Barwood Land

Land to the Rear of Cranbourne Drive, Otterbourne

Local Plan Site Promotion - Transport

December 2022

Project Code: 06485

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Contents

List of Tables

List of Figures

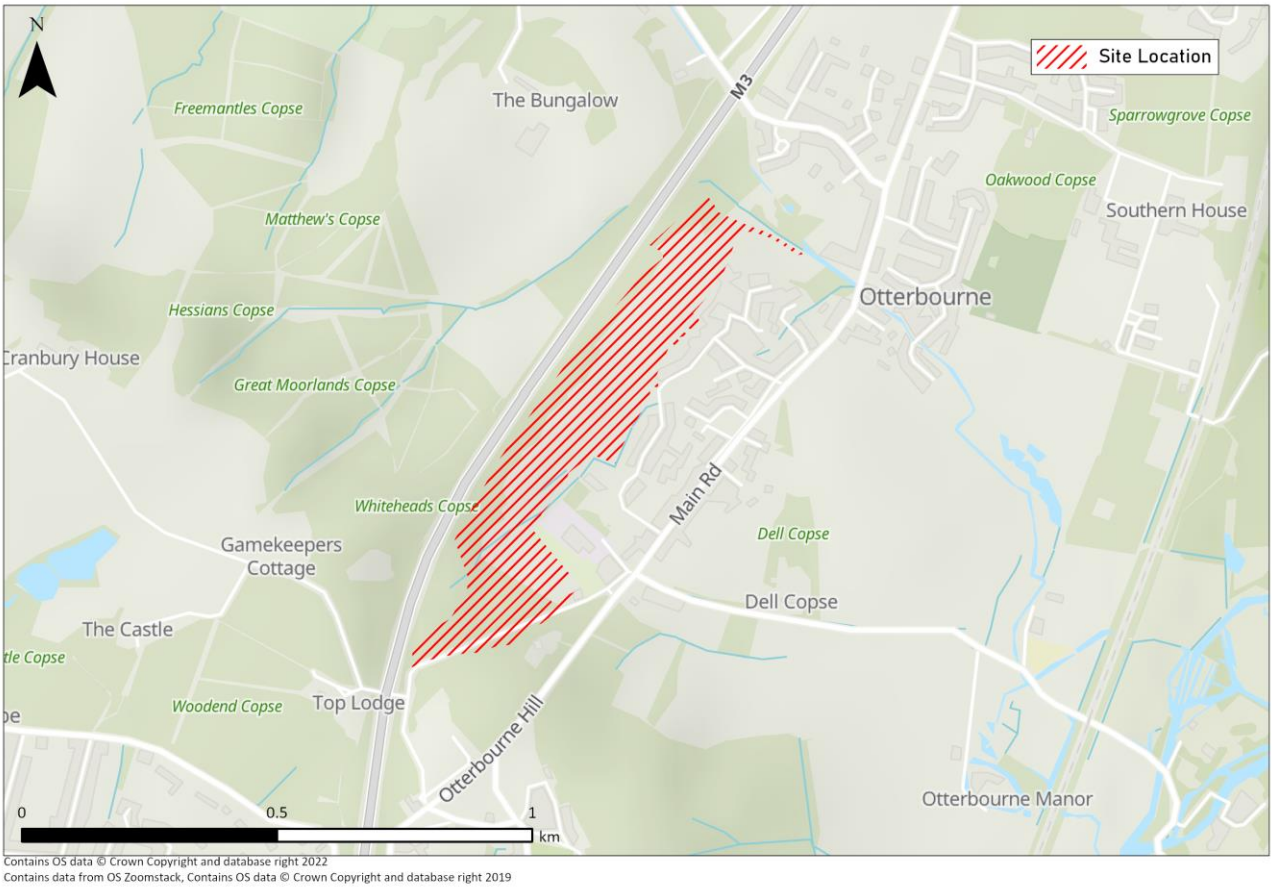
1 Introduction

1.1.1 Winchester District Council are in the process or producing a new Local Plan and they are currently consulting on their Regulation 18 draft plan. The emerging plan provisionally identifies Land East of Main Road (identified as OT01) for the development of approximately 55-70 dwellings.

1.1.2 This report supports representations being made on behalf of Barwood Land, promoting land off Cranbourne Drive identified in Figure 1-1. The provisional architects plan for the site is attached as **Appendix A**.

1.1.3 The Barwood site is able to address the current housing requirement for Otterbourne in a single site, with the potential to deliver approximately 55-70 dwellings with generous open space, green linkages and other community benefits explored further in this report.

Figure 1-1: Site Layout



1.1.4 This Report explores salient issues in the area and explores related transport constraints and opportunities to support sustainable development, enhancing the potential for new and existing residents to adopt sustainable travel choices and thereby minimise the effect of development on the area and support wider policy objectives for the District and County Councils.

1.1.5 To support a modest settlement extension, it is incumbent upon us to demonstrate the site's value both in terms of meeting local housing needs and its sustainability. This report is intended to demonstrate the potential for the site to support sustainable travel behaviours amongst prospective residents.

1.1.6 The site comprises of land to rear of Cranbourne Drive, Otterbourne, east of the M3. It includes a mix of farming (livestock) and woodland, offering a potentially developable area of approximately 2.3Ha. Access is available from Cranbourne Drive, Otterbourne, examined further below.

2 Policy Review

2.1 National Planning Policy Framework (2021)

2.1.1 The core principle underlying the NPPF is the "presumption in favour of sustainable development". It also sets out significant guidance on the application of strategic policy-making, such as in the area of identifying land suitable for housing development for the purpose of delivering a sufficient supply of homes.

2.1.2 Paragraph 73 sets out the principle for urban extensions to existing settlements:

"The supply of large numbers of new homes can often be best achieved through planning for larger scale development, such as new settlements or significant extensions to existing villages and towns, provided they are well located and designed, and supported by the necessary infrastructure and facilities"

2.1.3 As the population continues to migrate to urban areas, the viability of facilities and services has declined as such the NPPF recognises the need to deliver proportionate growth to preserve and enhance the importance of community facilities in villages. Paragraph 79 states:

Planning policies should identify opportunities for villages to grow and thrive, especially where this will support local services. Where there are groups of smaller settlements, development in one village may support services in a village nearby.

2.1.4 In Section 9 of the NPPF, a strong emphasis is placed on promoting sustainable transport.

2.1.5 Paragraph 110 states:

In assessing sites that may be allocated for development in plans, or specific applications for development, it should be ensured that:

a) appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location;

b) safe and suitable access to the site can be achieved for all users;

c) the design of streets, parking areas, other transport elements and the content of associated standards reflects current national guidance, including the National Design Guide and the National Model Design Code 46; and

d) any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree

2.1.6 This report therefore explores the local environment, focusing on accessibility to a range of land uses and existing transport infrastructure and services, firstly to highlight how existing communities accommodate their everyday needs and secondly to explore how these either would be sufficient

to meet and expanded community or, how development might enhance existing infrastructure to enhance accessibility for all.

2.2 Hampshire Local Transport Plan 4 (LTP4 – emerging)

2.2.1 The draft LTP4 was prepared for public consultation in April 2022. It outlines the proposed vision, guiding principles, policies and route that the County Council believes are required to deliver a set of core outcomes within the next 30 years. Its stated vision is:

"A carbon neutral, resilient, and inclusive transport system designed around people, which: supports health, well-being, and quality of life for all; supports a connected economy and creates successful and prosperous places; and respects and seeks to enhance Hampshire's unique environment."

2.2.2 Sustainable residential development within Otterbourne is both possible and could, in fact, advance progress towards achieving the goals of the Winchester Movement Strategy and emerging Hampshire 4th Local Transport Plan.

2.2.3 Eastleigh and the surrounding area are the focus of an 'area strategy' where, over the next 5 years, a case will be put forward for new or refreshed strategies to improve transport. These are likely to be complimentary to the proposals outlined in the Winchester Movement Strategy (outlined below), in supporting sustainable transport options in Otterbourne, located between the two.

2.3 Winchester Movement Strategy

2.3.1 The Winchester Movement Strategy is focussed on the urban area of Winchester City and therefore does not include Otterbourne and rural Winchester City District. However, it is expected that residents of the rural neighbouring communities will visit Winchester frequently for work and leisure purposes. The proposed Action Plan includes:

- ✓ Substantial increase in the number of Park and Ride spaces on the periphery of Winchester (up to 3000 additional parking spaces – a 66% increase on the existing 1800 spaces available). This may include investment in service frequency, opening times, additional capacity/ facilities at existing sites and consideration of potential new sites, which is likely to include Andover Road North corridor, Easton Lane corridor, Alresford Road corridor
- ✓ A new bus partnership which would improve bus services and infrastructure.
- ✓ Improved walking and cycling provision through re-allocation of road space. A Local Cycling and Walking Infrastructure Plan for Winchester has already been produced which has enhanced network planning and proposed a schedule of improvements for the city.
- ✓ A charging zone would act as a further traffic demand management tool, should other elements of the Movement Strategy not succeed in reducing city centre traffic. Charging zone options currently include: Congestion charge zone – vehicles are charged a fee to enter a defined area

at busy periods; Low Emission Zone (LEZ)– the most polluting vehicles are charged to enter areas with air quality concerns; Workplace Parking Levy (WPL) – businesses within a defined area are charged per parking space they own/ provide – many passing the charge onto employees who use the parking spaces.

2.3.2 Responding to the physical, historical and environmental constraints of the City, Winchester has followed a long-term approach to manage traffic demand and either increase parking costs ahead of inflation or reduce city centre parking supply – typically offering alternative infrastructure or services (such as Park & Ride) to support that transition. The potential for a LEZ or WPL is normally considered as a last resort but intended to accelerate the rate of shift towards more sustainable travel patterns.

