North Whiteley Consortium

North Whiteley

Access and Movement Strategy

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1 Introduction

- 1.1.1 This Access and Movement Strategy (AMS) has been prepared by Peter Brett Associates LLP (PBA) on behalf of the North Whiteley Consortium in support of the proposed urban extension to the North of Whiteley, South Hampshire.
- 1.1.2 The AMS draws upon the strategic transport context which is set by planning policy, including the Hampshire Local Transport Plan 2011 2031 and Winchester District Local Plan Part 1: Joint Core Strategy. It is also underpinned by baseline transport investigations and feasibility studies carried out to date. It provides an analysis of transport issues and an overview of the constraints and opportunities that have informed the emerging access and movement strategy.
- **1.1.3** Works relating to further design considerations are also being undertaken by the wider project team. This has led to the production of a draft masterplan which was the subject of a public consultation in October 2011.
- 1.1.4 In support of the proposed urban extension, a detailed SATURN traffic model has been created, in close consultation with Hampshire County Council (HCC) and the Highways Agency (HA), and is currently in the process of technical sign-off by the relevant Authorities.
- 1.1.5 This modelling evidence base will be used to inform the Transport Assessment, which will be produced to support the future planning application for the proposed development. The technical scope of the Transport Assessment has been discussed and agreed with HCC and the HA, in accordance with the DfT's Guidance on Transport Assessment and will provide the detailed evidence base on which any planning application will be considered.
- 1.1.6 Alongside this technical consultation, the emerging transport strategy has also been discussed through regular workshops with the key local planning authorities: Winchester City Council (within which the site is located), Fareham Borough Council and Eastleigh Borough Council.
- 1.1.7 Early indications from the technical modelling works and consultation with relevant stakeholders suggest that the proposed Access and Movement Strategy will provide an acceptable mechanism for promoting sustainable transport within the site and local area and mitigating the residual impacts of the development. However, the modelling works will continue to inform the Access and Movement Strategy which will be updated if necessary as modelling works are finalised.
- **1.1.8** The modelling works, as they are progressed, will also inform the noise and air quality assessments for the site and the strategy may require minor alterations in order to mitigate the traffic impact on sensitive areas.
- **1.1.9** This document therefore aims to capture the proposed Access and Movement Strategy at this stage in the planning process, in order to set the design concepts and principles to be tested through the technical Transport Assessment works.



2 Policy Context

2.1 National Policy

- 2.1.1 PBA appreciate that the transportation strategy needs to evolve and develop in a consistent manner in order to take account of development proposals, policy background and previous studies. It is appropriate that the development accords with all appropriate national and local transport policy including at a national level:
 - Transport 10 Year Plan (Department of the Environment, Transport and Regions, 2000);
 - The Future of Transport, White Paper (Department for Transport, 2004);
 - Delivering a Sustainable Transport System (Department for Transport, 2008); and
 - National Planning Policy Framework (Department for Communities and Local Government, 2012).

National Planning Policy Framework (2012)

- 2.1.2 The National Planning Policy Framework (NPPF, Department for Communities and Local Government, 2012) sets out the Government's economic, environmental and social planning policies for England. Taken together, these policies articulate the Government's vision of sustainable development, which should be interpreted and applied locally to meet local aspirations.
- 2.1.3 The NPPF sets out the Government's commitment to ensuring that the planning system does everything it can to support sustainable economic growth. A positive planning system is essential because, without growth, a sustainable future cannot be achieved. Planning must operate to encourage growth and not act as an impediment. Therefore, significant weight should be placed on the need to support economic growth through the planning system.
- **2.1.4** The NPPF sets out 12 Core Planning Principles at Para 17 which should underpin both planmaking and decision taking. With regards to the principles of access and movement, these state that planning should:
 - "2. Not simply be about scrutiny, but instead be a creative exercise in finding ways to enhance and improve the places in which people live their lives.
 - 3. Proactively drive and support sustainable economic development to deliver the homes, business and industrial units, infrastructure and thriving local places that the country needs. Every effort should be made objectively to identify and then meet the housing, business, and other development needs of an area, and respond positively to wider opportunities for growth...;
 - 9. Promote mixed use developments, and encourage multiple benefits from the use of land in urban and rural areas...: and



