



Hywel Dda Urgent & Planned Care Hospital

Summary Technical Appraisal Report

Spring Gardens, Whitland

(Formerly known as Site 12)

BDP. **WSP** **mace** **gleeds**[®]



GIG
CYMRU
NHS
WALES

Bwrdd Iechyd Prifysgol
Hywel Dda
University Health Board

Contents

Executive Summary	4
1.0 Introduction	5
2.0 Drainage	8
3.0 Ground Conditions	9
4.0 Utilities	10
5.0 Local Transport Infrastructure	11
6.0 Flood Risk	12
7.0 Ecology	13
8.0 Environmental Appraisal	14
9.0 Design	15
10.0 BREEAM	16
11.0 Town Planning and Acquisition	17
12.0 Travel Time Analysis	18

Appendix A: Utilities Constraints Plan

Appendix B: Proposed Highways Infrastructure

Appendix C: Agricultural Classification Map

Appendix D: Environmental Constraints Plan

Rev	Description	Date	Check
A	Technical appraisal workshop	23.06.22	ND
B	Public consultation exercise	22.12.22	ND

Summary Table of Scoring Criteria

This summary report is based on information contained in a more detailed technical appraisal document. The structure of this report is based on the format of the technical appraisal work undertaken by the consultant team on behalf of Hywel Dda University Health Board. The table below shows how the section of this report are relevant to the key scoring criteria identified through the previous public consultation exercise

Section No.	Description	<i>Criteria which is informed by this information for scoring</i>	<i>Criteria Description</i>
1.0	Introduction	<i>All</i>	
2.0	Drainage	<i>Criteria 1</i>	<i>Site conditions</i>
3.0	Ground Conditions	<i>Criteria 1</i>	<i>Site conditions</i>
4.0	Utilities	<i>Criteria 1 & 2</i>	<i>Site conditions/Site Infrastructure</i>
5.0	Local Transport Infrastructure	<i>Criteria 2</i>	<i>Site Infrastructure</i>
6.0	Flood Risk	<i>Criteria 3</i>	<i>Environment & Ecology</i>
7.0	Ecology	<i>Criteria 3</i>	<i>Environment & Ecology</i>
8.0	Environmental Appraisal	<i>Criteria 3</i>	<i>Environment & Ecology</i>
9.0	Design	<i>Criteria 4</i>	<i>Design</i>
10.0	BREEAM	<i>Criteria 5</i>	<i>Sustainability</i>
11.0	Town Planning and Acquisition	<i>Criteria 6</i>	<i>Planning & Acquisition</i>
12.0	Travel Time Analysis	<i>Criteria 7</i>	<i>Transport (Travel Time Analysis)</i>

Executive Summary

The Spring Gardens site lies a short distance north east of the centre of Whitland. The A40 forms the boundary to the North. Whitland railway station is located approx. 750m to the south west. To the south there are residential properties between the site and Spring Gardens.

The site is within reasonable walking distance from Whitland town centre and the railway station. There is a comprehensive existing road infrastructure providing access to the site, providing both primary and secondary resilient access routes. Some upgrade works will be required to address increased use, however, this is not considered as unusual for major hospital developments.

The site is considered greenfield with its predominant current use being agricultural with associated buildings. This site is in multiple private ownership and all owners nominated their land in the public engagement period May – June 2021.

The site slopes from west to east with a difference of approximately 22m between the high and low points.

A review of historical information and a desktop based study has indicated that no significant sources of contamination are expected.

Similarly no significant ground condition constraints have been identified.

An environmental appraisal was undertaken to determine the likelihood of significant environmental effects. Potential environmental effects cannot be ruled out at this stage, and therefore, a statutory Environmental Impact Assessment is likely to be required to support a planning application.

The site does not lie within a Special Area of Conservation, or have any discharge into a watercourse within the catchment of a riverine SAC, and as such is not subject to any additional requirements or constraints around prevention of phosphate pollution associated with new developments.

Most services utilities are available local to the site. Water supplies and drainage connections are likely to require significant upgrade although the extent of this can only be established as more detailed design work is completed. Electrical supplies will need to be drawn from a sub-station approx. 1.1km away from the site along with upgrades within the sub-station itself.

There is limited space on site for renewables such as PVs. However, there is the possibility of locating a solar farm or wind turbines in the surrounding area with a dedicated feeder to the site.

1.0 Introduction

A shortlist of potential viable sites for the provision of a new Urgent and Planned Care Hospital has been determined. The shortlist sites are indicated on the map below and are identified as:

- Spring Gardens, Whitland (Site 12)
- Tenby Road, St Clears (Site 17)
- Ty Newydd, Whitland (Site C)

This report provides summary information on the potential development of the Spring Gardens site in Whitland (Site 12) for the proposed new Urgent and Planned Care Hospital. It covers information obtained by the technical advisory team engaged by Hywel Dda University Health Board to support with the development planning for the new hospital. Separate reports will cover the other two sites.

Key items covered in this report include:

- Site location
- Drainage
- Flood Risk
- Transport
- Utilities - power, water, gas, telecoms
- Ecology
- Environmental Appraisal
- Ground Conditions
- Town Planning & Land Acquisition
- BREEAM
- Design

The content of this report summarises the large extent of information available to the project team about potential sites.

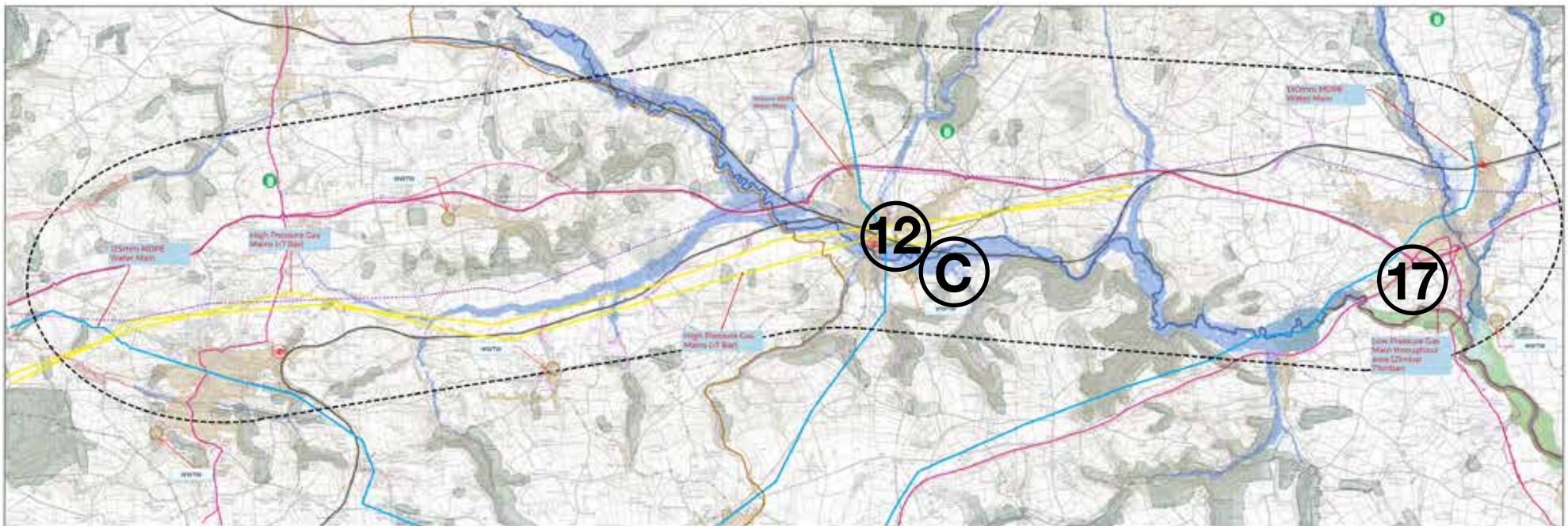


Fig. 1.1 - Overview map of the selected development zone identifying the shortlisted sites

1.0 Introduction



Fig. 1.2 - Aerial location plan showing the location of site 12 (in red) in relation to Whitland town centre and the A40