2.4 Eastleigh Mobility Hub

2.4.1 The proposed Eastleigh Mobility Hub went to public consultation in August 2021. Its aim is to support the interconnection of public and active travel methods to promote sustainable transport. The mobility hub will offer a combination of cycle hire/cargo bikes, e-car club vehicles and e-scooters in addition to high quality cycle parking. It will be located near to the bus and rail station as well as popular town centre destinations to promote efficiency and maximise usage, creating a web of interconnected hubs to exploit the potential for sustainable travel.

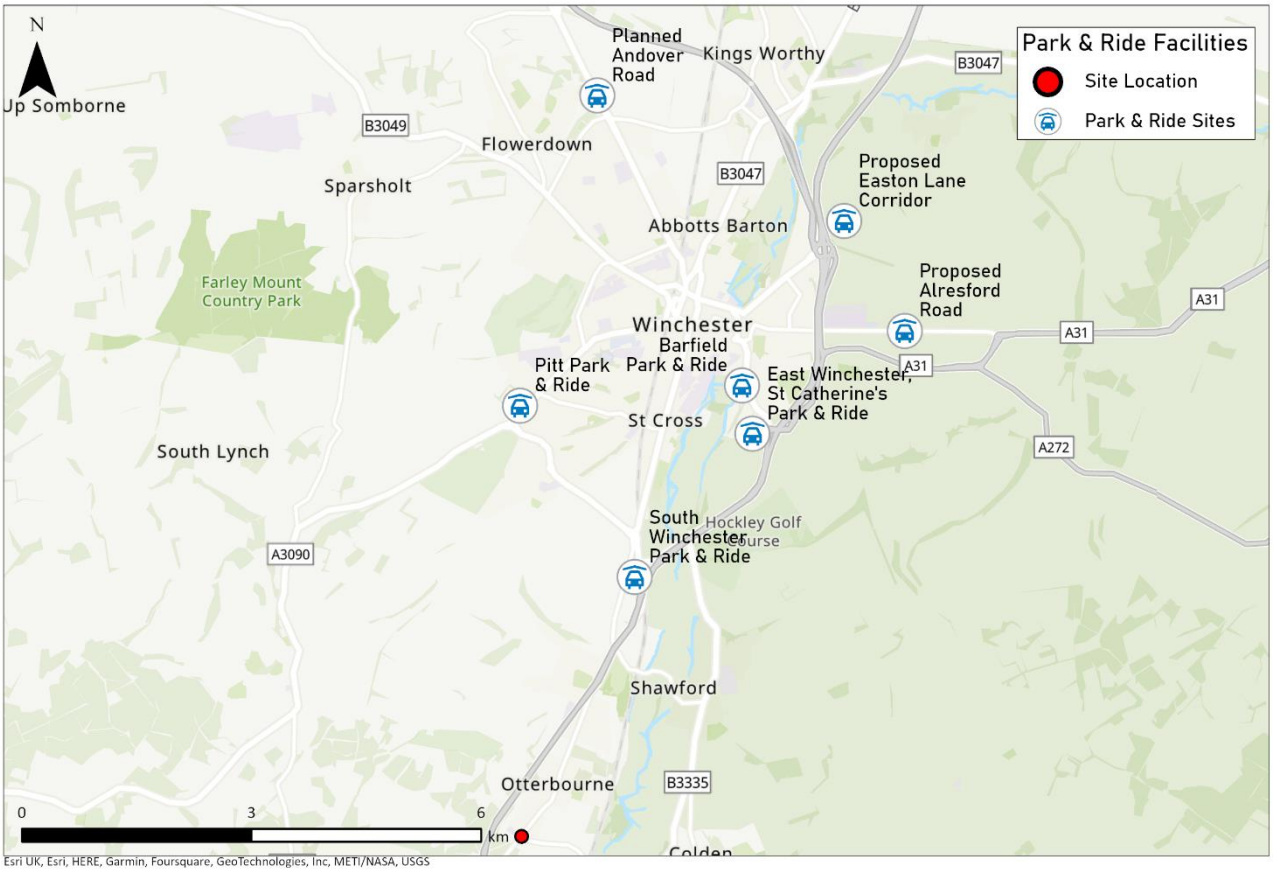
2.5 Park and Ride

2.5.1 There are a number of existing Park and Ride (P&R) sites within the Winchester are:

- East Winchester, St Catherine's Park & Ride site
- Barfield Park & Ride site
- South Winchester Park & Ride site
- Pitt Park and Ride

2.5.2 The location of these existing P&R sites plus the aforementioned new sites proposed as part of the Winchester Movement Strategy, are mapped in Figure 2-1. This highlights that the southern P&R is within a convenient cycle (~3km) distance from the site, offering five buses/hour into Winchester (up to nine during peak periods).

Figure 2-1: Existing and Proposed Park & Ride Sites



3 Background and Site Location

3.1 Otterbourne

3.1.1 Main Road is a historic route running through the village of Otterbourne. Historic maps show that in the post-war years the village began to expand with new development along the western side of Main Road joining the previously separate areas to the northeast and southwest. Around this time, development along Poles Lane resulted in expansion of the village to the north, adjoining it with the villages of Shawford and Southdown. Further development during the second half of the 20th Century saw the village continue to expand in a southern and easterly direction, creating the wider urban area extending towards Eastleigh, broadly as exists today.

3.1.2 The Council has produced a SHELAA which forms part of its evidence base for the emerging Local Plan. The SHELAA identifies eight sites in Otterbourne which are currently being promoted for development by landowners / developers.

3.1.3 These sites are listed in Table 4-1 below and includes our client's land as OT08. However, it must be noted that the SHELAA refers to a much larger area of land than is now being actively promoted. An illustrative layout produced by our client demonstrates capacity for 55-70 dwellings in a reduced site area, which is capable of meeting Otterbourne's identified housing need over the plan period in a single sustainable site.

Table 3-1: Sites Assessed for their Residential Capacity in the SHELAA

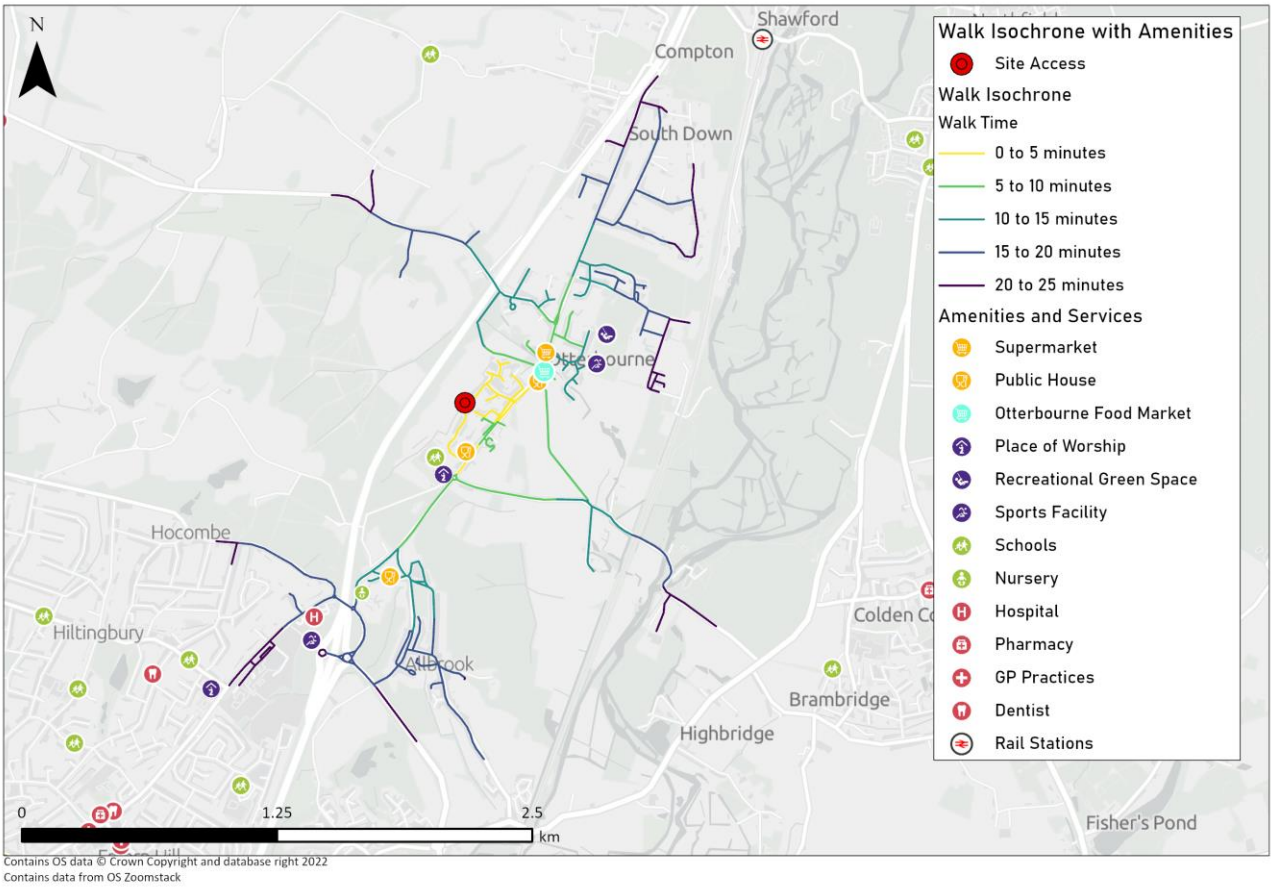
Site Ref	Site Description	Residential Capacity
OT01	1.518ha residential land in the west of Otterbourne – no relevant planning history	36 units
OT02	12.06ha residential land in the south of Otterbourne – no relevant planning history	181 units
OT03	6.435ha residential land in the east of Otterbourne – two applications for residential dwellings refused in 2016 and 2019. Change of use permitted in 2020 from agricultural land to pony paddock and stables.	106 units
OT04	3.499ha of residential land in the east of Otterbourne – no relevant planning history	68 units
0T05	1.01ha of residential land in the east of Otterbourne – no relevant planning history	24 units
OT06	2.09ha of residential land in the south of Otterbourne – no relevant planning history	41 units
OT08	6.011ha of residential land in countryside to the west of Otterbourne – no relevant planning history	99 units
OT09	12.3ha of residential land in the southeast of Otterbourne – no relevant planning history	185 units

4 Proximity of Amenities and Services

4.1.1 The 2011 Census recorded that Otterbourne has a population of around 1,539 split across 626 dwellings. It is located approximately four miles (6.4 km) south of Winchester and eight miles (13 km) north of Southampton.

