church
6 More recent development within the village
Village/landscape relationship

Setting

The villages of the Vale of Glamorgan all have a direct relationship with the surrounding countryside; with the landscape permeating into their core. The settings of the villages vary. For example, Llancarfan nestles at the bottom of a small valley with wooded sides, whereas St Mary Church sits proudly on top of a hill. The factor that is common, however, is that the layout of each village is a direct response to the topography and location.

Boundaries

Generally, there is a clear distinction between the village edge and the surrounding countryside in the Vale of Glamorgan. There appear to be two village/countryside boundary relationships that are utilised to create this distinction: a road skirting the edge of the village with houses on one side and fields on the other; and, a rear garden wall/hedge/fence bounding directly onto open fields.

Approaches

The appearance of the village on approach is an important feature of the Vale of Glamorgan villages. A change in the treatment of the landscape occurs upon approach to a village: hedgerows become tidier, grass on the verges is cut short, drainage ditches are more ordered and stone walls start appearing. These countryside elements do not stop at the edge of the village, however, but continue into them.

Views

The surrounding countryside is always visible from the villages and, where there is an opportunity, houses are oriented to take advantage of views. In terms of views of the village from outside, it very much depends on the setting of the village. For example, St Mary Church, which sits on a hill, compared with Llancarfan, which lies in a valley bottom.

Spatial arrangement

Focal points

The villages are usually arranged around a single or series of focal points, which include churches, pubs, vor village greens. The focal points can be located close together but are often separated to give an attraction to the differing parts of the village. The majority of these focal points relate to activities that provide interest for the community and draw people together. The larger villages also have village halls, primary schools and playing facilities, for example a football pitch in Llanmaes, a tennis court in Llancarfan and a cricket pitch in Wick. Also, many villages contain farms within their core areas.

Organisation of streets and spaces

The dominant characteristic of the villages in the Vale of Glamorgan is their irregularity. Roads meander through the villages in an informal way, varying in width and edge treatment. The villages are rarely linear; they comprise a network of intertwined narrow winding lanes. Traffic is slowed naturally through the arrangement of the built form.

The road edge treatment is very natural or informal. Instead of kerbs, the road surface runs into grass verges or meets stone garden boundary walls or the gable of a house. Often drainage ditches or reens run along the side of the roads. A few of these are substantial streams, separating houses from the street. Where pavements have been introduced in areas of newer infill development, they appear out of character, even alien. Car parking on the roads is opportunistic, taking advantage of small spaces where the relationship of property boundary to road creates a slightly wider space.
Building/street relationship

249 The arrangement of buildings within the villages is informal and irregular. Sometimes buildings lie parallel to the road, singularly or in terraces, with a small stone walled front garden area providing a semi private buffer area. Often these terraces lie at a slightly different angle to the road, creating a variety of spaces. Buildings are frequently oriented with their gable to the road and this is accompanied by stone garden walls, which are often high, running directly from the gable enclosing private garden areas. There is no clear building line to the street; buildings, supplemented by stone garden walls, move in and out along the road, providing articulation and interest to the village scene.

Built form/Building widths/depths/plot relationships

250 The buildings in the villages tend to have wide frontages with short depth of plan. In the centre of the villages, density is increased through the terracing of buildings and the provision of smaller gardens. Garden size increases away from the core, with houses sitting within individual plots. Stone garden walls provide strong edges to these properties, however, strengthening the village rather than country atmosphere.

KEY TO IMAGES
1 Stone boundary walls marking boundaries with the carriageway in Penmark.
2 Varied building positions defining the route of the carriageway in Llantwit Major.
**Building character, materiality and detailing**

251 The buildings appear to nestle into the ground, protecting themselves from the elements, particularly the strong prevailing winds. They are generally two-storey, but with the head of the first-floor window meeting the eaves, the scale is reduced. The main exceptions to this are the churches, which provide a landmark feature for the village.

252 The buildings are vernacular with simple slate gabled roofs with stone or brick chimneys but little eaves interruption by bays or dormers. Wall materials tend to be a mixture of stone, painted stone and render and windows are rectangular with a vertical emphasis. Detailing is simple with buildings appearing functional. Overall, stone is the dominant building material utilised for both buildings and garden and boundary walling.