1.0 Introduction

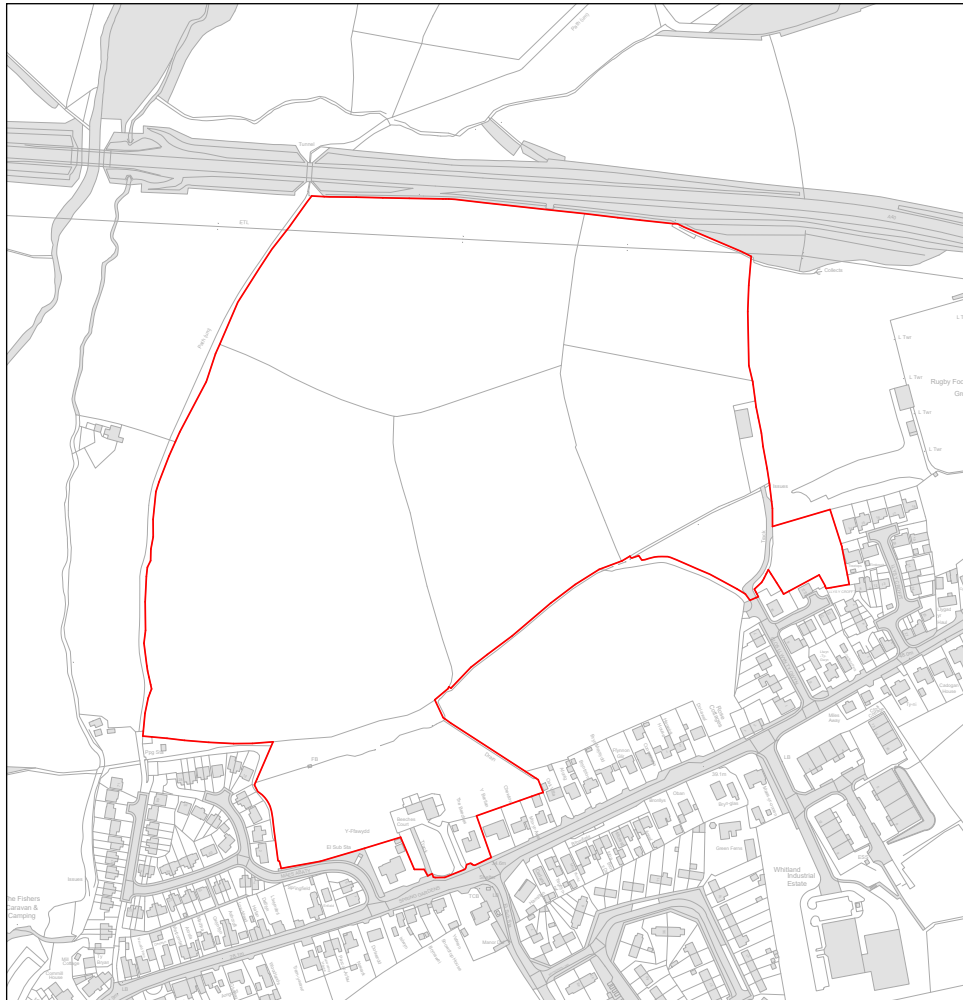


Fig. 1.3 - Ordnance survey plan showing the site boundary in red

1.1 Site Location

The site is located directly to the north-east of central Whitland and has a British National Grid Reference of 220650, 217000. The site location is illustrated in figure 1.2.

The A40 forms the northern boundary of the site; the southern boundary of the site is formed of Spring Gardens, with residential developments also located at the south-west and south-east of the site. Situated adjacent to the south-western corner of the site is the Maes Abaty Foul Pumping Station; the Whitland Rugby Club pitch lies to the east of the site.

The Afon Marlais passes approximately 150-300m to the east of the site. Also, a mill leat off the Gronw lies approximately 40-150m to the east of the site.

1.2 Site Description

The site is considered to be greenfield, is approximately 19.0 ha in size and has historically been used for agricultural purposes, with The Beeches residential property located towards the south of the site, off Spring Gardens. The site slopes from east to west with a high point of approximately 46m above datum and a low point of 24m. The site is located approximately 750m to the north-east of Whitland Station.

The site is located in Development Advice Map Zone A, which is considered to be at little or no risk of fluvial or coastal/tidal flooding.

There are no Listed Buildings in the nearby vicinity of the site.

The site is not located in any statutory designated sites (Ramsar, Sites of Special Scientific Interest (SSSI), Special Areas of Conservation (SAC), Special Protection Areas (SAC)).

A number of residential properties are located immediately to the south of the site boundary on Spring Gardens, Maes Abaty and Clos Llwyn Ty Gwyn.

2.0 Drainage



Fig. 2.1 - Existing sewerage infrastructure

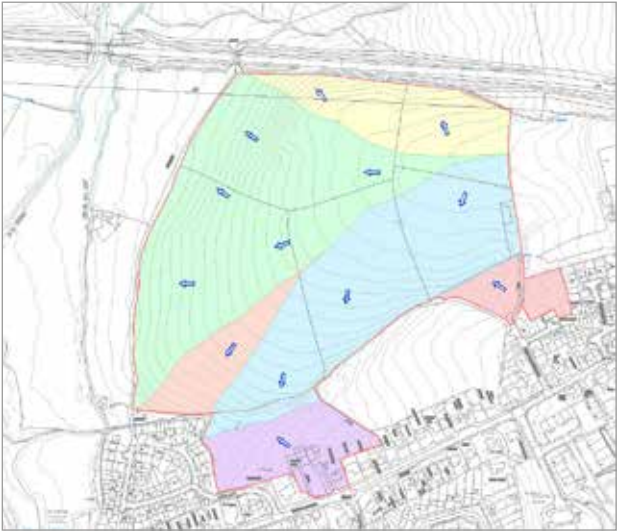


Fig. 2.2 - Existing surface water catchment

2.1 Existing Drainage

The site lies adjacent to the catchment of the Whitland Wastewater Treatment Works.

Adjacent to the site a number of foul pumping stations (FPS) have been identified. The first of these serves the Maes Abaty residential development to the south-west of the site, and discharges via a 100mm rising main into the combined sewer in Spring Gardens. The second of these serves a residential development off Clos Llwyn Ty Gwyn to the south-east of the site, and discharges via a 100mm rising main into foul sewers within Clos Llwyn Ty Gwyn.

A surface water sewer is also present serving Clos Llwyn Ty Gwyn residential development. This routes though the site along the southern boundary before discharging into the minor watercourse located near the south of the site.

2.2 Surface Water Drainage

The aim of the surface water drainage strategy is to mimic the natural catchment processes as closely as possible and adopt the principles of Sustainable surface water management.

Surface water will either be discharged into the ground via infiltration or into the adjacent watercourses via a controlled discharge. Storage provision would be provided within the site for all storm events up to and including the 100-year return period plus climate change. Infiltration is the preferred method of disposal but if this is not feasible due to local ground conditions then runoff would be discharged at an agreed rate, which would be no greater than existing, into the existing land drainage features.

2.3 Water Quality / Phosphates

The site does not lie within a Special Area of Conservation, or have any discharge into a watercourse within the catchment of a riverine SAC, and as such is not subject to any additional requirements or constraints around prevention of phosphate pollution associated with new developments.

3.0 Ground Conditions

The site is in an area of moderate to low environmental sensitivity.

The site is reported to be underlain by bedrock deposits of the Arenig Tetragraptus Beds (Mudstone) which are classified as a Secondary B Aquifer.

Groundwater vulnerability across the site is reported to be high, associated with a well-connected fracture flow network within the underlying bedrock, and local small-scale domestic abstraction has been noted to have historically occurred within the area.

Minor unnamed surface water features cross the northern boundary and southern area of the site. Both features flow from east to west and feed into Mill Race which is located 50m to the east of the site and which is a tributary of the Afon Gronw, which is located 150m to the east of the site. A number of other minor stream/tributaries, ponds and a spring are also present within 500m of the site.

The online Flood Risk Development Advice Map provided by NRW indicates that the site is located within Zone A, which is classified as “at little or no risk of fluvial or coastal/tidal flooding.”

The online Flood Risk Assessment Wales Map provided by NRW indicates that the majority of the site is not at risk of flooding from surface water and small watercourses. However, localised areas around the immediate vicinity of the surface water features that are located adjacent to the northern site boundary and which cross the southern area of the site are within Flood Zones 2 and 3 (for surface water and small watercourses). This is defined as Areas with 0.1% to 1% (1 in 1000 to 1 in 100) chance of flooding in a given year (Zone 2) and with a 1% (1 in 100) chance or greater of happening in any given year (Zone 3).

The majority of the site is located within areas where between 3% and 5% of the properties would be estimated to exceed the Radon Action Level. As such, basic radon protection measures would likely be required within future structures.

No significant ground condition constraints have been identified at the site in relation to future structures and infrastructure. However, the site slopes downwards from the north-west to the south-east and earthworks may be required to provide an appropriate development platform.

It is considered that the majority of the site is unlikely to be impacted by contamination. However, the potential exists for current and historical land use activities to have led to localised contamination at the site. The most noticeable sources of potential contamination comprise the presence of a former brick yard that was historically located in the south-eastern area of the site.

Within the context of the proposed development of the site as a health care facility/hospital the undertaking of a preliminary land quality assessment has indicated that the risks presented to potential receptors (health of future site users, controlled waters and infrastructure) from localised potential sources of contamination are considered to be typically low.

4.0 Utilities

4.1 Existing utilities infrastructure

Power

There is an existing 132kV overhead supply running adjacent to A40 at the north of the site. These cables require a 6m wayleave either side of the lines. This supply crosses the proposed primary access to the site and would therefore need to be diverted.

