

Shropshire Local Plan Examination Representation

Response to Inspector's Matters, Issues
and Questions

Matter 24: Whitchurch Place Plan Area

Castle Green Homes

SEPTEMBER 2024



mosaic
town planning

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1 Introduction

- 1.1 These representations are submitted on behalf of Castle Green Homes, who have an interest in the adjoining draft allocated sites WHT044 and WHT037. The purpose of this response is to support the Council's position that the proposed joint allocations meet the tests laid out in NPPF paragraph 35 and should be considered 'sound'.
- 1.2 Castle Green Homes holds option agreements for the purchase of the land, with an intention for future residential development of the site. Having been predominantly active in the North West and North Wales, which adjoin Shropshire to the north and west, Castle Green Homes have acquired an interest in the proposed site allocations in Whitchurch and are now eager to pursue development opportunities within the area.
- 1.3 This Representation is accompanied by the following plans and documents, which are included as appendices:
- Parameters Plan (Castle Green Homes)
 - Access Appraisal (SCP)
 - Drainage Technical Note (SCP)
 - Levels & Drainage Feasibility Design Masterplan (SCP)

2 Responses to Inspector's Questions

- 2.1 The below section responds to the Inspector's identified questions regarding the Issue of "*Whether the proposed Place Plan Area and site allocations within it are justified, effective and consistent with national planning policy.*". Answers have been provided to all questions which Castle Green Homes can provide further information on.

2. 'What is the scale and type/mix of uses proposed?' and 3. 'What is the basis for this and is it justified?'

- 2.2 Castle Green Homes intends to develop the site to provide approximately 199 dwellings and has produced a Parameters Plan (see Appendix 1) which demonstrates that this is a suitable and achievable site capacity. The Parameters Plan was produced from an exercise which sought to show how the number of plots could be accommodated on the site whilst accounting for the area occupied by internal roads, parking, landscaping, open space, drainage features and any other necessary supporting infrastructure. The draft Local Plan policy indicates that the site should provide around 200

dwellings. The appended Parameters Plan demonstrates that the site can accommodate a similar level of housing and allows for a site layout which reflects the surrounding pattern of development whilst accounting for non-developable areas of the site. Approximately 68% of the site area is developable area, producing a net residential density of 38 dwellings per hectare. This ensures that efficient use is made of the site to meet housing needs whilst providing a level of density which is appropriate to the suburban context and mirrors the density of surrounding housing.

- 2.3 The combined site will accommodate a residential housing estate, along with supporting infrastructure and public open space. The site is well related to the town of Whitchurch which is identified as a Principal Centre in the draft Local Plan and benefits from easy access to essential shops and services throughout the settlement. This includes in the town centre as well as a large Sainsbury's foodstore located approximately 0.5km from the site. The Access Appraisal appended to this Document confirms the accessibility of the site by sustainable modes of transport from the rest of Whitchurch. The site sits within a suburban residential context, surrounded by housing other than agricultural fields to the north-west at the edge of the settlement. The site is therefore appropriate for housing, which will lead to the formation of a coherent residential neighbourhood in north-west Whitchurch.

4. 'What is the current planning status of the site in terms of planning applications, planning permissions and completions/construction?'

- 2.4 There is no relevant planning history on any part of the site. The site is low value agricultural land used as pasture / grazing land which Castle Green Homes landowners are seeking to promote for residential development on behalf of the landowners.
- 2.5 Castle Green Homes holds an option agreement for the site and has undertaken preparatory technical scoping studies to confirm the suitability of the site for housing. The company commenced pre-application discussions with Shropshire Council regarding the sites in 2023 and intends to submit a full planning application in late 2024.

5. 'What are the benefits that the proposed development would bring?'

- 2.6 The primary benefit which the development would bring about is the important contribution which the sites would make towards meeting housing needs in Whitchurch and across Shropshire. The draft Local Plan includes sets a requirement of 30,800 across the plan period, 1,600 of which will be in Whitchurch. As a Principal Centre, Whitchurch should be the focus for a significant proportion of development in Shropshire across the plan period. The proposed allocation provides a chance to provide more than 10% of the required homes as part of a strategically planned urban extension, with a comprehensive and coherent development pattern. It must also be considered that the majority of respondents who expressed an opinion were in support of the allocation during the preferred sites

consultation in November 2018. There is also a greater degree of certainty over delivery of the proposed allocation with Castle Green Homes already actively involved in the site.

- 2.7 Another benefit of the proposed development of the allocated site would be the delivery of affordable housing to meet identified affordable housing needs. Draft Policy DP3 would require the delivery of 20 affordable homes on-site, made available through social or affordable rent and for intermediate housing. This would make an important contribution to meeting the affordable housing needs in Shropshire, where the 2020 Strategic Housing Market Assessment (Ref: EV097.02) confirms that there will be an estimated 799 households per year which require additional affordable housing.
- 2.8 Acquisition and development of the site by Castle Green Homes would make areas of the site which is currently inaccessible privately owned agricultural land, into public use. More than 2 hectares of the site would be designated as public open space in the proposed development, with more detailed typologies provided at the application stage in line with need identified by the Council. This would provide high quality recreational space for both prospective residents and the local community. The development would also provide a through route for pedestrians and cyclists from Chester Road to recent housing developments off Tarporley Road, improving the connectivity of the settlement by active transport.
- 2.9 Finally, Castle Green Homes expect to contribute to potential connectivity improvements surrounding the site, which would provide transport and accessibility benefits. Potential options are detailed in the Access Appraisal, but include bus, footway and cycleway improvements along Chester Road and a walking route to Whitchurch Town Centre. These improvements would go beyond mitigating the impacts of the proposed development and would provide a tangible benefit to the surrounding neighbourhood.

6. 'What are the potential adverse impacts of developing the site? How could they be mitigated?'

- 2.10 Whilst the site is agricultural grazing land and does not contain many diverse, species rich habitats, there would still be a potential loss of ecology / biodiversity value from developing the site without mitigation measures in place. This potential would be offset by a thoroughly considered landscaping scheme and management plan, in compliance with the mandatory requirement for new developments to demonstrate a 10% biodiversity net gain. There are protected sites within the wider surrounding area and that a Habitat Regulations Assessment will need to be undertaken at the application stage to ensure that development of the proposed site is managed appropriately so as to not impact on any designated sites.

- 2.11 The Landscape and Visual Sensitivity Assessment (Ref: EV071.59) confirms that the area of Whitchurch where the site is located is not an area of high visual sensitivity. Any visual landscape impact of the development will be mitigated by the layout of the scheme which provides dwellings at an appropriate density, with landscaping and considerable areas of open space throughout. This includes an area to the north-west of the site where the proposed development would meet with adjoining countryside, which softens the transition between open countryside and built development. In addition, the proposed development will be low rise and will not exceed two storeys, ensuring that the development is not visually prominent.
- 2.12 The proposed development would accommodate approximately 199 additional households, creating demand for local infrastructure and services. Whilst this would bring benefits by supporting local business through increased custom, it would also increase demand for essentials services. The allocation of the site has involved the impact of the proposed development being assessed and managed in the Local Plan and Infrastructure Plan. The Infrastructure Plan for the Whitchurch Place Plan Area (Ref: EV067.18) identifies expansion of infant and junior education provision as a high priority aim for the plan period which developer contributions could help to fund. Any such contributions will be considered, subject to the legal tests for planning obligations.
- 2.13 Finally, the development of the site will impact on surface water runoff due to the resultant decrease in permeable site area. Any potential impacts arising from this can be sufficiently addressed by a well-considered sustainable drainage system to provide attenuation and effectively manage runoff. The appended Drainage Technical Note demonstrates that drainage at the site can be feasibly managed and further hydraulic modelling and drainage assessments will be carried out by the developer at the application stage which will inform a final drainage layout to be reviewed and approved by the LLFA.

7. 'How is the site affected by flood risk? How has this been taken into account in allocating the site? How have the sequential and, if necessary, exception tests been applied?'

- 2.14 For both sites, 100% of the site area is contained within Environment Agency Flood Zone 1. The only identifiable flood risk across the wider site is from surface water flooding, which applies principally to the WHT037 aspect of the combined allocation. For the WHT044, 1% of the site is contained within the 1 in 1000-year surface flood risk zone, so it can be considered that this area of the site is not at any considerable risk of flood risk. For the WHT037 portion of the site, 15% is located within the 1 in 1000-year surface flood risk zone, with this figure dropping to 9% and 6% for the 1 in 100-year and 1 in 30-year zones respectively. As such, whilst there is identifiable surface water flood risk across the wider site, it is evident that this applies to a relatively small portion of the total site area.

- 2.15 The sites were identified and recommended following a robust site assessment process which gave due consideration to flood risk as one of many assessed factors. Flood risk from all sources was appropriately assessed through the Strategic Flood Risk Assessments (Stages 1 and 2) produced by the Council which form part of the evidence base of the Local Plan. Within these documents, the Sequential and Exception Tests were applied, adopting a methodology which complies with national planning policy and guidance.
- 2.16 Flood risk at the site has been assessed with an appropriate level of detail at the allocation stage to confirm that the flood risk at the site does not exceed a level which can be sufficiently managed through the implementation of a sustainable drainage system. The Drainage Technical Note explores this in more detail and demonstrates that based on a preliminary assessment, a drainage strategy which manages surface water appropriately is achievable and feasible at the site. Hydraulic modelling will be carried out by the developer at the planning application stage which will inform the design of a drainage system which is able to provide necessary attenuation and manage surface water runoff so as to not have any unacceptable impacts in flood risk terms for prospective residents or surrounding land and property.
- 2.17 Finally, it is also important to note that there has been no objection raised to the joint allocation from Welsh Water or the Environment Agency during any stage of consultation regarding the proposed allocation. It is therefore apparent that these bodies agree with the Council's position that surface water flood risk does not present a constraint which should preclude allocation of the site.

8. 'What are the infrastructure requirements/costs and are there physical or other constraints to development?'

- 2.18 There are no significant physical or other site constraints which would lead to infrastructure requirements beyond what would typically be expected for a residential development of this kind.
- 2.19 The accompanying Access Appraisal confirms that the entire combined site can be appropriately served by a single vehicular access from Chester Road. Castle Green Homes have indicated their willingness to implement wider off-site highway and transport improvements where appropriate, however, it must be noted that these are wider improvements to the local area rather than fundamental infrastructure requirements to facilitate the development.
- 2.20 There will be a requirement for supporting drainage infrastructure including SuDS features and a surface water pumping station, but these requirements and the area needed to accommodate them have been included in preliminary scoping exercises carried out by the developer.
- 2.21 The allocation is surrounded by modern housing development, so it can be reasonably assumed that basic utilities infrastructure requirements can be made available feasibly. There are no abnormal

development costs anticipated for any aspect of supporting infrastructure and the developer considers that all necessary infrastructure is achievable without impacting on viability.

9. 'Is the site realistically viable and deliverable?'

- 2.22 It is apparent that the site has strong development potential and there are no significant site constraints which would add abnormal costs and impact on viability. The site is located in a desirable suburban location on the periphery of Whitchurch, with good connections to the town centre. There is an evidenced need for more homes in the locality and the Local Plan Delivery and Viability Study (Ref: EV115.01) confirms that that average price paid for a dwelling in Whitchurch from 2018 to 2020 sat just below £250,000, indicating strong recent market performance in the locality. The site has been identified by the developer, an experienced housebuilder with commercial awareness, as a site which should be pursued. There is nothing at this stage to suggest that the site is not realistically viable, with the ability to withstand proportionate developer contributions and the provision of the necessary affordable housing and open space on site.
- 2.23 The three landowners who are responsible for the land which makes up the allocation are working proactively to bring the site forward for development and Castle Green Homes have option agreements in place for future procurement of the land. As such, the land must be considered as readily available and seen as a practical development opportunity.

10. 'What is the expected timescale and rate of development and is this realistic?'