253 The built environment outside MoD St Athan is predominantly residential in character, domestic in scale and generally two storeys. Many of these residential areas were constructed as part of the early development of the military base, during the inter-war and post-war years. These homes are a mixture of semi-detached and terraced properties, and are similar in both style and construction materials to buildings on the military base of the same period. Generally, properties are constructed with brown brickwork, have pitched gable roofs and concrete roof tiles, both reflective of the fashion and construction techniques of the time. These properties are more formal in their spacing and layout arrangements, sometimes fronting onto and enclosing an area of green space to create a ‘focal green’.

**Key attributes of local character**

- **The village/landscape relationship**: The nature of the site means that the main boundaries of the development will be formed by roads, with development on one side only or by existing hedgerows. By locating the lower density residential development along these edges, the appearance will be of the landscape and village merging at the edges.

- **Spatial arrangement**: Focal points will be created for each site and these will either be centred on existing landscape features, around new open space and children’s play areas. Roads will meander through the sites, with the road width, that is the space between kerbs and front gardens, varying to provide irregularity and natural traffic calming. There will be a variety of road edge/property boundary treatments, to provide articulation, interest and informality. For example, grass verges, pavements, drainage swales, garden walls. Variation in the relationship of the houses to the road and in the building line will increase the irregular appearance and help create places of differing character.

- **Built form**: The housing should predominantly have wide frontages, where possible, with terracing or large buildings occurring at key focal points. The use of substantial garden walling will be important in reinforcing the street scene. The buildings will relate to the local vernacular in form and appearance.
KEY TO IMAGES
1 Wide streets with grassed verges in development constructed for service family accommodation
2 Homes constructed on Eagle Road to the south of the site
3 St Hilary
4 Painted stone walls fronting on to the carriageway
Key

- Site boundary
- Ffordd Bro Tathan
- Site access
- Potential for noise
- Trees and hedgerows (Category B)
- Trees and hedgerows (Category C)
- Trees and hedgerows (Category U)
- Root protection area
- Foul sewer (with 3 m easement)
- Overhead power line (33 kV with 15 m easement)
- Public right of way
- Conservation area
- Flood zone 3 (1 in 100 years)
- Flood zone 2 (1 in 1,000 years)
- Steeply sloping land
- Contours (0.5 m intervals)
- Watercourse
- Existing hedgerows
- Consented development site
- Ecologically constrained area unsuitable for development
- Railway line
- Archaeological constraint

Figure 17 Issues
Constraints

1. Trees and hedgerows on site of various preservation categories (B, C and U). Some of landscape and ecological interest.
2. Corridor along Boverton brook constrained by bat activity and as such will have to be kept dark. Dormouse habitats found on hedgerows on sites.
3. Hedgerows and trees of landscape and ecological interest.
4. Watercourses and areas prone to flooding (flood zone 3).
5. Ffordd Bro Tathan: Changes in levels, landscaping and attenuation features. Potential for traffic noise to impact upon residential amenity.
6. Immediately adjacent residential property and associated curtilage.
7. Utilities: Foul sewer, overhead power line and surface water sewer.
8. Listed building - Grade II: Bethesda’r Fro Chapel and associated forecourt and graveyards gates, gate piers and walls.

Opportunities

9. Create links to nearby bus stops, strengthening connections between the development and its surroundings as well as providing access to public transport routes.
10. Incorporate existing trees, hedgerows, ecologically rich areas and play spaces within a strong landscape framework to enhance biodiversity.
11. Provide a range of housing types, sizes and tenures to meet local needs and job opportunities to support the local economy.
12. Create community growing spaces and children’s play areas to enhance health & well-being and help deliver a sustainable new community with a strong identity.
13. Integrate sustainable drainage features as part of green spaces to enhance wildlife and biodiversity.
14. Create green corridors and wildlife habitat for bats and dormice along Boverton brook, connecting sites A and B.
15. Form connections to existing network of footpaths/cycleways as well as provide connections to neighbouring strategic development sites to contribute towards the creation of a sustainable new neighbourhood.
View looking west towards Froglands Farm
Local planning framework
The site is closely related to the suburban edges of Llantwit Major, Boverton and Eglwys-Brewis. The nearest local facilities to the site are primarily located to the west of the site in Boverton or further to the west in Llantwit Major. There are a range of local facilities located within 1 km of the site. Drawing xx on the following page summarises the range of different facilities available in the area surrounding the site.

**Retail**

Boverton is located within 1 km of the site and offers a range of services mainly within a small parade of retail premises including a post office, takeaway and hairdressers. A pub is also available in Boverton. A wider range of retail outlets are available in either Llantwit Major approximately 1.5 km to the west or St Athan, 2 km to the east.

