

# Land to the south of HSDC, Waterlooville

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Places for People

## Transport Assessment



## Land to the south of HSDC, Waterloooville

### Transport Assessment

|                |                                                                                                                         |
|----------------|-------------------------------------------------------------------------------------------------------------------------|
| Job Title      | Land to the south of HSDC, Waterloooville                                                                               |
| Project Number | 1017                                                                                                                    |
| Date           | 24 <sup>th</sup> March 2022                                                                                             |
| Revision       | Initial Issue                                                                                                           |
| Client         | Places for People                                                                                                       |
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| File Reference | P:\1017 South Downs College\C Documents\Reports\1017 - Land to the south of HSDC, Waterloooville - Transport Assessment |

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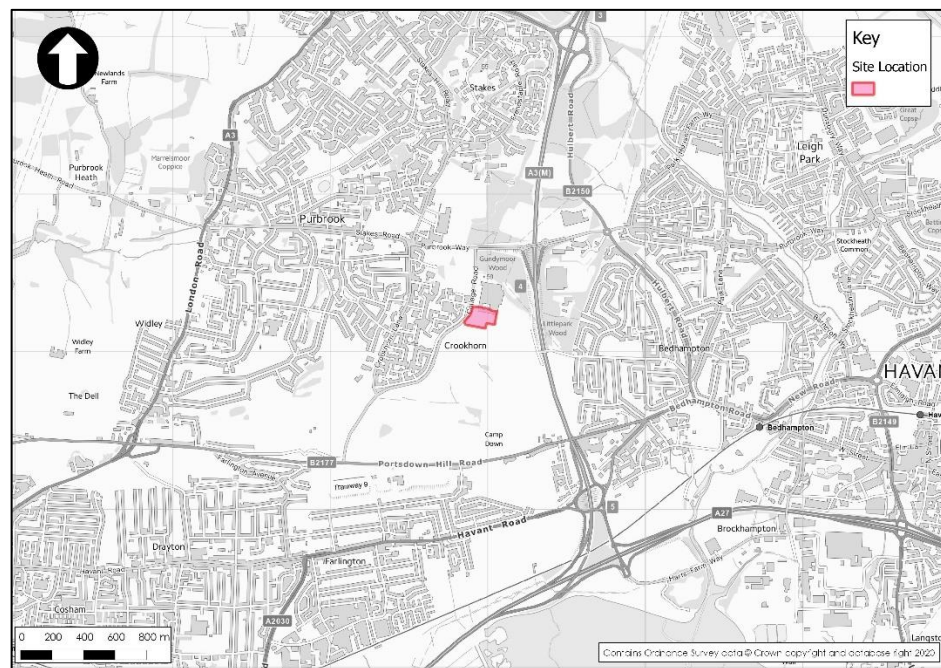
**Appendix I** ARCADY Output

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# 1 Introduction

- 1.1 Awcock Ward Partnership (AWP) has been commissioned by Places for People to prepare a Transport Assessment in support of a detailed planning application for 102 dwellings and public open space on Land to the south of South Downs College, Waterloooville.
- 1.2 The location of the proposed development is shown on Figure 1.1 below:

**Figure 1:1 - Site Location – Wide Area**



- 1.3 The site was identified in 2018 within the Draft Havant Borough Local Plan 2036 as site 'H45 | Former South Downs College Car Park'.
- 1.4 This report has been prepared broadly in accordance with the DfT/DCLG 'Guidance for Transport Assessments' (March 2007) and Planning Practice Guidance published in connection with the National Planning Policy Framework. Scoping discussions have also been held with Local Highway Authority officers.

- 1.5 The structure and content of the report comprises the following:
- Summary of relevant transport policy (local and national);
  - Review of existing transport infrastructure and services;
  - Review of the accessibility of the site to local facilities and public transport opportunities;
  - Summary of the development proposals and access arrangements;
  - Anticipated vehicular trip generation for the proposed development;
  - An assessment of potential traffic impact on the local road network; and
- 1.6 The final chapter of the Transport Assessment sets out a summary of the key issues and conclusions on the highways impact of the proposed development.
- 1.7 A Framework Travel Plan has been prepared as a separate report. This report sets out the proposed strategy to promote sustainable transport choices for journeys to/from the development.

## 2 Background & Policy

### National Policy

#### **National Planning Policy Framework**

2.1 A revised National Planning Policy Framework (NPPF) was published in July 2021. It sets out Central Government's planning policies for England and how they are expected to be applied. The revised Framework replaces the original NPPF that superseded PPG13 Transport and provides an overarching national transport planning policy.

2.2 Paragraph 10 states that 'at the heart of the Framework is a presumption in favour of sustainable development'. Paragraph 11 of the NPPF expands on this point and declares that '*plans and decisions should apply a presumption in favour of sustainable development*'. In relation to decision making the Framework states that this means:

- *Approving development proposals that accord with an up-to-date development plan without delay; or*
- *Where there are no relevant development plan policies, or the policies which are most important for determining the application are out-of-date, granting permission unless:*
  - *The application of policies in this Framework that protect areas of assets of particular importance provides a clear reason for refusing the development proposed; or*
  - *Any adverse impact of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this Framework taken as a whole.*

2.3 Paragraph 92 states that planning policies, and decisions should "aim to achieve healthy, inclusive and safe places". The Framework provides a guidance and examples on how this should be done:

- *Promote social interaction, including opportunities for meeting between people who might not otherwise come into contact with each other – for example through mixed-use developments, strong neighbourhood centres, street layouts that allow for easy pedestrian and cycle connections within and between neighbourhoods, and active street frontage;*
- *Are safe and accessible, so that crime and disorder, and fear of crime, do not undermine that quality of life or community cohesion – for example through the use of clear and legible pedestrian routes, and high quality public space, which encourage the active and continual use of public areas; and*
- *Enable and support healthy lifestyles, especially where this would address identified local health and well-being needs – for example through the provision of safe and accessible green infrastructure, sport facilities, local shops, access to healthier food, allotments and layouts that encourage walking and cycling.*

2.4 Section 9 of The Framework specifically considers promoting sustainable transport. The Framework acknowledges that *'Transport issues should be considered from the earliest stages of plan-making and development proposals'*.

2.5 It is stated within Paragraph 110 that plans and decisions should take account of whether:

- *Appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location;*
- *Safe and suitable access to the site can be achieved for all users;*
- *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; and*
- *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.*

2.6 The Framework states in Paragraph 111 that a 'Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe.'

2.7 In relation to design and layout, Paragraph 112 of the NPPF requires that developments should:

- Give priority first to pedestrian and cycle movements, both within the scheme and with neighbouring areas; and second – so far as possible – to facilitating access to high quality public transport, with layouts that maximise the catchment area for bus or other public transport services, and appropriate facilities that encourage public transport use;
- Address the needs of people with disabilities and reduced mobility in relation to all modes of transport;
- Create places that are safe, secure and attractive – which minimise the scope for conflicts between pedestrians, cyclists and vehicles, avoid unnecessary street clutter, and respond to local character and design standards;
- Allow for the efficient delivery of goods, and access by service and emergency vehicles; and
- Be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations.

2.8 Paragraph 113 requires that all developments that generate significant amounts of movement should be supported by a Transport Statement or Transport Assessment, and a Travel Plan.

2.9 In terms of parking the NPPF states in paragraph 107 that in setting local parking standards for residential and non-residential development, local planning authorities should take into account the following:

- The accessibility of the development;
- The type, mix and use of development;
- The availability of and opportunities for public transport;
- Local car ownership levels; and
- The need to ensure an adequate provision of spaces for charging plug-in and other ultra- low emission vehicles.

2.10 Paragraph 108 of the Framework that 'Maximum parking standards for residential and non-residential development should only be set where there is a clear and compelling justification that they are necessary for managing the local network, or for optimising the density of development in city and town centres and other location that are well served by public transport'.

- 2.11 Further to this, paragraph 85 states that 'Planning policies and decisions should recognise that sites to meet local business and community needs in rural areas may have to be found adjacent to or beyond existing settlements, and in locations that are not well served by public transport.'

*The Government recognises that different policies and measures will be required in different communities and opportunities to maximise sustainable transport solutions will vary from urban to rural areas.*

### **National Planning Practice Guidance**

- 2.12 On 6 March 2014 the Department for Communities and Local Government (DCLG) launched a suite of planning practice guidance to bring together relevant material for England in an accessible and usable way. As well as other planning matters, the new resource contains specific guidance on 'Travel Plans, Transport Assessments and statements in decision-making.'

- 2.13 The guidance states that these documents should:

*"primarily focus on evaluating the potential transport impacts of a development proposal" and that they "can be used to establish whether the residual transport impacts of a proposed development are likely to be "severe", which may be a reason for refusal, in accordance with the National Planning Policy Framework."*

- 2.14 The guidance also states that:

*"The Transport Assessment or Transport Statement may propose mitigation measures where these are necessary to avoid unacceptable or "severe" impacts. Travel Plans can play an effective role in taking forward those mitigation measures which relate to on-going occupation and operation of the development."*

- 2.15 The key principles that should be taken into account when preparing a Travel Plan, Transport Assessment or Statement are also defined in the guidance. This states that Travel Plans, Transport Assessments and Statements should be:

- Proportionate to the size and scope of the proposed development to which they relate and build on existing information wherever possible;
- Established at the earliest practicable possible stage of a development proposal;
- Be tailored to particular local circumstances (other locally determined factors and information beyond those which are set out in this guidance may need to be considered in these studies provided there is robust evidence for doing so locally);
- Be brought forward through collaborative ongoing working between the Local Planning Authority/ Transport Authority, transport operators, Rail Network Operators, Highways Agency where there may be implications for the strategic road network and other relevant bodies. Engaging communities and local businesses in Travel Plans, Transport Assessments and Statements can be beneficial in positively supporting higher levels of walking and cycling (which in turn can encourage greater social inclusion, community cohesion and healthier communities).

- 2.16 The NPPG is currently in the process of being revised with documents being published continually to respond to changes that occur.

### Regional Policy

#### Hampshire Local Transport Plan (LTP) – Long-term Strategy 2011-2031

- 2.17 The Hampshire Local Transport Plan is a two part plan, setting out the vision, goals, objectives and policies for transport up to 2031. The current plan is LTP3, superseding LTP2 which covered the 5-year period 2006-2011. The vision of the Long Term Strategy is summarised below:

*The starting-point for Hampshire County Council is that a Local Transport Plan (LTP) is not only about transport, it is about helping people maintain their quality of life and go about their daily business...*

*...It is the Council's role to organise its own resources, make the best use of its powers, and work with a wide range of partner organisations, so that whatever happens in their lives people can:*

- *reliably get to the places they need to go;*
- *choose how, when (and whether) to travel;*
- *travel safely, for themselves and others;*
- *if possible, enjoy their journey.*

*The Council also works with others where it can, to contribute towards the health and prosperity of the places where people live and work, so that transport:*

- *respects and protects the physical quality of places;*
- *serves places' economic needs;*
- *minimises carbon emissions and the impact of climate change;*
- *is fully integrated with other areas of policy affecting places (for example, economic development, energy and land-use planning);*
- *helps places be sustainable and socially connected.*

2.18 There are a number of Policy Objectives contained in Hampshire LTP: 2011-2031 established with the view to meeting this vision. Those that are of particular relevance to the proposed residential development are summarised below:

**Policy Objective 1** - Continue to work to improve road safety through targeted measures that deliver reductions in casualties, including applying a speed management approach that aims to reduce the impact of traffic on community life and promote considerate driver behaviour.