- 2.24 Castle Green Homes envisage that a start on site with preparatory works would be achievable by June 2025, with the dwellings delivered subsequently at a rate of 40 dwellings per annum from January 2026. This would mean that all homes would be projected to be delivered by January 2031, comfortably within the short and medium term within the plan period. Castle Green Homes have already undertaken preliminary site assessment and scoping works, allowing for a shorter turnaround time to submit a planning application upon allocation of the sites.
- 2.25 The WHT044 section of the joint allocation includes the location where the main vehicular access to the site will be taken from and is not dependent on the WHT037 area for development. This allows the site to be developed logically as the WHT044 section of the site could be developed as a first phase, allowing the properties to be delivered and occupied independently of the wider allocation.
- 2.26 Castle Green Homes are an experienced developer, with decades of experience delivering homes in North Wales and the North West of England. The above timescales are projections based on the company's expertise gained across years of experience in the sector. There are no abnormal site constraints or infrastructure requirements which would indicate that the delivery rate would differ substantially from other comparable sites delivered by Castle Green Homes in the past. In addition,

the allocation is not tied to any wider development proposals for delivery and can come forward for development independently, decreasing the degree of uncertainty in the projected timeline.

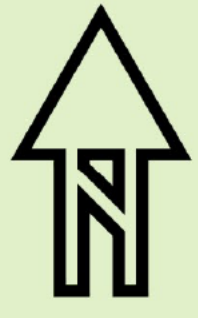
11. 'Is the boundary of the site appropriate? Is there any justification for amending the boundary?'

- 2.27 Much of the boundary is appropriate by default as it follows the border of where agricultural fields meet residential development at the edge of the settlement. The boundary ensures that the allocated sites are immediately adjacent to the built-up area of Whitchurch and are not isolated from the settlement. The northern edge of the boundary rounds off the settlement of Whitchurch and avoids any isolated edge of settlement ribbon development. The allocation boundary avoids intrusive harmful extension into open countryside and minimises any impact on more sensitive open areas surrounding Whitchurch.
- 2.28 The land under the control of Castle Green Homes differs marginally from the allocation area in the northern corner where the allocated site comes to a point to the north-west of Badger Crescent and The Squirrels. The allocation area includes only part of a rectangular parcel of agricultural land which our client controls all of. However, it is not envisaged that there will be any built development in this area of the site, which has been indicatively proposed as a flood storage area.

12. 'Are the detailed policy requirements effective, justified and consistent with national policy?'

- 2.29 The detailed policy requirements as set out in *Schedule S18.1(i). Residential Allocations: Whitchurch Principal Centre* of the draft plan outline overarching development management requirements for the delivery of the site relating to design and layout, drainage, noise, access, highways and green infrastructure. These requirements ensure that due consideration will be given to these factors but avoid creating overly specific and prescriptive requirements, providing the developer with flexibility to achieve these aims in a practical and implementable way.
- 2.30 The accompanying access appraisal undertaken by Prime Transport Planning demonstrates that the site is able to be served by a single vehicular access from Chester Road. The wording of the policy outlines that there is potential for two site accesses but does not require this, again leaving the developer with an appropriate degree of flexibility to develop the site access arrangements as appropriate.
- 2.31 The policy requirements ensure that the tests outlined in NPPF paragraph 35 have been met and that the allocation and accompanying policy should be considered 'sound' for inclusion in the adopted Local Plan.

Appendix 1 – Parameters Plan



Sheep Dip

Track

115.5m

CHESTER ROAD

111.3m

OAK TREE WAY

HAZELNUT WAY

BADGER CRESCENT

El Sub Sta

Site Boundary: Aprx. 22.4A

CIRCULATION & DEVELOPMENT

- Primary vehicular / pedestrian access point
- Potential Secondary/ Emergency Access
- Potential developable area; Aprx. 15.37A (Up to 199 units @ 38dph)
- Lanes and private drives

GREEN INFRASTRUCTURE & RECREATION

- Existing vegetation
- Proposed green infrastructure
- Sustainable Drainage Systems basins
- Pump station

CONTEXT

- Existing bus stops
- Plot orientation

Rev: Description: Date:



Castle Green,
Unit 20,
St. Asaph Business Park,
Denbighshire, LL17 0LJ.
Tel. 01745 536677

Site:
Land off Chester Road, Whitchurch

Title:
Parameters Plan - Phases 1 and 2

Scale: 1:500@A0 Date: 05.09.2024

Ref: CHR-WHIT-PP01 Rev: --

Appendix 2 – Access Appraisal

1 INTRODUCTION

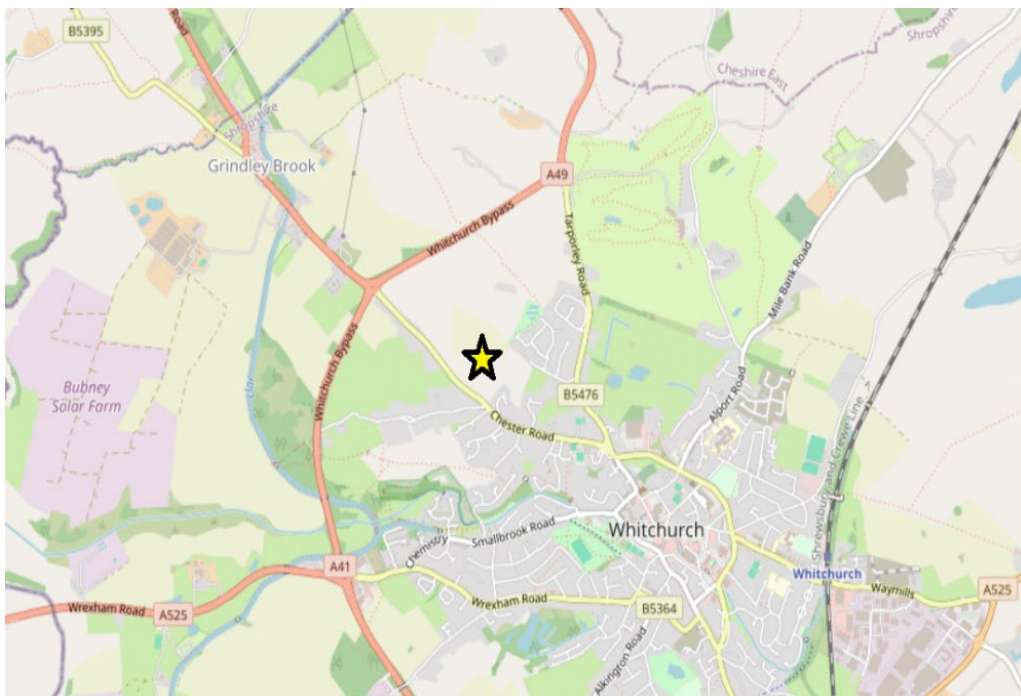
1.1 Preamble

1.1.1 This Access Appraisal pertains to the development of land to the north of Chester Road, Whitchurch. The development proposed will consist of up to 200 dwellings and is situated on the periphery of Whitchurch, at its northwestern boundary.

1.1.2 The site itself is located circa 1.2km northwest of Whitchurch town centre, circa 22km to the southeast of Wrexham and circa 14km to the southwest of Nantwich. The site is bound to the north by residential dwellings (Haroldgate/Hazelnut Way) and to the east by residential dwellings (Oak Tree Way and The Beeches). Open fields front the development to the west, with the site having a direct frontage to Chester Road to the south.

1.1.3 Image 1.1 shows the location of the site (yellow star) in the context of the surrounding area.

Image 1.1: Site location



Source: [OpenStreetMap](https://www.openstreetmap.org)

1.1.4 Shropshire Council (SC) is both the Local Highway Authority (LHA) and the Local Planning Authority (LPA) for the area. A pre application response from SC, which considered highway aspects for the

proposed scheme was received 12th October 2023. The Highway Officer comments noted the site and layout to be ‘*acceptable*’, subject to some clarification and FUL planning application.

1.2 Purpose of the report

- 1.2.1 The purpose of this report is to provide an overview of the site access proposals, to highlight the accessible nature of the site by sustainable modes of transport to the various facilities that can be found in the surrounding area and to demonstrate that there are no highways technical reasons which would preclude the allocation of the Site for housing in the Local Plan. Opportunities to enhance the accessibility of the site by sustainable modes of transport will also be reviewed.

2 EXISTING SITUATION

2.1 Local Highway Network

B5395 Chester Road

- 2.1.1 Chester Road is a ‘B’ classified road running in an approximate east-west alignment across the site’s southern frontage. The road meets with the 4-armed roundabout junction of the A49 Whitchurch Bypass/A41 Chester Road circa 600m to the west of the site and the 3-armed roundabout junction of Tarporley Road/Bargates circa 700m to the east of the site. The frontage of the road is residential in nature and also provides access to other residential side roads.
- 2.1.2 The speed limit along Chester Road to the east of the site is 30mph with street lighting being provided. This changes to 40mph approximately half way along the site frontage, this change in speed limit being marked by speed limit signage/roundels and a narrowing of the carriageway from circa 7.5m to circa 6m at the point of the narrowing.
- 2.1.3 A pedestrian footway circa 1.5/2.0m width is accommodated along Chester Roads southern verge for its entire length between the A49/A41 junction in the west to the town centre to the east. A footway circa 2m in width commences in the northern verge circa 250m to the east of the site frontage. It should be noted that the existing footways along Chester Road are recognised by SC as promoted walking routes.
- 2.1.4 An advisory cycle lane is provided on the either side of the carriageway between the site and the junction of Chester Road/The Firs some 400m to the east, although the white lining depicting this facility is somewhat faded or hasn’t been replaced following works in the carriageway. These cycle facilities on Chester Road provide access to a network of cycle routes that are described in more detail in Section 2.4.
- 2.1.5 A bus stop is provided in the northern verge of Chester Road circa 50m to the east of the site. This is a very basic facility comprises a bus stop sign attached to a lighting column. There is no hardstanding

or any informal crossing facilities to aid crossing movements over Chester Road to access this facility. Additional information on bus access to the site is provided in Section 3.

Haroldgate providing connections to Tarporley Road to the East

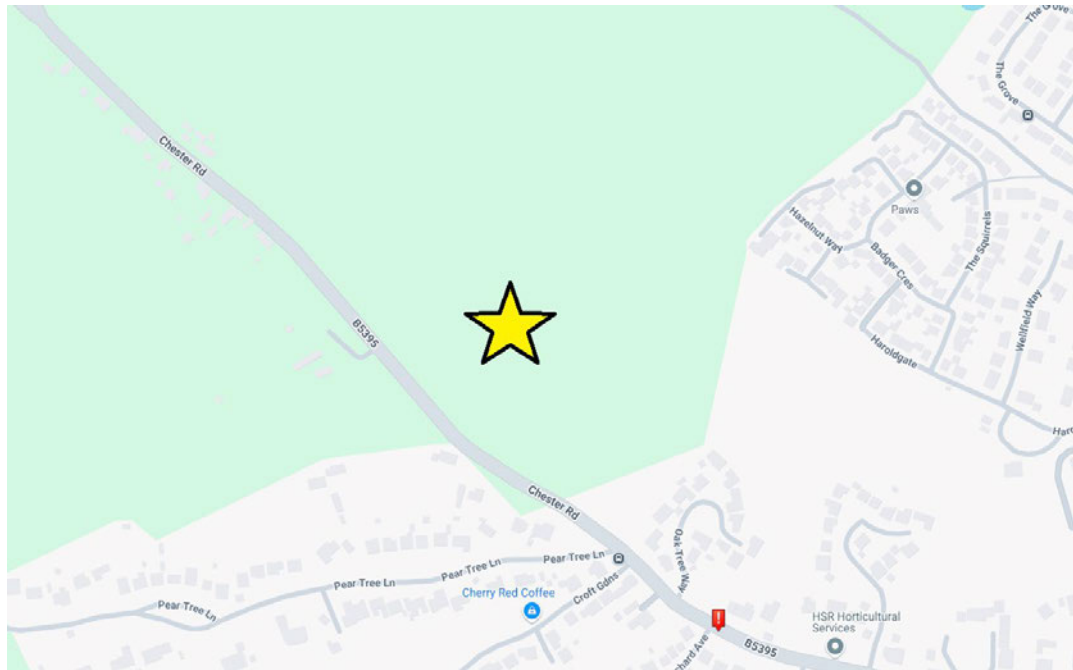
- 2.1.6 This is a residential road that is found toward the northern end of the site. It comprises a circa 6m carriageway and circa 2m to 3m wide footways in both verges, is subject to a 30mph speed limit and street lighting is provided.
- 2.1.7 It would appear from information provided by the client that there is no direct frontage between the site and Holdgate, although it would appear from the pre-app response that the highways officers at SC would like to see some form of connection between the site and Holdgate. This is discussed in more detail below.