There are additional 11kV & LV overhead lines running along the B4328 at the south of the site, which supplies the local properties.

Water

There is an existing 100mm diameter water main running along the B4328. This supplies the existing buildings located along this road. Where these supplies feed buildings on the proposed site, if they are to be demolished as part of this development. The supplies can be grubbed up and removed.

Gas

There are existing low pressure gas mains running along the B4328, which supply the existing properties.

To the south of the site, south of the B4328, there is an existing high pressure main, however this land is unlikely to be considered for any future expansion of the hospital.

Water

This system will need to be assessed for capacity by DCWW however, we would expect to provide on site storage for both domestic use and fire fighting to reduce the impact on the existing DCWW infrastructure.

Gas

In line with the current decarbonisation aspirations, there is no intention for large scale gas use on site. There are existing local low pressure mains in the area to supply any small scale requirements.

Telecommunications & Digital

There is currently Openreach infrastructure running along the B4328, to serve the local properties, but there are no known services crossing the site that will require diversion.

Telecommunications & Digital

It is likely that a new high speed connection will be required to serve the proposed scheme. Openreach are in the process of upgrading their networks and this would need to be assessed closer to the construction stage.

4.2 New Supply / Connections

Power

Based on the requirements of an all electrical site, upgrade works would be required to the 11kV switchgear/ infrastructure. Upgrades would also be required to primary transformer from 5/6.5MVA to 7.5/15MVA. This would also provide the site with a 6.5MW supply with a dedicated Substation. This also allows for a diverse route for the cabling to site in accordance with the HTM requirements. Albeit from the same substation. Different substations as mentioned in the HTM is not feasible due to DNO constraints.

Renewables

There is limited space on site for renewables such as PVs. However, there is the possibility of locating a solar farm or wind turbine in the surrounding area with a dedicated feeder to the site. PVs would require approx. 10 acres of suitable land to meet the demand of the proposed Urgent & Planned Care Hospital.

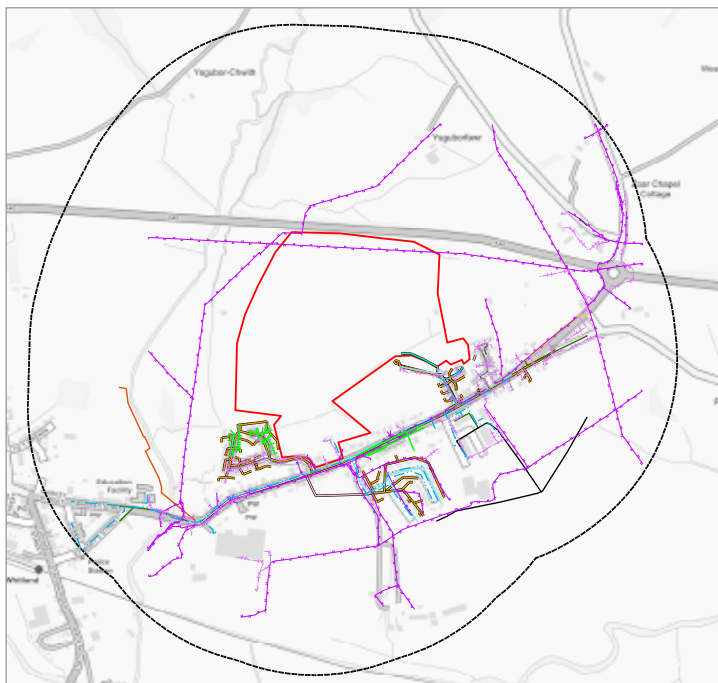


Fig. 4.1 - Plan showing the extent of existing services utilities infrastructure (As included in appendix A)

5.0 Local Transport Infrastructure

This section evaluates the accessibility to the site and considers the current provision surrounding the site for different mode of transport, importantly for walking, cycling and public transport in line with the Active Travel aspirations of the Welsh Government, while identifying opportunities for improving the provision for all transport modes to the site.

5.1 Walking and Cycling

A number of locations along the B4328 Spring Gardens have been identified for providing Active Travel access to the site. The introduction of active travel accesses in these locations would result in the site being permeable and integrating with the surrounding environment.

There is currently footway provision along the B4328 fronting the site at a width of 1.5 – 2.5 metres. There is however a gap in this provision on the site frontage on the southern extent of the carriageway. There is however a lack of crossing facilities within Whitland with the potential for a further crossing facility to be introduced as part of the scheme to ensure safe crossing of the B4328.

In places this footway provision is also narrowed by the built environment and by vehicles using the footway for parking.

Active travel to the rail station in Whitland is considered key to the feasibility of this development due to this being the main form of public transport within the immediate vicinity of site.

5.2 Bus Services

The site has a number of bus services that run nearby, however these services are infrequent and short. This is not favourable for the shift working patterns associated with hospitals, and therefore the possibility of providing more frequent and longer services on the existing bus routes need to be explored. Also, the existing 322 bus service already calls at the Withybush Hospital in Haverfordwest providing opportunities for cross working staff to connect between hospitals by bus.

5.3 Train

The Whitland Rail Station is located approximately 750m walking distance from the closest existing access to the site (off B4328 Spring Gardens), which is outside the CIHT recommended walking distance of 400m. It is therefore important that the possibility for improving connections between the site and the rail station be further investigated. This could be achieved through the operation of cycle hire schemes and the introduction of additional cycling infrastructure between the site and the station.

5.4 Highway / General

The site is well located along the A40 on the Pembrokeshire / Carmarthenshire border and therefore has a wider catchment as far as blue light access is concerned.

There is direct access from the A40 to the site and therefore traffic does not need to utilise local roads. There is however also a potential secondary / emergency access from the B4328 which could be utilised. It would however be recommended that use of this access be minimised.

The local roads do not appear to suffer from significant congestion during the typical weekday however the impact of the hospital on the local roads would need to be investigated as part of any Transport Assessment moving forwards.

There are improvements works underway along the A40 as part of the Llanddewi Velfrey to Redstone Cross improvements and therefore the impact of the scheme on the proposed hospital at Spring Gardens would have to be further investigated. Moreover, the traffic along the A40 is known to be very seasonal, with high volumes during the summer school holiday period and therefore any transport assessment undertaken for Spring Gardens would have to investigate the implication of the seasonal variation in flows.

6.0 Flood Risk

6.1 Site Context

The site lies near to the Afon Gronw, which routes from north to south, at distances of approximately 150-200m from the site's western boundary. Adjacent to the site there is also a historic mill leat drawn from the Gronw, which routes parallel to the western boundary of the site, coming within 30m of the site at the south-western corner of the site. It is understood this served a mill historically located on The Fishers caravan and camping site. This watercourse re-converges with the Gronw directly west of the south-western corner of the site.

The site contains two minor watercourses of note, both of which are understood to discharge into the Gronw Mill Leat.

The first minor watercourse within the site is understood to serve the southern embankment of the A40. It is assumed to enter a culvert structure at the north-western corner of the site, before discharging into the Gronw Mill Leat.

The second minor watercourse within the site originates within fields west of the Whitland Rugby Club, and routes westwards through the site until Maes Abaty, where it then routes along the northern boundary of Maes Abaty; it is then assumed to subsequently converge with the Gronw Mill Leat to the west of the site.

6.2 Flood Risk

The NRW modelled flood risk extents, highlight a number of areas of high and medium flood risk from surface water and minor watercourses. The primary areas of flood risk within the site are coincident with the existing minor watercourses.

The first of these, the ditch serving the southern embankment of the A40, approximately follows the northern site boundary; examination of LiDAR data shows that the flood risk extents associated with this watercourse are constrained to the watercourse channel. It is assumed that this feature is culverted and subsequently discharges into the mill leat, and as such, this culvert feature may be at risk of blockage, which could increase flood risk posed by this watercourse.

Flood risk associated with the second minor watercourse in the south of the site is also primarily constrained to the watercourse channel, notably at the northern boundary of Maes Abaty before discharging into the Mill Leat.

Flood risk posed by the site by groundwater is likely to be dominated by the minor watercourses running through the site, and the main rivers to the west. As groundwater tends to emerge slowly, it is thought that the flood risk posed by the minor watercourses is more significant than that of groundwater.

6.3 Access Routes

Primary access to the site is likely to be achieved via the B4328 (Spring Gardens) and the A40.

Considering access routes to the site from the west via the B4328, reveals that the B4328 contains significant areas of flood risk from both fluvial and surface water sources. It should however be noted that these flood extents are indicated within the area considered to be protected by fluvial flood defences, and as such would only occur if the fluvial defences failed.

NRW mapping shows that access routes to the site from the east are largely flood free, with only a limited extent of surface water flooding along Spring Gardens (B4328). This route offers an alternative route onto the A40 should the western route experience flooding.