**Policy Objective 4:** Work with bus and coach operators to grow bus travel, seek to remove barriers that prevent some people using buses where affordable and practical, and reduce dependence on the private car for journeys on inter- and intra-urban corridors;

**Policy Objective 7** - Ensure that travel from home to school affordably serves changing curriculum needs, underpins sustainable schools and maximises individual opportunities for education and training.

**Policy Objective 11** - Reduce the need to travel through encouragement of a highspeed broadband network, supporting the local delivery of services and in urban areas the application of 'Smarter Choices' initiatives.

**Policy Objective 12** - Invest in sustainable transport measures, including walking and cycling infrastructure, principally in urban areas, to provide a healthy alternative to the car for local short journeys to work, local services or schools; and work with health authorities to ensure that transport policy supports local ambitions for health and well-being.

### Hampshire Local Transport Plan Review – Hampshire 2050

2.19 The current Hampshire LTP (LTP3) was published in 2011. Hampshire County Council (HCC) have begun reviewing and updating LTP3 to ensure it '*continues to meet current and future challenges*'. In particular, the updated LTP (LTP4) will aim to support the emerging

Hampshire 2050 Vision and the declaration of a Climate Emergency

- 2.20 LTP4 will supersede the current LTP and will form the primary transport policy for HCC to 2050. Public consultation for the LTP took place in January-February 2021. According to the HCC website, the plan is currently being updated, and will be published for formal consultation in due course.

### **Adopted Havant Borough Local Plan**

- 2.21 The adopted Havant Local Plan is made up of two main documents: the Core Strategy (2011) and the Allocations (2014). This plan will remain in place until the new Havant Borough Local Plan is adopted.
- 2.22 Key policies within the adopted Local Plan Core Strategy document are listed as follows, and are considered within this TA:
- CS20 Transport and Access Strategy
  - DM11 Planning for More Sustainable Travel
  - DM12 Mitigating the Impacts of Travel
  - DM13 Car and Cycle Parking on Residential Development

#### **Policy CS20 Transport and Access Strategy**

Development will be permitted that:

1. Is consistent with and contributes to the implementation of the 'Reduce, Manage and Invest' strategy.
2. Does not increase congestion and promotes better use of existing transport networks.
3. Improves accessibility to goods, services and employment and promotes equality in the transport system.
4. Provides transport management measures to ensure the safe and efficient operation of the strategic and local road network.
5. Ensures that highway design responds positively to the characteristics of the area and delivers a high quality public realm for all users.
6. Maintains or improves the range of transport modes accessible to the users of the development site with specific emphasis on public transport, especially high quality/frequency buses and includes walking and cycling where appropriate.
7. Improves highway, cycling and pedestrian links between the western built up area of the borough (Waterlooville) and the eastern area of the borough (centred on Havant) to create a strong east/west communication axis that passes through Dunsbury Hill Farm/Leigh Park.

**DM11 Planning for More Sustainable Travel**

The council will seek to ensure that every opportunity is taken to increase integration of sustainable travel modes and availability of non-motorised modes by appropriate measures including:

1. Securing on-site and/or off-site interventions that promote integrated travel and access by non-motorised modes.
2. Requiring safe and secure vehicular and cycle parking and turning facilities to adopted standards.
3. Securing appropriate improvements to public and community transport (including infrastructure requirements) in accordance with the Hampshire Local Transport Plan and (where applicable) the relevant sub-regional transport strategy.
4. Proposals for reducing opportunities for informal parking in the area surrounding the development where this would impact on the capacity, operation and safety of the local highway network and/or the amenity of the locality.
5. Ensuring that new developments are located and designed at the outset to encourage lower vehicle speeds and safe, permeable, inclusive layouts that integrate with existing pedestrian, cycle and public transport routes. This will facilitate and encourage short distance trips by cycle and walking, including to public transport interchanges.

**DM12 Mitigating the Impacts of Travel**

New developments will be required to mitigate their travel impact, including the environmental impacts of travel (such as noise, air and visual pollution) and impacts on amenity, health and climate change by ensuring that, where relevant, the following criteria are met:

1. Adequate provision is made for integrated and improved transport infrastructure or appropriate mitigation measures, through direct improvements and S106 contributions in accordance with the Hampshire County Council Transport Contributions Policy.
2. The submission of a transport assessment and travel plan alongside any planning application on proposals for major development or where a proposal is likely to have significant transport implications.
3. The submission of a transport statement must accompany planning applications to explain changes to travel demand.
4. A bond is provided which will be used to mitigate negative travel impacts of the development, should the travel plan fail to achieve its targets. This bond will be held by the relevant local transport authority.
5. In relation to outline planning applications, a framework for the preparation of travel assessments and travel plans will be submitted with the planning application proposals.

**DM13 Car and Cycle Parking on Residential Development**

Residential development will only be permitted where it provides car parking and cycle storage in accordance with the standards set out in the Residential Car Parking and Cycle Provision Supplementary Planning Document.

- 2.23 The supporting text states that developments which generate significant amounts of travel require a transport assessment, as well as a travel plan that details the approach to minimise the expected traffic impact of new development.
- 2.24 Car parking will be provided in line with the adopted 'Parking Supplementary Planning Document'.

**Havant Borough Submission Local Plan (2018-2036)**

- 2.25 The new local plan was submitted for examination to the Secretary of State for Housing Communities and Local Government on 12 February 2021.
- 2.26 In relation to the proposed development site Policy KS7 of the Submission local plan states:

*'Following the relocation of 'A' level students from the South Downs to the Havant campus, there will be a surplus of space at the South Downs site. Around 2.65 ha of land in the northern part of the site will be retained in education use for the South Downs campus. However the southern part of the site, currently used as car parking and teaching facilities, will become surplus to requirements. The capital gain from this site can be used to fund refurbishment and remodelling of the remaining areas of the campuses. Policy H46 allocates the site for about 94 dwellings.'*

- 2.27 The site was allocated in policy H45 of the Submission, listed as 'H45 | Former South Downs College Car Park'. The policy continues to list the criteria requiring fulfilment in order for residential development of 'about 95 dwellings' to commence.
- 2.28 Policy H45 requires a Transport Statement to be prepared before development may commence, as well as a set of criteria which the design and layout must follow:

*Residential development of about 95 dwellings will be permitted where the design and layout:*

- i. Responds to the site's sensitive location in landscape terms, being located on Portsdown Hill;*
- ii. Provides an appropriate street frontage and relationship with residential properties on College Road;*
- iii. Ensures that pedestrian and cycle routes are integrated throughout the development and provide connectivity between College Road, this site and the East of College Road site (Policy H41);*
- iv. Retains and integrates existing trees and hedgerows according to their quality and value;*
- v. Integrates cycle and pedestrian routes to and from College Road and the adjacent housing allocation (Policy H41);*
- vi. An appropriately scaled contribution is made towards primary education provision.*

- 2.29 Policy H45 also required that there be 'An appropriate means of vehicular access [...] established in a coordinated manner with the adjacent site (Policy H41)'. However, the policy contained no specific details on where access should or should not be taken, and no requirement for access to be provided through the adjacent H41 Campdown site.
- 2.30 A hybrid application for the Campdown site had been submitted by Persimmon Homes in 2019 under application reference APP/19/01101 for up to a total of 780 new homes.
- 2.31 Stage 1 of the Local Plan examination concluded in July 2021. The 'Inspector's Interim Findings Report' did not contain any concerns regarding the H45 site, but did raise ecological and heritage concerns over the adjacent 'Campdown' (Policy H41) site, which the Inspector has asked to be removed from the Submission Local Plan. Further to this, the most recent 'Extension of time agreement' expired on 1<sup>st</sup> May 2021 without a new application being submitted. The application is therefore considered to be dormant.
- 2.32 When concluding that the H41 Campdown site should be removed from the draft Local Plan, the Inspector must have considered the H45 allocation to be capable of being accessed independently without H41 (Campdown) coming forward, with access from College Road being the only option available with frontage to the public highway.

#### **Havant Borough Council Parking Supplementary Planning Document (SPD)**

- 2.33 The standards formulated in the Residential Parking and Cycle Provision SPD were adopted by Havant Borough Council (HBC) in July 2016. The document sets out the HBC off-street parking standards relating to new development in the Borough.
- 2.34 The standards also take account of locations where cycling and walking should and can be encouraged and, in these areas, a lower provision of car parking might be acceptable. No specific reduction parameters are cited, with any reduction so granted agreed on a case by case basis.
- 2.35 The document also sets out guidance for electric vehicle charging provision:

- *Where possible, garages and car ports should have a home charging point or electric socket.*
- *Electric charging points and parking for mobility scooters should be provided in new residential developments in a convenient location at ground floor level where possible*

### **Additional Guidance; Manual for Streets**

2.36 Manual for Streets was published by the Department for Transport in 2007 with the purpose of being a “common reference point for all those involved in the design of residential neighbourhoods” and represents “a strong Government commitment to the creation of sustainable and inclusive public spaces”.

2.37 This latest design guidance demonstrates “benefits that flow from good design and assigns a higher priority to pedestrians and cyclists, setting out an approach to residential streets that recognises their role in creating places that work for all members of the community”.