2.2 Existing Traffic Conditions

- 2.2.1 A site visit was completed by Prime Transport Planning at the beginning of September 2024. Traffic across the site frontage and through Whitchurch was noted to generally adhere to the signed speed limits. Pedestrians and cyclists were seen to travel along Chester Road, with the existing infrastructure including the footway provision, cycle lanes and traffic calming feature generally creating an environment conducive to walking and cycling.

2.3 Road Safety Review

- 2.3.1 A review has been undertaken of the Chester Road corridor to help establish if there were any road safety issues that would influence the location of any access to Chester Road from the site or indeed precluded the ability to deliver an access onto this road from the site.
- 2.3.2 This review has utilised data contained in the CrashMap database and covers the length of Chester Road between the A41/A49 junction to the west and the Tarporley Road/Bargates junction to the east. This review covers the period between 2018 and 2022, this being the latest available data.
- 2.3.3 Image 2.1 below shows the output from the CrashMap database.

Image 2.1: Accident Study Area

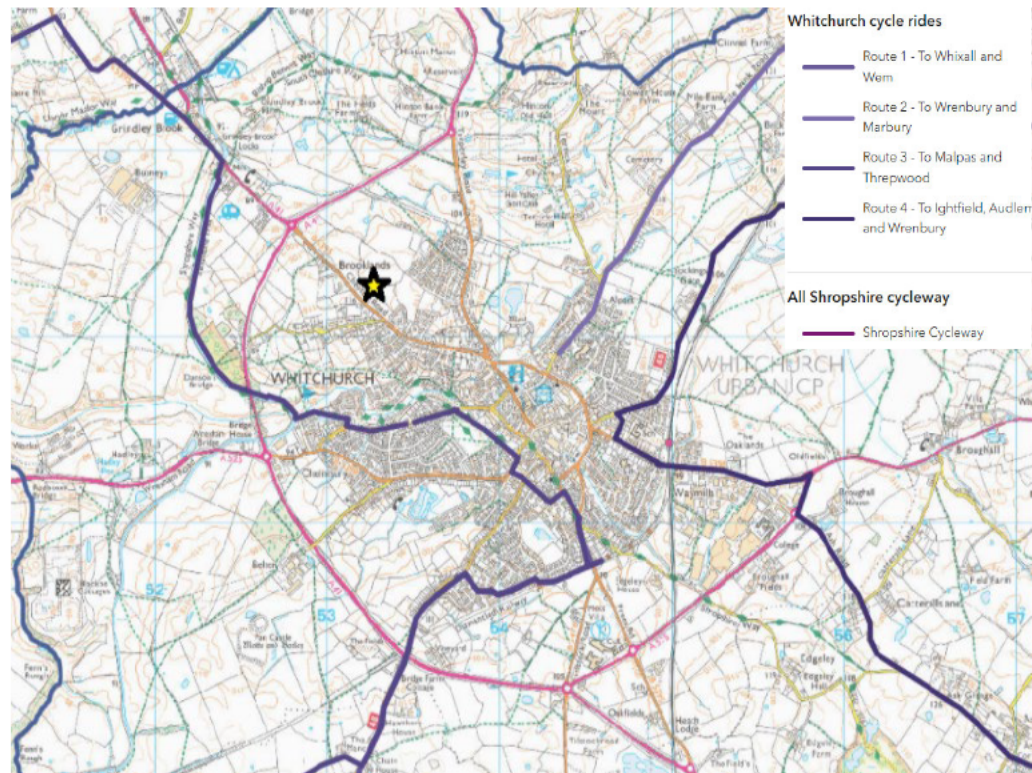
Source: [CrashMap](#)

- 2.3.4 An examination of the above shows that there has been 1 injury accident on the Chester Road corridor, this occurring in the vicinity of the Orchard Avenue junction circa 100m to the east of the site frontage. It would appear from the information contained within the CrashMap database that this incident involved a right turning vehicle in collision with another vehicle travelling along Chester Road, this resulting in a serious injury being sustained by the driver of one of the vehicles. The incident occurred in January 2022 during the hours of darkness and the road conditions were wet.
- 2.3.5 The above demonstrates number and severity of injury accidents that have occurred in the vicinity of the site are low when considering the 'B' classification of Chester Road. It should also be noted that no incidents have occurred in the vicinity of the site, the only incident that did occur was circa 100m to the east of the site. The above clearly demonstrates that road safety is not a factor that should influence the form and location of any access to the site.

2.4 Local Cycle Facilities

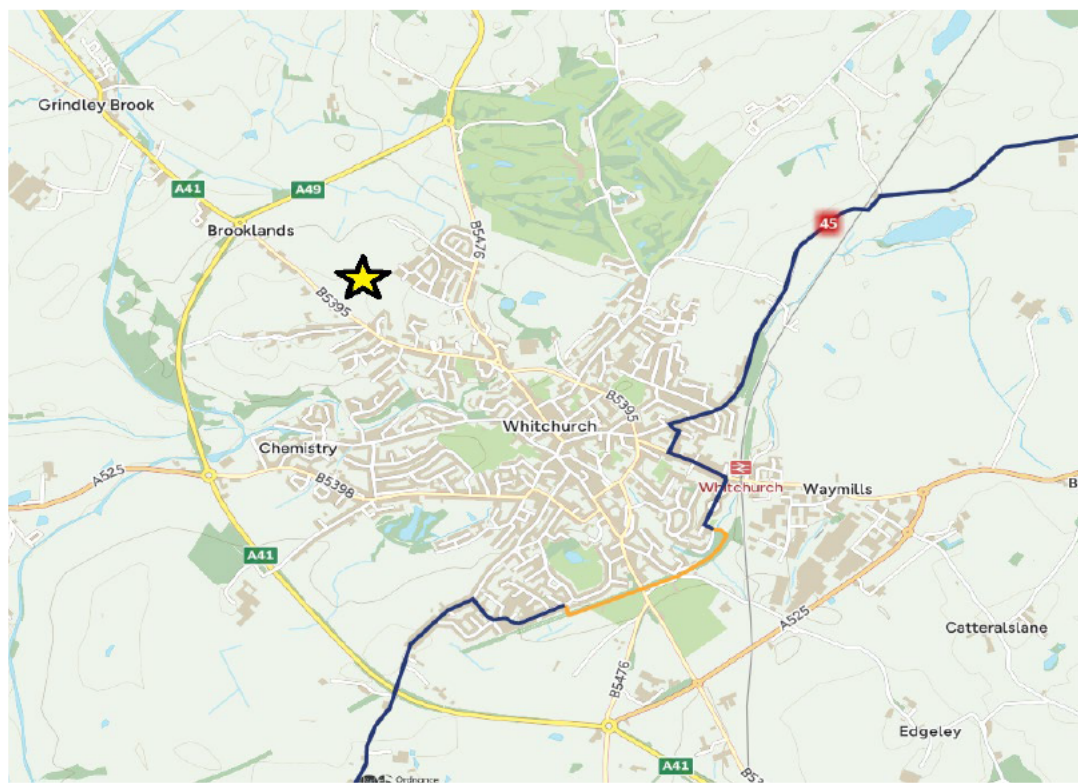
- 2.4.1 The existing cycle routes along Chester Road provide access to several cycling routes throughout Shropshire, with several cycle routes highlighted on the SC website either starting from or incorporating Whitchurch. These cycle routes include the Shropshire Cycleway Route, a 185-mile circular which traverses the entirety of the county boundary.
- 2.4.2 Image 2.2 below highlights these cycle routes, with some routes utilising the same direction whilst traveling through Whitchurch. The map has been derived from SC Local Access Forum website, 'Shropshire's Great Outdoors'.

Image 2.2: Whitchurch Cycle Routes



2.4.3 In addition to the above, National Cycle Network (NCN) route 45 passes through the eastern edge of Whitchurch. Image 2.3 is an extract from the Sustrans website, highlighting NCN 45.

Image 2.3: Local Cycle Routes



- 2.4.4 NCN 45, as seen on Image 2.3, runs in a north to south alignment, passing through the eastern edge of Whitchurch. From the development site a cyclist could connect on to this route in a circa 5-minute ride time. Locally the route helps facilitate cycle connections to smaller villages/hamlets, such as Welsh End, Alkington, Hollinwood and Wrenbury.

3 ACCESS BY SUSTAINABLE MODES OF TRANSPORT

3.1 Introduction to Sustainable Modes of Transport

- 3.1.1 National and local transport planning policy centres on the importance of sustainable development, meaning that new developments should be located in areas where there is access to sustainable modes of travel, or where sustainable modes of travel can be introduced. The National Design Guide (2021) defines sustainable transport modes as:

‘Any efficient, safe and accessible means of transport with overall low impact on the environment, including walking and cycling, low and ultra-low emission vehicles, car sharing and public transport.’

- 3.1.2 Walking and cycling are commonly regarded as two of the most sustainable modes of transportation. This section of the report will describe how the proposed development is accessible by these modes.

3.2 Access on Foot

- 3.2.1 Whitchurch is a large town with a very good range of facilities and local employment opportunities. As such, the local pedestrian infrastructure includes well maintained footways, street lighting and, where appropriate, pedestrian crossings. As mentioned above, the existing footways along Chester Road are recognised by SC as promoted walking routes.
- 3.2.2 Research has indicated that acceptable walking distances depend on a number of factors, including the quality of the development, the type of amenity offered, the surrounding area, and other local facilities. The Chartered Institution of Highways and Transportation (CIHT) document entitled Providing for Journeys on Foot (2000) suggests walking distances which are relevant to this access appraisal. These distances are shown in Table 3.1.

Table 3.1: Suggested Acceptable Walking Distances

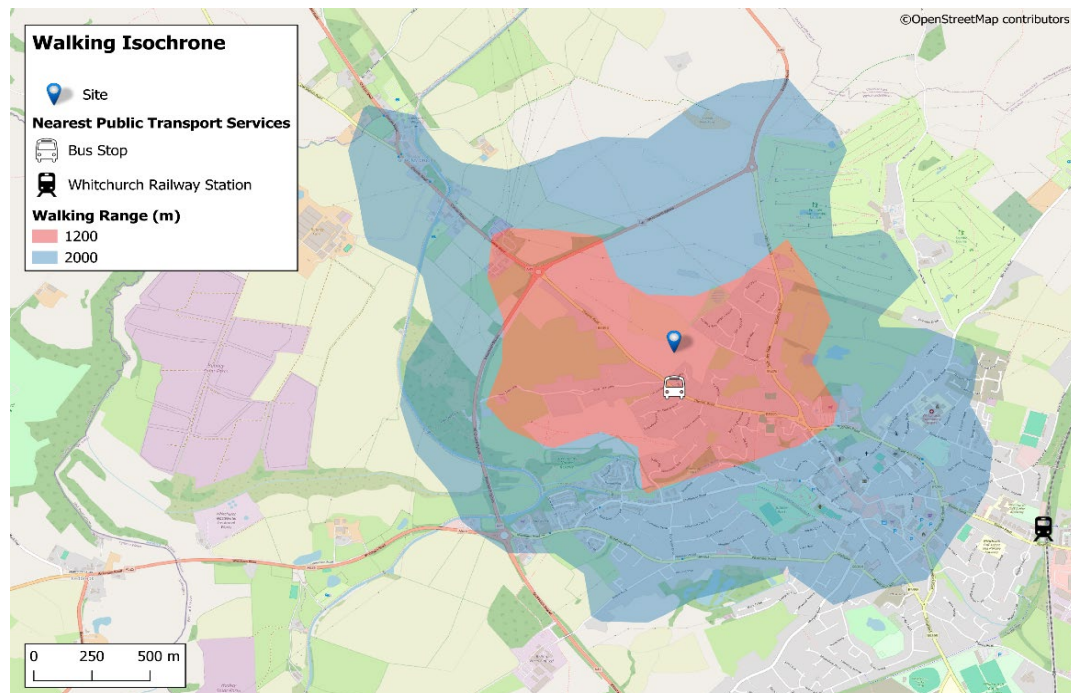
Criteria	Town Centres (m)	Commuting/School/Sightseeing (m)	Elsewhere/Local Services (m)
Desirable	200	500	400
Acceptable	400	1000	800
Preferred Maximum	800	2000	1200

Source: CIHT Document; ‘Providing for Journeys on Foot’, (2000)

3.2.3 In order to highlight the site’s accessibility on foot, an indicative walking isochrone has been produced using the Geographic Information System (GIS) software Basemap TRACC. To provide an accurate representation of the future highway and PRoW network, the site’s proposed vehicular access point has been manually added to the network used for the isochrone.