Access routes to the south are likely to be more affected by flooding, with significant extents of fluvial flood risk present in and around the Trevaughan and Station Road areas, particularly at the Trevaughan Bridge over the Afon Taf. Possible alternative routes to the south include via the A40 and A477, however, an extent of low fluvial flood risk is shown on the Flood Map for Planning, at the A477 river crossing over the Afon Taf at Pont Newydd, south-west of St Clears.

6.4 Recommendations

Multiple access/egress routes should be considered as part of the site master-planning and development to provide resilience

An appropriate offset is given to minor watercourses to allow for access, maintenance and ecological corridors

Development is located outside areas that are considered to be at risk of flooding

From a review of the available information, the site is largely at low risk of flooding, with isolated areas of higher risk associated with existing land features and minor watercourses around the site.

It is anticipated that through careful master-planning and design, development can be directed to avoid areas of risk, and that suitably designed site levels and drainage should be able to effectively manage the risk of flooding both within the site and to / from neighbouring land.



Fig. 6.1 - Extract from natural Resources Wales Flood Risk map

7.0 Ecology



Fig. 7.1 - Habitat Survey Map

- f2 - fen, marsh and swamp
- g4 - modified grassland
- h3 - dense scrub
- u1 - built-up areas and gardens
- u1b5 - buildings
- u1c - artificial unvegetated unsealed surface
- u1e - built linear features
- w1g6 - line of trees
- h2a - hedgerow (priority habitat)
- r1e - canals or ditch

The Spring Gardens site comprises mainly fields (majority modified grassland) bordered by wire fences and hedges, some on earth banks, with a network of ditches. The site also has areas that are built-up, comprising buildings, sealed surfaces, or other developed land. The site contains lines of trees and dense scrub. There were no areas of standing open water, although the site does have an area where rushes dominate in fen.

Two statutory designated Special Areas of Conservation (SAC) for which bats are a qualifying feature were identified within 35 km of the site. The distances between the designated sites and the site are larger than the particular bat species would travel therefore, it can be assumed that the Proposed Development would not have a negative impact on the bat populations roosting within these SACs.

No statutory nature conservation sites of international or national importance within 2 km of the centroid used for the desk study were identified.

Further surveys are required to determine the presence/likely absence of bats at the site, involving up to three close inspections of the trees with suitability to support roosting bats.

Avoidance and/or precautionary methods of working to minimise negative impacts has also been recommended for: badger, hedgehog, dormouse, breeding birds, reptiles, amphibians, and Invasive Non-Native Species. These measures would require safeguarding by the implementation of an Ecological management Plan comprising precautionary and planned Method of Working Statements during the construction phase, and a Construction phase Environmental Management Plan from the construction phase through to the operational phase of the Proposed Development.

A Biodiversity Net Gain (BNG) assessment using currently available BNG resources should be utilised in order to ensure that a measurable net benefit for biodiversity is achieved. This is in line with current guidance and would ensure the Proposed Development demonstrates a measurable net gain for biodiversity and aligns with Planning Policy Wales (PPW) (Edition 11) 2021.

Ecological enhancements are recommended, such as retention/creation of habitats e.g. species-diverse grassland to increase the value of the site for biodiversity.

8.0 Environmental Appraisal

8.1 Key Constraints

The main environmental and social constraints identified for the Spring Gardens site are:

Ecological receptors comprising a B-Line (an insect pollinator dispersal pathway) which lies within the site and nearby ancient woodland inventory (AWI) sites;

Potential for the site to be a suitable habitat for protected and/or notable species;

Nearby above ground heritage assets and potential archaeological assets on site;

Various residential receptors, in particular, properties which are adjacent to the site;

Businesses and community assets in the Study Area, in particular businesses located off the B4328.

Air quality emissions and noise from the A40 which forms the northern boundary of the site.

8.2 Environmental Impact Assessment

The proposed development is considered to be a Category 10 (b) Urban development project under Schedule 2 of The Town and Country Planning (Environmental Impact Assessment) (Wales) Regulations 2017 ("EIA Regulations") and exceeds the 5 hectares (ha) threshold for Schedule 2 development. Therefore, the Proposed Development requires screening under the EIA Regulations.

The Proposed Development was reviewed against different environmental categories and a high-level assessment was undertaken to determine the likelihood of significant environmental effects. It was concluded that potential significant environmental effects cannot be ruled out at this stage and it is likely that there will be significant adverse for the following topics:

- Cultural Heritage and Archaeology
- Ecology and Nature Conservation
- Landscape Character/Visual Impact
- Traffic and Transport
- Population and Human Health
- Air and Climate
- Noise
- Material Assets and Waste

Therefore, a statutory EIA is likely to be required for the Proposed Development.

8.3 Recommendations

To determine whether there may be significant environmental effects, the following recommendations have been made:

Further surveys and assessments to support a planning application and EIA requirements including:

- Arboriculture surveys;
- Archaeological and heritage assessments and surveys;
- Air quality surveys;
- Noise surveys;
- Landscape and Visual Impact Assessment (LVIA);
- Climate impact assessment;
- Traffic and transport assessment;
- Ecological surveys;
- Intrusive ground investigation;
- Mitigation incorporated into site master planning and design in relation to drainage and flood risk

Consultation with local businesses and residents informing them of the Proposed Development;

Notice given to the relevant LPA, Carmarthenshire County Council, to inform and/or obtain permission for any PROW disruption;

SuDS Approving Body (SAB) consent; and

Producing construction related assessments such as a Construction Environmental Management Plan (CEMP), Construction Traffic Management Plan (CTMP) and Site Waste Management Plan (SWMP) to mitigate against any construction related disruption including potential pollution incidents, air quality changes and noise disruption.

A detailed summary of the environmental recommendations can be found within the main Technical Appraisal report.

9.0 Design

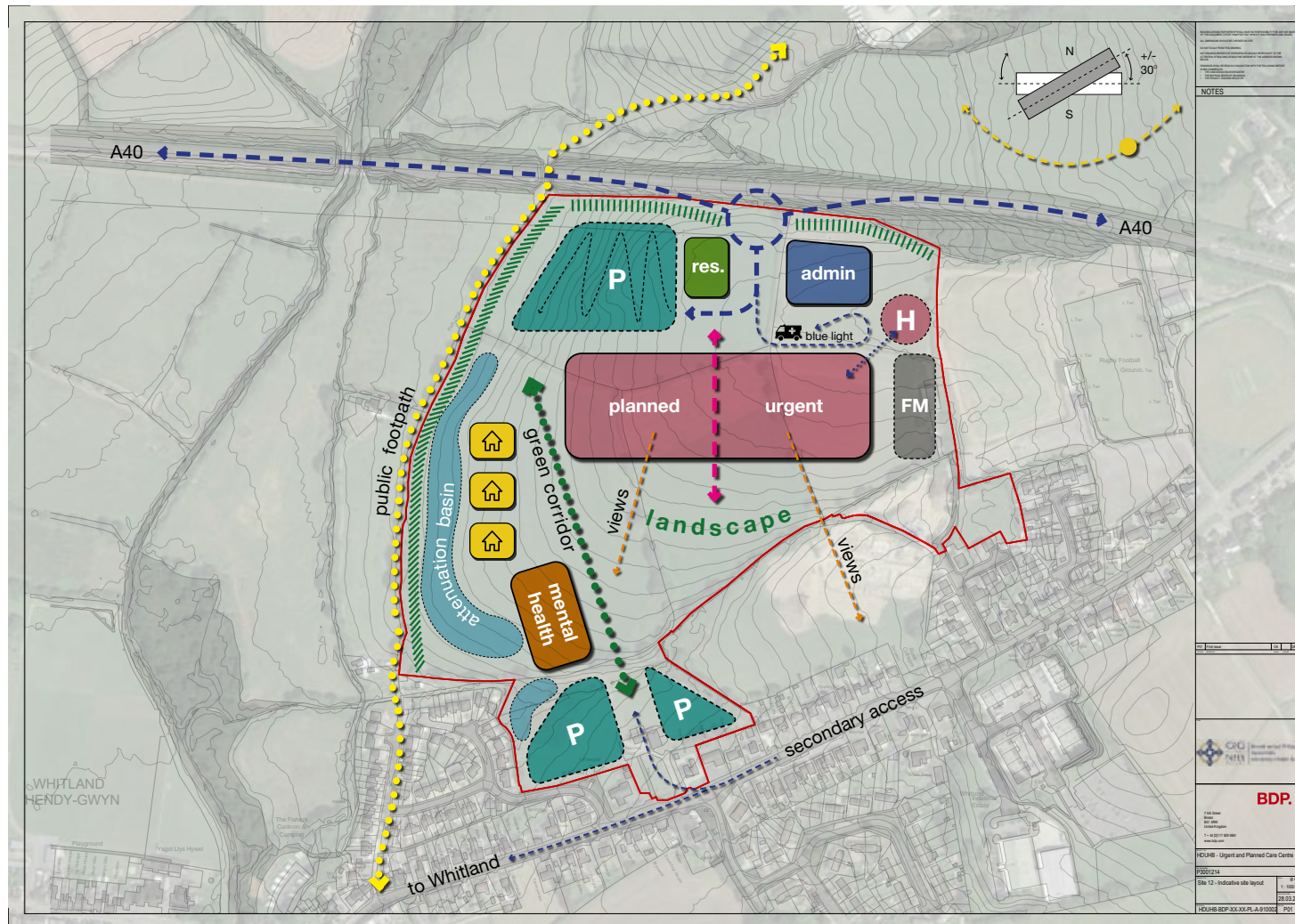


Fig. 9.1 - Indicative site layout showing the primary components of the proposed masterplan

As part of the technical appraisal process the design team have tested the ability of the site to support the development of a sustainable and robust masterplan.