2.38 Manual for Streets sets out the following key objectives of the design of new residential neighbourhoods:

- *Encouragement of low vehicle speeds;*
- *Creation of an environment in which pedestrians can walk, or stop to chat, without feeling intimidated by motor traffic;*
- *Make it easier for people to move around;*
- *Promote social interaction.*

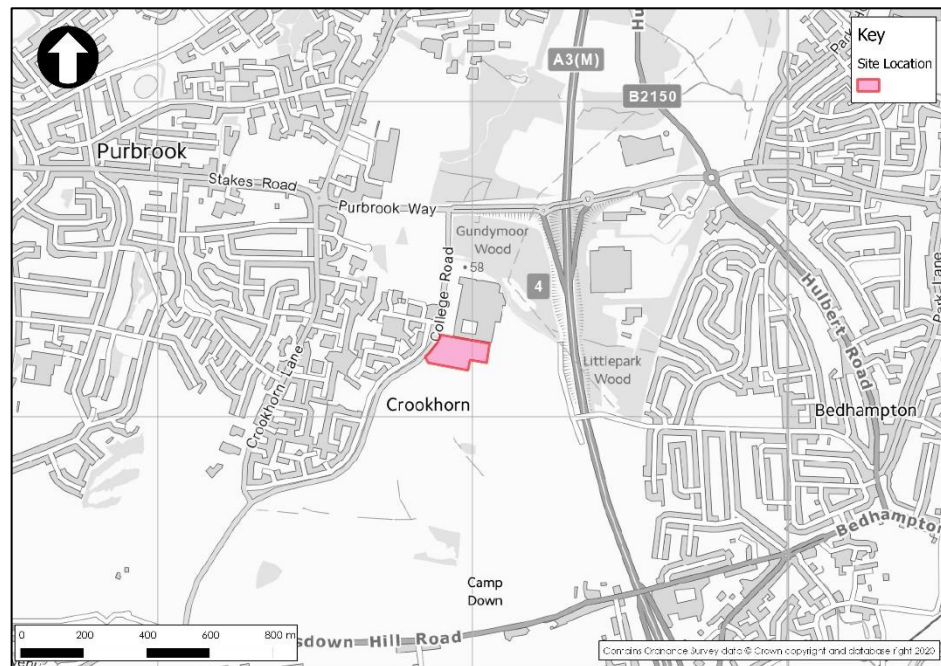
2.39 Manual for Streets 2 – “Wider Application of the Principles, a companion guide to Manual for Streets”, was published by the Chartered Institution of Highways and Transportation in September 2010. Manual for Streets 2 builds on the philosophies originally set out in Manual for Streets, and aims to fill the perceived gap in design advice that lies between Manual for Streets and the Design Manual for Roads and Bridges. The document sets out additional guidance and case studies showing how the Manual for Streets principles can be extended beyond residential streets to encompass both urban and rural situations.

### 3 Existing Conditions

#### Context

- 3.1 The proposed site is located within the town of Waterlooville, Hampshire. The location of the proposed site in relation to its surroundings is shown on Figure 3.1 below:

**Figure 3:1 - Site Location – Local Area**



- 3.2 The site is bordered to the north by the 'South Downs' campus of Havant and South Downs College (HSDC). To the east and south, the site is bordered by greenfield land. To the west, the site is bordered by College Road.

#### Local Road Network

- 3.3 College Road is a streetlit, unclassified two-way road which is approximately 7.3m wide along the site frontage. The street begins at its northern end as the minor arm of a signalised junction with Purbrook Way, continuing south for approximately 1.3km until its junction with Crookhorn Lane which continues south for approximately 500m before forming the minor arm of a priority junction with Portsdown Hill Road (B2177).
- 3.4 College Road is subject to a 30mph speed limit between the junction with Purbrook Way to approximately 30m south of the

junction with Apollo Drive. From the junction with Apollo Drive to Portsdown Hill Road, College Road/ Crookhorn Lane has a speed limit of 40mph and, on some sections, solid white lines are present to prohibit overtaking. Between the junctions with Portsdown Hill Road and Apollo Drive, College Road/ Crookhorn Lane has continuous pedestrian footways of approximately 2m width on both its eastern and western sides.

- 3.5 Aside from access to Atlantis Avenue, a local distributor road, Apollo Drive is otherwise a residential *cul-de-sac* with a continuous pedestrian footway along its northern side. Right-turning traffic from College Road is able to turn into Apollo Drive by means of a marked ghost-island junction on College Road.
- 3.6 Atlantis Avenue runs parallel to College Road between Apollo Drive and Crookhorn Lane, forming the minor arm of a priority access junction with each. The street is residential in character and has intermittent footway coverage on the northern side of the carriageway.
- 3.7 College Road forms the major arm of a ghost island junction with the South Downs College access, 80m to the north of its junction with Apollo Drive. Traffic from College Road is provided with a 25m ghost island to facilitate right turns. . The exit from South Downs College is provided with dedicated right and left turning lanes.
- 3.8 Purbrook Way forms the major arm of a signalised junction with College Road. Between the Apollo Drive junction and Purbrook Way junction there is a continuous pedestrian footway of 1.5-2.0m width on the eastern side of College Road, where narrower widths are supplemented by a grass verge of at least 1.5m.
- 3.9 Approximately 300m to the east of the junction with College Road, Purbrook Way joins the A3 (M) northbound off slip at a roundabout junction. Approximately 150m east of this is another roundabout granting southbound access to the A3(M). Approximately 400m east of this roundabout is a large five-arm roundabout granting access to B2150 and a northbound connection to the A3(M).
- 3.10 From the B2150 roundabout, Purbrook Way continues east as a residential road with a 30mph speed limit. Purbrook way is streetlit and from the junction with College Road to the B2150 roundabout

is a two-way street with two lanes on each side, with the second lane ending as a left-turn lane into College Road.

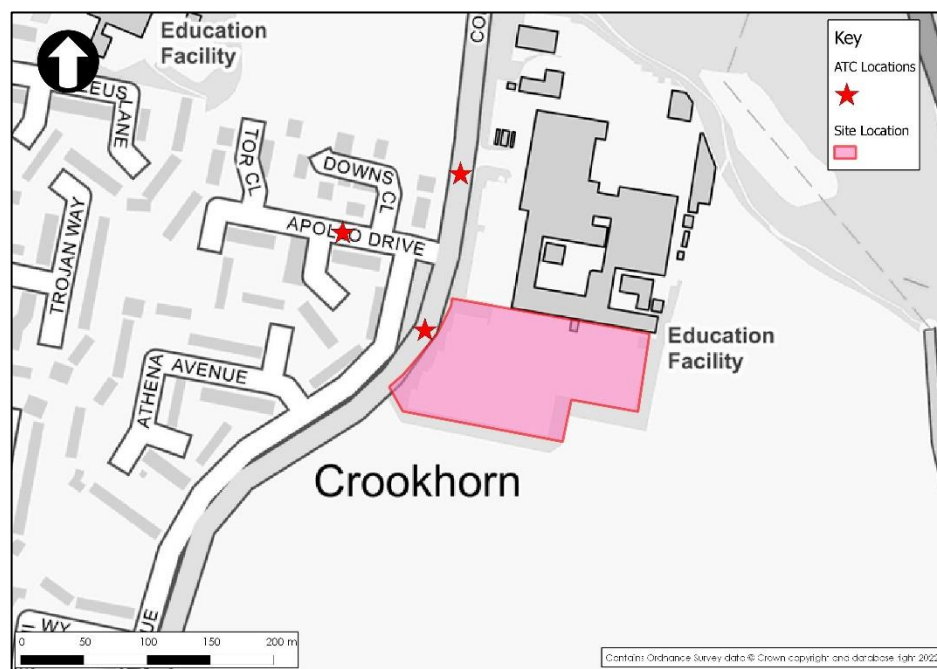
- 3.11 The A3(M) is a motorway bypass for the A3 beginning in the south at the Havant Bypass (A27) and running north for approximately 9.0km before continuing as the A3 near the village of Horndean. The A3(M) is a continuous dual carriageway for its duration with a 70mph national speed limit. The A3 runs north-east to London, passing through Guildford and providing connection to the A272.
- 3.12 Purbrook Way runs west from the junction with College Road for approximately 400m before ending as the eastern arm of a four-arm roundabout, of which the southern arm is Crookhorn Lane. On this section of Purbrook Way, the southern carriageway has a single lane, whilst the northern carriageway runs east from the roundabout with a single lane for approximately 250m, then transitions to two lanes, with a third right-hand turn lane into College Road.
- 3.13 Crookhorn Lane runs south from the roundabout with Purbrook Road as a residential street, ending in the south with right and left hand turn lanes at the minor arm of a priority access junction with College Road. There are also long flare lengths on the junction, and an unmarked ghost island junction for right-turning traffic on College Road. From this priority access junction, College Road continues south under the name of Crookhorn Lane until it terminates at the B2177.
- 3.14 The western arm of the Crookhorn Lane roundabout continues west as a 30mph residential street for approximately 1.3km as Stakes Road/ Ladybridge Road, before ending as the eastern arm of a four-arm roundabout with London Road (A3).
- 3.15 The northern arm of the Crookhorn Lane roundabout runs north for approximately 650m as Stakes Hill Road, then continuing north-west from a three-arm roundabout towards the centre of Waterlooville.
- 3.16 The B2177 runs east from the junction with Crookhorn Lane as a single-lane, 40mph road for approximately 2.0km before ending at a roundabout with Bedhampton Road. From here, Bedhampton Road runs east past Bedhampton Railway Station towards the centre of Havant. The B2177 runs west from the College Road

junction for approximately 13km before ending in the village of Wickham. Along its length, the B2177 provides access via the A3 to the M275 and M27, main routes to Southampton and Portsmouth.

### Existing Traffic

- 3.17 An Automatic Traffic Count (ATC) on College Road was commissioned in by AWP, with counters 30m to the north and south of the proposed site access junction, and one 70m back from the give-way line on Apollo Drive, as shown on Figure 3.2. The ATC survey was conducted 28/02/2022 to 06/03/2022 inclusive.

**Figure 3.2 – ATC Locations**



- 3.18 Tables 3.1 to 3.3 below summarise the traffic flows and speeds along College Road and Apollo Drive. Full ATC survey results are attached in Appendix B.

**Table 3.1 2022 Survey: College Road north of site access**

|            | AM Peak<br>(0800-0900) | PM Peak<br>(1600-1700) | Mean Speed<br>(mph) | 85 <sup>th</sup> Percentile<br>Speed (mph) |
|------------|------------------------|------------------------|---------------------|--------------------------------------------|
| Northbound | 174                    | 131                    | 27.4                | 35.2                                       |
| Southbound | 137                    | 232                    | 27.8                | 35.1                                       |

|         | AM Peak<br>(0800-0900) | PM Peak<br>(1600-1700) | Mean Speed<br>(mph) | 85 <sup>th</sup> Percentile<br>Speed (mph) |
|---------|------------------------|------------------------|---------------------|--------------------------------------------|
| Two Way | 311                    | 363                    | 27.6                | 35.1                                       |

**Table 3.2 2022 Survey: College Road south of site access**

|            | AM Peak<br>(0800-0900) | PM Peak<br>(1600-1700) | Mean Speed<br>(mph) | 85 <sup>th</sup> Percentile<br>Speed (mph) |
|------------|------------------------|------------------------|---------------------|--------------------------------------------|
| Northbound | 125                    | 90                     | 31.0                | 37.4                                       |
| Southbound | 110                    | 170                    | 32.0                | 37.7                                       |
| Two Way    | 235                    | 260                    | 31.6                | 37.6                                       |

**Table 3.3 2022 Survey : Apollo Drive**

|           | AM Peak<br>(0800-0900) | PM Peak<br>(1600-1700) | Mean Speed<br>(mph) | 85 <sup>th</sup> Percentile<br>Speed (mph) |
|-----------|------------------------|------------------------|---------------------|--------------------------------------------|
| Eastbound | 11                     | 23                     | 19.6                | 24.0                                       |
| Westbound | 20                     | 16                     | 19.1                | 23.6                                       |
| Two Way   | 31                     | 39                     | 19.3                | 23.8                                       |

- 3.19 Table 3.2 above shows that the flows along College Road are relatively balanced with a maximum of five vehicles every minute in the AM Peak and six vehicles per minute in the PM Peak.
- 3.20 The weather was fine and dry for five of the seven days during the survey, with the two wet days being excluded from the data. Dry weather speeds used to ensure a robust assessment.
- 3.21 The survey evidence demonstrates that the maximum recorded speed along College Road to the south of the junction is 37.4mph northbound, and 37.7mph southbound. This compares with speeds to the north of the junction which were recorded at 35.2mph northbound, and 35.1mph southbound. This is consistent with drivers slowing down after moving northwards into the 30mph zone, and increasing their speed southbound in anticipation of the 40mph limit.