3.2.4 Image 3.1 represents the site’s walking catchment with the CIHT’s *Preferred Maximum* distances of 1200m and 2000m for local service and commuting/school trips illustrated.

Image 3.1: Walking Isochrone



3.2.5 Being located on the periphery of an established residential area, there is a multitude of local amenities, schools and workplaces within a reasonable walking distance of this proposed development. The amenities within the approximate 1200m catchment include a large supermarket (Sainsbury’s), public house (The Cock and Greyhound), place of worship (St Alkmunds), bars (The Black Bear), tennis club (Hollies Tennis Club) and bowling club (Chester Road Bowling Club). It should also be noted that Whitchurch High Street is a circa 1400m walk from the centre of the site, this providing access to an array of amenities including a butchers (Purcell Butchers), restaurants (Docket), a deli (Walker Deli), Whitchurch Civic Centre, clothing shops (Frocs@35) and takeaways (Hundred King).

3.2.6 Within the 2000m walking catchment area are schools and nurseries, including Whitchurch C of E Junior School, Whitchurch CE Infant and Nursey School. In addition to the above, slightly more than the 2000m catchment, is Waymills Industrial Estate which can be walked to in <30 minutes, with this walking time also including Whitchurch train station. Employment opportunities may become available over time at the aforementioned amenities and schools along with other local businesses.

3.2.7 The above demonstrates that walking offers the opportunity for potential residents of the site to access a considerable range of local amenities, places of employment and places of education.

3.3 Access by Cycle

3.3.1 It is widely recognised that cycling can offer an attractive alternative to short car trips, particularly those under 8km, but also as part of longer journeys by public transport.

3.3.2 Local Transport Note (LTN) 1/20 *Cycle Infrastructure Design* states that:

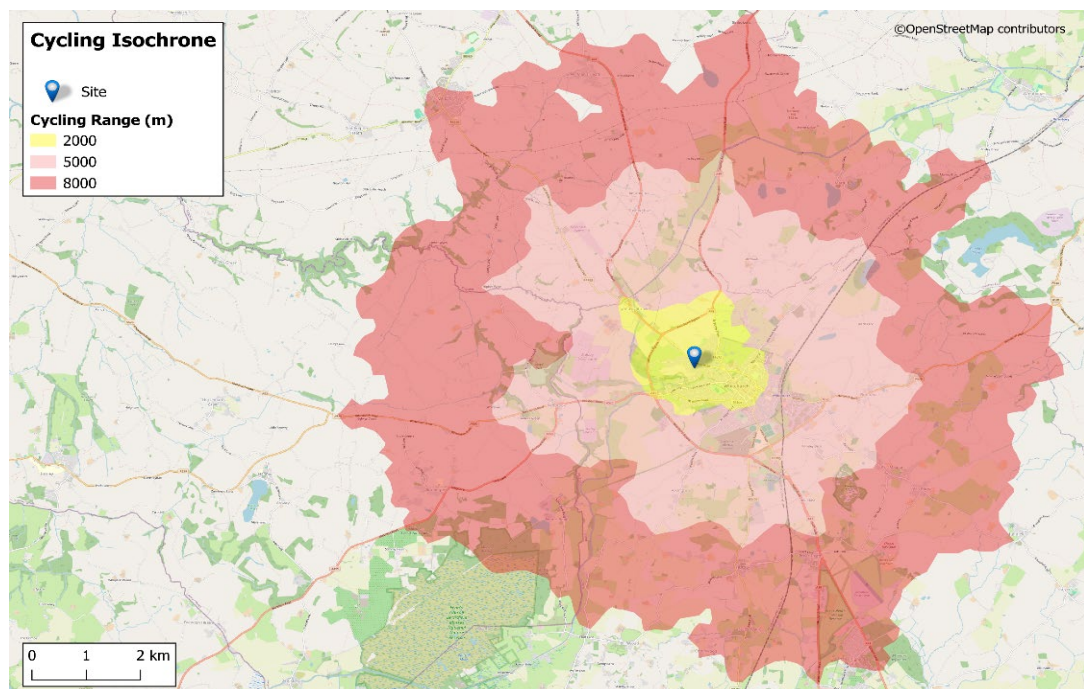
‘Two out of every three personal trips are less than five miles [8km] in length - an achievable distance to cycle for most people’.

3.3.3 As described in Section 2.4, the site is located in proximity to 8 separate SC promoted cycle routes, including the Shropshire Cycleway Route. NCN 45 additionally runs along the eastern boundary of Whitchurch, accessible in a short <5-minute cycle time.

3.3.4 The provision of such cycle routes would not only help to encourage cycling as a mode of travel, but it also helps to facilitate access to smaller villages/hamlets, such as Welsh End, Alkington, Hollinwood and Wrenbury.

3.3.5 A cycling isochrone showing the site’s catchment has been produced using TRACC and is shown in Image 3.2 below. Image 3.2 illustrates 2000m, 5000m and 8000m catchment ranges, which equate to 10, 25 and 40-minute journey times respectively and are based on the somewhat conservative or leisurely cycle speed of 12kph. Anecdotally, commuting cyclists are generally thought to travel at speeds between 15-20kph so a greater catchment may be more realistic.

Image 3.2: Cycling Isochrone



3.3.6 Image 3.2 illustrates that the entirety of Whitchurch can be cycled, with this distance including Sir John Talbot High School and 6th Form College. In addition to Whitchurch, the various facilities that can

be found in Alkington, Fenns Bank, Prees Heath, Tilstock, Bronington and Malpas can also be accessed within an easy cycle ride from the site.

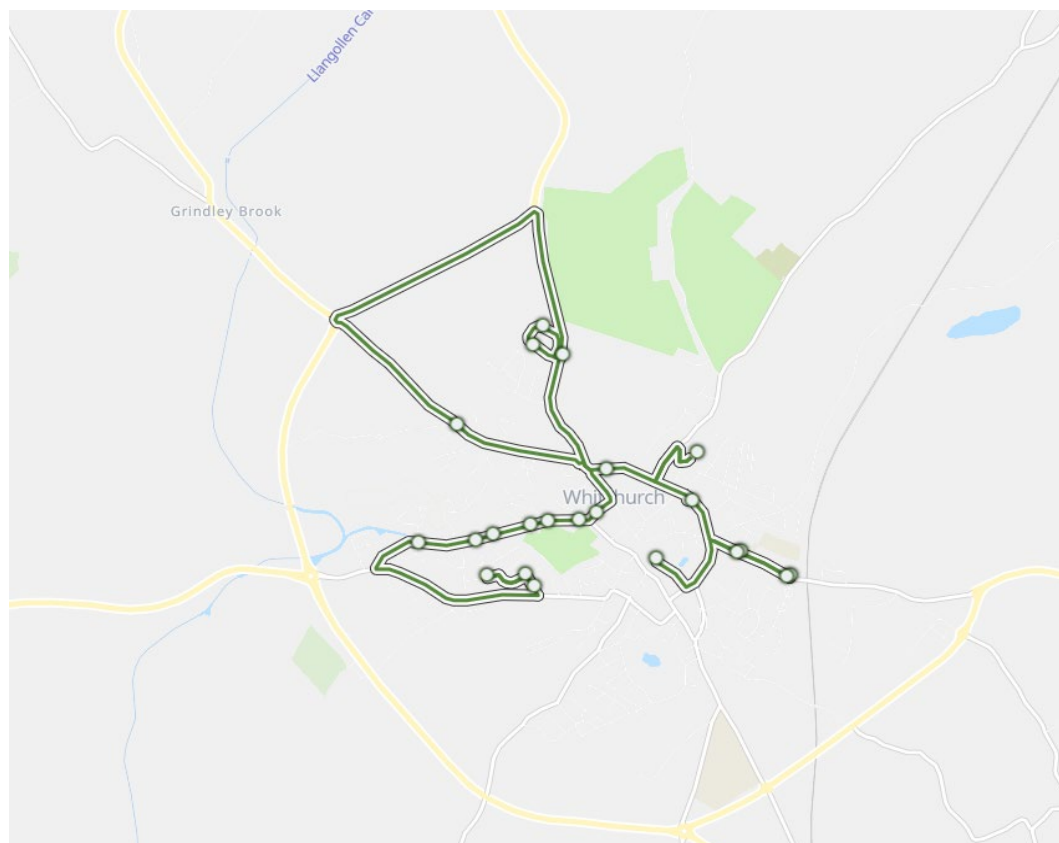
- 3.3.7 The above demonstrates that cycling offers the opportunity for potential residents of the site to access a considerable range of local amenities, places of employment, places of education and other settlements.

3.4 Access by Public Transportation

Bus Travel

- 3.4.1 As mentioned above, there is a bus stop located on Chester Road circa 50m to the east of the site frontage. Even when considering the development sites most northern extremity the bus stop remains within a circa 400m walking distance of all proposed dwellings. The proximity of this bus stop complies with the design criteria set out in SMART Part B with regards to the ability to access public transport facilities.
- 3.4.2 The above bus stop provided access to the service 205. This is an hourly service running from circa 08:00 to 18:30 Monday to Saturday and runs on a circular route around Whitchurch. It provides access to locations such as the rail station, Smithfield Shopping Centre, the hospital, Sainsbury's and many residential areas across the town. The route of this 205 service is depicted on Image 3.3 below.

Image 3.3: Bus Service 205 Route

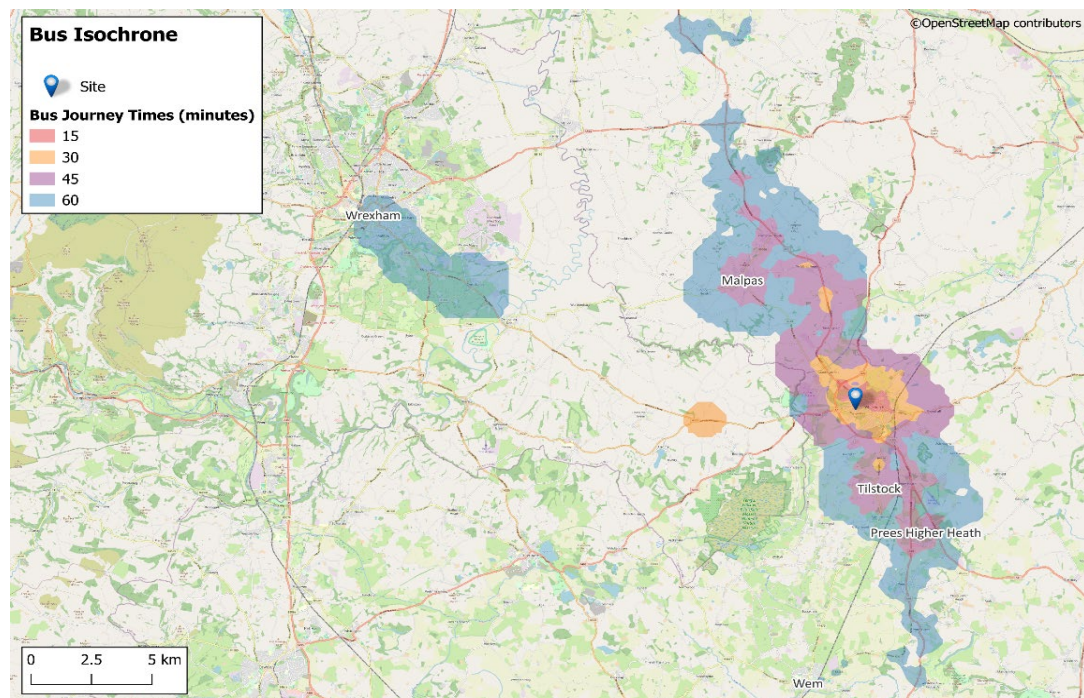


Source: [Line Route WHO205 - Lakeside Coaches - Bus Schedules | Moovit \(moovitapp.com\)](#)

3.4.3 It should also be noted that additional bus services can also be accessed in Whitchurch either via a short walk of via the use of the 205 service. These services include the services 41, 511, 512 and 146 which provide connections to Chester, Shrewsbury and Wrexham, stopping at other villages and towns on their journey including Broughton, Hatton Heat, Tilstock, Wem and Overton.