4.1.2 Despite its size, there are a number of local amenities and services within walking distance, within the village and surrounding hinterland, as is summarised on the Walk Isochrone in Figure 4-1.

Figure 4-1: Walk Isochrone with Amenities



4.1.3 The National Travel Survey (NTS) reveals how distance becomes a factor in travel choice and that around 80% of trips on foot are under 1 mile (20 mins walking distance). Whilst mobility is a contributory factor for some people the return distance/journey time to certain facilities begins to influence willingness to walk, where community severance (ability to cross busy roads) can be a factor.

4.1.4 Table 4-1 reproduces guidance on severance. Surveys suggest that traffic flows on Main Road were around 10,500 vehicles per day (2-way) and therefore creates high levels of severance. This is

mitigated through the provision of uncontrolled (refuge) and controlled (puffin) crossings, making it easier for communities to cross, typically with a small diversion.

Table 4-1: Community Severance

Severance level	Traffic Flow
Very High	>16,000
High	<8-16,000
Medium	>4-8,000
Low	<4,000

4.1.5 For these reasons, key locations accessible within a five-minute walk from the site identified below. Amongst other things this highlights why development to the west of Main Road, closer to the school and shop, without the psychological barrier of crossing a busy road, will support greater levels of walking, even amongst children:

- Otterbourne Village Hall
- Otterbourne C of E Primary School
- Two restaurants/public houses
- St Matthew's Church

4.1.6 Key locations accessible within a ten-minute walk from the site include:

- Otterbourne Food Market
- Nisa Local Supermarket
- Bright Horizons Otterbourne Day Nursery and Preschool
- Oakwood Park Recreation Ground

4.1.7 Slightly further afield, Thorden Secondary School and Nuffield Health Wessex Hospital are around one mile south of the site, broadly within acceptable walking distance and certainly within cycling distance. Indeed, the footway/cycleway network extends south of Cranbourne Drive, via the subway at Otterbourne Hill, to connect these facilities.

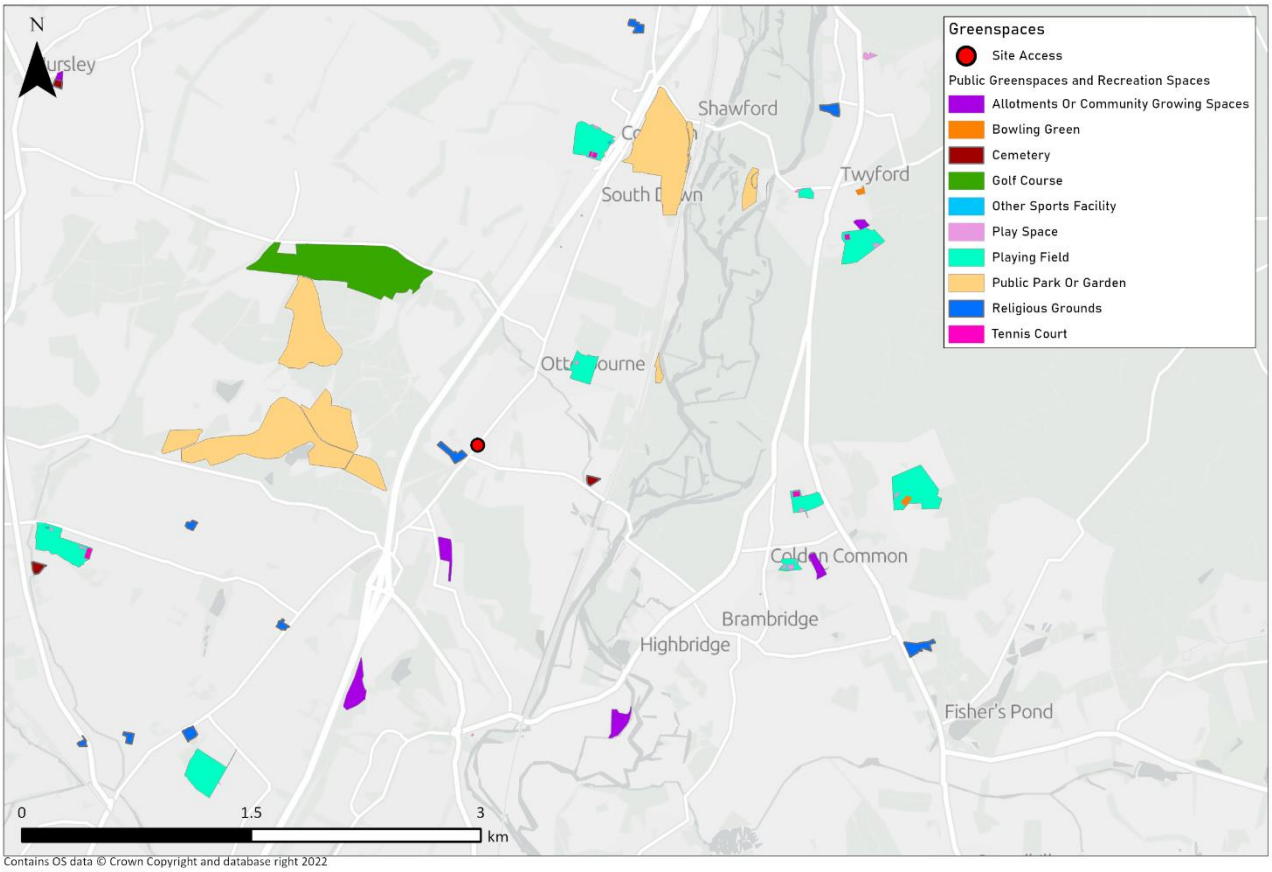
4.1.8 Comparing the level of severance (Table 4-1 refers), accessibility on foot (Figure 4-1) it is evident that the willingness to walk to some facilities is better and worse for some of the promoted housing sites because walking to school for example would not involve crossing Main Road.

4.1.9 Figure 4-2 identifies various greenspaces and recreational sites within a short distance (around 2km) including sports fields, tennis courts, bowling greens, community gardens and playing spaces. Some of these greenspaces and recreational sites are also affected by severance, either by the M3 (physically) or B3335 Main Road so may appear less accessible to certain parts of the community. As severance can have a greater effect on the very young and old, the proposals are likely to include

some enhancement in play provision west of B3335 Main Road, as trips on foot to facilities such as Boyatt Lane allotments are less sensitive to severance

4.1.10 Section 7.3 explores the existing Public Rights of Way (PROW) network and explores opportunities to link leisure facilities and routes to support healthier lifestyles.

Figure 4-2: Greenspaces



4.2 Settlement Hierarchy

4.2.1 A settlement hierarchy was produced by Winchester City Council as a background paper to inform the emerging Local Plan 2038[1].

4.2.2 The Winchester District Local Plan Part 1 – Joint Core Strategy (JCS, adopted March 2013) sets out the development strategy for the district. This is based on a "settlement hierarchy" approach which ranks and classifies settlements, based on the availability and accessibility of a broad range of facilities, a settlement's economic role and the environmental constraints to development.

[1] https://www.winchester.gov.uk/assets/attach/27841/Settlement-Hierarchy-Review-2021.pdf

4.2.3 The spatial strategy follows the following classifications:

- Winchester Town
- South Hampshire Urban Areas
- Market Towns and Rural Area

4.2.4 The classification of settlements is an important factor in determining their potential sustainability and producing appropriate policies. As part of the District Council evidence and the allocation of development scales, the assessment focused on an audit of facilities and services by settlement:

- ✓ Convenience store
- ✓ Post office
- ✓ Primary School
- ✓ Local Jobs
- ✓ Frequent bus service to nearest main centre
- ✓ Mainline railway station

4.2.5 A points-based scoring system has been used to rank the settlements, with points being scored for the presence of services and facilities. A settlement's accessibility to services and facilities has also been taken into account, with more points being gained for good or satisfactory accessibility to selected services, where a higher score was determined by geographic proximity from the centre of a settlement.

4.2.6 Different sources of data were used:

- Parish Facilities Audit 2019
- HCC Website
- NHS Direct Website
- Network Rail Website

4.2.7 Different facilities attracted different scores, according to assumed contribution to a self-sustaining community. For example, a Supermarket would receive three points, but a convenience store would only attract two points.

4.2.8 The full methodology for the Council's evidence broadly follows the deprivation index criteria on accessibility to local services.