### **Pedestrian and Cycle Facilities**

- 3.22 College Road is of a gentle gradient for most of its length, with a slight positive incline from Portsdown Hill Road. The street is lit along its length and has no steps on any footway.
- 3.23 There is an uncontrolled pedestrian crossing approximately 60m south of the junction with Apollo Drive. There are steps on both sides of the carriageway leading down onto Portsmouth Golf Course, located approximately 60m south from the junction between Crookhorn Lane and College Road.
- 3.24 At the junction of College Road with Purbrook Way there are two-stage signalised crossings for pedestrians across both College Road and Purbrook Way (east).
- 3.25 Approximately 20m north and 30m south of the South Downs College junction with College Road there are uncontrolled pedestrian crossings with dropped kerbs and pedestrian refuges.
- 3.26 There is a continuous foot/cycleway of approximately 3m width along the southern side of Purbrook Way from the junction with College Road to the Crookhorn Lane roundabout, where cyclists merge with the on-road traffic at the roundabout. This route is a Public Right of Way (PRoW), listed as Bridleway 108/28/3 which may also be used by cyclists. PRoW 108/28/3 runs south from Purbrook Way along College Road before continuing east through Gundymoor Wood for approximately 250m where it meets PRoW footpath 108/524/1. Both PRoW 108/28/3 and 108/524/1 continue east before meeting Scratchface Lane and continuing to end near the overpass on the A3(M). These routes provide a good off-road connection for pedestrians and cyclists to access Bedhampton.
- 3.27 There is a continuous pedestrian footway of approximately 1.5m width along the northern side of Purbrook Way between the Crookhorn Lane roundabout and the B2150 roundabout, with some sections of 3m shared pedestrian/cycle space.
- 3.28 Off-road footpaths connect Atlantis Avenue and Crookhorn Lane via Athena Avenue. This allows pedestrian access from the development site to the amenities on Crookhorn Lane within a short 10-minute (800m) walk.

- 3.29 National Cycle Route 222 (NCN 222) runs north from Portsdown Hill Road along Crookhorn Lane, continuing north along Crookhorn Lane to the four-arm roundabout with Purbrook Way. NCN 222 then runs along Stakes Hill Road towards the centre of Waterlooville. Within Waterlooville town centre there are many off-road cycleways. A map of the local cycle routes in Havant and Waterlooville can be seen in Appendix A.

### Accident History

- 3.30 Personal Injury Accident (PIA) data has been acquired from Hampshire Constabulary covering the highway network close to the site. The search area is seen below in Figure 3.3. The data was obtained for the most recent five-year period available (01/07/2016 – 30/06/2021). The PIA data, and a plot of all reported incidents, is included in Appendix C.

**Figure 3.3 – PIA Data search area**



- 3.31 The data indicates that there has been a total of three incidents within the search area during the five-year period, with two of these accidents categorised as 'slight' and one as 'serious'.
- 3.32 The first slight incident is reported to have occurred in July 2016 on College Road approximately 65m southwest of the Apollo Drive junction. The records indicate that this incident occurred when the driver of a car mounted the nearside kerb on a left hand bend,

losing control of the vehicle and hitting a lamp post. The lack of driver experience was listed as a very likely factor contributing to the accident.

- 3.33 The second slight incident occurred in August 2018 at the priority access junction for entering South Downs College. The incident occurred when a driver turning right onto College Road failed to see an oncoming motorcycle travelling south along College Road. The car collided with the rear offside of the motorcycle.
- 3.34 The only serious incident occurred in October 2018 at the southbound bus stop outside South Downs College. The records indicate that, as the bus moved away from the bus stop, a passenger fell from their seat and was injured.
- 3.35 In conclusion a review of the records for the previous five year period indicates all the recorded incidents occurred at different locations, were not in similar time periods and with different contributing factors. The records do not, therefore, contain any patterns that might suggest any areas of highway safety concern within the search area.

### **Summary**

- 3.36 The proposed site is located within the Town of Waterlooville, Hampshire. The site is bordered to the north by the 'South Downs' campus of Havant and South Downs College (HSDC). To the east and south, the site is bordered by greenfield land. To the west, the site is bordered by College Road.
- 3.37 College Road is a streetlit, unclassified two-way street which runs between Purbrook Way in the north and Portsdown Hill Road in the south. These streets afford access to central Waterlooville, Bedhampton, and Havant, as well as connecting roads to allow onward travel to Portsmouth, Southampton, and Guildford.

### **Conclusion**

- 3.38 There is good footway provision along the length of College Road, together with a number of uncontrolled pedestrian crossings. The signalised crossing at the Purbrook Road junction provides a safe, segregated route for pedestrians and cyclists to access the centre of Waterlooville. An off road pedestrian route allows quick access from the development site to the amenities on Crookhorn Way.

- 3.39 Personal Injury Accident data received from Hampshire Constabulary showed three recorded incidents in the most recent five year period available. The records do not contain any patterns that might suggest any areas of highway safety concern within the search area.

## 4 Accessibility

- 4.1 This section of the report considers the accessibility of the site in relation to local facilities and sustainable transport in the area.

### Local Amenities and Facilities

- 4.2 The Institution of Highways and Transportation document '*Guidelines for Providing for Journeys on Foot*' contains suggested acceptable walking distances for pedestrians for some common facilities. This document is intended to advise on planning for and providing for pedestrians, maintaining pedestrian infrastructure and promoting walking and as a result the distances stated in the document may be used for planning and evaluation purposes.
- 4.3 Table 4.1 below reproduces Table 3.2 from '*Guidelines for Providing for Journeys on Foot*' (GPJF) which shows the acceptable walking distances.

**Table 4.1 – 'GPJF Table 3.2' - Suggested Acceptable Walking Distance**

|                          | Town Centres (m) | Commuting/School /Sight-seeing (m) | Elsewhere (m) |
|--------------------------|------------------|------------------------------------|---------------|
| <b>Desirable</b>         | 200              | 500                                | 400           |
| <b>Acceptable</b>        | 400              | 1000                               | 800           |
| <b>Preferred maximum</b> | 800              | 2000                               | 1200          |

- 4.4 Section 4.4 of Manual for Streets also states that '*Walkable neighbourhoods are typically characterised by having a range of facilities within 10 minutes' walk (up to about 800m)*'. However MfS goes on to state that '*this is not an upper limit and...that walking offers the greatest potential to replace short car trips, particularly those under 2 km*'.
- 4.5 Figure 4.1 contained in Appendix A of this report, highlights the location of local facilities with respect to the development site. To provide context, boundaries indicating distances from the site boundary in 400m (or 5 minute walk) increments are also shown.
- 4.6 As highlighted on Figure 4.1, residents of the development will be able to access a range of local facilities on foot within an

approximate 5, 10 and 15 minute walk of the development. Table 4.2 sets out the measured walking distance to each amenity from the site following the highway network.

**Table 4.2: Accessibility to Local Facilities**

|                                    | Approximate Walking Distance (m/mins) |          |          |           |           |            |            |            |            |            |
|------------------------------------|---------------------------------------|----------|----------|-----------|-----------|------------|------------|------------|------------|------------|
|                                    | 0-400m                                | 0-5 mins | 400-800m | 5-10 mins | 800-1200m | 10-15 mins | 1200-1600m | 15-20 mins | 1600-2000m | 20-25 mins |
| South Downs College Bus Stops      | ✓                                     |          |          |           |           |            |            |            |            |            |
| South Downs College                | ✓                                     |          |          |           |           |            |            |            |            |            |
| Rowlands Pharmacy Crookhorn Lane   |                                       |          | ✓        |           |           |            |            |            |            |            |
| Co-op Convenience Store            |                                       |          | ✓        |           |           |            |            |            |            |            |
| Crookhorn Post Office              |                                       |          | ✓        |           |           |            |            |            |            |            |
| Crookhorn Surgery                  |                                       |          | ✓        |           |           |            |            |            |            |            |
| Crookhorn Precinct Bus Stops       |                                       |          | ✓        |           |           |            |            |            |            |            |
| Morelands Primary School           |                                       |          | ✓        |           |           |            |            |            |            |            |
| Crookhorn College                  |                                       |          | ✓        |           |           |            |            |            |            |            |
| Oaklands Catholic Secondary School |                                       |          |          |           | ✓         |            |            |            |            |            |
| St Peter's Catholic Primary School |                                       |          |          |           | ✓         |            |            |            |            |            |
| Purbrook Infant School             |                                       |          |          |           |           |            | ✓          |            |            |            |
| Asda Havant Supercentre            |                                       |          |          |           |           |            | ✓          |            |            |            |

4.7 In the area around the Asda Havant Supercentre, there are other retail opportunities including a B&Q store and food outlets, providing employment opportunities.

4.8 With reference to GPJF Table 3.4 and Manual for Streets the Crookhorn Precinct (adjacent to the Crookhorn Precinct bus

stops), which houses, amongst other things, a convenience shop and post office is within an easy 10 minute walk (800m) of the development site. There is also a primary school and tertiary education opportunities within 800m of the site. This is within the distance set out in Manual for Streets for a walkable neighbourhood.

- 4.9 From the development site, it would be possible to access NCN 22 via Purbrook Way, providing a suitable route for cyclists to access Waterloooville.
- 4.10 Crookhorn Lane contains a number of facilities not mentioned in Table 4.2, including pubs, a takeaway restaurant, community centre and café. This area is accessible via an easy 800m walk from the site via the off-road footpath from Athena Avenue. The site, therefore, is extremely well located for access to the existing facilities at Crookhorn Lane.
- 4.11 Various educational facilities for ages 5-18 are within a 15 minute walk (1200m) of the site and therefore within the 'Acceptable' walking distance as set out within *Providing for Journeys on Foot*. There is also a nursery for ages 0-4 attached to the South Downs College site within a 2 minute walk (100m) of the site. There is another nursery located within a 10 minute walk (800m) from the site on Crookhorn Lane.