3.4.4 Image 3.4 below shows the locations that can be reached by bus within an hour's journey time (including the walk time) from the site.

Image 3.4: Local Bus Catchment Plan



3.4.5 The above demonstrates that the bus provides future residents of the proposed development with the opportunity to access a substantial number of services and amenities that can be found in Whitchurch and the various surrounding towns and villages.

Rail Travel

3.4.6 Whitchurch rail station is located with a 10-minute bicycle ride from the site, or a circa 20-minute bus journey. From the station, passengers can access regular services direct to regional destination such as Crewe, Shrewsbury and Manchester Piccadilly.

3.4.7 The above demonstrates that rail services provides future residents of the proposed development with the opportunity to access regional destinations. It should also be noted that national destination can be reached from both Crewe and Manchester Piccadilly.

3.5 Travel Plan

- 3.5.1 The Travel Plan that will support the eventual planning application will outline the applicant's commitment to promoting and encouraging sustainable travel. Bespoke measures that will encourage future residents of the site to walk, cycle and use public transport use will be presented.

3.6 Accessibility Summary

- 3.6.1 The above has demonstrated that the site is in a sustainable location where a range of local amenities, employment opportunities and schools are within nationally recognised acceptable walking and cycling distances.
- 3.6.2 The existing bus stops are accessible on foot with local bus services offering the opportunity for potential residents to access the various facilities that can be found in Whitchurch and beyond. Rail services also offer the opportunity for future residents to access regional and national destinations.
- 3.6.3 A Travel Plan will be produced to support these development proposals which will provide incentives for future residents of the site to utilise sustainable modes of transport to access local, regional and national facilities.

4 HIGHWAY DESIGN GUIDANCE

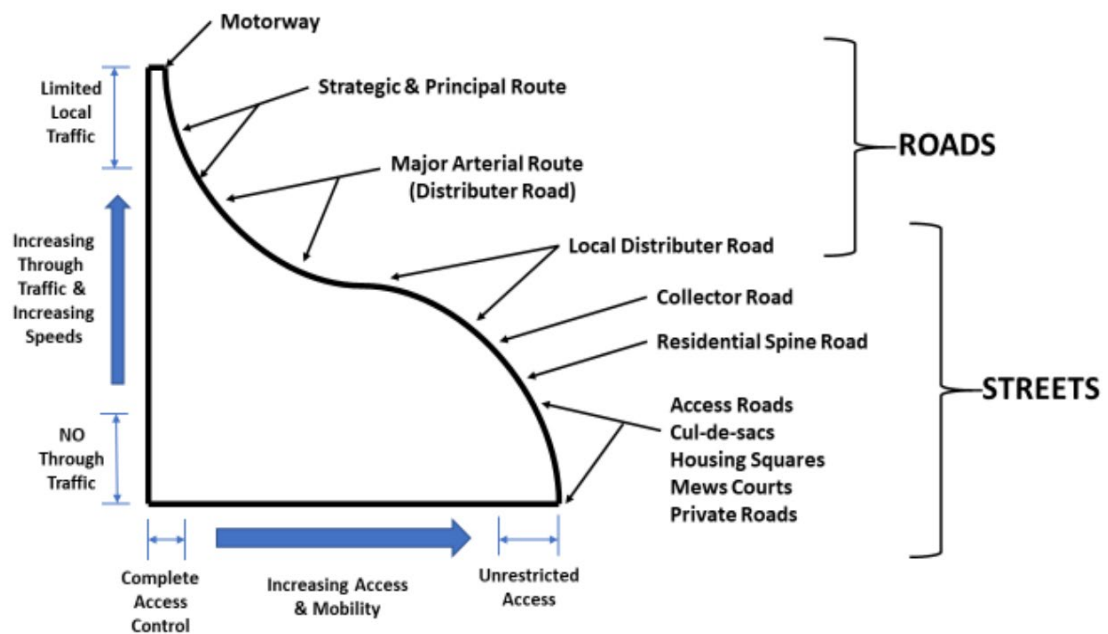
Shropshire Council Design Guidance

- 4.1.1 SC adopt county wide guidance which sets out a range of information for applicants, planners, developers and transport planners to utilise in the design of schemes. These documents include Manual for Streets 1 and 2, as well as the Shropshire Manual for Adoptable Roads and Transport (SMART). As part of pre application advice, the SMART document was stated as being a design guide to which this development should refer.

SMART

- 4.1.2 As noted above, in addition to the guidance given by MfS, SC have their own design guidance document known as SMART.
- 4.1.3 The SMART document is made up of several reports and when combined they cover such aspects as design principles (A), specifications for adoptable assets (B), legislation (C), procedures and technical notes (D) which address an array of topics.
- 4.1.4 SMART Part A provides classification regarding road hierarchy, with Image 4.1 below being an extract from this document.

Image 4.1: SMART Road Hierarchy



Source: [part-a-design-principles-oct-2021.pdf \(shropshire.gov.uk\)](#)

4.1.5 From Image 4.1 above it can be seen that the document clearly sets out a hierarchy, with a split defined by either 'roads' or 'streets'. The main differentiator between these being the limitation of through traffic. The document sets out the hierarchy to be:

Roads

- Local Distributer Road – distributing traffic between large towns or settlements;
- Collector Road – highway serving up to 500 dwellings; and
- Major Residential Access Road (Or Residential Spine Road) – highway serving up to 300 dwellings.

Streets

- Access Road – highway serving 200 dwelling in a loop style arrangement, of 100 dwellings in a cul de sac arrangement;
- Minor Access Ways – streets serving up to 25 dwellings as a cul de sac or up to 50 dwellings as a connection street;
- Mews Court - no more than 25 dwellings as a loop, or 12 dwellings as a cul de sac; and
- Housing Square - up to 10 dwellings.

4.1.6 Part B of the SMART document provides some clarification regarding adoptable standards of footways and carriageways, with footways stated to be provided at a recommended 2.0m width. Carriageway widths of 5.5m are referenced several times throughout Part B of SMART as being adoptable.

- 4.1.7 Other aspects of guidance are noted with SC requiring all visibility splays and sightlines to be within the adopted highway and for at least 1 bus stop to be within a 400m walking distance of each dwelling within a development.

Design Manual for Roads and Bridges (DMRB CD 109)

- 4.1.8 Although not specifically referenced via the SC website, the Design Manual for Road and Bridges (DMRB) is set of standards which relate to the design and assessment of motorways and all-purpose trunk roads. Although Chester Road across the site frontage does not technically need to adhere to this guidance, the application of DMRB visibility requirements (derived through stopping sight distance (SSD)) is a common best practice for access locations in rural settings.

- 4.1.9 Image 4.2 below provides a section of information derived from DMRB document CD 109.

Image 4.2: DMRB CD 109 SSD

Table 2.10 Design speed related parameters

Design speed kph	120	100	85	70	60	50	V2/R
Stopping sight distance (metres)							
Desirable minimum	295	215	160	120	90	70	-
One step below desirable minimum	215	160	120	90	70	50	-

Source: [CD 109 - Highway link design \(standardsforhighways.co.uk\)](https://standardsforhighways.co.uk)

- 4.1.10 As seen with Image 4.2 the require SSD varies depending upon the design speeds for a road.

5 ACCESS STRATEGY

5.1 Proposed Access Arrangement

- 5.1.1 As previously mentioned, the site has direct frontage to Chester Road, this road offering the only realistic opportunity to access the site. Given the site is proposed to accommodate up to 200 dwellings and would have no through traffic, a single access point designed to the geometric standards of an 'Access Road' is considered appropriate in accordance with the SC's SMART Guidance. Drawing P24080-001 in Appendix I depicts the proposed access arrangements, this drawing being based on a topographical survey of the section of Chester Road along the site frontage.

- 5.1.2 An examination of this drawing shows that the site access is proposed to consist of a priority controlled junction to be located at the existing change of speed limit. In accordance with SC's SMART Guidance, the access geometries are proposed to comprise of a 5.5m wide carriageway, 6m corner radii and 2 x 2m footways. The delivery of this access will require the re-location of the change of speed limit and the traffic calming feature further west, to a location to be agreed with the highway's officers at SC. The extension of the 30mph speed limit further west will require the promotion of a Traffic Regulation Order (TRO) which the developer is prepared to fund.

- 5.1.3 Drawing P24080-001 in Appendix I also shows visibility splays of 2.4m x 90m are to be provided to the left on exit and 2.4m x 120m to the right on exit are to be provided and can be delivered either within

the site or highway boundary. These recognise the design criteria set out in DMRB and reflect the current situation with regards to the speed limits on Chester Road fronting the site. These visibility splays are therefore overly robust given that the 30mph speed limit is to be extended westwards as part of these development proposals.

- 5.1.4 It should be noted that the proposed access arrangements described above are similar to those that were the subject of the pre-app submitted to SC. The comments from the highways officers at SC suggested that the *'proposed development layout is, in principle, acceptable'*.
- 5.1.5 An examination of the site access drawing also shows a set of dropped kerbs/tactile paving are also to be provided at the site access which will help the crossing of pedestrians over Chester Road to connect into the continuous footway that can be found in the southern verge of Chester Road, this providing a continuous safe pedestrian route into the centre of Whitchurch. Pedestrians using this crossing point will also benefit from the extension of the 30mph speed limit westwards along Chester Road which will ensure vehicles will be travelling at a more appropriate speed where pedestrians are crossing the road.
- 5.1.6 It was noted during the site visit that statutory undertaker's equipment would appear to be present in the northern verge of Chester Road. It is suggested that a stats search is undertaken to establish the impact of these access arrangements on this equipment. The delivery of the visibility splays mentioned above may also have an impact on the trees and vegetation that can be found along the site frontage. It is suggested that arb advice is sought to establish the acceptability of the loss of this vegetation.

5.2 Other Potential Highway Improvements

- 5.2.1 In conjunction with the delivery of the proposed site access arrangements detailed above, we would suggest the following improvements are also considered to be delivered to enhance the accessibility of this site by sustainable modes of transport.

Chester Road Bus Improvement and New Footway

- 5.2.2 As highlighted above, there is an existing bus stop provided in the northern verge of Chester Road located circa 50m to the east of the site frontage. This is a very basic facility comprises a bus stop sign attached to a lighting column. There is no hardstanding or any informal crossing facilities to aid crossing movements over Chester Road to access this facility.
- 5.2.3 It is suggested that as part of the site access proposals a footway is provided in the northern verge of Chester Road to connect the proposed development to this bus stop. It is also suggested that the bus stop is upgraded to provide a raised waiting area, a shelter, carriageway markings, timetable information and dropped kerbs and tactile paving to aid access to this improved facility.

- 5.2.4 These improvements will help to increase the potential for future residents of the site to use this sustainable mode of transport. The delivery of these improvements will be subject to detailed design and advice with regards to the proximity of statutory undertakers equipment.

Walking Route to Whitchurch High Street (Via Chester Road)

- 5.2.5 As mentioned above, the existing pedestrian connections between the site and Whitchurch provide opportunities for future residents of the site to walk into the town centre. However, it was noted during the site visit that there are a number of locations along this route where improvements can be made to this pedestrian connection by the provision of additional dropped kerbs and tactile paving. It is envisaged that sufficient land is available within the boundaries of the adopted highway to facilitate these improvements.

- 5.2.6 The promotor of the site is willing to implement these additional improvements to the pedestrian connectivity between the site and the town centre as part of these development proposals in accordance with the site-specific development guidelines set out in Schedule S18.1(I) of the Local Plan.

Chester Road Cycle Route Upgrade

- 5.2.7 As noted above there is an advisory cycle lane provided on the either side of the carriageway between the site and the junction of Chester Road/The Firs some 400m to the east, although the white lining depicting this facility is somewhat faded or hasn't been replaced following works in the carriageway.
- 5.2.8 The promotor of this site is willing to re-instate these cycle lanes as part of these development proposals in accordance with the site-specific development guidelines set out in Schedule S18.1(I) of the Local.