**Health care**

Doctors and dental surgeries are available both within Llantwit Major and St Athan. The nearest hospital is the Princess of Wales hospital located in Bridgend.

**Education**

In respect of primary schools, the following are within close proximity of the site:
- Ysgol Y Ddraig Primary School lies 2.65km from Site A and 3.15km from Site B
- Ysgol Gymraeg Dewi Sant (Welsh Medium) lies 2.25km from Site A and 2.75km from Site B

In respect of secondary schools,
- Llantwit Major School lies 2.45km from Site A and 2.95km from Site B

**Recreation and sport**

The nearest recreation and sports grounds can be found at Llantwit Major. The Leisure Centre, Rugby Football Club and Bowls Club are located within 1.5 km of the site.

**Employment**

The site is located within close proximity to the St Athan Aerospace Business Park, at which there are a wide range of employment opportunities available.

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**Figure 18 Extract from LDP Proposals Map**
The planning framework

Local planning policy framework

301 The statutory development plan for the Vale of Glamorgan is the Local Development Plan (LDP) 2011-2026 (adopted 2017). This sets out the Vision and Objectives, Strategy, Strategic Policies, Development Management Policies and Policies for Managing Growth in the Vale over a 15 year period up to 2026. The adopted LDP Strategy for the Vale of Glamorgan is:

“To promote development opportunities in Barry and the South East Zone. The St. Athan area to be a key development opportunity and Cardiff Airport a focus for transport and employment investment. Other sustainable settlements to accommodate further housing and associated development”

302 Policy SP1 relates to the delivery of the LDP Strategy, which is to be achieved by: 1. providing a range and choice of housing to meet the needs of all sectors of the community; and 3. reinforcing the role of Barry, service centres settlements and primary settlements as providers of cultural, commercial and community services. Policy SP3 indicates that in respect of the residential requirement, land is made available in sustainable locations for the provision of 9,460 new residential units up to 2026. The application site is allocated by virtue of Policy MG2:

303 The site comprises the entire strategic housing allocation MG2(6), plus two small areas of land, north and east of Old Froglands and land the eastern parcel of land lying between Ffordd Bro Tathan and Egwlys Brewis Road, north of the former Carpenters Arms pub.

304 Policy MD2 relates to the design of new development and highlights that:

“In order to create high quality, healthy, sustainable and locally distinct places development proposals should:

1. Be of a high standard of design that positively contributes to the context and character of the surrounding natural and built environment and protects existing features of townscape or landscape interest;
2. Respond appropriately to the local context and character of neighbouring buildings and uses in terms of use, type, form, scale, mix, and density;
3. Where appropriate, provide new or enhanced areas of public realm particularly in key locations such as town centres, major routes and junctions;
4. Promote the creation of healthy and active environments and reduce the opportunity for crime and anti-social behaviour. In the case of retail centres, developments should provide active street frontages to create attractive and safe urban environments;
5. Provide a safe and accessible environment for all users, giving priority to pedestrians, cyclists and public transport users;
6. Have no unacceptable impact on highway safety nor cause or exacerbate existing traffic congestion to an unacceptable degree;
7. Where appropriate, conserve and enhance the quality of, and access to, existing open spaces and community facilities;
8. Safeguard existing public and residential amenity, particularly with regard to privacy, overlooking, security, noise and disturbance;
9. Provide public open space, private amenity space and car parking in accordance with the council's standards;
10. Incorporate sensitive landscaping, including the retention and enhancement where appropriate of existing landscape features and biodiversity interests;
11. Provide adequate facilities and space for the collection, composting and recycling of waste materials and explore opportunities to incorporate re-used or recyclable materials or products into new buildings or structures; and
12. Mitigate the causes of climate change by minimising carbon and other greenhouse gas emissions associated with their design, construction, use and eventual demolition, and include features that provide effective adaptation

305 Policy MD3 relates to the provision for open space and states: “Where there is an identified need for public open space, new residential development with a net gain of 5 or more dwellings will be required to provide public open space in accordance with the following standards:

1. Outdoor sports provision 1.6 hectares per 1,000 population
2. Children’s equipped play space 0.25 hectares per 1,000 population
3. Informal play space 0.55 hectares per 1,000 population.