To do this we have tested some layout options to check whether the existing site conditions allow for an efficient layout of buildings, roads, parking areas and landscape, taking into account issues such as the shape and slope of the site along with other physical constraints such as utilities infrastructure and flood risks.

For consistency we have used the same assumptions about the proposed building areas, parking numbers and future expansion across all three of the short listed sites. The indicative site layout opposite shows how the buildings and associated infrastructure could be arranged on the site.

The masterplanning exercise on the Spring Gardens site has identified some opportunities such as the orientation of the building to optimise the potential for sunlight, the potential to utilise an existing public footpath to create good connectivity to the centre of Whitland and the use of the existing site slope to create sustainable surface water drainage infrastructure supported by 'placemaking.'

Should Spring Gardens be selected as the preferred option, further investigative work would need to be carried out and the site Layout would be subject to change.

10.0 BREEAM

BREEAM CREDIT	SPRING GARDENS
Travel Plan (Tra 02-01)	2 Credits
Sustainable Transport Measures (Tra 02-02)	5 Credits (Excellent) 7 Credits (Outstanding)
Previously Occupied Land (LE 01-01)	0 Credits
Contaminated Land (LE 01-02)	0 Credits
Change and Enhancement of Ecology (LE 04-01)	2 Credits (Excellent) 3 Credits (Outstanding)
Flood Resilience (Pol 03-01)	2 Credits
Surface Water Run Off Rate (Pol 03-02)	1 Credit
Surface Water Run Off Volume (Pol 03-03)	1 Credit

BREEAM SCORE	SPRING GARDENS
If aiming for BREEAM Excellent	76.95%
If aiming for BREEAM Outstanding	92.31%

BREEAM (Building Research Establishment's Environmental Assessment Method) is an environmental impact assessment system for buildings. It helps design teams and developers to make sustainable decisions through the design and construction stages of a project by awarding credits against a range of key criteria. The aspiration is to aim for the best BREEAM score possible for the new hospital. A score of 75% or higher qualifies as 'Excellent' and a score of over 85% rates as 'Outstanding'.

As part of this technical appraisal we have carried out an initial BREEAM assessment of each of the 5 sites. The assessment is based on the technical reports and information about the local area.

As the buildings are not yet designed a number of assumptions have been made for many of the credits where information is not yet available, for example we are not able to assess the potential energy use or the impact of building materials until later design stages.

The assessment is based on specific credits which are applicable to the site, these are listed in the table opposite. The credits with the biggest impact on the overall score were **Sustainable Transport Measures** and **Flood Resilience**.

The sustainable transport measures credit is based on the proximity and density of the public transport network. Based on a review of available data the Spring Gardens site achieves an Accessibility Index score of 0.33. This could be increased in future stages if public transport services are enhanced.

The flood resilience credits are applied where sites have a low probability of flooding. As Spring Gardens has a low flood risk (based on Natural Resources Wales information) it achieves the maximum 2 credits.

Based on the initial assessment a development on Spring Gardens would likely achieve a BREEAM score of between 76.95% and 92.31%. This assessment assumes that all other potential credits are secured through the later stages of design.

Fig. 10.1 - BREEAM credits and scores

11.0 Town Planning and Acquisition

11.1 Planning Policy

National Planning Policy

The relevant National Planning Policy documents are Future Wales: The National Plan 2040 and Planning Policy Wales (PPW) Edition 11 (February 2021).

Local Planning Policy

The relevant Local Planning Policy document is the Carmarthenshire County Council Local Development Plan (LDP), which was adopted in December 2014.

CCC's revised Delivery Agreement dated August 2022 states that the Revised Local Development Plan which is currently in preparation, is due to be adopted towards the end of 2024

11.2 Committed Developments

There are 4 applications located in the vicinity of the site and are considered to be relevant to the Proposed Development. Further pre-application with CCC is required to complete a thorough due diligence on committed developments at the site.

11.3 Town Planning - Key Findings

The key findings of the Town Planning review are as follows:

Policy 1 of Future Wales identifies that development and growth in towns in rural areas should be of appropriate scale and support local aspirations and need.

Policy 6 of Future Wales indicates that significant new commercial, retail, education, health, leisure and public service facilities must be located within town and city centres.

Policy 29 of Future Wales identifies Carmarthen and the Pembrokeshire Haven Towns as the focus for housing, employment, tourism, public transport and key services within their wider areas and function as focal points for sub-regional growth.

The south of the site is allocated for residential development under the Carmarthenshire LDP. Planning permission has been granted for residential development in part of this land.

The majority of the site is located on unallocated land outside the Development Limits for Whitland. In the LDP, Development Limits are set to prevent inappropriate development in the countryside and provide certainty and clarity as to where exceptions proposals (adjacent to limits) may be considered appropriate.

Whitland is identified as a Service Centre in the LDP Settlement framework with a role for Local employment provision, residential provision, town centre and local retail service offer, community service provision and gypsy and traveller site.

The LDP supports the provision of new community facilities in accordance with the settlement framework and based upon evidence of need.

11.4 Land Acquisition

The freehold of the property is in two separate freehold ownerships and has been nominated separately by the two private individuals who own the property via their appointed agent.

We understand that there are no leases over the property. Legal searches have revealed that a strip of land around one of the land interests is within third party landownership.

This strip of land is owned by a limited company and would need to be acquired in addition to the two nominated land parcels in order to develop a hospital at Spring Gardens. Confirmation has not yet been obtained from them as to whether or not they are willing to include their land within the site nomination area.

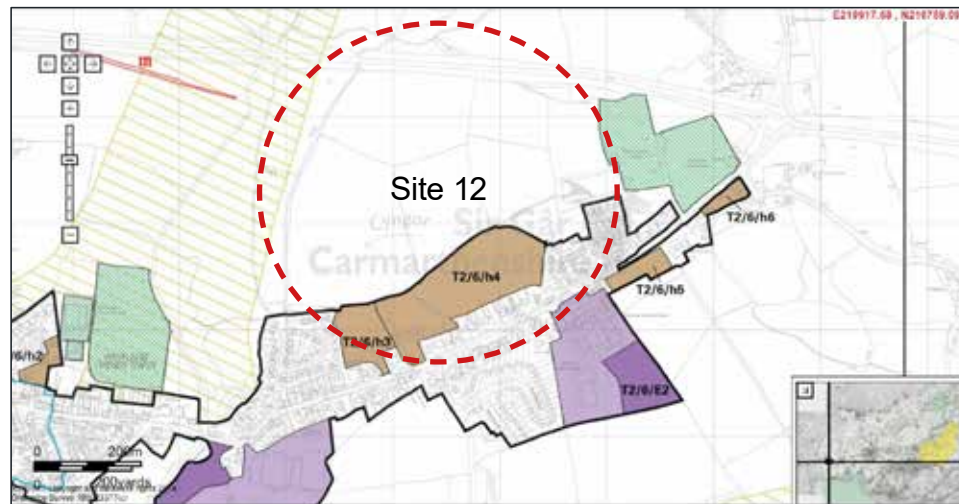


Fig. 11.1 - LDP - Extract of Policies map showing housing allocations T2/6/h3 and T2/6/h4

12.0 Travel Time Analysis



Circa 3912 people are living within the 30 minutes walking travel time from the Spring Gardens site.

Circa 10,529 people are living within the 30 minutes cycling travel time from the Spring Gardens site.

Circa 53,669 people are living within the 60 minutes travel time by public transport from the Spring Gardens site.

The nearest bus stop is along Spring Gardens and is accessible by 1 minutes walk (around 35m walking distance) and the nearest railway station is Whitland railway station and is accessible by 11 minutes walk (around 800m walking distance).

The travel time calculations also include the time for walking to the bus stop or railway station from the site and travelling via public transport and reaching to the required destination.

Circa 571,108 people living in Wales who are within 60 minutes car travel time from the Spring Gardens site.