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- 11. Actively manage patterns of growth to make the fullest possible use of public transport, walking and cycling, and focus significant development in locations which are or can be made sustainable".
- 2.1.5 The Promoting Sustainable Transport section of the NPPF notes the importance transport policies have in facilitating development but also in contributing to wider sustainability and health objectives. The Framework also states, at Para 32, that:

'All developments that generate significant amounts of movement should be supported by a Transport Statement or Transport Assessment. Plans and decisions should take account of whether:

- The opportunities for sustainable transport modes have been taken up depending on the nature and location of the site, to reduce the need for major transport infrastructure;
- Safe and suitable access to the site can be achieved for all people; and
- Improvements can be undertaken within the transport network that cost effectively limit the significant impacts of the development. Development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe'.
- **2.1.6** The Framework continues, at Para's 34 to 36, by stating that:

"Plans and decisions should ensure developments that generate significant movements are located where the need to travel will be minimised and the use of sustainable transport modes can be maximised. However, this needs to take account of policies set out elsewhere in this Framework, particularly in rural areas.

Plans should protect and exploit opportunities for the use of sustainable transport modes for the movement of goods and people. Therefore, developments should be located and designed where practical to:

- Accommodate the efficient delivery of goods and supplies;
- Give priority to pedestrian and cycle movements, and have access to high quality public transport facilities;
- Create safe and secure layouts which minimise the conflicts between traffic and cyclists or pedestrians, avoiding street clutter and where appropriate establishing home zones;
- Incorporate facilities for charging plug-in and other ultra-low emission vehicles; and
- Consider the needs of people with disabilities by all modes of transport.

A key tool to facilitate this will be a Travel Plan. All developments which generate significant amounts of movement should be required to provide a Travel Plan."



2.2 Local Policy and Transport Evidence Base

- 2.2.1 The current version of the Winchester District Local Plan Part 1: Joint Core Strategy has been developed over time and subject to various studies aimed at: assessing the likely transport impacts, relationships with adjoining authorities' growth strategies and potential transport measures required to support development.
- **2.2.2** These iterations and studies are set out below, identifying the conclusions and recommendations as they relate to proposals at North Whiteley.

Setting Strategic Direction: North/North East Hedge End Strategic Development Area and North Whiteley (Mott Gifford & MVA, March 2008)

- 2.2.3 This document was produced on behalf of the Partnership for Urban South Hampshire (PUSH) and Transport for South Hampshire (TfSH) and was aimed at considering the transport implications of the N/NE Hedge End SDA and, due to the close proximity and interrelationship of the proposals and strategy, an urban extension at North Whiteley.
- 2.2.4 The report noted that the completion of the Whiteley Way is required to facilitate further development and that it would come forward as part of the development. Currently, Whiteley is accessed by M27 Junction 9, the traffic calmed Leafy Lane and the Yew Tree Drive bus link.
- 2.2.5 The report also noted that Whiteley has limited bus access and, as a result, the vast majority of journeys are currently made by car. The report stated that particular issues include:
 - Completion of Whiteley Way is essential;
 - Links to Swanwick Station via Yew Tree Drive bus gate:
 - Links to wider core network to access both Southampton and Portsmouth centres and other local employment areas;
 - Working with employers in Whiteley and Segensworth to revitalise travel planning initiatives and support better bus services;
 - Possible use of M27 and A27 with bus priority measures may be appropriate;
 - Feasibility of introducing a new station at Segensworth on the Netley link to access eastbound and westbound journeys; and
 - Potential for Park and Ride into or out of Whiteley using the bus link.
- 2.2.6 The report refers to the Solent Strategic Traffic Model which was used to represent travel demand in the Solent area with a base year of 2004 and 2 horizon years of 2011 and 2026. Access to North Whiteley would be via M27 Junction 9 through the extension of Whiteley Way which will tie into the A3051 to the north. The report noted that the A3051 will itself tie in with the then proposed Botley Bypass alignment to the north of Botley village (eastern section) providing a continuous route to Hedge End, avoiding the M27.