306 In order to create sustainable places areas of open space will usually be required to be provided on-site as part of new development proposals. Where it is not practical or desirable to make provision on-site, appropriate off-site provision or financial contributions for improvements to existing facilities will be required in lieu of on-site public open space”

307 Policy MD9 relates to the promotion of biodiversity and emphasises that new development proposals will be required to conserve and where appropriate enhance biodiversity interests unless it can demonstrate that: 1. The need for development clearly outweighs the biodiversity value of the site; 2. The impacts of development can be satisfactorily mitigated and acceptably managed through appropriate future management regimes.

308 Policy ED7 emphasises that development proposals will be required to demonstrate they will not result in unacceptable impact on people, residential amenity, property and / or the natural environment. In respect of flood risk, new developments will be expected to avoid unnecessary flood risk and meet the requirements of TAN 15.
The following supplementary planning guidance is relevant to this project:

- Residential and householder development (2018)
- Parking standards (2019)
- Affordable housing SPG
- Biodiversity and development (2018)
- Trees, woodlands, hedgerows and development (2018)

Planning Policy Wales

Planning Policy Wales (PPW)\(^1\) Edition 10 sets out the land use planning policies of the Welsh Government. The primary objective of the latest version of PPW is to ensure that the planning system contributes to the delivery of sustainable development and improves the social, economic, environmental and cultural wellbeing of Wales, as required by the Planning (Wales) Act 2015, the Well-being of Future Generations (Wales) Act 2015 and other key legislation.

The Well-being of Future Generations (Wales) Act 2015 seeks to improve the social, economic, environmental and cultural well-being of Wales. It contains seven well-being goals which certain public bodies (including local authorities) must seek to achieve in order to improve well-being both now and in the future. Paragraph 2.12 relates to the interaction between the Well-being and Future Generations (Wales) Act 2015 and PPW, it states:

"The planning system is a very important policy, decision making and delivery mechanism. It should seek to maximise delivery of outcomes against all aspects of well-being/sustainable development, thus seeking to maximise contributions towards all of the goals of the Well-being of Future Generations Act. This can be achieved by adopting a placemaking approach”.

A more detailed summary of the relevant planning policy framework – both national and local – is to be found in the submitted Planning Statement.

\(^1\) Planning Policy Wales (Edition 10), Welsh Government, December 2018
Looking south west across the site
4
Design proposals
**Concept option 1**
The development parcels are organised on the centre of the site, allowing existing greenery to be retained and enhanced along Boverton Brook. This green corridor will have multiple benefits for wildlife, recreation and will incorporate drainage features. The strategic play space location benefits from good levels of natural surveillance from surrounding development.

**Concept option 2**
Option 2 retains a similar arrangement of development to option 1 but repositions the main children’s play space to the south of the site. This play space will be integrated as part of the green corridor along Boverton Brook combining wildlife habitats, and recreation opportunities with drainage features. Development has also been moved away from the eastern edge of the site, which is may be prone to flooding.
Design strategy

401 The overarching strategy guiding development of the master plan has been to achieve a positive relationship with the site’s landscape setting as well as neighbouring development sites. A strategic green link following the course of Boverton Brook has been allowed for to knit the application site together with the MG2(7) allocation, to the west (See Figure 21 below). This will allow for the creation of three distinct but interrelated communities, connected by high quality bus, car and cycle links along Ffordd Bro Tathan and a green corridor following the course of Boverton Brook, which will provide opportunities for wildlife as well as contributing towards the health and well-being of residents. Development will be orientated to front on to existing landscape assets and Ffordd Tathan, to create a positive relationship with the site’s context. Another key element of the design strategy is the integration of a comprehensive sustainable drainage system so that surface water is stored and conveyed across the site using open attenuation basins, swales and rain gardens, which will also provide benefits for wildlife and recreation. This strategy has been used to inform the development of high-level concept options for the site (opposite).
Figure 22 Development framework

Key
- Site boundary
- Secondary access route
- Primary access route
- Adjoining future development site
- Trees and hedgerows
- Amenity green space
- Urban block
- Attenuation basin (indicative)
- Key pedestrian route
- Green corridor
- Existing bus stop

Figure 07 Historical ordnance survey
Development framework

402 The development framework shown opposite (Figure 22) develops the broad principles for design established as part of the strategic framework and the approach taken to structuring development shown in concept option 2. It begins to show how development blocks and access routes may be structured to take into account the site’s constraints and opportunities.