Fig. 12.1 - Travel times to site 12 by respective methods

12.0 Travel Time Analysis

Settlement	population	Nearest existing Hospital	Drive time to nearest existing hospital (minutes)	Whitland	
				Drive time to new Site (minutes)	Drive time variance (minutes)
Llanelli	45,551	GGH (ex. PPH)	37	49	12
Carmarthen	16,260	GGH	8	23	15
Ammanford	8,610	GGH (ex. PPH)	30	48	18
Cross Hands	6,465	GGH (ex. PPH)	18	35	17
Burry Port	6,061	GGH (ex. PPH)	31	44	13
Glanamman	4,487	GGH (ex. PPH)	36	53	17
Tumble	4,333	GGH (ex. PPH)	21	38	17
Llangennech	4,313	GGH (ex. PPH)	28	46	18
Tycroes	3,775	GGH (ex. PPH)	26	42	16
Lampeter	2,861	GGH	38	58	20
Llandybie	2,853	GGH (ex. PPH)	28	43	15
Kidwelly	2,844	GGH	21	35	14
Brynamman	2,634	GGH (ex. PPH)	45	62	17
St Clears	2,223	GGH	16	10	-6
Pembrey	2,007	GGH (ex. PPH)	27	38	11
Llandovery	1,987	GGH	37	56	19
Newcastle Emlyn	1,914	GGH	29	35	6
Llandeilo	1,749	GGH	22	40	18
Pontyberem	1,693	GGH (ex. PPH)	21	36	15
Whitland	1,641	GGH	24	1	-23
Trimsaran	1,573	GGH (ex. PPH)	28	38	10
Pontyates	1,529	GGH (ex. PPH)	20	33	13
Llandysul	1,459	GGH	28	48	20
Pwll	1,348	GGH (ex. PPH)	35	46	11
Waungilwen	1,329	GGH	29	39	10
Llanybyther	1,235	GGH	28	49	21
Aberporth	1,167	GGH	48	50	2
Penybanc	1,115	GGH	20	40	20
Carway	1,091	GGH (ex. PPH)	23	35	12
Pencader	1,086	GGH	18	38	20
St Dogmaels	1,075	GGH	50	42	-8
TOTAL POP.	138,268	Population Drivetime Variance			13

Fig. 12.2 - Car travel time variance by settlement - Glangwili General Hospital

Key:	
-30+	
-20 to -29	
-10 to -19	
-9 to 9	
10 to 19	
20 to 29	
30+	

Settlement	population	Nearest existing Hospital	Drive time to nearest existing hospital (minutes)	Whitland	
				Drive time to new Site (minutes)	Drive time variance (minutes)
Llanelli	45,551	PPH	8	49	41
Ammanford	8,610	PPH	24	48	24
Cross Hands	6,465	PPH	19	35	16
Burry Port	6,061	PPH	19	44	25
Glanamman	4,487	PPH	30	53	23
Tumble	4,333	PPH	17	38	21
Llangennech	4,313	PPH	9	46	37
Tycroes	3,775	PPH	20	42	22
Llandybie	2,853	PPH	26	43	17
Brynamman	2,634	PPH	40	62	22
Pembrey	2,007	PPH	23	38	15
Pontyberem	1,693	PPH	18	36	18
Trimsaran	1,573	PPH	17	38	21
Pontyates	1,529	PPH	18	33	15
Pwll	1,348	PPH	13	46	33
Carway	1,091	PPH	19	35	16
TOTAL POP.	98,323	Population Drivetime Variance			31

Fig. 12.3 - Car travel time variance by settlement - Prince Philip Hospital

Settlement	population	Nearest existing Hospital	Drive time to nearest existing hospital (minutes)	Whitland	
				Drive time to new Site (minutes)	Drive time variance (minutes)
Haverfordwest	15,388	WGH	6	29	23
Milford Haven	14,337	WGH	22	40	18
Pembroke Dock	9,747	WGH	26	37	11
Pembroke	8,171	WGH	28	33	5
Tenby	4,260	WGH	35	27	-8
Cardigan	4,250	WGH	41	42	1
Neyland	3,758	WGH	22	40	18
Fishguard	3,480	WGH	22	43	21
Saundersfoot	2,707	WGH	32	22	-10
Narberth	2,622	WGH	19	12	-7
Johnston	2,230	WGH	12	35	23
Goodwick	1,862	WGH	22	44	22
St Davids	1,390	WGH	28	50	22
Pentlepoir	1,305	WGH	29	17	-12
Letterston	1,283	WGH	23	36	13
Kilgetty	1,261	WGH	29	17	-12
TOTAL POP.	78,051	Population Drivetime Variance			12

Fig. 12.4 - Car travel time variance by settlement - Withybush General Hospital

The drive time to the existing hospital and the proposed new hospital from the existing settlements and the additional travel time required to travel to new hospital are shown in the tables.

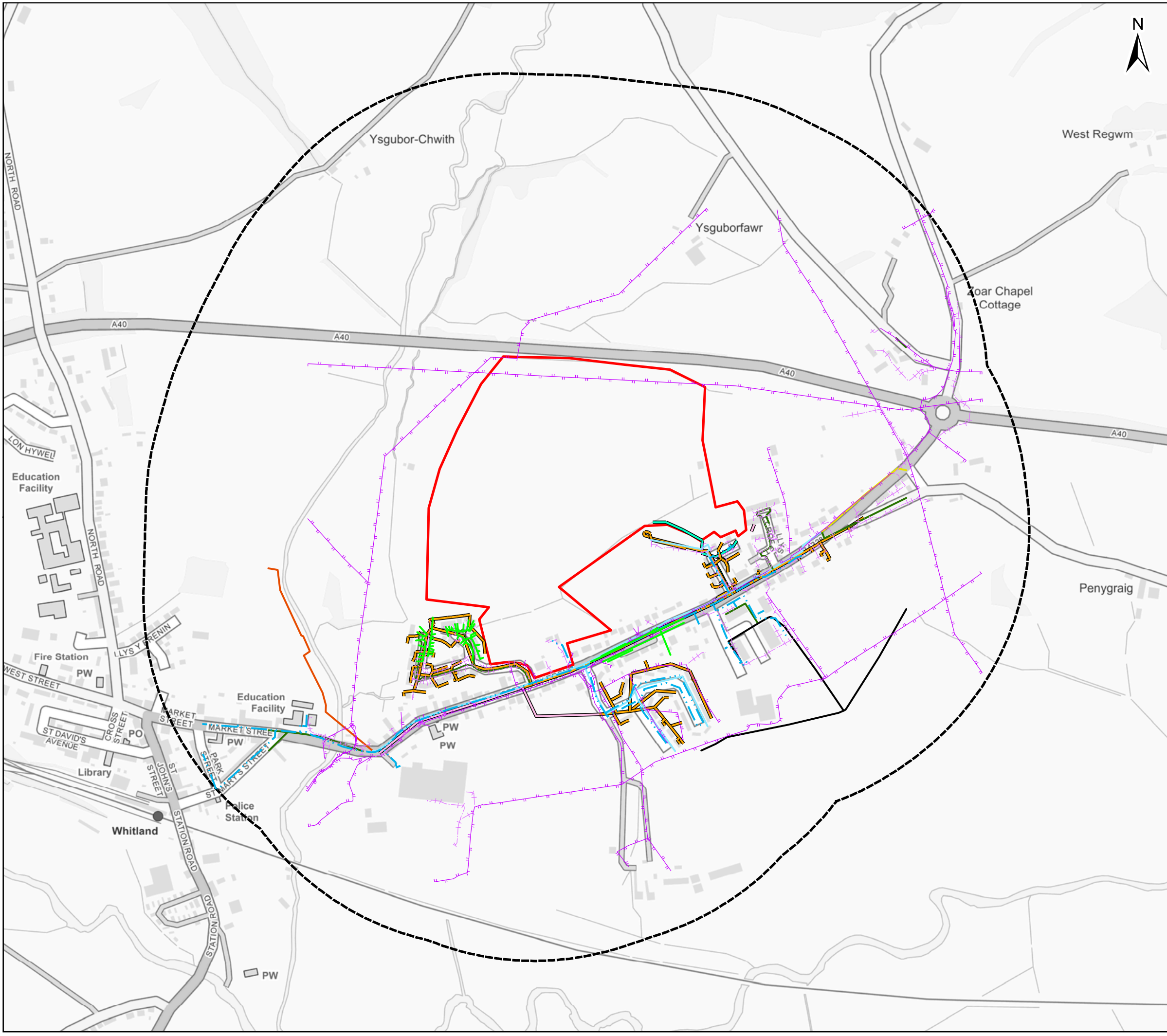
The population currently travelling to the existing Glangwili General Hospital for emergency services which are likely to be relocated to the proposed new hospital in future, travel time variance are within 25 minutes for most of settlements.

The population currently travelling to the existing Prince Philip Hospital for emergency services which are likely to be relocated to the proposed new hospital in future, travel time variance is less than 30 minutes for most of settlements except for Llanelli, Llangennech and Pwll.