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- 2.2.7 The report also suggested that the introduction of a free flow eastbound on-slip at J9 of the M27, allowing traffic from Whiteley wishing to travel towards Portsmouth to move freely through the junction, has significant benefits for Whiteley Way with greatly reduced delays on this approach.
- 2.2.8 The report further identified a "Progressive" Approach for dealing with impacts which development will have on the highway network. This considered how effective and viable public transport can be provided to serve sites and how a range of other measures can be incorporated into the planning process to reduce the number of car journeys.
- 2.2.9 There are a number of "Smarter Choices" that can be implemented at the site, such as travel plans, car clubs, car sharing, marketing of public transport services and a realistic view of self-containment. The availability of good public transport is fundamental to the success of this proposed development. Buses must have significant priority to improve journey times. Botley and Swanwick Stations should be linked with strong bus corridors. To access North Whiteley the road link created by the Whiteley Way could provide improved access for buses. Yew Tree Drive is an important link from Whiteley to Swanwick Station and should be considered. Furthermore, the M27 could also be used for public transport links to the east, particularly if priority measures are introduced on the motorway.
- 2.2.10 Two main bus services are proposed within the MVA report: 200 Hedge End and Whiteley to Portsmouth and 300 North Whiteley to Southampton. Viability of proposed services has been considered and operation costs for each service have been determined. The 200 service would incur high operating costs unless demand increases. The 300 service including the Windhover P&R could be operated at a 20 min peak time frequency and would generate greater revenue if P&R users are included.

Towards Delivery: Transport for South Hampshire Statement (April 2008)

2.2.11 This Statement set out issues and priorities for the South Hampshire area in the context of planned growth. It identified that as the economy expands, demand for travel will increase, adding pressures to the existing transport networks. A strategy was devised which considers how and when journeys are made and how they could be dealt with in the future. There are three main strands of the Strategy: Reduce – Manage – Invest.

2.2.12 Reduce:

- Travel planning for workplaces and schools:
- Land use and car dependency overcoming the difficulties of dispersed land uses and expectations of self-containment;
- Location of development sites promoting choice of mode and promoting mixed use developments;
- Public transport improvements rail and bus infrastructure and service improvements;
- Application of technology improving fuel efficiency and spreading internet applications;



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- Car clubs facilitating car use without car ownership;
- Supplementary Planning Documents featuring sustainable transport measures;
- Central area parking policies co-ordinating changes in availability and pricing;
- Workplace Parking Levy charging employees for use of parking spaces in tandem with public transport improvements; and
- Road User Charging and Congestion Charging mechanisms to reduce demand and support alternatives to car use.

2.2.13 Manage:

- Highway networks reallocation of road space in favour of buses and high occupancy vehicles or to support improved access for freight vehicles, also Active Traffic Management to make better use of existing infrastructure;
- Public transport networks:
- Bus networks responding to changing land uses with Bus Rapid Transit services and considering other forms of service provision;
- Park and ride and complementary measures;
- Rail improvements to services and infrastructure;
- Technology traffic management and information systems and also smart cards to make payment for public transport easier and more 'seamless'; and
- Freight promoting more efficient movement of goods.

2.2.14 Invest:

- Targeting investment to meet regional and sub-regional objectives;
- Access to the sub-region via the M3 Winchester-Southampton corridor with Active Traffic Management on motorways and rail capacity enhancements;
- Access to Portsmouth and South East Hampshire Bus Rapid Transit applications and a premium bus network, linked to the North Fareham SDA (and potentially to development sites in the District);
- Eastern access to Southampton and South West Hampshire including the Eastleigh Chord to provide direct rail access from the east-west access to Southampton International Airport, bus priority corridors and access to the North / North East Hedge End SDA; and
- Considering the access needs by sustainable modes to the SDA's.