4.2.9 Whilst this is a sensible starting point, the approach omits accessibility to services and facilities within walking/cycling distance or short public transport journey. For example, an urban extension to Winchester, might be 5km from a facility on the other side of the settlement or 2.5km from the city centre whereas a Parish might omit facilities in adjacent parishes.

4.2.10 Taking account of the NPPF, acknowledging that the population of Otterbourne utilise services available in adjacent villages, this section explores how the community functions within a poly-centric settlement.

4.3 Polycentric Approach

4.3.1 The methodology adopted by Winchester City Council is appropriate for identifying the sustainability of a settlement with relation to district-wide transportation. It can be assumed that demand for travel is greatest in settlements with fewest facilities and services within their urban extent.

4.3.2 However, it is proposed that sustainability can be promoted amongst these smaller settlements by treating settlements as parts of a 'polycentric' settlement. Respecting the propensity for people to travel to their nearest facility, even if that lies beyond their defined village, this section explores other settlements within a 20-minute cycle journey of Cranbourne Drive, depicted in Figure 7-1.

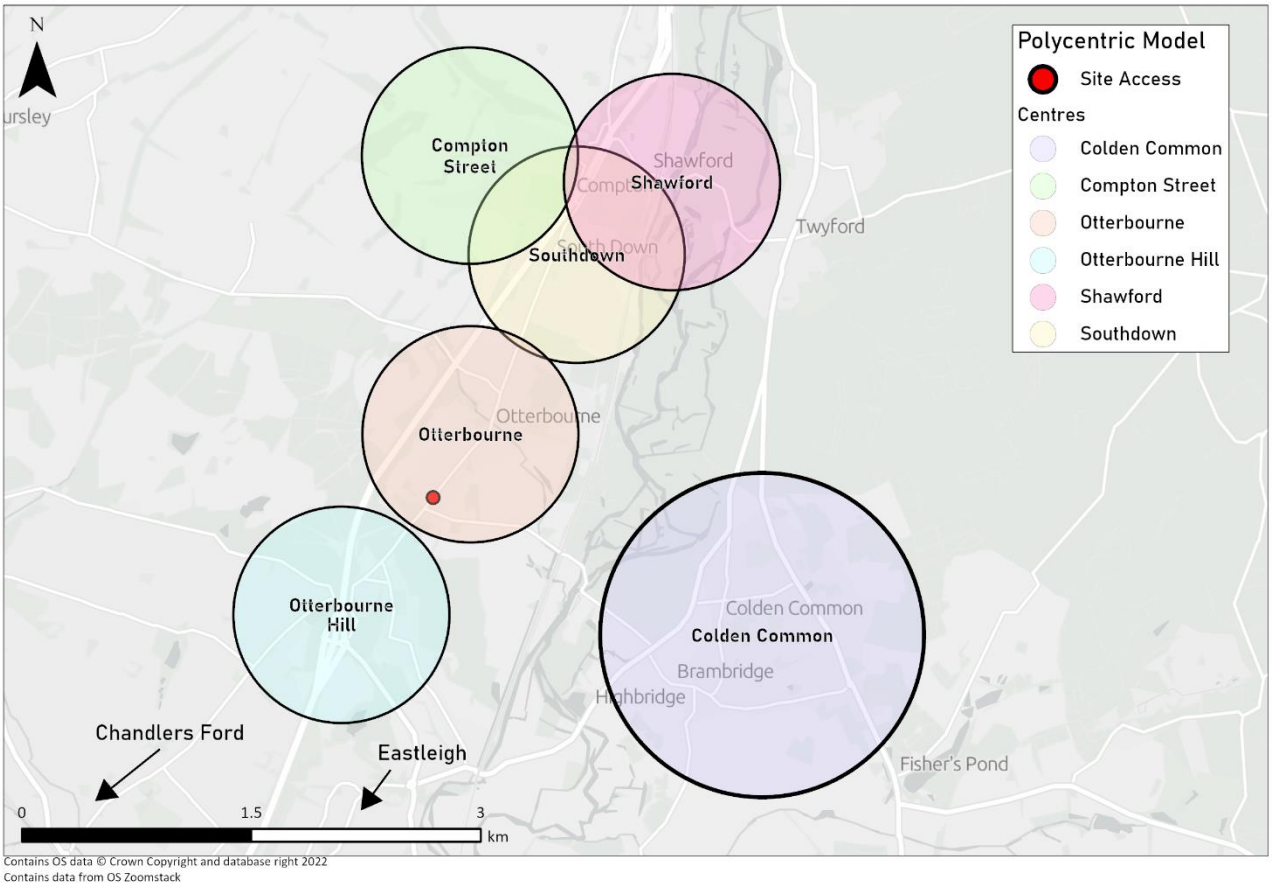
4.3.3 The settlements included in this polycentric model are listed in Table 4-2.

Table 4-2: Otterbourne Surrounding Settlements

Category	Settlement	Winchester City Council Settlement Score	Approx. Distance from Site
Market Towns and Larger Villages (score of 30-50)	Colden Common	36	2.6km
Other Settlements in the Market Towns and Rural Area (with settlement boundaries [score of below 30])	Southdown	9	1.1km
Other Settlements in the Market Towns and Rural Area (without settlement boundaries [score of below 30])	Shawford	12	2.3km
	Otterbourne Hill	14	0.5km
	Compton Street	16	2.8km

4.3.4 These centres are visualised in Figure 4-3, with the size of the sphere representing the settlement score and relative draw of the location.

Figure 4-3: Polycentric Model



4.3.5 Otterbourne itself is classified as 'Other Settlements in the Market Towns and Rural Area (with settlement boundaries [score of below 30])'. It received a score of 25. Taking account of the wider accessibility of neighbouring villages, following the polycentric model, the score would be higher, including a secondary school, GP surgery and railway station.

4.3.6 It is therefore proposed that several daily tasks could be completed within locations proximate to the site, supporting the use of active or public transport methods.

5 Spatial Planning

5.1.1 Employment and retail developments have always been focused in or around larger more accessible conurbations, contributing to the logical correlation that sustainable residential development should be concentrated in or around larger settlements.

5.1.2 ONS data from 2020 found that job density in Winchester district area was 1.25, up from 0.86 within the northeast and 0.84 across Great Britain. This implies that there is a significant number of employment sites located within reasonable sustainable travel distances to the site which could support the Carbon Neutrality Action Plan.

5.1.3 Smaller settlements have tended to offer proportionately fewer employment sites, contributing to a pattern that people who live in more rural areas support (peri) rural industries, work from home or are employed in transient roles.

5.1.4 E-commerce has continued to affect retail patterns contributing to the diversification of retail centres to provide more leisure, food and drink. The Covid-19 Pandemic accelerated this pattern and continued to comparable shifts in homeworking. In the emerging post-pandemic environment, hybrid working patterns have contribute to changes and appear likely to sustain more sustainable travel choices.

5.2 Employment

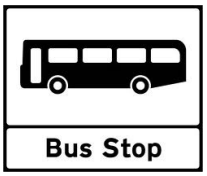
5.2.1 The site is surrounded by a number of significant employment sites within a short commuting distance. These are mapped in Figure 6-2, overleaf.

- South Central Ambulance Service
- IBM Hursley
- Nuffield Hospital
- Monks Brood Industrial Park
- Boyatt Wood Industrial Estate
- Marwell Zoo / Marwell House

5.2.2 Winchester City Council produced an 'Employment Land Study' in April 2020 to support the creation of their new Local Plan. In it, available office space has been identified at 'Southern House, Otterbourne'. Occupied by the South-Central Ambulance Service, South Central Strategic Health Authority and NHS Education Service it is a single unit of 45,000 sq ft. This suggests that the unit, which is located within a ten-minute walk of the proposed development site, will be retained and prioritised for employment use.

6 Public Transport

6.1.1 Data from the latest (2021 Census) is being released in stages and thus far focuses on demographic trends. The 2011 Census identified a higher-than-average car ownership and car-commuting rate in Otterbourne, than in neighbouring locations or the Hampshire average. However, there is significant infrastructure in place which makes public and active travel viable alternatives for residents of the proposed development site.



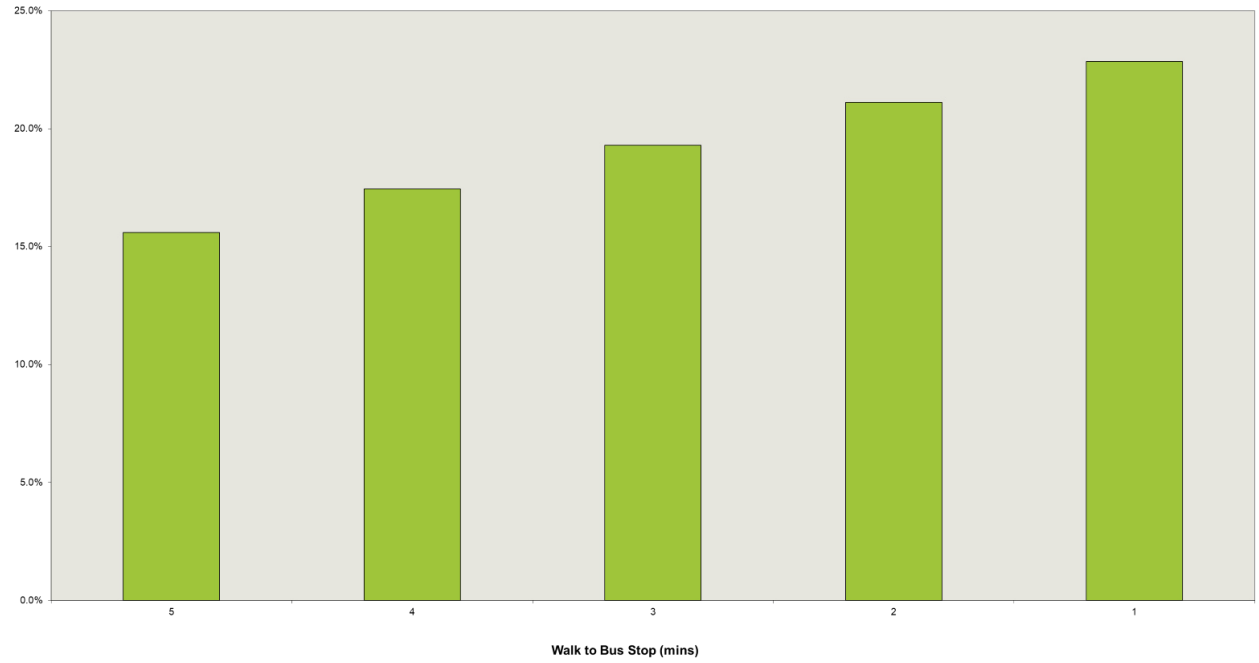
6.2 Bus Accessibility

6.2.1 The closest bus stop to the site is at The White Horse. Each bus stop has a flag, timetable, shelter and seating and are located a short distance from the B3335/Cranbourne Drive junction:

- ✓ Northbound Bus Stop, approximately 150m north of the junction
- ✓ Southbound Bus Stop, approximately 40m north of the junction

6.2.2 Figure 8-1 depicts the bus mode share relative to walk distances to a bus stop with a frequent bus service travelling to a centre where free car parking is limited, highlighting the importance of bus stop proximity.

Figure 6-1: The Effect of Distance to Bus Stop on Bus Mode Share



6.2.3 From the White Horse, regular services run between the cities of Winchester, north of the site and Southampton, south of the site via Eastleigh. It is anticipated that these major settlements would be significant locations for work and leisure for residents at the site. The services frequenting the White Horse bus stops are summarised in Table 6-1.

Table 6-1: Bus Services from The White Horse stop

Otterbourne Bus Services	Destinations	Frequency	Hours of Operation
E2	Winchester City Centre to Eastleigh Bus Station	Every 60 minutes	09:15-17:55 7 days
1 Bluestar	Winchester City Centre to Southampton City Centre	Up to every 16 minutes	05:44-00:12 7 days

6.2.4 There are currently 140 bus routes within the average travel to work zone and 27 which operate within two kilometres of the site meaning that the site is highly connected using public transport.

6.2.5 As can be seen from Figure 6-2, each of the employment sites, identified in Section 6, are accessible via bus. In particular, the 1 Bluestar route connects the site directly with Nuffield Wessex Hospital and Monks Brood Industrial Estate via Winchester Road.

6.2.6 The South Winchester P&R (section 3.5 refers) is located around 3.5km north of the site.

Eclipse Bus Network

6.2.7 Eclipse is a priority bus network running in Hampshire. It links key towns and destinations in southeast Hampshire, including a 3.4km dedicated off-road busway between Fareham and Gosport.

6.3 Rail Accessibility

6.3.1 The site is also very well-connected to both local and regional destinations by rail. Three railway stations are located within close proximity to Otterbourne.

6.3.2 Shawford Station is around 2.5km to the north, providing excellent access to Winchester. Eastleigh and Chandlers Ford stations are each located approximated 3.5-4km from the site in a south and south-easterly direction, respectively. The services offered at each of these stations is summarised in Table 6-2.

6.3.3 Sections 6.4 and 7.1 explore connections to these stations by sustainable means.

6.3.4 Alternatively, changing stations at Winchester from Shawford station allows easy rail connection a multitude of different locations on either Southwestern Railway or Cross-Country services. This includes services up to every 7-minutes into London Waterloo.

Figure 6-2: Bus Services and Employment Sites

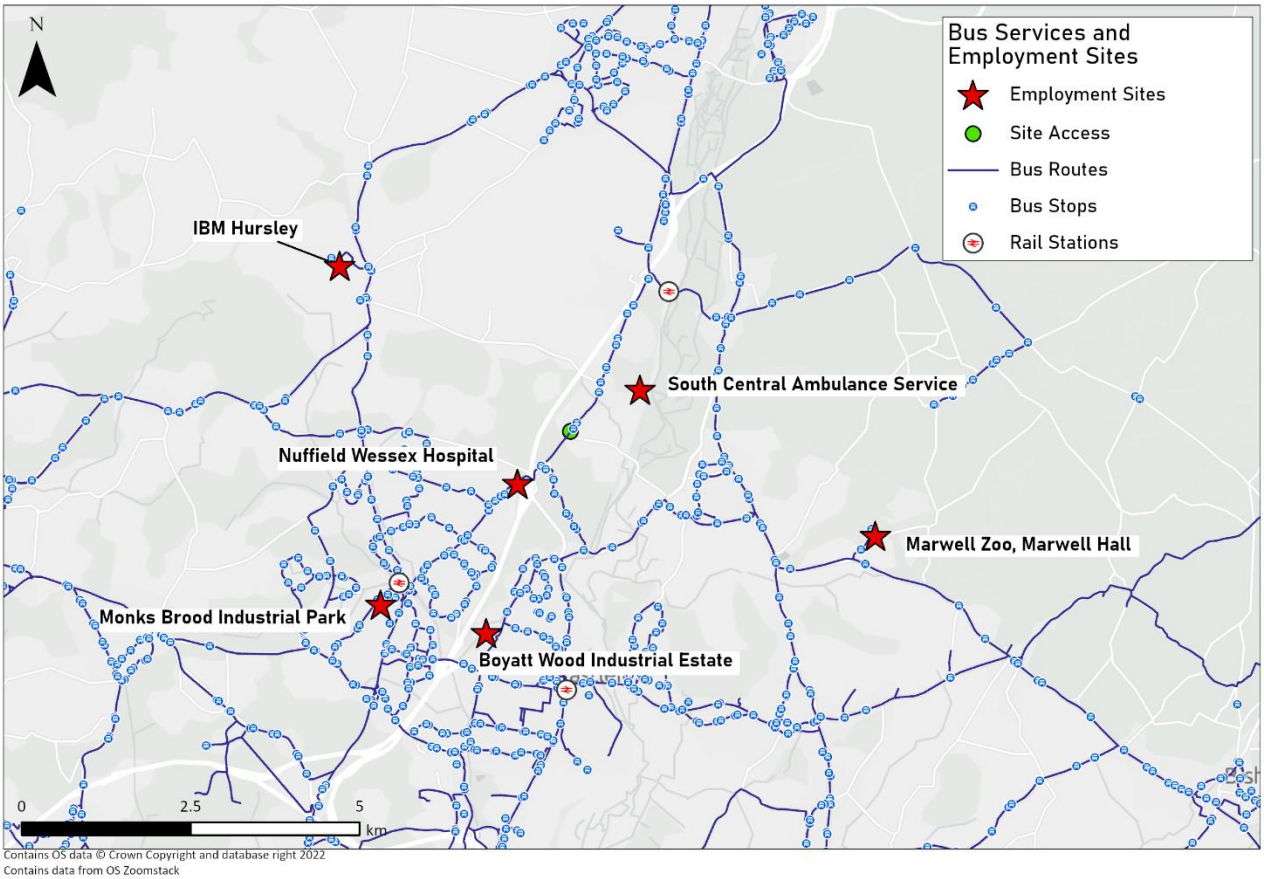


Table 6-2: Train Stations

Station	Destinations	Frequency
Shawford	Winchester	Up to every 60 minutes
	Bournemouth	Up to every 60 minutes
	Southampton Central	Up to every 2 hours
	Basingstoke Central	Up to every 2 hours
	Poole	Up to every 2 hours
	Portsmouth Harbour	Up to every 60 minutes
	London Waterloo	Up to every 30 minutes
	Woking	Up to every 2 hours
Chandler's Ford	Salisbury	Up to every 60 minutes
	Romsey	Up to every 60 minutes
Eastleigh	London Waterloo	Up to every 5 minutes
	Portsmouth Harbour	Up to every 30 minutes
	Bournemouth	Up to every 60 minutes
	Romsey	Up to every 60 minutes
	Southampton Central	Up to every 60 minutes

6.4 Bus and Rail Inter-Connectivity

6.4.1 Both Chandlers Ford and Shawford stations are located along the route of the 1 Bluestar bus and can be accessed from the site within twenty minutes.

6.4.2 Alternatively, The E2 bus route terminates at Eastleigh bus station, a one-minute walking distance from Eastleigh rail station.

6.4.3 The Eastleigh Plus Bus ticket offers unlimited bus travel on participating operators' services around the urban area of Eastleigh and Chandlers Ford when buying a train ticket for these rail stations.

6.4.4 The strong level of interconnectivity of bus and rail services in the surrounding area minimises total travel times for passengers and promotes the use of public transport amongst residents of the proposed development site.