#### **Public Transport – Bus**

- 4.12 The closest stops to the site are situated on College Road and are known as the 'South Downs College' stops- these stops can be reached in under a 5-minute walk from the proposed development site via College Road.
- 4.13 A summary of services is shown in Table 4.3 below. The relevant bus timetables are attached in Appendix D.

**Table 4.3 - Existing Bus Services – South Downs College Bus Stops**

| Service                                                                               | Operator   | Route                                                                  | Approximate Average Frequency |                  |          |
|---------------------------------------------------------------------------------------|------------|------------------------------------------------------------------------|-------------------------------|------------------|----------|
|                                                                                       |            |                                                                        | Mon-Fri                       | Sat              | Sun & BH |
| 37                                                                                    | Stagecoach | Havant - <b>Waterlooville</b> - Petersfield - Liss - Alton - Bordon    | Hourly                        | Every 1.5 hours  | -        |
| 39                                                                                    | Stagecoach | Havant – Bedhampton – <b>South Downs College</b> - Waterlooville       | Every 15 minutes              | Every 15 minutes | Hourly   |
| 654*                                                                                  | First      | Hambledon - Waterlooville - <b>South Downs College</b> - Havant Campus | Morning & Evening             | -                | -        |
| 7C*^                                                                                  | First      | Portsmouth - <b>South Downs College</b>                                | Morning & Evening             | -                | -        |
| Source: travelinesw.com<br>* School Service<br>^ Timetable applicable from 16.01.2022 |            |                                                                        | Date: 12.01.2022              |                  |          |

- 4.14 Table 4.3 shows that there are a number of daily services from the South Downs College Stops to the destinations in the local area, with services to Havant operating every 15-minutes.
- 4.15 The 'Crookhorn Precinct' stops are accessible from the site within a short 10-minute (800m) walk. These stops include services additional to those at the 'South Downs College' stops. A summary of services is shown in Table 4.4 below. The relevant bus timetables are attached in Appendix D.

**Table 4.4 - Existing Bus Services – Opposite Crookhorn Precinct Stops**

| Service                                       | Operator   | Route                                                               | Approximate Average Frequency |                  |                  |
|-----------------------------------------------|------------|---------------------------------------------------------------------|-------------------------------|------------------|------------------|
|                                               |            |                                                                     | Mon-Fri                       | Sat              | Sun & BH         |
| 7^                                            | First      | Portsmouth–QA Hospital – <b>Purbrook</b> – Wecock - Waterloooville  | Every 20 minutes              | Every 30 minutes | Every 30 minutes |
| 20                                            | Stagecoach | Havant – Bedhampton – Purbrook - Portsmouth                         | Every 30 minutes              | Every 30 minutes | -                |
| 37                                            | Stagecoach | Havant - <b>Waterlooville</b> - Petersfield - Liss - Alton - Bordon | Hourly                        | Every 1.5 hours  | -                |
| 39                                            | Stagecoach | Havant – Bedhampton – <b>South Downs College</b> - Waterloooville   | Every 15 minutes              | Every 15 minutes | Hourly           |
| Source: travelinesw.com                       |            |                                                                     | Date: 12.01.2022              |                  |                  |
| ^ <b>Timetable applicable from 16.01.2022</b> |            |                                                                     |                               |                  |                  |

- 4.16 Buses are available to Portsmouth with a combined frequency of four times per hour from stops within a two- and ten-minute walk of the development site. From Portsmouth, coach services are available at The Hard Interchange. National Express run services every two hours from Portsmouth to London. Megabus run direct services 3-5 times a week to destinations including Birmingham, Manchester, Oxford, York, and Newcastle.
- 4.17 'Community First' operate 'Call & Go Havant', a service available for individuals unable to access regular public transport due to limited mobility or sensory difficulties. They operate a fleet of wheelchair accessible vehicles, and can pick up and drop off at chosen locations.

### Public Transport – Rail

- 4.18 Bedhampton Railway Station is approximately 2km to the southeast of the site, or a 10 minute cycle along Purbrook Way and Hulbert Road. Direct services from this station offer travel to destinations including Portsmouth, London, and Littlehampton. Selected destinations and frequencies are set out in Table 4.5 below.

**Table 4.5 – Railway Service Frequencies – Bedhampton Station**

| Destination                    | Approximate Average Frequency |        |                  |
|--------------------------------|-------------------------------|--------|------------------|
|                                | Mon-Fri                       | Sat    | Sun              |
| <b>London Waterloo</b>         | Hourly                        | Hourly | Hourly           |
| <b>Portsmouth</b>              | Hourly                        | Hourly | Hourly           |
| <b>Littlehampton</b>           | Hourly                        | Hourly | -                |
| Source: www.nationalrail.co.uk |                               |        | Date: 12.01.2022 |

- 4.19 As can be seen in Table 4.5 above, the presence of a station close to the proposed site means that there will be the opportunity for sustainable travel to major destinations including Portsmouth and London. Other destinations are accessible from the station via connecting trains at Guildford.
- 4.20 As well as Bedhampton, Havant Railway Station is located approximately 3km southeast of the site. Havant serves the same destinations as Bedhampton as well as other direct services to Southampton and Brighton. Selected destinations and frequencies are set out in Table 4.6 below.

**Table 4.6 – Railway Service Frequencies – Havant Station**

| Destination                    | Approximate Average Frequency |                  |                  |
|--------------------------------|-------------------------------|------------------|------------------|
|                                | Mon-Fri                       | Sat              | Sun              |
| <b>London Waterloo</b>         | Every 30 minutes              | Every 30 minutes | Hourly           |
| <b>London Bridge*</b>          | Every 30 minutes              | -                | Hourly           |
| <b>Portsmouth</b>              | Every 10 minutes              | Every 10 minutes | Every 30 minutes |
| <b>Littlehampton</b>           | Hourly                        | Hourly           | -                |
| <b>Southampton</b>             | Every 30 minutes              | Every 30 minutes | Hourly           |
| <b>Brighton</b>                | Every 30 minutes              | Every 30 minutes | Every 30 minutes |
| Source: www.nationalrail.co.uk |                               |                  | Date: 12.01.2022 |
| * London Victoria on Sundays   |                               |                  |                  |

- 4.21 Both Bedhampton and Havant Railway Stations are accessible from the site by means of the Number 37 bus, which departs from the South Downs College bus stops adjacent to the development and stop in Havant, less than a 10-minute walk (800m) from each Railway Station.

- 4.22 There are cycle storage facilities in place at Bedhampton and Havant Stations enabling residents to get to the station by bicycle and then board a train for destinations further afield. Bedhampton Station can be accessed via Purbrook Way (with a 3m shared space for cyclists on 40mph sections) and the B2150, a 30mph residential street. Havant Station can be accessed via Purbrook Way and Barncroft Way, a 30mph residential street. Both stations therefore can be accessed via sustainable means.

### Summary

- 4.23 The main local centre, Crookhorn Lane, is within an easy 10 minute walk of the development site. This is within the distance *Manual for Streets* sets out as being a Walkable Neighbourhood. Various educational facilities for ages 0-18 are within a 15 minute walk (1200m) of the site, including a primary school within a 10-minute (800m) walk, and therefore within the 'Acceptable' walking distance as set out within *Providing for Journeys on Foot*.
- 4.24 The closest bus stops to the site are the 'South Downs College' stops situated on College Road, within 100m of the development site. Bus stops are also situated at the Crookhorn Lane local centre 10 minutes' walk from the site. From these locations there are services offering connections with Havant and Portsmouth.
- 4.25 Trains from Bedhampton Railway Station travel to destinations including Portsmouth and London Waterloo, while the nearby Havant Railway Station serves additional destinations including Brighton, Southampton, and London Bridge.
- 4.26 In conclusion, the site is in a highly accessible location, with a range of key services within a Walkable Neighbourhood as defined by *Manual for Streets* guidance. Local public transport facilities provide opportunities for travel to destinations further afield without using a private car. The site therefore provides the opportunity for sustainable development in transport terms as required by the NPPF, a conclusion that has already been accepted by Havant Borough Council through its allocation of the development in the emerging Local Plan.

## 5 Development Proposals

### Introduction

- 5.1 The development proposals comprise 102 residential dwellings, with associated vehicular and pedestrian access. All dwellings will be offered as affordable housing. The site layout is attached in Appendix F.
- 5.2 The Havant Draft Local Plan includes an adjacent site in its allocations, listed as 'H41 | Land east of College Road, Campdown' (APP/19/01101). The site is also listed in the Havant Borough Local Plan Housing Statement (2016) as 'Urban Extension UE70'. However, this development was rejected in the July 2021 Local Plan examination owing to ecological and heritage concerns. It is assumed, therefore, that this development will not be progressed.

### Vehicular Access

- 5.3 Access is proposed to be taken by changing the existing priority access junction between College Road and Apollo Drive into a 4-arm mini-roundabout. The new eastern arm of the mini-roundabout will form the vehicular access to the development.
- 5.4 As well as providing a means of access to site, the introduction of a mini-roundabout could also provide benefits in terms of a traffic calming effect along College Road (as suggested in Manual for Streets 2 guidance; section 9.7.4). The location and proposed layout for the new access onto College Road, including junction visibility splays, is shown on drawing 1017-01-PHL-101 contained within Appendix A of this TA.
- 5.5 Hampshire's Guidance Note TG3 (2021) states that a mini-roundabout may be provided if "...the 85<sup>th</sup> percentile speed of traffic is less than 35 mph within a distance of 70 metres from the give-way line on all approaches."
- 5.6 Whilst speeds are currently very slightly in excess of 35mph north of the junction, and 2-3mph more south of the junction, it is considered that this is a function of moving into and out of the existing 30mph zone.

- 5.7 College Road at present has a 30mph speed limit between the Purbrook Way junction in the north to approximately 35m south of the Apollo Drive junction. It is proposed that the 30mph zone is extended to approximately 120m south of its current location to encourage slower vehicle speeds on the approach to the College site and the proposed mini-roundabout. This replicates the approach understood to have been agreed with the Highway Authority in connection with the proposed access strategy for the adjacent H41 Campdown scheme.
- 5.8 Drivers will have more time to reduce their speeds as they leave the 40mph limit, and are not expected to start to increase speeds southbound as they approach the 40mph zone until they have passed the proposed mini-roundabout junction. This arrangement is expected to reduce speeds to below 35mph as suggested in the HCC guidance for conditions where a mini-roundabout might be provided. The mini-roundabout arrangement would also benefit users of both the proposed development and the adjacent college and pre-school nursery.
- 5.9 As set out in Hampshire's Technical Guidance Note TG3, the Local Highway Authority require DMRB standards to be applied to new mini roundabouts and therefore reference has been made to CD 116 (formerly TD 54/07). However, TG3 also provides some alternative standards for visibility parameters specific to Hampshire.
- 5.10 Hampshire's Technical Guidance Note TG3 states 'Mini-Roundabouts shall only be located on existing streets where MfS criteria apply' and where the road is limited to a speed of 30mph or less. The proposed mini-roundabout is located within the existing 30mph zone along College Road and therefore the site of the proposed junction satisfies this requirement. As noted above, however, it is also proposed that the existing 30mph limit is extended further south.
- 5.11 Section 2.12 of CD 116 suggests that 'a 4 arm mini roundabout should not be used where the sum of the maximum peak hour entry flows for all arms exceeds 500 vehicles per hour.' Whilst the total peak hour traffic flows through the proposed junction exceed this threshold of 500 vehicles per hour, this broad blanket threshold takes no account of local conditions or distribution of traffic. HCC Technical Guidance also allows for departures from standards and the opportunity to utilise wider guidance to 'provide suitable

reasoning/justification for the departure from a particular standard when considering site specific constraints.'