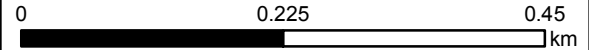
The population currently travelling to the existing Withybush Hospital for emergency services which are likely to be relocated to the proposed new hospital in future, travel time variance is within 25 minutes for most of settlements.

The vehicle speed datasets used to derive the journey times were provided by Transport for Wales. The datasets allow an average to be calculated. In this case, the presented travel times are neither from a neutral month (i.e. non-peak) or a peak period such as the school holidays

Appendix A: Utilities Constraints Plan

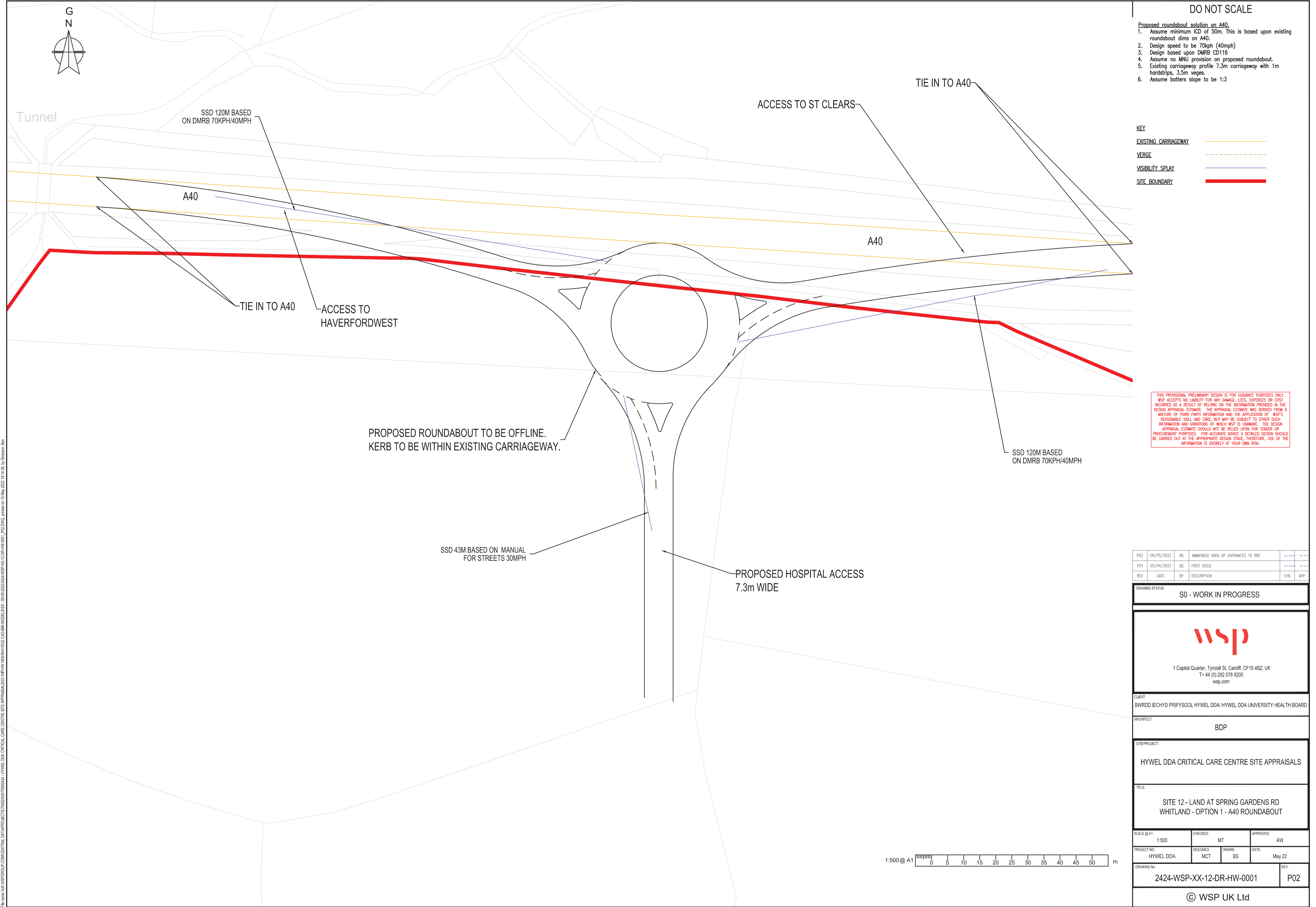


- Legend**
- Site 12 Site Boundary
 - 500m Study Area
 - Telecoms (BT maps)**
 - Telecoms (BT maps)
 - Gas (Wales and West Utilities)**
 - Low Pressure
 - Power (Western Power)**
 - Overhead
 - Underground
 - Mains Water (Welsh Water)**
 - Unidentified
 - 3 inch
 - 4 inch
 - 6 inch
 - 8 inch
 - Storm and Foul Sewerage system (Welsh Water)**
 - Combined
 - Foul
 - Surface Water



Client:	Hywel Dda University Health Board		
Project:	Site 12 – Technical Due Diligence Appraisal		
Title:	Site 12 Utilities Constraints Plan		
Date:	05 May 2022	Scale:	6,500 @ A3
Drawn:	PB	Checked:	CLH
		Approved:	WB
Drawing Number:	2424-WSP-XX-12-DR-EN-0017-P01_Utility Constraints Plan		

Appendix B: Proposed Highways Infrastructure



- DO NOT SCALE
- Proposed roundabout solution on A40.
1. Assume minimum ICD of 50m. This is based upon existing roundabout dims on A40.
 2. Design speed to be 70kph (40mph)
 3. Design based upon DMRB CD116
 4. Assume no MNU provision on proposed roundabout.
 5. Existing carriageway profile 7.3m carriageway with 1m hardstrips, 3.5m veges.
 6. Assume batters slope to be 1:3

KEY	
EXISTING CARRIAGEWAY	<div></div>
VERGE	<div></div>
VISIBILITY SPLAY	<div></div>
SITE BOUNDARY	<div></div>

THIS PROVISIONAL PRELIMINARY DESIGN IS FOR GUIDANCE PURPOSES ONLY. WSP ACCEPTS NO LIABILITY FOR ANY DAMAGE, LOSS, EXPENSES OR COST INCURRED AS A RESULT OF RELYING ON THE INFORMATION PROVIDED IN THE DESIGN APPRAISAL ESTIMATE. THE APPRAISAL ESTIMATE WAS DERIVED FROM A MIXTURE OF THIRD PARTY INFORMATION AND THE APPLICATION OF WSP'S REASONABLE SKILL AND CARE, BUT MAY BE SUBJECT TO OTHER SUCH INFORMATION AND VARIATIONS OF WHICH WSP IS UNAWARE. THE DESIGN APPRAISAL ESTIMATE SHOULD NOT BE RELIED UPON FOR TENDER OR PROCUREMENT PURPOSES. FOR ACCURATE ADVICE A DETAILED DESIGN SHOULD BE CARRIED OUT AT THE APPROPRIATE DESIGN STAGE. THEREFORE, USE OF THE INFORMATION IS ENTIRELY AT YOUR OWN RISK.