Connection to Tarporley Road (Via Haroldgate)

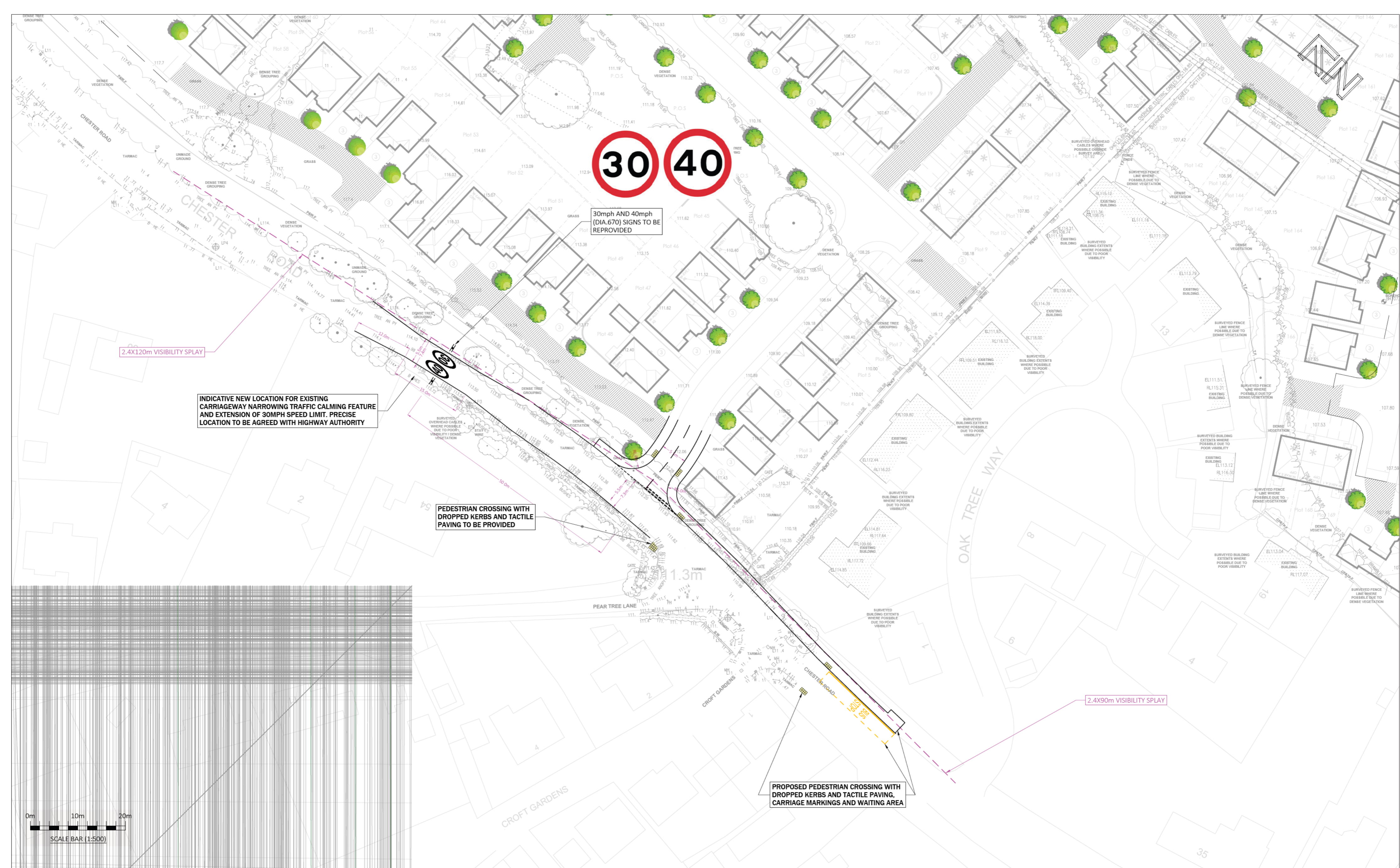
- 5.2.9 The site-specific development guidelines set out in Schedule S18.1(I) of the Local Plan highlights the potential for two vehicular access points from Chester Road and Tarporley Road through the existing Mount Farm Development (via Haroldgate).
- 5.2.10 Whilst the promotor of the site understands the benefits of such a connection, unfortunately as it stands land ownership issues precludes the delivery of such a facility. The promotor of the site is willing to work with other 3rd party landowners to help deliver such a connection, although providing no direct vehicular access between Chester Road and Tarporley Road is not considered to impede the delivery of the scheme.
- 5.2.11 Notwithstanding ownership matters, the Chester Road access arrangement can safely accommodate circa 200 homes without the need for a secondary access to Haroldgate (as per the appended access arrangement) and there is sufficient land within the developments control to deliver this access.

6 SUMMARY

- 6.1.1 The site is situated in a sustainable location where many facilities can be accessed via the use of sustainable modes of transport.
- 6.1.2 A priority controlled access onto Chester Road should be located at the point of the change in speed limit on Chester Road. The provision of the site access and the associated visibility splays will require the removal of the existing vegetation along the site frontage. We would suggest that arb advice is sought relating to the acceptability of the loss of this vegetation.
- 6.1.3 We also suggest a stats search is undertaken to establish if the proposed access arrangements will have an impact on any stats equipment present in Chester Road.
- 6.1.4 A footway is to be provided along the northern verge of Chester Road to connect the site access to the existing bus stop that is located circa 50m to the east of the site. This bus stop is to be upgraded to provide a raised boarding area, shelter, timetable information and informal crossing facilities to aid the movements of pedestrians to this facility.
- 6.1.5 The promoter of the site is also willing to improve the pedestrian connection between the site and Whitchurch town centre. The land required for the delivery of improvements is either within the developments control or forms part of the envisaged highway boundary, and as such there should be no encumbrance to their delivery.

APPENDIX I

TECHNICAL DRAWING



30 40

30mph AND 40mph (DIA.670) SIGNS TO BE REPROVIDED

2.4x120m VISIBILITY SPLAY

INDICATIVE NEW LOCATION FOR EXISTING CARRIAGEWAY NARROWING TRAFFIC CALMING FEATURE AND EXTENSION OF 30MPH SPEED LIMIT. PRECISE LOCATION TO BE AGREED WITH HIGHWAY AUTHORITY

PEDESTRIAN CROSSING WITH DROPPED KERBS AND TACTILE PAVING TO BE PROVIDED

PROPOSED PEDESTRIAN CROSSING WITH DROPPED KERBS AND TACTILE PAVING, CARRIAGE MARKINGS AND WAITING AREA

2.4x90m VISIBILITY SPLAY



Key Visibility Splay	Vehicle models used in swept path analysis	DISCLAIMER PROPOSALS ARE PRELIMINARY ONLY, NOT FOR CONSTRUCTION PURPOSES PROPOSALS WILL BE SUBJECT TO UTILITY AND DRAINAGE INVESTIGATIONS PROPOSALS WILL BE SUBJECT TO EXTENT OF ADOPTED HIGHWAY DO NOT SCALE THIS DRAWING. DIMENSIONS ARE FOR REPRESENTATIONAL AND INFORMATIONAL PURPOSES ONLY AND SUBJECT TO DETAILED DESIGN THIS DRAWING MUST ONLY BE USED FOR THE PURPOSE FOR WHICH IT HAS BEEN SUPPLIED	 Prime Transport Planning 9 Hurricane Court Liverpool International Business Park Estuary Boulevard Liverpool L24 8RL www.primetp.co.uk 0151 728 1860	* * * *	Project CHESTER ROAD, WHITCHURCH, SHROPSHIRE	Drawn by RO	Issue date 12 SEP 2024
				Rev Date By Revision notes		Scale(s) 1:500 @ A2	
Key Visibility Splay				Status INFORMATION	Title SITE ACCESS VISIBILITY, RELOCATED TRAFFIC CALMING FEATURE AND BUS STOP IMPROVEMENTS	Drawing No P24080-001	

Appendix 3 – Drainage Technical Note

DRAINAGE TECHNICAL NOTE

Land off Chester Road, Whitchurch

SCP/240899/TN01 Rev A – 20 September 2024



Prepared by: Lauren Campton - Engineer	Date: 20/09/2024
Checked by: Ijaz Akram – Principal Engineer	Date: 20/09/2024
Approved by: Tracy Magee – Technical Director	Date: 20/09/2024

1.0 EXECUTIVE SUMMARY

1. This technical note has been produced for Castle Green Homes Ltd to review the proposed drainage arrangements for a new residential development site at Chester Road, Whitchurch following pre-planning enquiry feedback.
2. The proposals are to provide approximately 190 new dwellings along with associated access road off Chester Road, shared drives and landscaping areas.
3. The proposed development site is located with Flood Zone 1 and is at a low risk of flooding from fluvial and pluvial sources.
4. The site is in an area with less than 0.1% risk of fluvial flooding (Flood Zone 1) and based on NPPF 2021 the development proposal is wholly suitable in terms of flood risk as it is a more vulnerable development.
5. Pre-planning enquiry feedback from Welsh Water provided confirmation that disposal of surface water flows from the development must follow the drainage hierarchy as per Part H of Building Regulations. Furthermore, Welsh Water confirmed that foul water flows from the proposed development can be accommodated within the public sewer for a 190-unit development.
6. The proposed surface water drainage is proposed to discharge to an existing watercourse ditch located in the north-east, as per Part H of Building Regulations. The discharge rate will be restricted to 36 l/s and attenuation is proposed in the form of pipes and attenuation basins.
7. The proposed foul water for the development site is proposed to drain via a gravity system to the north-east of the site, where it will go into a pumping station. From the pumping station the foul water is proposed to discharge to the existing Welsh Water foul sewer system located in Chester Road to the south of the development site.



8. The proposed foul network will connect into the existing system between manholes SJ52429001 and SJ52419901.
9. The drainage arrangements will need to be modelled during detailed design stage to confirm the arrangements are suitable for the site and to include an allowance for climate change.

APPENDICES

[Appendix A – Greenfield Run-off Calculations](#)

[Appendix B – Pre-planning Enquiry Feedback](#)

[Appendix C – Welsh Water Asset Map](#)

2.0 REVIEW OF FLOOD RISK

1. The proposed development site is located off Chester Road, Whitchurch which is 9.135 hectares in area and is currently undeveloped greenfield land.
2. The proposal is to provide approximately 190 new dwellings along with associated access road off Chester Road, shared drives and landscaping.
3. The site is located within an area classified as flood zone 1 with the risk of fluvial flooding being low and is therefore not at risk of flooding from fluvial sources, see Figure 1.

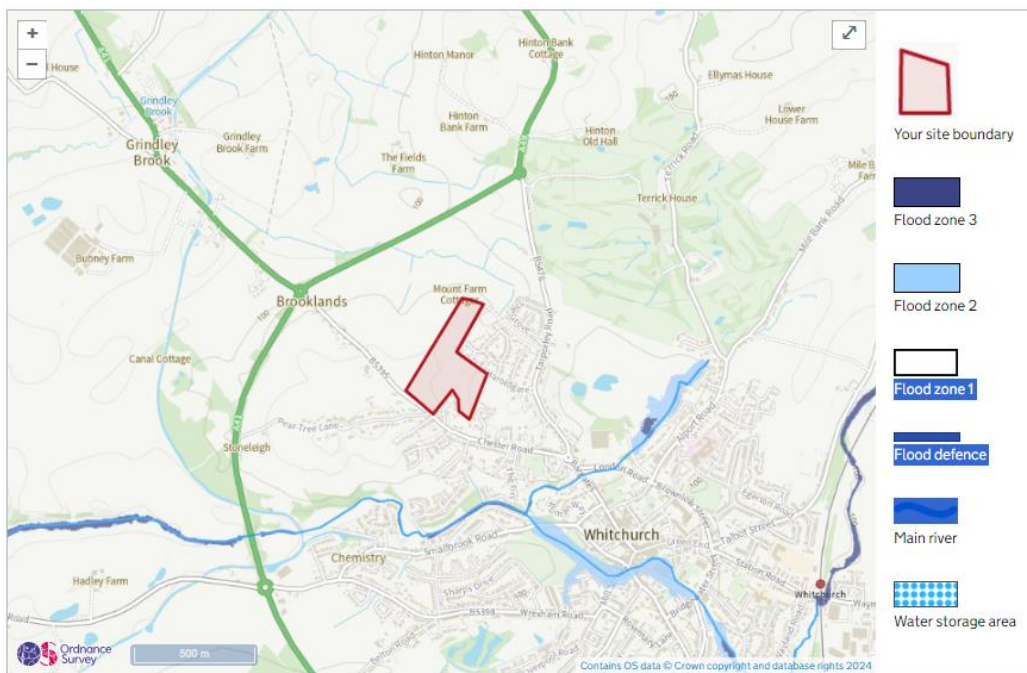


Figure 1: Flood Map for Planning (Source: EA Online Maps, 2024)

4. The Environment Agency long-term flood risk mapping shows a small area of the development site is at a high risk (more than 3.3%) of pluvial flooding, with the rest of the development site not at risk of pluvial flooding, see Figure 2.
5. The pluvial flooding noted within the development boundary is between a depth of 30cm to 90cm.
6. The development site is not at risk of flooding from reservoirs.
7. It is currently unknown whether the site is at risk of flooding from groundwater or sewers. The groundwater level is currently unknown and could be determined following ground investigations being complete.