Amount of development

403 The development framework provides 2.495 ha of land for housing development, equivalent to around 100 new homes at a density of 40 dwellings per hectare, a proportion of which will be affordable as advised by the local planning authority. The mix of dwelling types will be provided to respond to policy requirements, market demands and local need.

404 1.63 hectares of the site is set aside as open space to include areas for wildlife and informal recreation. Some of these areas will also benefit the site by being used to attenuate surface water during periods of high rain fall. Children’s play space will be provided across the site to include a local equipped area for play (LEAP) and a series of local areas for play (LAPs) as per guidance provided by the Fields in Trust\(^1\) and the Vale of Glamorgan’s Planning Obligations SPG\(^2\). A summarised quantum of development is provided below.

<table>
<thead>
<tr>
<th>Land use</th>
<th>Area</th>
<th>Size (ha)</th>
<th>Quantum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Housing</td>
<td>40 dwellings per hectare (average)</td>
<td>2.49 ha</td>
<td>100 homes</td>
</tr>
<tr>
<td>Recreation</td>
<td>Open space</td>
<td>1.63 ha</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Children’s equipped play facilities</td>
<td>&gt;0.0580 ha</td>
<td>To include 1 LEAP and LAPs as per Fields in Trust guidance.</td>
</tr>
<tr>
<td></td>
<td>Other children’s play space</td>
<td>&gt;0.1276 ha</td>
<td></td>
</tr>
</tbody>
</table>

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1. Guidance for Outdoor Sport and Play, Beyond the six acre standard, Wales, Fields in Trust, 2017
2. Planning obligations Supplementary Planning Guidance, Vale of Glamorgan July 2018
Figure 23 Framework master plan

North
The framework masterplan

405 Based on the development framework, an indicative master plan has been developed (see Figure 23). This master plan illustrates in greater detail how development on the site may be structured, establishing the broad location for key spaces, building frontages and access. The design of this master plan has been guided by a set of design principles.

Design principles

406 The following key principles have acted as a guide for the design and layout of the site:

- To create a sustainable community focused on health and well-being for future generations and resilience to a changing climate.
- To reflect the historical character of the local built form and layout, specifically the relationship between village and surrounding countryside;
- To maintain and increase access to an important green and blue corridor following the course of Boverton Brook which connects the application site with adjoining sites as part of a strategic green infrastructure network.
- To promote high-quality development with a clear identity, activity and a strong sense of place;
- To orientate building frontages to create a well observed and active public realm;
- To provide a range of tenures to attract a mixed and balanced residential community;
- To create a hierarchy of streets appropriate to their function, balanced between the needs of pedestrians, cyclist and vehicles; and
- To create a strong locally distinctive sense of place that is safe, inclusive and accessible to all.
Urban form

407 The urban form will respond to the topography and physical context of the site with a relatively regular disposition of development, following the contours of the land where possible. The network of streets and spaces will be designed to provide a clear distinction between public and private areas using a series of perimeter blocks. The masterplan’s distinctive ‘sense of place’ will be reinforced by its response to natural site features and the integration of a comprehensive sustainable drainage system.

Building orientation and frontages

408 The proposed masterplan aims to create streets and open spaces that are well overlooked and feel safe by encouraging active frontages. It illustrates that all streets and open spaces will be fronted by development. It also shows how houses front onto significant landscape features such as hedgerows and trees, which will create an attractive aspect for these properties. For example, development of the site should make sure that houses face outwards towards areas of open space, footpath links and Ffordd Bro Tathan to provide a positive relationship with the site’s context. In the case of blocks fronting on to Ffordd Bro Tathan, vehicular access will need to be provided from the rear via parking courts.

409 Within the development, houses should front on to streets and public spaces helping to increase natural surveillance, aid crime prevention and create a ‘sense of place’. Continuous building frontages will enclose key spaces, junctions and at the main site access. Front boundary walls should not act as a barrier to the surveillance of the street. The use of set-backs will allow front gardens and semi-private spaces, enclosed by walls, to be introduced.

410 The orientation of buildings has also been considered so that they can provide screening to private gardens from potential noise wherever possible from adjacent roads.

Building scale and massing

411 Development proposed on the site will comprise a mixture of two-, three-, and four-bedroom, detached, semi-detached, terraced houses, with the potential for a small number of low-rise flats. Building heights are generally proposed to be two storeys, in keeping with those in the surrounding area. However, there may be a limited number of opportunities for buildings in less sensitive areas of the site to be higher to punctuate key frontages.