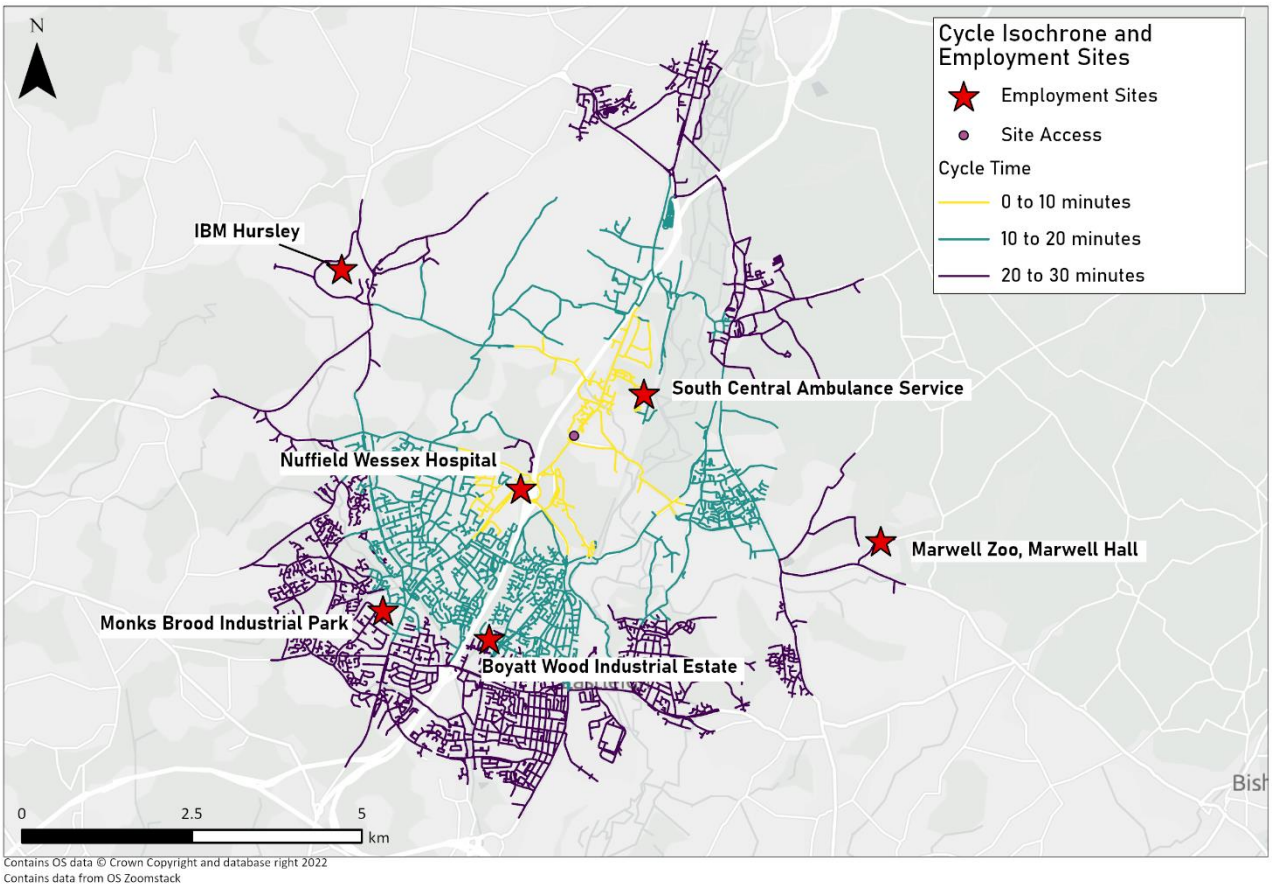
7 Active Travel Infrastructure

7.1 Cycle Connectivity

7.1.1 The site is also highly accessible by active travel, particularly cycling, to various destinations.

7.1.2 As can be seen in Figure 7-1, each of the employment sites identified in Section 6 are accessible within a 30-minute cycle journey from the site.

Figure 7-1: Cycle Isochrone and Employment Sites



7.1.3 Each of the rail stations discussed in Section 7 are also easily accessible within a fifteen-to-twenty-minute cycle journey. The following cycle parking provision is available:

- At Chandlers Ford station there are 62 cycle storage spaces, nine of which are lockers.
- Shawford station has 22 cycle storage spaces in the form of wheel racks.
- Eastleigh station has 130 cycle storage spaces in the form of stands and wheel racks.

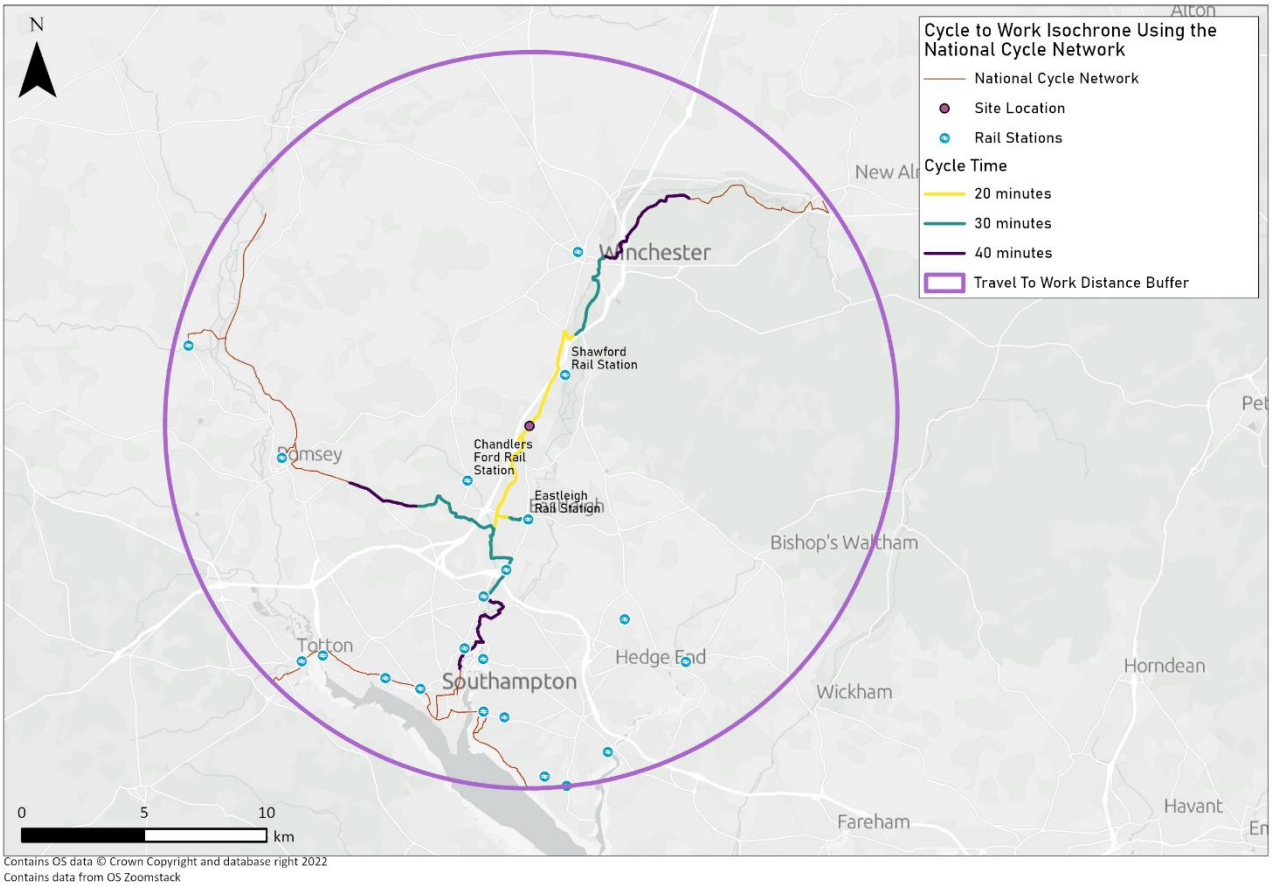
National Cycle Network Route 23

7.1.4 The site also benefits from its close proximity to National Cycle Network Route 23 which passes from Winchester in the north, south to Southampton via Otterbourne Main Road. The Route features several off-road sections which offer a more direct and pleasant cycle connection to destinations further afield.

7.1.5 From the 2011 Census, the average distance travelled to work by a resident of the Compton and Otterbourne ward was found to be 23.5km, 6.7km further than the Winchester District average of 16.8km.

7.1.6 A buffer representing this 23.5km average distance with a cycle time isochrone overlayed is visualised in Figure 10-2. As can be seen in Figure 10-2, NCN23 connects the site directly with Eastleigh rail station in approximately 22-minutes.

Figure 7-2: Cycle to Work Isochrone Using the National Cycle Network



7.1.7 NCN23 also runs into a number of other National Cycle Network Routes including NCN24 which leads to Romsey. Additionally, Figure 7-2 also demonstrates that both Winchester and Southampton, significant commuting destinations for residents of the Otterbourne area, are both

feasibly accessible by cycle. Using the National Cycle Network, Winchester is accessible within a 25-minue cycle journey and Southampton within a 35-minute cycle journey.

7.1.8 On Main Road, road markings indicate where cyclists are to turn off to Cranbury Close to follow NCN23. This offers a quieter route bypassing the mini roundabout at the junction between Main Road and Coles Mede. Cycle road markings continue northwards on Main Road where the carriageway has been narrowed with wide central reservation hatching as a means of traffic calming.

7.1.9 The Propensity to Cycle Tool identifies a number of 'Fast and Quiet Routes' around the Otterbourne area, with most of the NCN23 being deemed a 'Fast' route. For the stretch of NCN23 along Otterbourne Main Road, it records an average gradient of 2.7 and 12% of traffic on the on-road sections is made of cyclists. The majority of roads in Chandlers Ford and Eastleigh are deemed either 'Fast' or 'Quiet' routes by the Tool, suggesting that cycling south of the site may be a particularly efficient commuting option.

7.2 Pedestrian Infrastructure

7.2.1 The site is located to the rear of Cranbourne Drive, a quiet residential road featuring footways on either side of the carriageway.

7.2.2 Cranbourne Drive has a junction with Otterbourne Main Road which is subject to a 30mph speed limit. It features wide footways on either side of the carriageway.