2.2.15 It is expected that the three strands can work together to enable planned growth and to deliver the development sites identified.

Delivering Strategies: Winchester District LDF Transport Assessment (MVA Consultancy, November 2008)

- 2.2.16 This document was produced as a result of a study commissioned by Winchester City Council in 2008. The study was aimed at collating a range of data sources to build up a picture of current transport activity across the Winchester District and consider how proposed development would affect existing movement and how transport networks could be changed to meet additional demand when the development is in place.
- **2.2.17** Data was collated from a variety of sources to provide information on employment, public transport capacities, accessibility, highway capacities and highway casualties.
- 2.2.18 The study reviewed a number of development options within the Winchester District including the option at North Whiteley. For each of the locations identified, MVA recommended that there is a minimum requirements for transport choice to make any choice of development tenable, without which sites cannot be considered to be sustainable as car use will dominate.
- 2.2.19 The report suggested that, in Whiteley, a new bus service must be introduced to overcome barriers to movements, additional traffic congestion on the M27 and local road network and to provide travel choice. The completion of Whiteley Way is also required to allow northbound traffic access by avoiding use of the M27 Junction 9.
- **2.2.2.20** With regards to the North Whiteley opportunity MVA highlighted a number of issues:
 - The only main road access is via M27 Junction 9 and A27 at Segensworth, thus the area is associated with severe traffic congestion at peak times both for residents travelling out and in-commuters to the various extensive employment sites;
 - A severe constraint of the site is the failure to complete the Whiteley Way which was aimed at providing access to the north;
 - High-rates of car-ownership lead to near-total car dependency:
 - The implementation of Yew Tree Drive bus link has provided an alternative route out of Whiteley to A3051 Botley Road at Swanwick and hence to gain access to Swanwick Station;
 - Priority has been given to vehicle movements with only some provision for walking and cycling; and
 - There are parking problems related to the area of employment premises.
- 2.2.21 MVA conducted a SWOT analysis (Strengths, Weaknesses Opportunities and Threats) on all sites and identified the following for North Whiteley:
 - Strengths:



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- Relative recent developments include extensive employment opportunities and comparison retail as well as a large supermarket.

Weaknesses:

- Road access limited to M27 Junction 9 / A27 at Segensworth with severe congestion at peak times.
- Largely car orientated due to poor bus services and lack of viable walk and cycle routes.

Opportunities:

- Yew Tree Drive bus link provides an opportunity to access Swanwick rail station by bus.
- Retail and employment facilities provide a focus for more housing developments.
- Scope to reconsider the role of the Whiteley Way extension.

Threats:

- Further development would add to M27 congestion and pressure on the local road network.
- Continuation of Whiteley Way to the north is essential to avoid further substantial pressures on the M27 at Junction 9.
- Current lack of sustainable modes needs to be overcome and integrated with additional development sites.
- 2.2.22 In terms of mitigation measures, MVA identified that the establishment of a Bus Rapid Transit (BRT) route in connection with the North / North East Hedge End SDA would allow the site at North Whiteley to benefit. Sufficient priority measures would be required for this to act as an acceptable alternative to car use for journeys to Fareham.
- **2.2.23** Further remedial measures which should be extended to incorporate the existing area include:
 - Continuous cycle routes on both adopted and un-adopted highways and creating a comprehensive network off-road;
 - Providing secure cycle parking for housing units;
 - Infrastructure to support walking, particularly overcoming lack of lighting on some routes and direction signing;
 - Investigation of how bus services can be provided throughout Whiteley, linking housing and employment areas with Swanwick Station and Fareham on a frequent basis – this is



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- a basic requirement that must be addressed to overcome the inaccessibility and car dependency of recent housing sites;
- Consideration of workplace parking charges and charging for parking at the Village Outlet Shopping Area; and
- Reinvigoration of travel plans for the primary school and workplaces alongside the above measures.
- 2.2.24 The report concluded that major opportunities are presented at North Whiteley, although it is likely that existing congestion problems at M27 Junction 9 will be exacerbated unless they are addressed effectively. The relationship between North Whiteley and North / North East Hedge End SDA means that the sites could share some transport provision, particularly BRT links to major centres.