Relationship to topography

412 The site’s topography has been an important factor informing the development of proposals for the site. Where possible, the scheme will:

- follow the contours of the site to minimise the need for cut and fill;
- provide level ground at the front and rear of properties, to maximise their amenity value for residents; and
- work with the land to avoid large retaining structures.

Architectural appearance

413 The masterplan is not intended to prescribe a particular architectural style. However, the aim is to ensure that new development sensitively integrates with the natural setting of the masterplan area, and respects local styles identified in the character appraisal. These traditional references will be interpreted in a contemporary way, rather than as a pastiche of historical styles to ensure they are appropriate to the twenty-first century and complement, rather than detract from, the qualities of the area. The form of buildings will benefit from an attention to detail in their use of materials and the design of window and door openings, boundary treatments and roof forms.
Ecology

414 As per guidance included in the Vale of Glamorgan Biodiversity and Development SPG¹ the site design has focused on the retention of important habitats wherever possible (i.e. retention of hedgerows for dormice/bats and green/blue corridors associated with Llanmaes and Boverton Brook) and the inclusion of suitable buffers as appropriate. These include a 30 metre buffer to existing badger setts and 3m buffers to retained hedgerows. Additional mitigation will include the provision of a sensitive lighting strategy to limit light spill within the green/blue corridors to allow continued use as wildlife corridor.

Green infrastructure

415 The site design aims to integrate green infrastructure assets as a network of multi-functional green spaces that will deliver a wide range of environmental and quality of life benefits for residents. Subject to their condition and amenity value, existing trees and vegetation will be retained wherever possible and incorporated as a feature in public open spaces and to allow landscape to penetrate into and through the development. The master plan is designed to allow houses to front on to, and enclose, existing trees and hedgerows.

416 Sustainable drainage systems (SuDS) form an integral element of the green infrastructure strategy and are integrated as part of the site layout. A series of attenuation basins, permeable paving and swales are proposed, which will help attenuate, filter and slow down the discharge of surface water before discharging to Boverton Brook. This will not only minimise the risk of localised flooding on site, but will also moderate discharge into sewers and local watercourses that could otherwise contribute towards down-stream flooding and pollution. Further information on the drainage strategy can be found in the accompanying drainage strategy (WYG, 2019).

¹ Biodiversity and development SPG, Vale of Glamorgan, 2018
Recreational open space
417 The design actively seeks to ensure that future residents will be in close proximity to public open space. Furthermore, these open spaces are intended to serve multiple functions in terms of the amenity they bring to local residents, the benefits for wildlife and also their role in managing surface water as components of a SuDS network. The development will comply with Vale of Glamorgan LDP policy MD3 and the benchmark standards advocated by Fields in Trust, namely, to provide 0.25 hectare of children’s equipped play space and 0.55 hectare of informal play space per 1,000 resident population. The children’s play areas will be accommodated as local areas for play (LAPs) and a local equipped area for play (LEAPs). It is assumed that sports pitch provision would be made off-site via a financial contribution. Policy MD3 of the Vale of Glamorgan LDP states that

Landscape design objectives
418 The primary landscape design objective is to provide an appropriate setting for the proposed development. Secondary design objectives include assisting in achieving sustainability objectives, for example, increasing biodiversity and creating ecological connectivity. Sustainable drainage in the form of swales, rain gardens and detention basins are also a key component of the proposed development which is integral to the landscape proposals.

419 Existing hedgerows and linear tree groups will be largely retained within the development and would be supplemented by additional planting to improve habitat connectivity. Retained areas of green space are mainly focused the river corridor following Boverton Brook where ecological value is the highest. A management strategy would consider the maintenance and management of the retained vegetation, SuDS and proposed planting to maximise amenity and biodiversity value.
Movement and access

420 The starting point for the movement framework has been to provide a primary means of circulation that works with the topography of the site and minimises impacts on the site’s ecological features. The movement strategy considers all modes of transport but, in particular walking, cycling and public transport so that car travel is minimised for short trips.

421 It is proposed that the site has one point of access for vehicular traffic from Ffordd Bro Tathan. This point of access has been designed and received planning permission as part of plans for Ffordd Bro Tathan. This main access will provide access to a series of secondary streets, lanes, parking courts and private drives to serve all homes. The development will seek to employ horizontal measures of traffic calming using deflection or textural change of surface. These elements will be incorporated into the detailed design. The principal way of controlling speed, however, will be via the design of the built form.