7.2.3 An informal crossing with pedestrian island is installed on Otterbourne Main Road, less than 10m north of the junction with Cranbourne Drive. It features dropped kerbs and tactile paving. There is also a signalised pedestrian crossing located approximately 50m south of the junction.

7.2.4 Further north on Otterbourne Main Road, there is another informal crossing with pedestrian island featuring dropped kerbs and tactile paving, located 20m south of the northbound bus stop

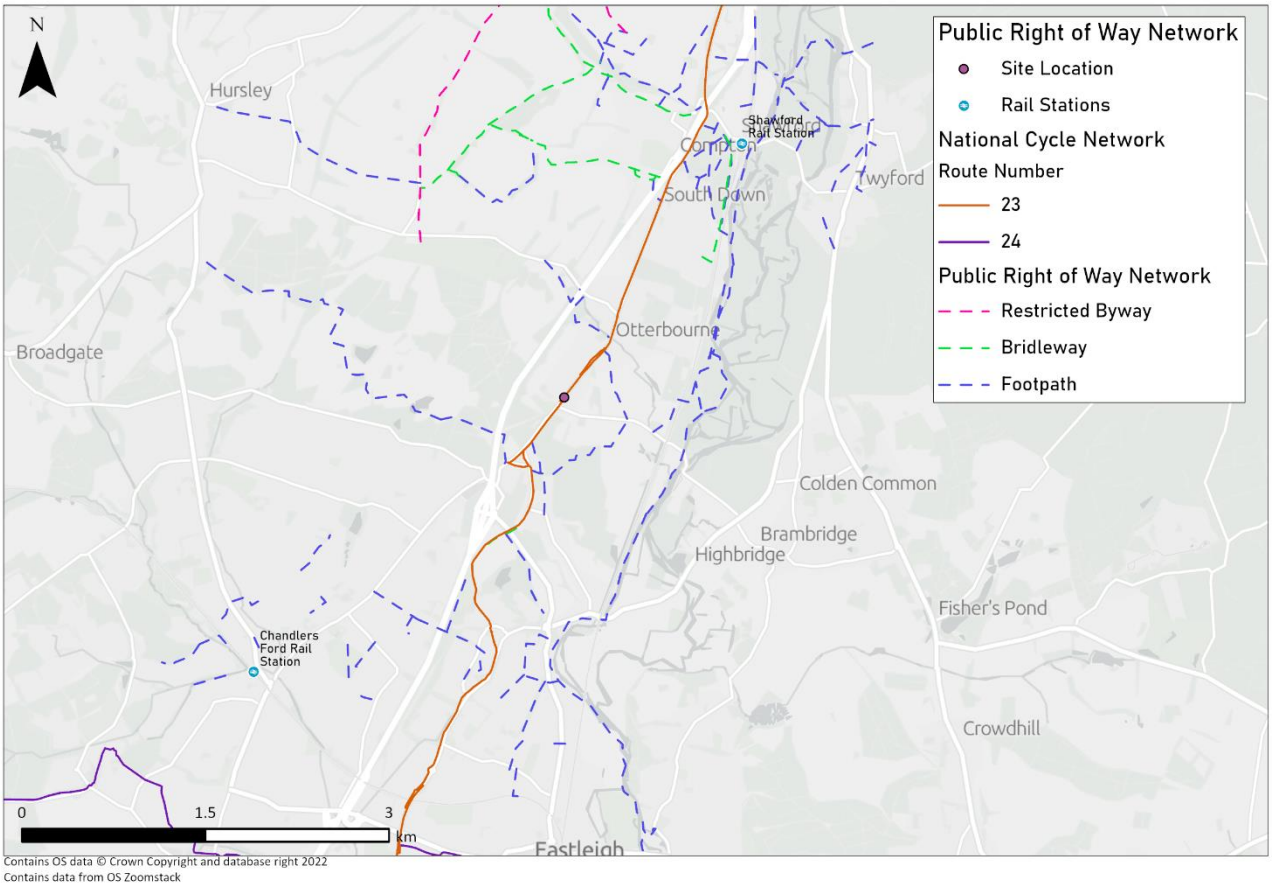
7.2.5 Otterbourne Main Road has been the subject of recent improvement works, enhancing the pedestrian environment. Works were completed in early October 2022 for a new pedestrian crossing in Otterbourne, relocating the existing crossing point on Main Road northwards and converting it to a zebra crossing.

7.2.6 Furthermore, the northern exit from the Nisa car park has been blocked to provide a safer crossing area.

7.3 Public Right of Way Network

7.3.1 In addition to NCN23, the site is surrounded by a number of routes which form the PROW network, including Byways and Bridleways which are potentially suitable for cycling. These are shown in Figure 7-3.

Figure 7-3: Public Right of Way Network



7.3.2 The site is located adjacent to the M3 which leads into outer Southampton via Eastleigh, in approximately 20-minutes. Northwards, the M3 passes around Winchester and heads east through Surrey into London.

7.3.3 Figure 7-3 also highlights how the PROW network extends to the west of the M3 crossing north (via Footpath 182/9a/1 and Poles Lane) and south (via Footpath 182/8/1 and M3 bridge near the reservoir). Whilst an existing permissive path exists past the war memorial and church and extends to the accommodation bridge and southern footpath, the development also offers the potential to create a circular walk through the site, to connect these via none trafficked routes.

7.3.4 There is also potential for some of the existing PROW routes to be improved, further supporting connectivity between neighbouring settlements by active means. Most notably a Bridleway (056/506/1) adjacent to Shawford Down connects Grove Road/Southdown Road to Shawford Station (see image upper right).

7.3.5 Elsewhere in Hampshire (see image lower right) the PROW network has been improved to support low-impact cycle routes in rural areas. As part of the Public Rights of Way Improvement Plan the development could therefore contribute to improving the quality of the surface of the Bridleway to provide an enhanced cycle connection to the station for existing and future residents.

8 Travel Behaviour

8.1 Reducing the need to travel

8.1.1 Prior to the Pandemic the appetite for homeworking was limited, taken up by those who live in remote locations and often by people who are self-employed or offering services that can be delivered by individuals or very small enterprises.

8.1.2 The Office of National Statistics (ONS) produced the following data highlighting that around 47% people worked from home on an occasional basis and often to support time-efficiencies around other business travel. By 2016/17 these patterns had increased to over 20% regularly working from home on a typical week.

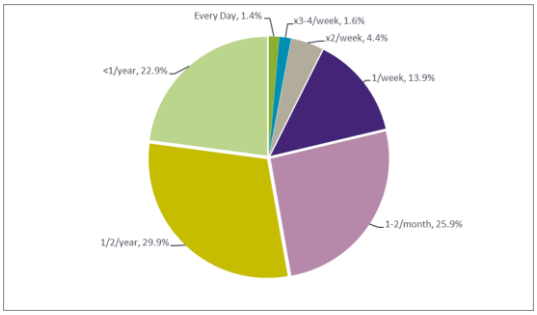


Figure 8-1: Work from Home (Day)

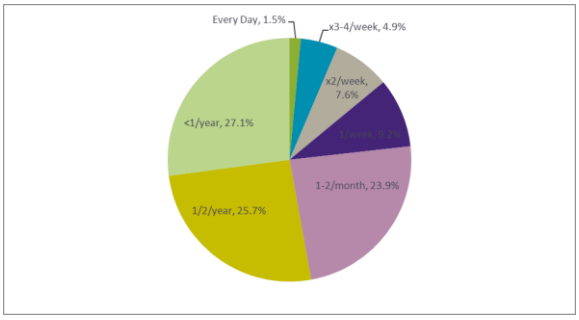


Figure 8-2: Work from Home (Part Day)

8.1.3 Following the Pandemic, home working has become a lifestyle choice for a significant proportion of the British workforce. Most surveys have established that 40-50% of the workforce work from home, at least some of the time. Whilst hybrid working practices continue to evolve, most surveys suggests that 1:4-6 business and commuting trips have been replaced by virtual meetings and home working practices, reducing the need to travel.