- 5.12 College Road is not a trunk road and MfS2 guidance is clear that 'as a starting point for any scheme affecting non-trunk roads, designers should start with MfS.' (1.3.2) and that "the application of MfS advice to all 30mph speed limits as a starting point is in keeping with MfS1" (1.3.4). It is therefore considered that the wider DfT guidance for non-trunk roads set out in Manual for Streets can be considered an appropriate point of reference for College Road.
- 5.13 On the topic of mini-roundabouts, MfS2 advises that the guidance set out in the DMRB is written specifically for trunk roads and should 'not be applied uncritically' in other situations (9.7.1). MfS 2 also highlights that mini-roundabouts are "a valid choice of junction for new and existing junctions and can be advantageous and reduce traffic speeds."
- 5.14 It is therefore considered that the blanket limit of vehicles movements per hour for a mini-roundabout set out in the DMRB should not be applied on the local road network uncritically, and instead, the traffic impact assessment set out in this report should be considered an entirely appropriate 'reasoning/justification for a departure from the DMRB approach in this respect as set out in HCC's guidance. Further details of the detailed capacity assessment completed for the site access junction is set out in Chapter 7 of this report.
- 5.15 The H45 allocation for the proposed development site in the Draft Local Plan simply states that '*an appropriate means of vehicular access should be established in a coordinated manner with the adjacent site (Policy H41)*'. There are therefore no specific requirements contained within the draft Local Plan policy that prescribe the precise location or form of an access junction to serve the proposed development site, and nothing that should prevent access being provided from College Road in principle.
- 5.16 Following withdrawal of the emerging local plan, it is understood that site H41 (Campdown) is highly unlikely to be brought forward due to non-transport-related issues, and therefore the need for coordination with H41 is no longer considered to be pertinent to the access arrangements for the proposed development site.

- 5.17 Whilst the Campdown site to the south and east of the proposed development has been rejected from the Draft Local Plan by the Planning Inspector, the South Downs College site has not. From this, it is evident that the Inspector considered access to the proposed development site to be achievable independently from H41 (Campdown), and by extension that access must be acceptable from College Road given that is the only frontage available to the public highway.
- 5.18 A number of options were considered as junction forms for the proposed access, including a mini-roundabout, a staggered priority junction arrangement, and a simple crossroads priority junction with Apollo Drive.
- 5.19 Preliminary schemes for all three options were subject to a Stage One Road Safety Audit (RSA), attached at Appendix E. Whilst the Audit team stated that all three forms of junction could be suitable, they suggested that the staggered and crossroads junctions were the least preferred in terms of safety.
- 5.20 In response to the RSA, the preliminary junction layout has been updated to respond to the recommendations set out in the report. A Designer's Response has also been completed, which is also included in Appendix E.
- 5.21 Visibility splays have been provided in accordance with DMRB CD116 guidance, in accordance with HCC Technical Guidance Note 3, and prevailing speeds. Speed data, included in Appendix B, confirms that the geometric parameters are sufficient to provide suitable visibility.
- 5.22 Capacity assessment for the junction has been undertaken for the assessment years of 2022 and 2027 to demonstrate that the mini-roundabout can accommodate the predicted traffic flows. The results are set out in Section 7 of this report.
- 5.23 Swept path analysis has been undertaken using a 16.5m Articulated Vehicle, included as Drawing No. 1017-01-ATR-103 in Appendix A, which demonstrated that this vehicle can negotiate the mini-roundabout travelling north or south along College Road without encroaching onto the central island.
- 5.24 Swept path analysis showing a very large refuse truck negotiating the internal roads of the development is shown on drawing 1017-

01-ATR-101 in Appendix A. Swept path analysis showing a refuse truck using the proposed access from College Road, and turning into and out of Apollo Drive, is shown on drawing 1017-ATR-102 in Appendix A.

### **Active Travel Access**

- 5.25 The pedestrian access to the development would be facilitated by new connections to the existing footway along the eastern side of College Road at the proposed Apollo Drive mini-roundabout. This point of access would connect to dwellings via a network of footpaths within the internal layout of the site. The pedestrian site access is shown on the access drawing 1017-01-PHL-101 in Appendix A.
- 5.26 An uncontrolled pedestrian crossing will be provided on the access road to facilitate pedestrian movement to College Road south of the site.

### **Internal Layout**

- 5.27 The internal layout has been developed using the principles set out within Department for Transport Guidance; *Manual for Streets*. The routes through the development will be generally 6m in width to accommodate perpendicular parking. There are also 'home-zone' shared surfaces within the development of widths greater than 6.0m.
- 5.28 It is expected that the eastern arm of the mini-roundabout leading into the site will become adopted highway for approximately 40m into the site, beyond which the roads will be privately maintained, as shown on 1017-PHL-102 contained in Appendix A.
- 5.29 Visibility has been provided in line with Manual for Street guidance the design speed of each link (20mph on straighter sections and 15mph at the tightest corners). A reduced design speed at corners is considered appropriate given the slower speeds required in order to negotiate the turn.
- 5.30 It is expected that bin collection will be undertaken on-street within the proposed development. Swept path analysis of a large refuse truck negotiating the internal roads of the development is shown on drawing 1017-01-ATR-101 in Appendix A.

## Parking

- 5.31 Car parking for the development will be provided in line with the HBC Parking SPD. The accommodation schedule for the development is seen in Table 5.1:

**Table 5.1 – Accommodation Schedule**

| Type of Dwelling | Private | Affordable | Total |
|------------------|---------|------------|-------|
| 1 bed flat       | 0       | 11         | 11    |
| 2 bed flat       | 0       | 32         | 32    |
| 2 bed FOG        | 0       | 3          | 3     |
| 2 bed house      | 0       | 20         | 20    |
| 3 bed house      | 0       | 25         | 25    |
| 4 bed house      | 0       | 11         | 11    |
| <b>TOTAL</b>     | 0       | 102        | 102   |

- 5.32 All 56 houses in the development, together with the flats over garages (FOG), have two allocated parking spaces each whilst the 43 flats have one parking space each. This results in a total of 161 unallocated parking spaces for residents, with eight unallocated visitor spaces bringing the total number of spaces to 169.
- 5.33 The parking provision required by HBC depends on whether parking spaces are allocated or unallocated. The indicative requirements for allocated and unallocated parking space provision are found in Table 4A and 4B of the parking SPD respectively. The resulting parking provision required for the development is represented below in Table 5.2:

**Table 5.2 – Minimum Car Parking Requirements (HBC)**

| Size of Dwelling | Units | Unallocated  |        | Allocated    |        |
|------------------|-------|--------------|--------|--------------|--------|
|                  |       | Spaces/ Unit | Spaces | Spaces/ Unit | Spaces |
| 1 bed flat       | 11    | 0.9          | 9.9    | 1            | 11     |
| 2 bed flat       | 32    | 1.3          | 41.6   | 2            | 64     |
| 2 bed FOG        | 3     | 1.3          | 3.9    | 2            | 6      |
| 2 bed house      | 20    | 1.3          | 26     | 2            | 40     |
| 3 bed house      | 25    | 1.9          | 47.5   | 2            | 50     |

|                    |            |     |              |   |            |
|--------------------|------------|-----|--------------|---|------------|
| <b>4 bed house</b> | 11         | 2.4 | 26.4         | 3 | 33         |
| <b>TOTAL</b>       | <b>102</b> |     | <b>155.3</b> |   | <b>204</b> |

- 5.34 The 169 unallocated residential parking spaces proposed for the development therefore meet the minimum requirement for unallocated spaces according to the standards set by HBC.
- 5.35 HBC standards state that, with regards to visitors parking '*With the exception of small residential developments an additional 20% of unallocated parking for visitors should be accommodated*'. This equates to 31 additional spaces for unallocated residents' parking; or 41 additional spaces for allocated residents parking.
- 5.36 However, the HBC standards allow for lower levels of parking provision than the minimum standard for certain types of rented and social housing. Provision below the minimum standard is '*only considered for rented properties where there is evidence that the tenure is unlikely to change or the developers can demonstrate that lower standards would be appropriate*'.
- 5.37 In the case of the proposals, it is understood that all the properties will be affordable housing (secured by the s106 Agreement), and therefore a lower level of parking provision than that seen in Table 5.2 should be considered to be appropriate.
- 5.38 Furthermore, as shown in section 4 of this Transport Assessment, there are good public transport opportunities and amenities within a walkable distance of the site that should reduce the dependence on the private car for residents.
- 5.39 The development therefore provides parking consistent with the HBC parking Standards, and which is considered appropriate for the location of the proposed development.

### Cycle Parking

- 5.40 Long stay cycle parking for the development will be provided in line with the HBC Parking SPD, seen below in Table 5.3;

**Table 5.3 – Cycle Parking Requirements (HBC)**

| Size of Dwelling | Units | HBC Requirements (long stay cycle parking) |
|------------------|-------|--------------------------------------------|
|------------------|-------|--------------------------------------------|

|                    |            | Spaces/ Unit | Spaces     |
|--------------------|------------|--------------|------------|
| <b>1 bed flat</b>  | 11         | 1            | 11         |
| <b>2 bed flat</b>  | 32         | 2            | 64         |
| <b>2 bed FOG</b>   | 3          | 2            | 6          |
| <b>2 bed house</b> | 20         | 2            | 40         |
| <b>3 bed house</b> | 25         | 2            | 50         |
| <b>4 bed house</b> | 11         | 2            | 22         |
| <b>TOTAL</b>       | <b>102</b> |              | <b>193</b> |

- 5.41 The proposed site layout includes cycle storage areas associated with each block of flats, providing 86 spaces across five blocks, equating to two spaces per flat. This exceeds the 75 spaces required for the flats set out within HBC standards. It is proposed that sufficient space for the storage of two bicycles will be provided within the curtilage of each house and in the garages below the FOGs, providing a further 112 spaces. This results in a total long stay cycle parking provision of 204 spaces.