Winchester City Council Local Development Framework Core Strategy Issues and Options (December 2007)

- **2.2.25** The Core Strategy Issues and Options set out the broad strategic planning framework for the future of the Winchester District up to 2026. The report stated that the Core Strategy will:
 - Set out a vision for the District i.e. how does it wish to change in the future in physical, economic, social and environmental terms;
 - Identify strategic objectives and key policies for realising the vision;
 - Identify broad locations for change and growth as well as the areas to be protected; and
 - Set out a framework for the implementation and monitoring of the objectives and policies to measure their success.
- **2.2.26** The Issues and Options report considered the information obtained to date and the results of community consultation through various processes on emerging options. It stated that:
 - "...the way forward for the Core Strategy will be to look at the main areas of the District from a spatial perspective as this will allow us to fully explore the potential that different parts of the District can offer in terms of growth, sustainable development and diversity. The approach will however need to ensure that the different linkages and interactions between the different areas are maintained to guarantee that inclusiveness is not overtaken by the promotion of local distinctiveness within these spatial areas.

Accordingly it is proposed to sub-divide the District for the purpose of this Core Strategy into three distinct areas (Winchester Town, market towns / rural area, PUSH area) taking into account the following broad consideration:

- Availability of local employment opportunities;
- Public transport services to neighbouring settlements and further afield;
- Range of services and facilities including shops, education and health provision; and



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- Opportunities for growth / change and relationship with neighbouring settlements."
- **2.2.27** These considerations link the provision of sustainable transport to spatial planning in that development sites need to be determined on the basis of accessibility to facilities including employment opportunities.
- 2.2.28 The document identified some broad strategic options within the southern parishes of the district. The amount of housing required within this area was at that stage 4,000-5,000 over and above the amount already committed. There are various options that need to be explored in order to provide this and indeed the best approach may be for a combination rather than a single approach.
- 2.2.29 Option 3 outlined the potential for concentrating growth at Whiteley and highlighted that development at this location would need to be supported by the creation of essential transport infrastructure including roads and the completion of Whiteley Way, footpaths and cycleways to provide links to key services and facilities and opportunities for public transport services to be provided.
- 2.2.30 Winchester District LDF Core Strategy Issues and Options: Strategic Site Allocations West of Waterlooville and Whiteley, Analysis of Consultation Responses (March 2009).
- 2.2.31 Following consultation on the Issues and Options document (as detailed above) the purpose of this paper was to determine the best location for siting the additional housing proposed at West of Waterlooville and Whiteley and to assess the capacity of each of the preferred sites in order to allocate the required number of dwellings as set out in the South East Plan.
- 2.2.32 The report highlighted that there is potential for growth at Whiteley, however, this would need to overcome significant environmental and transport constraints. Following the completion of the MVA LDF Transport Assessment (as detailed above) preliminary discussion were held with the Highways Agency and Transport for South Hampshire. The completion of Whiteley Way would need to take into account the requirements to ensure that it does not encourage "rat-running", is designed to facilitate improved public transport and does not create undue severance. The report identifies that, by developing Areas 1 & 2 together, it would be possible to complete the Whiteley Way albeit on a new alignment to help preserve the landscape and nature conservation interests.
- 2.2.33 The Cabinet Report recommended that a development of approximately 3,000 dwellings should be provided on land to the north / north-west of Whiteley together with supporting social and physical infrastructure. A number of development principals are proposed to develop a new community which acts as an exemplar of sustainable development. These include:
 - The layout and design should be fully integrated with the adjoining settlement at Whiteley and ensure good accessibility to the existing district centre and employment uses in an environmentally sound and cost effective manner. It should provide essential transport infrastructure to meet the needs of the new development and to maximise the opportunities for sustainable travel including: a network of footpaths cycle ways and bridleways; the layout of the site to help facilitate the provision of an enhanced bus