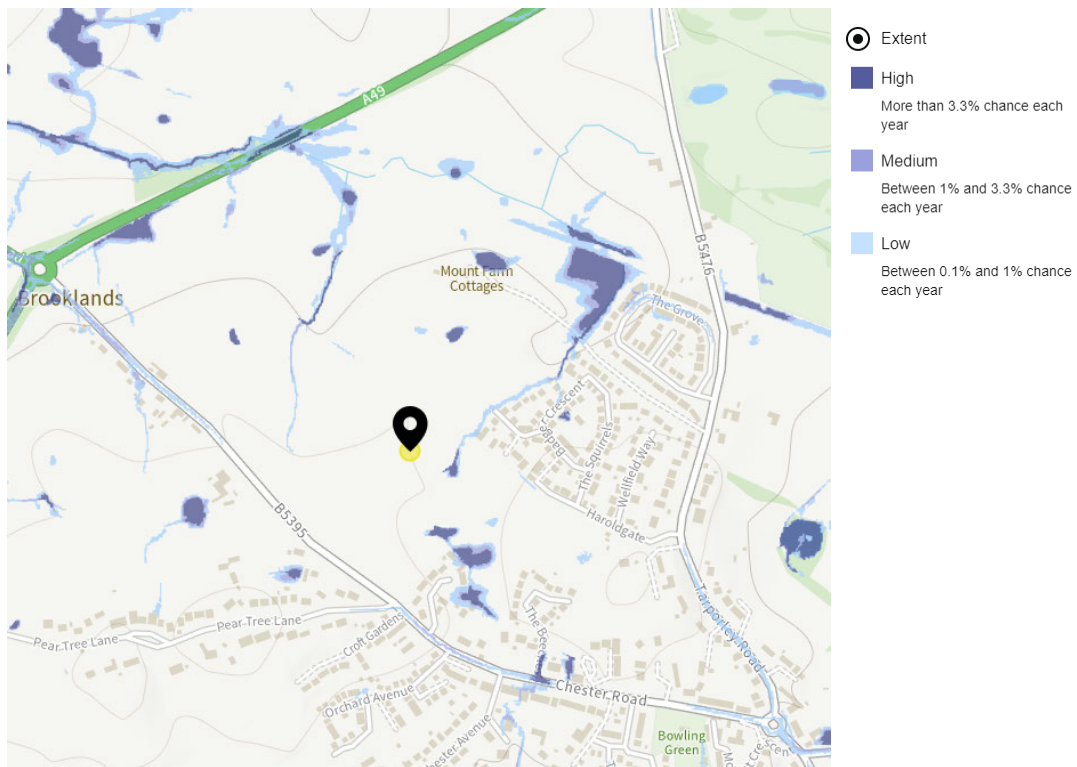


Figure 2: Environment Agency's long-term Flood Risk Map from Surface Water
(Source: EA Online Maps, 2024)

8. An assessment of the proposed development type (“Building used for dwelling houses” developments are considered “More Vulnerable” within the NPPF) against the appropriate Environment Agency’s flood zones (site is located in Flood Zone 1) as per *Table 2: Flood Risk Vulnerability Classification* of the NPPF has highlighted that the site is considered to be classified as ‘more vulnerable’.
9. Therefore, the site location is considered as suitable and flood risk to people, property and the environment is considered low, providing that fluvial flood risk mitigation measures of providing surface water management techniques, such as the use of SUDS or attenuation controls are identified and correctly implemented to ensure potential localised flooding and contaminated surface water runoff issues are avoided.

3.0 DRAINAGE DESIGN

Pre-application Planning Information

1. A pre-planning enquiry was submitted to Welsh Water regarding the proposed development and a response was received back in September 2021.
2. Within the response received back from Welsh Water, they confirmed that an assessment has been undertaken of the public sewerage system to accommodate 190 units.
3. Welsh Water confirmed that the proposed development site is located in the immediate vicinity of a separate sewerage system, comprising combined, foul and surface water public sewers, which drains to Whitchurch Wastewater Treatment Works (WwTW).
4. The pre-planning response requested that the disposal of surface water flows follows the drainage hierarchy as per Part H of Building Regulations and that discharge of surface water to the public sewer is only to be made as a last resort.
5. Welsh Water have considered the impact of foul flows generated by the proposed development and concluded that flows can be accommodated within the public sewerage system. We advise that the flows should be connected to the foul sewer between manholes SJ52429001 and SJ52419901 located in highway/grassland to the Southwest of the development site.
6. Furthermore, Welsh Water have verified that no problems are envisaged with the Waste Water Treatment Works for the treatment of domestic discharges from this site.
7. See Appendix B for pre-planning feedback.

Surface Water Drainage Strategy

8. The proposed development site is 9.135 hectares in area, with 7.00 hectares proposed to be developed as part of the works.
9. An assessment of the existing greenfield runoff rates has been undertaken using the ICP method on Micro-drainage. Calculations are summarised in Table 1 and can be found in Appendix A.

Table 1 – Existing Runoff Rates

Return Period (Yr.)	Existing Runoff Rate (l/s)
Total Site Area (9.135ha)	
1 Year	50.8 l/s
30 Year	98.9 l/s
100 year	121.4 l/s
QBar	58.4
Developed area (7.000ha)	
1 Year	38.9 l/s
30 Year	75.8 l/s
100 year	93.0 l/s
QBar	44.7 l/s

10. As per Part H of the Building Regulations and the pre-planning enquiry feedback, the principle of the surface water drainage strategy for the site is to collect the surface water runoff and restrict the discharge flow to an existing watercourse ditch located in the north-east.
11. The restricted discharge rate is to be maintained at 36 l/s as per a previous drainage strategy and provides a betterment of the existing QBar runoff. The restricted discharge rate will need to be agreed during planning application stage.
12. As per the Environment Agency's climate change requirements, an allowance of 45% will be made as part of the detailed drainage design.
13. The proposed impermeable area for the site is approximately 2.800 ha (60%) which will consist of a private access, shared rives, roofs and footways. All these areas will generate surface runoff.
14. Due to the surface water flow being restricted, attenuation will be required for the site.
15. The attenuation volume for the development site has been calculated based on an impermeable area of 28,000m² (60%) and will cater for up to the 1 in 100-year storm + 45% climate change.

16. The attenuation will be provided in the form of pipes and attenuation basins, a calculation for estimated attenuation requirements has been completed, see table below for quick storage estimate requirements.

Rainfall Method	Maximum Volume (m ³)
Pipes & Attenuation Basins	1400m ³ - 1982m ³


17. Detailed surface water calculations and design for the development site will need to be completed to ensure suitable attenuation volumes and carrier drains are provided.
18. Areas of exceedance will be considered in the detailed design phase once proposed finished levels have been finalised. The development will be designed to ensure all flows from up to and including the 1 in 100 years plus 45% will be attenuated below ground, controlled surface ponding will be acceptable up to the 1 in 100 year event plus 45% climate change and no flooding off site will occur due to the development.

Foul Water Drainage Strategy

19. The foul water system will be designed and constructed in accordance with the current Building Regulations, BS EN:752 drainage and sewer systems outside buildings, the local authority building control specifications and requirements, Design and Construction Guidance (DCG) and the Civil Engineering Specification for the Water Industry 7th Edition.
20. It is proposed to construct a new foul water drainage system to serve the proposed development.
21. The foul water drainage is proposed to drain via a gravity system to the northeast of the site into a proposed pumping station. From the pumping station the foul water will be pumped into the existing Welsh Water foul sewer system located in Chester Road to the south of the development site, as per the pre-planning enquiry feedback. See Appendix C for Welsh Water Asset Map.
22. The proposed foul network will connect into the existing system between manholes SJ52429001 and SJ52419901.
23. The proposed foul flows have been calculated using 4000 litres per dwelling per day as per the DCG. The proposed foul peak flow for approximately 190 units is 8.80 l/s.

[Appendix A](#)

Greenfield Runoff Calculations

SCP		Page 1
Colwyn Chambers 19 York St Manchester M2 3BA		
Date 08/09/2021 10:10 File	Designed by nick.mcgorry Checked by	
XP Solutions	Source Control 2016.1.1	

ICP SUDS Mean Annual Flood

Input

Return Period (years)	100	Soil	0.450
Area (ha)	9.135	Urban	0.000
SAAR (mm)	964	Region Number	Region 10

Results 1/s

QBAR Rural	58.4
QBAR Urban	58.4
Q100 years	121.4
Q1 year	50.8
Q30 years	98.9
Q100 years	121.4

Colwyn Chambers
19 York St
Manchester M2 3BA



Date 08/09/2021 13:59
File

Designed by nick.mcgorry
Checked by

XP Solutions Source Control 2016.1.1

ICP SUDS Mean Annual Flood

Input

Return Period (years)	100	Soil	0.450
Area (ha)	.000	Urban	0.000
SAAR (mm)	964	Region Number	Region 10

Results 1/s

QBAR Rural 44.
QBAR Urban 44.

Q100 years 93.0

Q1 year 38.9
Q30 years 5.8
Q100 years 93.0

[Appendix B](#)

Pre-planning Enquiry Feedback

Mr Mark Fitzsimons
Castle Green Homes
Bridgemere House
Chester Road
Preston Brook
Runcorn
WA7 3BD

Date: 16/09/2021
Our Ref: PPA0006010

Dear Mr Fitzsimons,

Site Address: Land off Chester Road, Whitchurch, Shropshire
Development: 200 Dwellings

I refer to your pre-planning enquiry received relating to the above site, seeking our views on the capacity of our network of assets and infrastructure to accommodate your proposed development. Having reviewed the details submitted I can provide the following comments which should be taken into account within any future planning application for the development.

APPRAISAL

Firstly, we note that the proposal relates to proposed development of 200 dwellings at land off Chester Road, Whitchurch and acknowledge that the site has been put forward for allocation within the Local Plan (LP) for 190 Units. In reference to our representations during the LDP consultation process, namely the 'Statement of Common Ground', we can confirm that an assessment has been undertaken of the public sewerage system to accommodate 190 units and informs our appraisal as follows.

Public Sewerage Network

The proposed development site is located in the immediate vicinity of a separate sewerage system, comprising combined, foul and surface water public sewers, which drains to Whitchurch Wastewater Treatment Works (WwTW).

You are also advised that some public sewers and lateral drains may not be recorded on our maps of public sewers because they were originally privately owned and were transferred into public ownership by nature of the Water Industry (Schemes for Adoption of Private Sewers) Regulations 2011. The presence of such assets may affect the proposal. In order to assist you may contact Dwr Cymru Welsh Water on 0800 085 3968 to establish the location and status of the apparatus in and around your site. Please be mindful that under the Water Industry Act 1991 Dwr Cymru Welsh Water has rights of access to its apparatus at all times.

Surface Water Drainage

With respect to the disposal of surface water flows from the proposed development, the developer is required to explore and fully exhaust all surface water drainage options outlined under Sections 3.2 and 3.4 of Part H of the publication 'Building Regulations 2000. Disposal should be made through the hierarchical approach, preferring infiltration and, where infiltration is not possible, disposal to watercourses in liaison with the Land Drainage Authority, Natural England and/or the Environment Agency. Discharge of surface water to the public sewer is only to be made as a last resort.