## 6 Trip Generation & Distribution

### Introduction

- 6.1 This section of the Transport Assessment considers the trip generation that might be expected to arise as a result of the proposed development, together with the potential distribution on the local road network.

### Vehicular Trip Generation

- 6.2 In order to estimate the potential vehicular trip generation for the proposed development, reference has been made to the trip rates from the adjacent Campdown application (*ref. 19/01101*), as agreed in pre-application discussions with HCC. The same parameters were used in obtaining the TRICS data as the Campdown application, with the only differences being that a more recent five-year period was used, and that Category 3B 'Affordable/ Local Authority Houses' was used instead of Category 3A 'Houses Privately Owned'. This is considered to be more representative of the development, which is proposed to be 100% affordable housing.
- 6.3 Table 6.1 show the TRICS Trip rates. Full TRICS reports are attached in Appendix G.

**Table 6.1 – Proposed Vehicular TRICS Rates**

|                           | AM Peak<br>(0800-0900) |       |       | PM Peak<br>(1700-1800) |       |       |
|---------------------------|------------------------|-------|-------|------------------------|-------|-------|
|                           | Arr.                   | Dep.  | Total | Arr.                   | Dep.  | Total |
| <b>Affordable Housing</b> | 0.134                  | 0.228 | 0.362 | 0.144                  | 0.139 | 0.283 |

- 6.4 Table 6.2 below shows the vehicular trip generation for the proposed 102 dwellings based on the rates in Table 6.1.

**Table 6.2 – Estimated Vehicular Trip Generation**

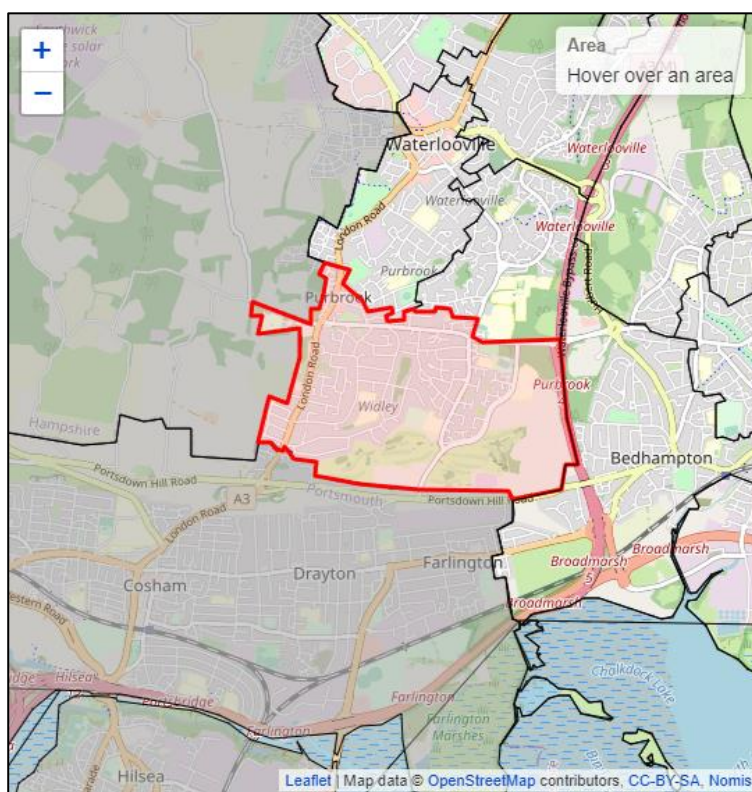
|                                               | AM Peak<br>(0800-0900) |      |       | PM Peak<br>(1700-1800) |      |       |
|-----------------------------------------------|------------------------|------|-------|------------------------|------|-------|
|                                               | Arr.                   | Dep. | Total | Arr.                   | Dep. | Total |
| <b>Affordable Housing<br/>(102 Dwellings)</b> | 14                     | 23   | 37    | 15                     | 14   | 29    |

- 6.5 As shown in Table 6.2 during the peak hours the site is anticipated to generate around one vehicle trip every two minutes on average. This is considered to be a very low level of trip generation, and likely to be within the natural day to day variation in traffic flow across the local road network.

### Multi-Modal Trip Generation

- 6.6 The anticipated trip generation for other modes of travel for the development has also been calculated. Using the vehicular trip generation in Table 6.2 as a base, the trips via other modes to places of work was estimated using the modal split information for the Middle Super Output Area (MSOA) 'Havant 011' (in which the site is located) extracted from 2011 Census data. A copy of the census data is contained in Appendix H. Figure 6.1 below shows the location and extents of the MSOA 'Havant 011':

**Figure 6.1 – MSOA 'Havant 011'**



- 6.7 As shown in Figure 6.1, the boundary of 'Havant 011' includes the site and the wider surrounding area. The modal split information for 'Havant 011' is shown in Table 6.3, whilst Table 6.4 illustrates the resulting anticipated trip generation for the development for other modes of travel.

**Table 6.3 – Existing Mode Share – ‘Havant 011’**

| Method of Travel to Work       | No. Workers | Mode share  |
|--------------------------------|-------------|-------------|
| Train                          | 61          | 1%          |
| Bus, minibus or coach          | 220         | 5%          |
| Taxi                           | 21          | 0%          |
| Motorcycle, scooter or moped   | 54          | 1%          |
| Driving a car or van           | 3,353       | 75%         |
| Passenger in a car or van      | 300         | 7%          |
| Bicycle                        | 128         | 3%          |
| On foot                        | 279         | 6%          |
| Other method of travel to work | 32          | 1%          |
| <b>TOTAL</b>                   | <b>4448</b> | <b>100%</b> |

6.8 As shown in Table 6.3, 75% of commuters drive to work although, of these, at least 7% car share as driver. The data indicate that there is a notable percentage of residents who commute by bus, or walk to their place of work.

6.9 Table 6.4 shows the expected modal split of trips generated by the development during the AM and PM peak periods.

**Table 6.4 – Trip Generation by Mode for Proposed Development**

| Mode                           | Mode Share  | Trips (Weekday) |           |
|--------------------------------|-------------|-----------------|-----------|
|                                |             | AM Peak         | PM Peak   |
| Train                          | 1%          | 1               | 1         |
| Bus, minibus or coach          | 5%          | 2               | 2         |
| Taxi                           | 0%          | 0               | 0         |
| Motorcycle, scooter or moped   | 1%          | 1               | 0         |
| Driving a car or van           | 75%         | 37              | 29        |
| Passenger in a car or van      | 7%          | 3               | 3         |
| Bicycle                        | 3%          | 1               | 1         |
| On foot                        | 6%          | 3               | 2         |
| Other method of travel to work | 1%          | 0               | 0         |
| <b>TOTAL</b>                   | <b>100%</b> | <b>49</b>       | <b>35</b> |

### Trip Distribution & Assignment

- 6.10 In order to estimate the distribution of residential development traffic onto the local road network reference has been made to the trip distribution understood to have been agreed through consultation with the Highway Authority for the adjacent Campdown site. This approach was agreed in pre-application scoping.
- 6.11 The 2011 Census origin-destination data for the 'Havant 011' MSOA (in which the site is located) was used, with the 'place of work' filtered by MSOAs.
- 6.12 The distribution of development traffic was based on the assumption that drivers are most likely to take the most direct route to their destination. The first turn out of the development was therefore estimated from Census data, with the option to turn 'North' or 'South'.

**Table 6.5 – Vehicular Trip Distribution: Initial Turn**

| Link             | Distribution |
|------------------|--------------|
| College Road (N) | 79%          |
| College Road (S) | 21%          |

- 6.13 The proportion of trips using each link on the local highway network, agreed with HCC during pre-application scoping is shown in Table 6.6 below:

**Table 6.6 – Vehicular Trip Distribution: Wider Road Network**

| Direction from Site Access | Route (direction)                         | % Traffic |
|----------------------------|-------------------------------------------|-----------|
| South                      | Portsdown Hill Road (WB)                  | 12%       |
|                            | Portsdown Hill Road (EB)/ Bedhampton Road | 9%        |
| North                      | Stakes Road                               | 7%        |
|                            | Stakes Hill Road                          | 13%       |
|                            | A3(M) (SB)                                | 44%       |
|                            | Hulbert Road/ A3(M) (NB)                  | 7%        |
|                            | Purbrook Way (EB)                         | 8%        |
| TOTAL                      |                                           | 100%      |

- 6.14 Figures 6.1-6.6 contained in Appendix A show the resulting assignment of residential development traffic onto the highway network.
- 6.15 The trips generated on the local road network by the proposed development were calculated by multiplying the total trips generated in the AM and PM peak periods (Table 6.2) by the vehicular trip distribution on the local road network (Table 6.6). The resulting trips generated on the local road network by the proposed development are shown in Table 6.7.

**Table 6.7 – Development Trips generated on local road network**

| Dir. from Site Access | Route                                                        | % Traffic | South Downs College Development |           |
|-----------------------|--------------------------------------------------------------|-----------|---------------------------------|-----------|
|                       |                                                              |           | AM Total                        | PM Total  |
| South                 | Crookhorn Ln/Portsmouth Hill Road (Portsmouth Hill Road (W)) | 12%       | 4                               | 3         |
|                       | Crookhorn Ln/Portsmouth Hill Road (Portsmouth Hill Road (E)) | 9%        | 3                               | 3         |
| North                 | Stakes Jn (Stakes Road W)                                    | 7%        | 3                               | 2         |
|                       | Stakes Jn (Stakes Hill Road N)                               | 13%       | 5                               | 4         |
|                       | A3(M) Jn 4 (S)                                               | 44%       | 16                              | 13        |
|                       | Asda Roundabout: Hulbert Road (N)                            | 7%        | 3                               | 2         |
|                       | Asda Roundabout: Purbrook Way (E)                            | 8%        | 3                               | 2         |
|                       |                                                              |           | <b>37</b>                       | <b>29</b> |

- 6.16 A full copy of the census data and analysis is contained in Appendix H of this Transport Assessment.

## 7 Traffic Impact Assessment

- 7.1 This chapter of the TA assesses the traffic impact at the junctions on the local road network.

### Committed Traffic

- 7.2 Although the Campdown site is not now expected to come forward, the TA submitted in support of its planning application provides data upon which the South Downs College application could be based such as trip distribution and trip rates.
- 7.3 Whilst it is acknowledged that the proposed development known as the '40-Acre Site' (application reference APP/18/00450) to the south of the proposals is a significant committed development, it will be shown that there should be no requirement to analyse any local junctions except the proposed site access junction. As the trips associated with the 40-Acre site do not assign to College Road, the cumulative effects of this committed development have not been considered.