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system; the measures to mitigate the traffic impacts of the proposed development on the strategic and local road networks;

- The development should facilitate the completion of the Whiteley Way in an environmentally sensitive manner which does not cause any undue severance for the new community and does not encourage traffic from adjoining areas to use the new route to gain access to the strategic road network; and
- The development proposals should clearly demonstrate how access will be gained to the strategic road network, and what measures will be put in place to ensure that smarter choices are made to achieve a modal shift which minimises car usage, and reduces the impact of private cars on the highways network.

Winchester District Development Framework, Core Strategy, Preferred Option (May 2009)

- 2.2.34 Following a review of the consultation on the proposed issues and options report Winchester City Council prepared and issued the Preferred Option document, which sets out for the first time the complete Core Strategy including detailed wording of policies and proposals. The document sets out 'Policy SH3 Strategic Housing Allocation North Whiteley' which states:
 - "Land to the North of Whiteley (as shown on the following plan) is allocated for the development of a new neighbourhood of up to 3,000 dwellings together with supporting uses. The development should be designed as an extension to Whiteley, reflecting its wooded character and setting and taking advantage of facilities in the nearby town centre and major employment at the Solent Business Parks. It must accord with Policy SS2 in addition to the following site-specific requirements:
 - Protect and enhance the various environmentally sensitive areas within and around the site, avoiding harmful effects or providing mitigation as necessary. These assets, particularly the existing woodlands, should be used to create an attractive neighbourhood with a distinctive sylvan character, improve biodiversity, provide recreational facilities for the area, and be managed as a source of renewable energy (woodfuel);
 - Provide two additional primary schools and a secondary school to accommodate the development, along with other physical and social infrastructure;
 - Provide a comprehensive assessment of existing access difficulties affecting Whiteley and agree proposed solutions, prior to planning permission being granted, and incorporate specific proposals to ensure that these are implemented at an early stage of the development;
 - Complete Whiteley Way at an early stage of development, in an environmentally sensitive manner which does not cause undue severance for the new community or encourage traffic from adjoining areas to use the new route to gain access to the strategic road network;



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- Provide measures to ensure that smarter transport choices are made to achieve a modal shift which minimises car usage, manages the impact of private cars on the highways network, and implements measures necessary to accommodate additional traffic. These should improve Whiteley's level of self-containment and make a significant contribution towards reducing commuting levels; and
- Undertake a full assessment of the impact on habitats and bio-diversity (especially those of national and international importance such as the River Hamble and the Solent) of development both locally and in combination with other nearby sites. The development proposals must be accompanied by measures to avoid harmful impacts and mitigate the local and wider impacts of the development."

Delivering Strategies: Winchester District LDF Transport Assessment Stage 2 Report (MVA Consultancy, November 2009)

- 2.2.35 Following the initial Transport Assessment Report prepared by MVA in November 2008 (see above) this document took forward the key sites identified in the preferred option to investigate in more detail both the expected transport impacts and how demand management and other mitigation measures should be introduced as an integral part of the development strategy of the development.
- 2.2.36 In general the document set out that design is a key to bringing forward transport in a sustainable manner at new development and that a Smarter Choices strategy can have a large impact on influencing decisions people make with regards to how they travel.
- 2.2.37 With regards to North Whiteley the document set out the context of the site as being within the congested network surrounding M27, Junction 9 and Segensworth Roundabout and the document discussed links with the North / North East Hedge End Strategic Development Area that was planned at the time the report was written.
- 2.2.38 The report set out the potential impact of North Whiteley based on development of 3,000 homes, 2,000m² local retail and 500m² community uses and then described a list of mitigation and intervention that could be introduced to alleviate the traffic impacts of development. These measures included:
 - Continued delivery of comprehensive Workplace Travel Plan at Solent Business Park to reduce commuting and business travel. Package to include as a minimum:
 - Car Sharing;
 - Home Working;
 - Flexible Working to reduce peak hour travel demands;
 - Season ticket loans for public transport;
 - Good quality cycle parking and shower facilities for each employer; and
 - Appointment / retainment of Travel Plan Co-ordinator.