P02	09/05/2022	BS	AMMENDED RADII OF ENTRANCES TO RBT
P01	05/04/2022	BS	FIRST ISSUE
REV	DATE	BY	DESCRIPTION	CHK	APP

DRAWING STATUS:
S0 - WORK IN PROGRESS

1 Capital Quarter, Tyndall St, Cardiff, CF10 4BZ, UK
T+ 44 (0) 292 076 9200
wsp.com

CLIENT:
BWRDD IECHYD PRIFYSGOL HYWEL DDA/ HYWEL DDA UNIVERSITY HEALTH BOARD

ARCHITECT:
BDP

SITE/PROJECT:
HYWEL DDA CRITICAL CARE CENTRE SITE APPRAISALS

TITLE:
SITE 12 - LAND AT SPRING GARDENS RD
WHITLAND - OPTION 1 - A40 ROUNDABOUT

SCALE @ A1:	1:500	CHECKED:	MT	APPROVED:	AW
-------------	-------	----------	----	-----------	----

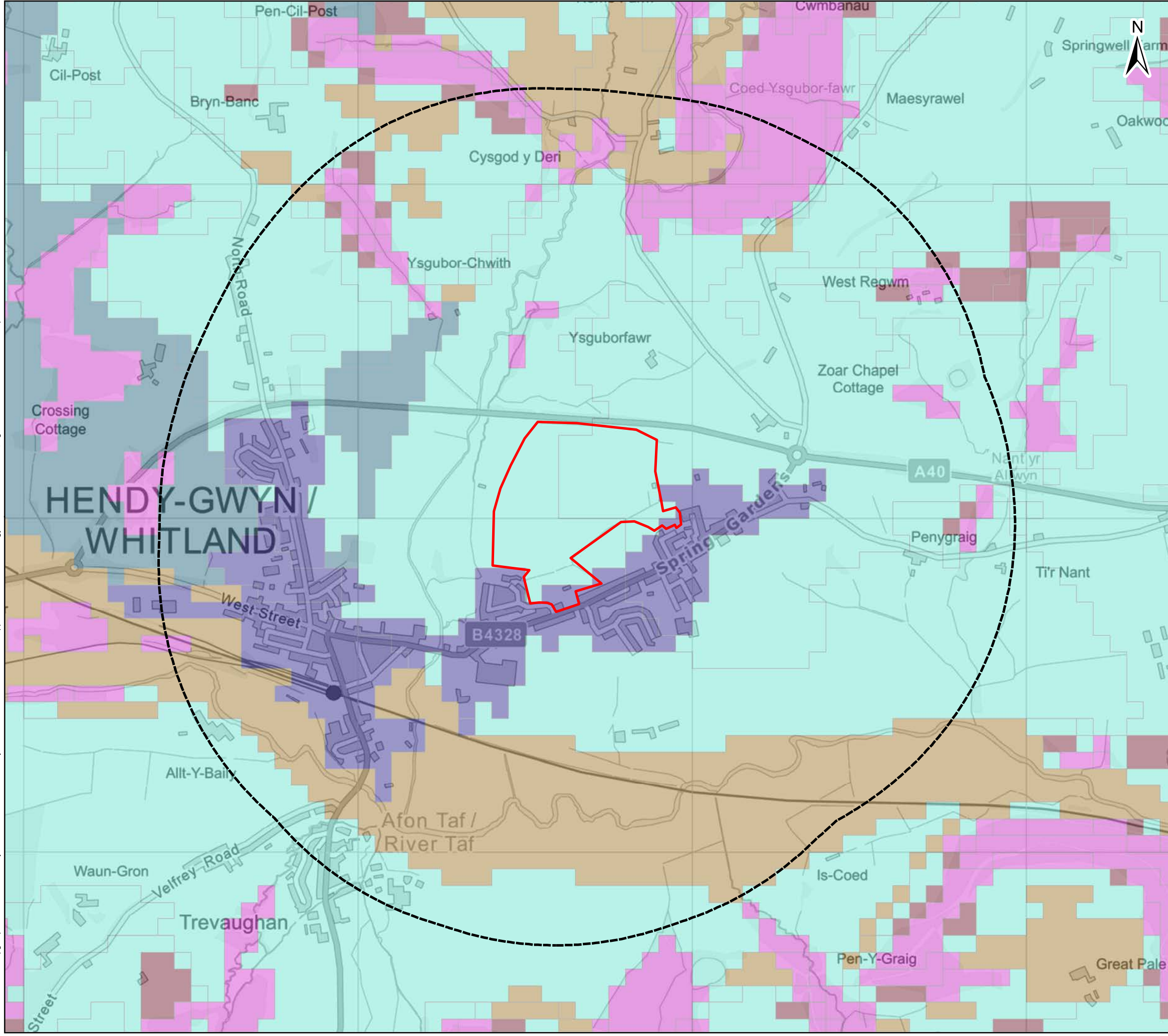
PROJECT NO:	DESIGNED:	DRAWN:	DATE:
HYWEL DDA	MCT	BS	May 22

DRAWING No:	REV:
2424-WSP-XX-12-DR-HW-0001	P02

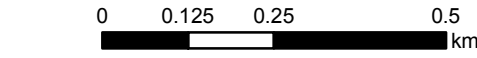
© WSP UK Ltd

Appendix C: Agricultural Classification Map

Document Path: \\uk.wspgroup.com\central_data\Projects\70092xxx\70092424 - Hywel Dda Critical Care Centre Site Appraisals\03 WPIEC Ecology\GIS\ICRC\MXD\Site 12 - Agricultural Land Classification Map.mxd Date Saved: 14/04/2022

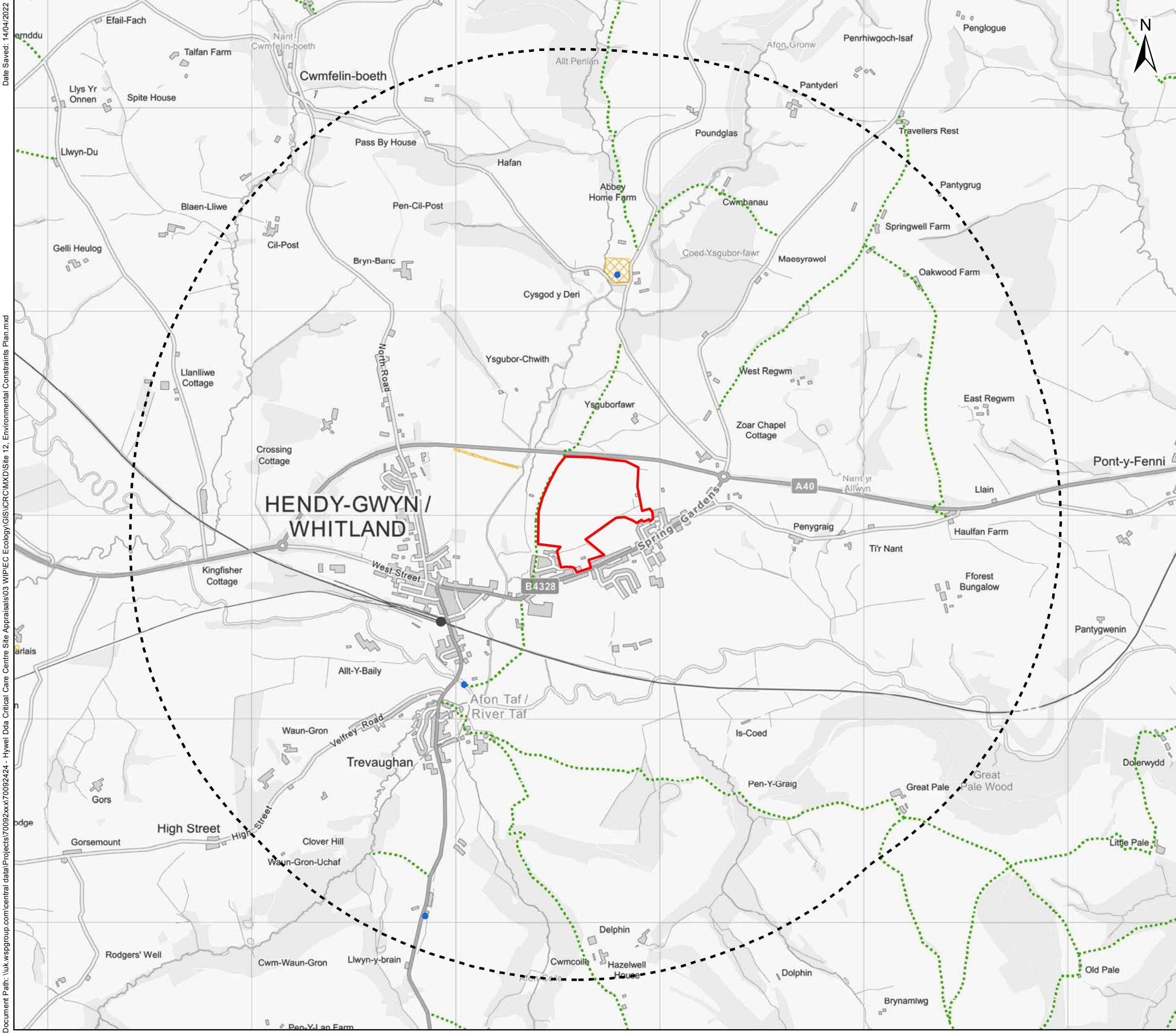


- Legend**
- Site 12 Site Boundary
 - 1Km Study Area
 - 3a
 - 3b
 - 4
 - 5
 - NA
 - U



Client:	Hywel Dda University Health Board		
Project:	Site 12 – Technical Due Diligence Appraisal		
Title:	Agricultural Land Classification Map		
Date:	14 April 2022	Scale:	11,000 @ A3
Drawn:	PB	Checked:	CLH
		Approved:	WB
Drawing Number:	2424-WSP-XX-12-DR-EN-0012-P01_ALC Map		

Appendix D: Environmental Constraints Plan



Legend

- Site 12 Site Boundary
- 2km Study Area
- Grade II Listed Building
- Footpath
- Scheduled Monuments

Scale: 1:500,000

Client:

Hywel Dda University Health Board

Project:

Site 12 – Technical Due Diligence Appraisal

Title:

Environmental Constraints Plan

Date: 14 April 2022
Drawn: PB
Drawing Number: 2424-WSP-XX-12-DR-EN-0003-P01_Env Constraints Plan

Scale: 18,000 @ A3
Checked: CLH
Approved: WB