Hierarchy of streets

422 The design of the highways aims to create a safe pattern of movement designed to the principles of the Manual for Streets (DCLG, 2007). The following hierarchy of streets proposes four main street types to serve the development. Indicative street sections are shown in Figures 25 to 29. Figure 24 indicates the location of these street types throughout the development site showing the primary access, secondary access, lanes and private drives.

423 The primary access street would be the main road for distribution of traffic into the site and will provide access to streets lower down the hierarchy. The primary access road would typically consist of a 5.5 m wide carriageway with 2.0 m wide footways to either side. Street trees would be used to help create a greater sense of enclosure and lessen the visual impact of the highway. The primary access road would have a design speed of 20mph (Figure 25).

424 The Secondary street would typically consist of a shared surface carriageway with informal footways and tree planting integrated as part of a high quality public realm. The design speed for local streets would be around 10-15 mph. The design of these streets would incorporate opportunities for swales and landscape planting to provide attractive public spaces that carefully balance the needs of motorists, pedestrians and cyclists. Semi-private space would be provided between the fronts of houses and the public footway to allow off-street parking and landscaping to front on to the street. (Figure 28).
425 **Lanes** would prioritise the needs of pedestrians and cyclists through providing a narrower corridor with less distinction between the carriageway and pedestrian areas to provide a low-speed access route. The streets would include areas of on-street parking, street furniture and planting to provide informal traffic calming with design speeds of 5 to 10 mph. Shared surfaces would be designed with a single material covering both the footway and carriageway. The entrance to these areas will be marked by transition strips in a different colour and texture in order to signal the change in status (**Figure 26**).

426 **Private drives** will serve limited numbers of dwellings and will consist of 4 m road widths and very low vehicle speeds: see Figure 24. The private drives within the development will generally allow houses to face on to existing ecological features (**Figures 27 and 29**).

**Pedestrian and cycle routes**

427 A network of attractive and direct pedestrian routes will be provided between the site and the surrounding area and also within the site to promote a walkable and healthy community. Streets will be designed to safely accommodate cyclists and will connect with with designated cycle routes on Ffordd Bro Tathan.

**Car parking**

428 Car parking provision will be made in accordance with the Vale of Glamorgan’s adopted ‘Parking Standards’ SPG (2015) and will generally be made in-plot, to the sides of homes where possible, with some properties benefiting from a private garage. For blocks on the northern edge of the site where frontage access for vehicles will not be possible, parking will be provided to the rear within parking courts. Parking will be designed to be sensitively integrated within streets and parking courts using landscape planting which will also help to calm traffic and provide a pedestrian friendly environment. Additional allowance will be made for visitor parking on-street in well observed publicly accessible locations.
Community safety

429 The master plan for the site has been carefully designed to deter criminal activity and anti-social behaviour by minimising opportunities to commit crime or to impact negatively on the quality of life of those using the development. The following principles from TAN 12: Design have been adopted:

- the creation of a high-quality public realm;
- the provision of routes that are fit for purpose and provide opportunities for safe physical activity and recreation that meet the needs of all members of society; and
- the promotion of a sense of ownership and responsibility throughout the development.

Inclusive design

430 TAN 12: Design sets out the matters that need to be considered in relation to inclusive design. It states that: “In every area of development earlier and greater attention should be given to the needs of all sectors of society, including older people, children and disabled people. This principle applies to the design of the public realm, to public transport infrastructure and to the location, design and layout of public leisure facilities as well as the design of individual buildings.” Design features should be included in the detailed design stage to ensure that the development delivers a truly inclusive community:

- Streets will be designed to encourage low vehicle speeds and priority will be provided for pedestrians commonly using kerbs and tactile surfaces to provide information for blind and partially sighted people.
- In order to help facilitate level and safe access to homes and community facilities, roads and footways seek to follow the contours of the land and avoid steep gradients.
Figure 25 Long section showing relationship of development with Ffordd Bro Tathan, adjacent block with courtyard parking and a primary street.

Figure 26 Illustrative section through shared surface lane with on street parking.
Figure 27 Illustrative section through a private drive, public open space containing equipped play space and Boverton Brook.
Figure 28  Illustrative section a secondary street with swale.