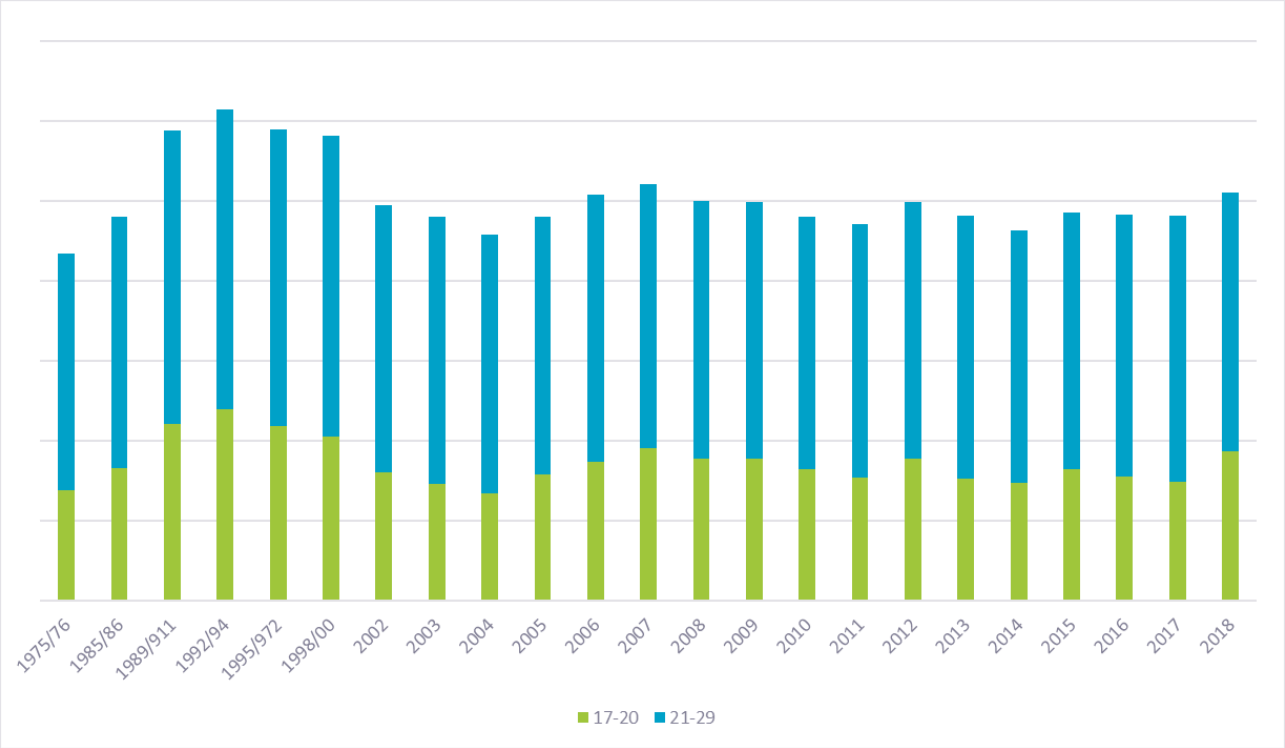
8.2 Factors influencing Driving

8.2.1 Over many years the UK has followed a 'Predict and Provide' approach to transport planning, planning for traffic growth. This pattern has manifested in increases in driving licences, with nearly 20,000 persons/year passing their driving test in the 1990's, creating a 'peak car' generation and corresponding with high levels of traffic growth.

8.2.2 Responding to global warming, the British Government has sought to exploit the potential for sustainable travel, by ensuring that plans align to support a 'Decide and Provide' approach. The change in emphasis over recent decades has altered the desire to drive contributing to a long-term reduction (to around 12,500 persons/year), depicted in Figure 8-3, as the cost of learning, buying a car and insurance has tended to make owning a car unaffordable for younger adults.

8.2.3 Over the long-term, as the 'peak car' generation begin to retire, travel pattern will begin to contribute to reductions in traffic supplementing other demographic and lifestyle changes as young people choose to live without a car.

Figure 8-3: Driving Licence Trends



8.3 Factors influencing Active Travel

8.3.1 Otterbourne lies mainly within the LSOA Winchester 010D (E01023230). Results from the Propensity to Cycle Tool (PCT) reveal that, from the 2011 Census only 10 people (1%) cycle to work and 691 (79%) drive.

8.3.2 Travelling to work on foot is the second most popular mode at 7%, while 6% take public transport.

8.3.3 For school travel, 8 pupils (3%) were found to walk to school with 101 (40%) driven by car, according to the 2011 census results.

8.3.4 However, there is evidence to suggest that this figure has improved or has the propensity to improve, from a decade ago. For example, the policies outlined in the Hampshire LTP4 and Winchester Movement strategy, and associated initiatives such as the Eastleigh Mobility Hub have placed a significant focus on increasing sustainable mode share.

8.3.5 Further interventions such as the traffic calming, cycle road markings and wayfinding measures implemented along Otterbourne Main Road are expected to directly increase cycle mode share in

coming years. The Hockley Viaduct was opened in 2013 improving the connectivity of the NCN23 into Winchester which is also considered to have improved cycle numbers in the area.

8.4 National Travel Survey

8.4.1 The National Travel Survey (NTS) is a household survey of personal travel by residents of England travelling within Great Britain, from data collected via interviews and a 7-day travel diary, which enables analysis of patterns and trends.

8.4.2 Results of recent issues of the NTS have been influenced by the effects of COVID-19 and associated lockdowns and restrictions on transport. From 2015-2019, cycling accounted for 0.9% of all traffic mileage but in 2020 this doubled to 1.8%. However, evidence suggests that the pandemic accelerated a trend which was already in place and hence, its effects may be lasting. Indeed, the 2019 NTS revealed that average cycling trip mileage have increased by 41% from 2002 to 2019 suggesting that the average distance commuters are willing to cycle is increasing. This further supports the possibility of longer-distance cycle commuting from the proposed development site.

8.4.3 The NTS also identified that the average number of trips made by surface rail has increased from 13 in 2002 to 21 in 2019.

8.4.4 Of particular note, however, is the general trend in the total number of trips made by people in England. From an annual average of 1,074 trips made in 2002 this has dropped steadily to 953 in 2019 and then to 739 in 2020 and 757 in 2021.

8.4.5 Leading from this, the NTS identifies a trend of a growing share of trips being for the purpose of leisure, which generally favours slower forms of transport such as walking and cycling.

8.4.6 Between 2004 and 2017 the number of commuting trips in the Southeast had fallen by 19%. Between 2017 and 2021 this appears to have reduced by another 23% (37% in total) where it seems likely that remote and hybrid working arrangements is the primary reason.

8.4.7 Over a similar period (2003 and 2017), the NTS demonstrates that shopping trips had reduced by 19%, following a long-term trend towards e-commerce. Whilst Winchester has remained a strong regional retail centre, the district has seen expenditure 'leakage' to E-commerce, effectively reducing the need to travel – making it easier for multi-drop deliveries to deliver to homes and thereby reducing the number and length of trips for this purpose.

8.5 Summary

8.5.1 This section has explored a series of long-term travel trends that have and continue to support reductions in travel and increases in active and sustainable travel. Whilst these trends support a national/regional trend, it is important that good planning seeks to exploit the potential to influence travel choice by identifying suitable and sustainable locations for development.

9 Conclusion

9.1.1 This Transport Technical Note forms part of the Site Promotion material considering the suitability of site Ref OT08 for residential development within the forthcoming Winchester Local Plan.

9.1.2 It acknowledges the District Council's Settlement Hierarchy and notes that Otterbourne functions as one of several villages afforded good levels of accessibility if considered as part of a polycentric network of adjoining villages. As Otterbourne is close to other settlements its accessible to a significant number of amenities and services within walking/cycling distance, would be commensurate to that expected of a much larger settlement.

9.1.3 The site also benefits from its several public transport links to other areas. These transport interchanges include a park and ride and three railway stations within acceptable cycling distances. A Bridleway (056) provides a more direct route to Shawford railway station where the development might offer some funding to improve the surface to encourage greater cycle/rail trips to/from the area.

9.1.4 There are bus stops located within very short walking distance of the site and each of the identified major employment sites in the area can be accessed by bus. The local bus services are also well-interconnected with the nearby rail stations of Chandlers Ford, Shawford and Eastleigh. From these stations, frequent services run to major employment centres such as London, Southampton, Winchester and Portsmouth.

9.1.5 The pedestrian environment surrounding the site is generally suitable to support walking for transport, having been improved in recent years. There are also significant stretches of the PROW network located near the site, oftentimes connecting with adjacent settlements using off-road footpaths. As part of the site promotion there are opportunities to preserve and enhance existing links, potentially linking existing footpaths through the site, village hall car park to the school.

9.1.6 A case has been made for the site to support longer-distance commuting by cycle. This is supported by the quality of existing infrastructure such as NCN23 and the associated wayfinding measures as well as national and local predictions for cycle propensity in coming years.

9.1.7 Emerging local policy, the Winchester Movement Strategy, and the Hampshire 4th Local Transport Plan, greatly support sustainable transportation. Additionally, a number of innovative schemes such as the Eastleigh Mobility Hub and acceleration of Park & Ride provision in Winchester are predicted to significantly decrease the mode share of private vehicles.

Appendix A Provisional Illustrative Layout, November 2022

BARWOOD LAND

FOOTPATH AND CYCLE ROUTE CONNECTING TO EXISTING PROW NETWORK

WILDFLOWER MEADOW

PLANTING BUFFER FROM NEIGHBOURING PROPERTIES

SUDS

LAP

POTENTIAL TO INCLUDE EXISTING RECREATIONAL AREA IN POS/ PLAY SPACE

NATURAL OPEN SPACE WITH OPPORTUNITIES FOR WILDLIFE TRAILS

PUBLIC OPEN SPACE

POTENTIAL PEDESTRIAN LINK TO VILLAGE HALL

POTENTIAL TO GIFT WOODLAND TO PARISH

FOOTPATH AND CYCLE ROUTE CONNECTING TO EXISTING PROW NETWORK

FP9A

FP9

FP8

GRANBOURNE DRIVE

MAIN ROAD

KILN LANE

ROMAN ROAD (course of)

Whiteheads Copse

Little Hessians Copse

Dell Copse

Workings (dis)

Otterbourne C of E Primary School

St Matthew's Church

Elderfield

EXAMPLE OF COMMUNITY ORCHARD

EXAMPLE OF NATURAL PLAY AREA

EXAMPLE OF FOOTPATH NETWORK

KEY

- Proposed Site Boundary (total area 14.64ha)
- Potential Site Access point (subject to detailed design)
- Potential Net Developable Area (2ha - 35dph)
- Pedestrian Route through site
- Existing Pedestrian Routes
- Provision for potential pedestrian/cycle link to neighbouring development site
- Existing Bus Stop
- Potential Footpath routes and connections
- Existing trees and hedges retained
- Potential Landscaping and new tree planting
- Wild-flower planting providing ecological enhancements
- Potential Attenuation areas providing opportunities for ecological enhancement
- New Area of Play

N

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SK04A - Parameters Plan | 1:1250 @ A0
October 2022