### Offset Trips

- 7.4 Prior to assessment of the impact of development traffic on the network, the reduction in trips due to the relocation of students from the South Downs Campus to the Havant Campus which was the driver for the former car park to be allocated for residential development (as referenced in Policy KS7 of the submission local plan) has been identified in order to determine the net trips arising from the proposed development.
- 7.5 The May 2021 report by HSDC: '*South Downs Travel to Learn Strategy*' indicated that at present there are 2500 pupils attending the South Downs Campus. This corresponds to an approximate 30% reduction in student numbers from before students were relocated to the Havant Campus, when there were approximately 3250 pupils.
- 7.6 The associated reduction in trips was estimated by determining TRICS rates for college-level education facilities, using 'Number of students' as the Trip Rate parameter.
- 7.7 Sites in Greater London and the Republic of Ireland have been excluded as they are not considered to be representative of the

site. Survey sites with numbers of students of less than 10,000 were included in the selection. The trip rates include locations classed as being within a 'Suburban Area' and 'Edge of Town'. Table 7.1 shows the TRICS Trip rates for Category 04C 'College/ University'. Full TRICS reports are attached in Appendix G.

**Table 7.1 – Proposed Vehicular TRICS Rates (College)**

|                                  | AM Peak<br>(0800-0900) |       |       | PM Peak<br>(1700-1800) |       |       |
|----------------------------------|------------------------|-------|-------|------------------------|-------|-------|
|                                  | Arr.                   | Dep.  | Total | Arr.                   | Dep.  | Total |
| <b>College<br/>(per student)</b> | 0.057                  | 0.019 | 0.076 | 0.013                  | 0.021 | 0.034 |

7.8 Table 7.2 below gives the vehicular trip generation for the College before and after the relocation of the students, as well as the corresponding reduction in trips and net trips after introduction of the proposed development.

**Table 7.2 – Estimated Vehicular College Trip Generation,  
Reduction in Trips and Net trips with development**

|                                   | AM Peak<br>(0800-0900) |      |       | PM Peak<br>(1700-1800) |      |       |
|-----------------------------------|------------------------|------|-------|------------------------|------|-------|
|                                   | Arr.                   | Dep. | Total | Arr.                   | Dep. | Total |
| <b>College (3250 Pupils)</b>      | 185                    | 62   | 247   | 42                     | 68   | 111   |
| <b>College (2500 Pupils)</b>      | 143                    | 48   | 190   | 33                     | 53   | 85    |
| <b>Reduction in College Trips</b> | 43                     | 14   | 57    | 10                     | 16   | 26    |
| <b>Development Trips</b>          | 14                     | 23   | 37    | 18                     | 9    | 29    |
| <b>Net Trips</b>                  | -29                    | 9    | -20   | 8                      | 7    | 3     |

7.9 Table 7.3 is likely to give a conservative estimate in the reduction in trips since there have also been organizational changes by the College to reduce the number of trips. Most significantly, HSDC report confirms that the College is moving from a four-day week to an 'optimised' three-day week for students. The 'Travel to Learn' report, published by the College, estimates that there will be a further 25% reduction in demand for student parking, and thus a

corresponding reduction in trips. Staff will also be expected to work from home on a number of days each week, although this has not been quantified in terms of trips. The trip reductions and net trips as set out above are therefore considered to be highly conservative.

### Local Highway Network impact

- 7.10 As shown in Table 7.2, even after the proposed redevelopment, it is likely that there will be a net reduction in AM peak hour trips and only a very slight increase in PM peak hour trips when compared to estimated trips generated by the college from before the relocation of students. Therefore, it is considered that no capacity analysis of the wider road network is required to confirm the impact of the proposed development will not be “severe”. It is considered that a net decrease in trips associated with the site overall has a beneficial impact on the local highway network in the AM peak.
- 7.11 However, the proposed access junction has been assessed to demonstrate that it will have capacity to accommodate the base plus development traffic in the assessment year of 2027.
- 7.12 To this end, a turning movement survey of the College Road/Apollo Drive junction was undertaken on Tuesday 1<sup>st</sup> March 2022. The results of this survey are included in Appendix J.
- 7.13 TEMPro growth factors were applied to the flows so derived to obtain 2027 turning movements at the proposed site access junction. The TEMPro growth factors are illustrated in Table 7.3.

**Table 7.3 - TEMPro (v7.2) Growth Rates – Havant 011**

| Time Period | AM Peak | PM Peak |
|-------------|---------|---------|
| 2022-2027   | 1.0471  | 1.0452  |

- 7.14 The proposed site access junction onto College Road was assessed by a constructing capacity model and testing using ARCADY software. This model takes the form of a 4-arm mini-roundabout and is tested for the most onerous scenario, 2027 with development, to demonstrate that the proposed mini-roundabout has sufficient capacity to carry existing traffic together with that generated by the proposed development.

- 7.15 Various committed developments were consulted, but all those coming forward in the surrounding areas are not expected to generate trips which would pass through the proposed site access junction.
- 7.16 Table 7.4 below shows a summary of the ARCADY capacity model results for the proposed site access junction under baseline plus development conditions. The full ARCADY outputs can be found in Appendix I.

**Table 7.4 – ARCADY Results – Site Access Junction**

**Baseline + Development Scenario:**

| Approach/<br>Movement        | AM Peak |                |                 | PM Peak |                |                 |
|------------------------------|---------|----------------|-----------------|---------|----------------|-----------------|
|                              | RFC     | Queue<br>(Veh) | Delay<br>(secs) | RFC     | Queue<br>(Veh) | Delay<br>(secs) |
| 2027 Baseline + Development: |         |                |                 |         |                |                 |
| College Rd (N)               | 0.31    | 0.5            | 5.48            | 0.39    | 0.6            | 6.13            |
| Site Access                  | 0.04    | 0.0            | 5.79            | 0.02    | 0.0            | 6.01            |
| College Rd (S)               | 0.28    | 0.4            | 5.39            | 0.12    | 0.1            | 4.48            |
| Apollo Drive                 | 0.11    | 0.1            | 4.93            | 0.08    | 0.1            | 4.30            |

- 7.17 The results summarised in Table 7.4 demonstrate that the junction is expected to operate well within theoretical capacity following the implementation of the proposed development, with minimal queueing or delay.
- 7.18 As noted previously, whilst the DMRB suggests a maximum throughput of 500 vehicles per hour as an upper threshold for providing a mini-roundabout, it is clear from the detailed ARCADY analysis summarised above that the proposed junction form would operate satisfactorily with significant levels of reserve capacity with flows in excess of 500 vehicles per hour.

**Conclusion**

- 7.19 It is concluded that the proposed site access junction would satisfactorily accommodate the additional traffic arising from the proposed residential development, without any severe impacts on College Road or the wider road network.

## 8 Summary and Conclusions

- 8.1 Awcock Ward Partnership (AWP) has been commissioned by Places for People to prepare a Transport Assessment (TA) in support of a detailed Planning Application for residential development on Land to the south of South Downs College, Waterloooville.
- 8.2 The site was allocated in the emerging Havant Borough Local Plan 2036 as site 'H45 | *Former South Downs College Car Park*' for development of 'about 95 dwellings'.
- 8.3 The development proposals comprise 102 residential dwellings, with associated vehicular and pedestrian access. The whole development will be provided as affordable dwellings.
- 8.4 The site is bordered to the north by the 'South Downs' campus of Havant and South Downs College (HSDC). To the east and south, the site is bordered by agricultural land. To the west, the site is bordered by College Road.
- 8.5 A review of PIA data supplied by Hampshire County Council indicates that there are no patterns in accident history that might suggest any material safety issues or deficiencies in the highway infrastructure within the vicinity of the site.
- 8.6 The site is very well located with respect to the existing town facilities on Crookhorn Lane where a Post Office, local shop and other facilities are all located, within a ten-minute walk of the site. Morelands Primary School can be reached in an around a ten-minute walk.
- 8.7 Existing bus stops are located on College Road, within a two-minute walk. These stops offer services to Havant town centre. Additional bus services are available at the 'Crookhorn Precinct' stops about a ten-minute walk away.
- 8.8 Bedhampton Railway Station can be accessed within ten minutes' cycle ride to the southeast of the site along Purbrook Way and Hulbert Road. Cycle parking facilities are available at the station. This station provides regular services to local and national destinations including Portsmouth, Littlehampton, and London Waterloo. Havant Railway Station is approximately 3km southeast of the site, or a 15-minute cycle, and offers more comprehensive services to destinations including Southampton, and London

Bridge. Rail is therefore considered a viable option for sustainable commuter trips to destinations further afield.

- 8.9 In conclusion, the site is in an accessible location with significant opportunities for journeys from the site to be made by sustainable modes of travel as required by the NPPF, a conclusion that has also been accepted by Havant Borough Council through its original allocation of the development site within the Draft Local Plan
- 8.10 Vehicular access to the development is proposed from College Road by changing the existing priority access junction between College Road and Apollo Drive into a four-arm mini-roundabout. The new eastern arm of the mini-roundabout will form the vehicular access to the development.
- 8.11 As well as facilitating access to the proposed development, the mini-roundabout will assist in reducing speeds on College Road which will benefit users of both the proposed development and the adjacent college and pre-school nursery. The principle of this form of access junction is considered to be consistent with Manual for Streets and Hampshire guidance, and the design has been subject to a Stage 1 Road Safety Audit. Detailed capacity analysis has also demonstrated that it would operate with significant reserve capacity. The proposed access arrangements are therefore considered to be appropriate given the location and nature of the site, and that it would provide safe and suitable access as required by the NPPF.
- 8.12 Pedestrian access to the development will be facilitated by new connections to the existing footway along the eastern boundary of College Road at the proposed mini-roundabout. An uncontrolled pedestrian crossing will be provided on the site access road.
- 8.13 The internal layout was developed using the principles set out within the latest Department for Transport Guidance; Manual for Streets. The principal access roads within the development are 6m in width to facilitate access to parallel parking with 2.0m footways where frontage development is present.
- 8.14 Parking within the development is considered to be consistent with the provisions of the Havant Borough Council Supplementary Planning Document for parking.

- 8.15 The net vehicular trip generation of the proposed development, given the removal of the former car park and the reduction in college students on site, is expected to be equivalent to or lower than has historically been the case at the site. Therefore no capacity analysis of existing junctions on the network is considered necessary to demonstrate that the proposed development will not result in any severe negative impacts. Indeed, the proposed development is expected to result in a positive beneficial impact on the highway network given the removal of redundant parking that could otherwise come back into use.
- 8.16 Capacity analysis for the proposed site access junction with College Road demonstrates that it is expected to operate well within theoretical capacity in the 2027 scenario with the addition of development traffic.
- 8.17 In conclusion, the site provides a sustainable location for development, safe and suitable access arrangements for all road users can be provided, and it would not result in any severe negative traffic impacts.
- 8.18 The development proposals are therefore considered to be consistent with the highways elements of the NPPF and the allocation policy for the site included in the emerging Local Plan. There is therefore no highways reason to prevent planning permission being granted as required by the NPPF.