Figure 29  Illustrative section through private drive with houses fronting onto public open space
Environmental sustainability

431 The environmental sustainability of design proposals for the site is considered at a number of different scales. At a strategic level, the site is near public transport with bus stops accessible to the north of the site on Ffordd Bro Tathan and to the south on Egylws Brewis Road. Footpaths and cycle routes have also been considered allowing connections through the site to link with existing settlements and nearby proposed development sites.

432 The design of the layout has also allowed important landscape features, such as retained trees and hedgerows, to be included as part of the scheme. New native planting will also contribute to the site’s biodiversity. Open spaces could be used as dedicated allotment spaces or community orchards, both contributing to healthy lifestyles and aiding the creation of valuable habitats.

433 The need to reduce resource use at the building level would be facilitated using highly-insulated, weathertight construction techniques using locally-sourced and/or recycled materials wherever possible. The contribution of passive design to reducing energy demand would be balanced with the need to create a traditional village form that works with the contours of the land.

Placemaking

434 Planning Policy Wales: Edition 10 (PPW10), makes the concept of “place making” a key priority, which should applied to all development proposals. It defines place making as:

“a holistic approach to the planning and design of development and spaces, focused on positive outcomes. It draws upon an area’s potential to create high quality development and public spaces that promote people’s prosperity, health, happiness, and well being in the widest sense. Placemaking considers the context, function and relationships between a development site and its wider surroundings….Placemaking adds social, economic, environmental and cultural value to development proposals resulting in benefits which go beyond a physical development boundary and embed wider resilience into planning decisions”.

435 The Welsh Government believes that everyone engaged with or operating within the planning system in Wales must embrace the concept of place making in both plan preparation and development management decisions, in order to achieve the creation of “sustainable places”.

There is strong evidence to show that the places where people live have a significant impact on their mental and physical health. Plans for the site as a sustainable and healthy new community have been developed in a way that builds upon this, by promoting physical activity, maintaining the site’s attractive views and landscape setting, and enabling recreation which fosters well-being and strong communities. The design of the site seeks to provide opportunities to integrate physical activity into the daily routines of those that will live there. This will include embedding active travel within everyday life through the provision of inclusive walking and cycling routes which connect to surrounding settlements, recreation and wildlife areas.

Another important aspect of health and well-being for the new community will be the integration of children’s play spaces. The benefits of outdoor play to children’s health, well-being and emotional and social development are well established. Through the integration of welcoming, stimulating and enjoyable places for play, it will improve levels of physical activity and help tackle child obesity, support families and build more cohesive communities. Other outdoor activities will include the provision of spaces which enable access to healthy food. In particular, the provision of community spaces and the integration of edible environments in public spaces, are opportunities which should engage the community, encourage people to be active outdoors, and directly provide fresh and sustainable food.

Social connections are vital for health and wellbeing. Loneliness increases the likelihood of death by 26% and people with strong relationships are 50% more likely to survive life-threatening illness. Creating strong communities, by promoting cohesion and inclusion, helps people form these highly beneficial relationships. Healthy placemaking can create opportunities for people of all ages and abilities to come together, be active and enjoy leisure time collectively. The design of the site considers this through the provision of community orchards and opportunities to grow food as well as through the creation of active pedestrian friendly streets and spaces which encourage social interaction.

Finally, proposals for redevelopment of the site will recognise that a large proportion of our time is spent indoors. Accordingly, the buildings we occupy and what takes place in them have a big effect on our health. In homes, sufficient space, daylight levels, ventilation, outlook and privacy are essential for good health. The design and layout of new homes will pay close attention to making sure a healthy internal environment that compliments the high-quality surrounding environment. This will help put in place all the necessary building blocks to act as the foundation for a healthy and sustainable new community.
Summary

501 The proposals described in this report demonstrate a thorough understanding of the site and the surrounding context. The detailed analysis of the site’s context, and its key opportunities and constraints have allowed the master plan and supporting set of design principles to set a clear vision for the development of this important strategic site.

502 The vision is to create a well-designed, sustainable residential development, which complements the unique rural character of the Vale of Glamorgan settlements, especially the relationship between town/village and the surrounding landscape. The quality of the immediate landscape, combined with the arrangement of buildings and public spaces will create a distinctive development. A variety of open space provision within the site will provide an important recreational and amenity resource and help to create a ‘Vale’ village character. Through bringing together these important threads it will deliver an attractive new neighbourhood with a real ‘sense of place’ that enhances the lives of the people that will live there as well as surrounding communities.