Please refer to further detailed advice relating to surface water management included in our attached Advice & Guidance note.

In addition, please note that no highway or land drainage run-off will be permitted to discharge directly or indirectly into the public sewerage system.

Foul Water Drainage – Sewerage Network

We have considered the impact of foul flows generated by the proposed development and concluded that flows can be accommodated within the public sewerage system. We advise that the flows should be connected to the foul sewer between manholes SJ52429001 and SJ52419901 located in highway/grassland to the South West of the development site.

Should a planning application be submitted for this development we will seek to control these points of communication via appropriate planning conditions and therefore recommend that any drainage layout or strategy submitted as part of your application takes this into account. However, should you wish for an alternative connection point to be considered please provide further information to us in the form of a drainage strategy, preferably in advance of a planning application being submitted.

You may need to apply to Dwr Cymru Welsh Water for any connection to the public sewer under Section 106 of the Water industry Act 1991. However, if the connection to the public sewer network is either via a lateral drain (i.e. a drain which extends beyond the connecting property boundary) or via a new sewer (i.e. serves more than one property), it is now a mandatory requirement to first enter into a Section 104 Adoption Agreement (Water Industry Act 1991). The design of the sewers and lateral drains must also conform to the Welsh Ministers Standards for Foul Sewers and Lateral Drains, and conform with the publication "Sewers for Adoption"- 7th Edition. Further information can be obtained via the Developer Services pages of www.dwrcymru.com.



SEWAGE TREATMENT

No problems are envisaged with the Waste Water Treatment Works for the treatment of domestic discharges from this site.

Water Supply

We do not serve this area with a potable water supply, we would advise that you consult the local water supplier.

I trust the above information is helpful and will assist you in forming water and drainage strategies that should accompany any future planning application. I also attach copies of our water and sewer extract plans for the area, and a copy of our Planning Guidance Note which provides further information on our approach to the planning process, making connections to our systems and ensuring any existing public assets or infrastructure located within new development sites are protected.

Please note that our response is based on the information provided in your enquiry and should the information change we reserve the right to make a new representation. Should you have any queries or wish to discuss any aspect of our response please do not hesitate to contact our dedicated team of planning officers, either on 0800 917 2652 or via email at developer.services@dwrwymru.com

Please quote our reference number in all communications and correspondence.

Planning Liaison Manager Developer Services

Please Note that demands upon the water and sewerage systems change continually; consequently the information given above should be regarded as reliable for a maximum period of 12 months from the date of this letter.



Welsh Water is owned by Glas Cymru – a 'not-for-profit' company.
Mae Dŵr Cymru yn eiddo i Glas Cymru – cwmni 'nid-er-elw'.

We welcome correspondence in
Welsh and English

Dŵr Cymru Cyf, a limited company registered in
Wales no 2366777. Registered office: Pentwyn Road,
Nelson, Treharris, Mid Glamorgan CF46 6LY

Rydym yn croesawu gohebiaeth yn y
Gymraeg neu yn Saesneg

Dŵr Cymru Cyf, cwmni cyfyngedig wedi'i gofrestru yng
Nghymru rhif 2366777. Swyddfa gofrestredig: Heol Pentwyn
Nelson, Treharris, Morgannwg Ganol CF46 6LY.

[Appendix C](#)

Welsh Water Asset Maps



Dŵr Cymru
Welsh Water

PPA0006010



LEGEND(Representative of most common features)

Waste network:		
	Foul chamber	
	Surface water chamber	
	Combined chamber	
	Combined sewer overflow	
	Special purpose chamber	
	Treatment works	
	Pumping station	
	Outfall	
	Lampole	
	Storm Overflow	
	Rising main	
	Gravity sewer	
	Private sewer	
	Private sewer subject to Sect. 104 adoption agreement	
	Private Sewer Transfer	
	Lateral Drain	
	Inspection Chamber	

NB: Sewer symbol colour indicates the type:
 RED - Combined
 GREEN - Surface Water
 BROWN - Foul
 Purple - Former S24 sewers (for indicative purposes only)

Notes:

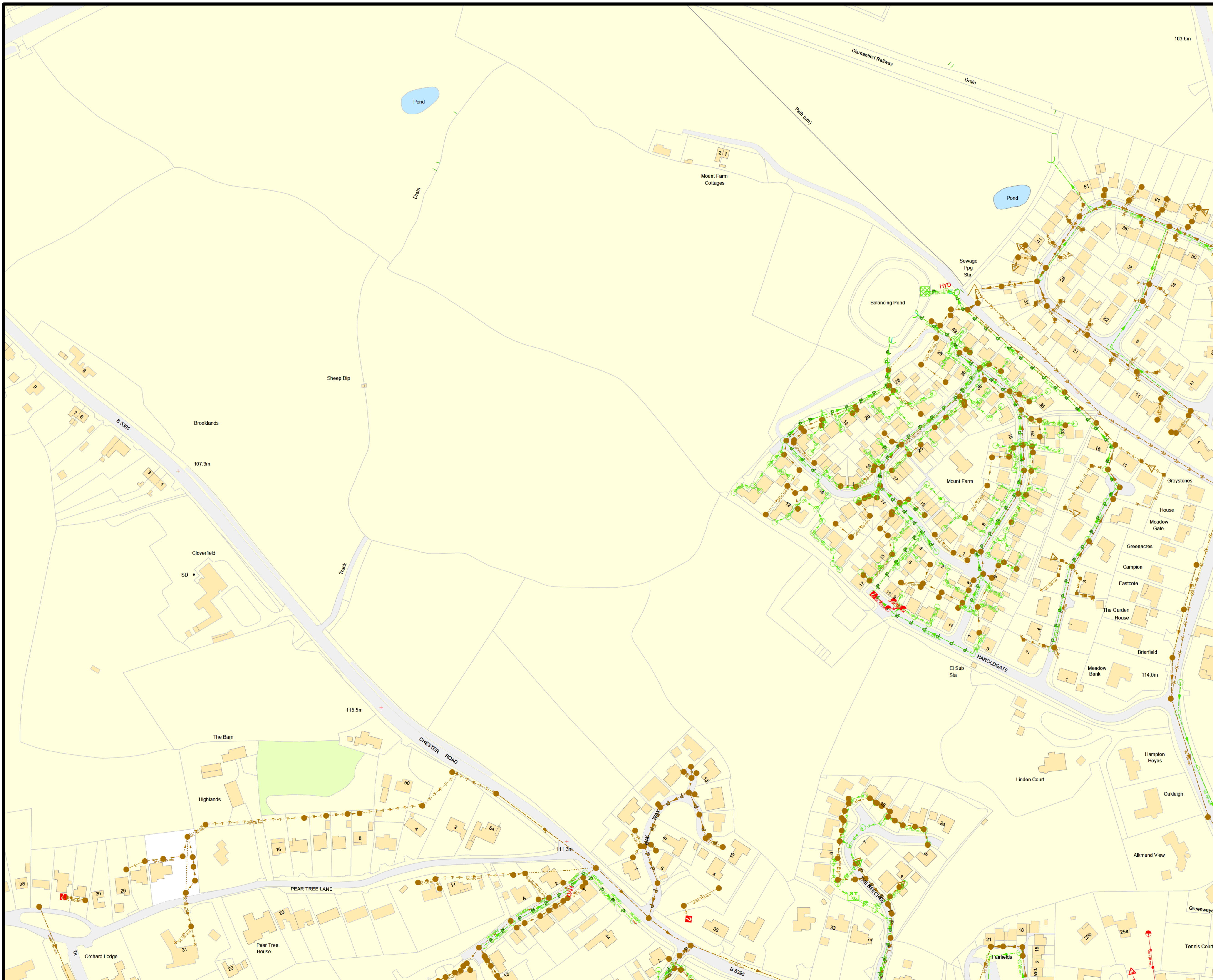
Whilst every reasonable effort has been taken to correctly record the pipe material of DCWW assets, there is a possibility that in some cases pipe material (other than Asbestos Cement or Pitch Fibre) may be found to be asbestos cement (AC) or Pitch Fibre (PF). It is therefore advisable that the possible presence of AC or PF pipes be anticipated and considered as part of any risk assessment prior to excavation

Dŵr Cymru (the Company) gives this information as to the position of its underground apparatus by way of general guidance only and on the strict understanding that it is based on the best information available and no warranty as to its correctness is intended (save in the event of excavations or other works made in the vicinity of the Company's apparatus). The onus of locating apparatus before carrying out any excavations rests entirely on you. The information which is supplied by the Company is done so in accordance with statutory requirements of sections 198 and 199 of the Water Industry Act 1991 which is based upon the best information available and, in particular, but without prejudice to the generality of the foregoing, it should be noted that the records that are available to the Company may not disclose the existence of a water main, service pipe, sewer, lateral drain or disposal main and any associated apparatus laid before 1 September 1989, or, if they do, the particulars thereof including their position underground may not be accurate. It must be understood that the furnishing of this information is entirely without prejudice to the provisions of the New Roads and Street Works Act 1991 and the Company's right to be compensated for any damage to its apparatus.
 Service pipes are not generally shown but their presence should be anticipated.

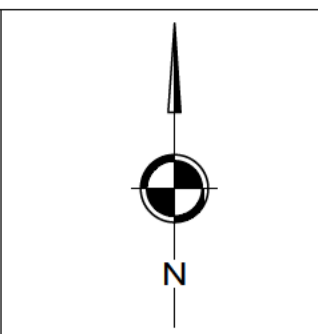
EXACT LOCATIONS OF ALL APPARATUS TO BE DETERMINED ON SITE.

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Map Ref: 353373.342343
 Map scale: 1:1250
 Printed by: Lester Barrow
 Printed on: 16 Sep 2021



Appendix 4 – Levels and Drainage Feasibility Design Masterplan



NOTES

1. ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE.
2. ALL LEVELS ARE IN METRES RELATED TO ORDNANCE DATUM NEWLYN (OD) UNLESS NOTED OTHERWISE.
3. ALL COORDINATES ARE IN METRES RELATED TO ORDNANCE SURVEY NATIONAL GRID.
4. ALL MATERIALS AND WORKMANSHIP WILL BE AS DEFINED IN THE SPECIFICATION UNLESS NOTED OTHERWISE.
5. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL DRAWINGS AND DOCUMENTATION ASSOCIATED WITH THE PROJECT.
6. THIS DRAWING HAS BEEN BASED UPON SURVEY/OS INFORMATION SUPPLIED BY A THIRD PARTY AND SCP SHALL NOT BE LIABLE FOR ANY INACCURACY OR DEFICIENCIES ARISING FROM IT.
7. ALL LEVELS, DIMENSIONS AND LOCATIONS ARE TO BE CHECKED BY THE MAIN CONTRACTOR PRIOR TO COMMENCEMENT OF ANY WORK ON SITE.
8. ALL WORKS TO BE CARRIED OUT IN ACCORDANCE WITH LOCAL AUTHORITY ADOPTABLE RESIDENTIAL ROAD SPECIFICATION AND STANDARD DETAILS.

KEY

- PROPOSED SURFACE WATER SEWER AND MANHOLE
- PROPOSED FOUL WATER SEWER AND MANHOLE
- FLOW CONTROL CHAMBER
- HEADWALL
- TREE TO BE MAINTAINED
- PROPOSED BANKING MAXIMUM 1:3 GRADIENT
- RETAINING WALL > 500mm
- UNDERBUILD > 300mm
- INTERNAL PLOT STEP
- SITE BOUNDARY

REVISIONS

REV	DESCRIPTION	DATE	BY
-	FIRST ISSUE	10.09.21	LR



Transportation Planning : Infrastructure Design
 Colwyn Chambers, 19 York Street, Manchester, M2 3BA, Tel 0161 832 4400,
 www.scptransport.co.uk, Email info@scptransport.co.uk

Client Name: CASTLE GREEN

Project Title: CHESTER ROAD, WHITCHURCH

Drawing Title: LEVELS & DRAINAGE FEASIBILITY DESIGN MASTERPLAN

Date: 10.09.2021	Drawn By: LR
Scale: 1:1000 @ A1	Checked: NM
Status: PRELIMINARY	Approved: NM

Drawing No. SCP-210580-0000-001	Rev: -
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