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- Comprehensive Residential Travel Plan delivered at North Whiteley to reduce travel demand. Package to include as a minimum:
 - Personalised travel planning for new residents;
 - Car Club;
 - Discounted public transport;
 - High speed internet access;
 - Consideration of central 'work hub' to facilitate remote working;
 - Space for cycle parking provided at all dwellings; and
 - Appointment of Travel Plan Co-ordinator.
- Comprehensive School Travel Plan measures offered at all Whiteley schools. Package to include as a minimum:
 - Identification of designated walk and cycle to school routes within development and beyond;
 - Engineering measures to facilitate walking / cycling;
 - Delivery of walking bus and / or chain gangs;
 - Secure cycle parking and lockers;
 - Curriculum support initiatives;
 - Parent car share club; and
 - Appointment of Travel Plan Co-ordinator(s).
- Incentives offered for Solent Business Park employees to relocate to North Whiteley.
 Incentives offered for existing Whiteley residents to relocate jobs to Solent Business Park.
- North Whiteley Personalised Travel Planning package extended to cover rest of Whiteley.
- Introduction of Whiteley wide car club to reduce parking pressure and manage travel demand.
- Delivery of new BRT (or similar) service serving Whiteley, Hedge End SDA and Segensworth, potentially linking Southampton and Portsmouth.



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- Introduce a new bus route connecting Whiteley to Swanwick railway station which utilises Yew Tree Drive bus link.
- Extension of Windover (Jn 8) Park and Ride service to Solent Business Park.
- Investigate conversion to signals of roundabout access to Solent Business Park.
 Facilitates pedestrian / cycle access, allows bus priority and regulates traffic flow.
- Commission a report to undertake a feasibility study for a new station at Segensworth.
 Reliant on use of the Eastleigh Chord, positive demand forecasts and re-scheduling opportunities.
- Complete Whiteley Way.
- Introduce bus priority measures on M27 Junction 9 roundabout and Segensworth Roundabout to facilitate new BRT service.
- Introduce High Occupancy Lanes (HOV) on Junction 9 slip roads.
- Investigate potential for separate on / off slips on Junction 9 east-facing to provide direct access to Solent Business Park.
- 2.2.39 The document goes on to state that the remedial measures would need to be in place from the initial occupancies so that Travel Plans can be promoted with alternatives to car use available from the outset.

M27 Parallel Study (Mott MacDonald, July 2010)

- 2.2.40 The M27 Parallel Study was prepared by Mott Gifford on behalf of Hampshire County Council (HCC) and Transport for South Hampshire (TfSH) in parallel with the M27 Corridor Study and Delivering a Sustainable Transport System. The Parallel Study aims to identify a package of interventions that would facilitate access to and from the large development areas associated with the South East Plan proposals for South Hampshire, namely:
 - North East Hedge End Strategic Development Area;
 - North Whiteley Major Development Area; and
 - North Fareham Strategic Development Area.
- **2.2.41** This summary focuses on the suggestions for the North Whiteley Major Development Area only.
- 2.2.42 The M27 Parallel study was carried out in consultation with all the relevant stakeholders representing both public bodies and the developers involved in each of the development areas. These stakeholders produced a list of all the possible transport interventions that could be implemented at each of the development areas and a plan was produced illustrating the interventions. The plan for North Whiteley (Figure 3.3) is provided at



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Appendix A. These proposed interventions were put into a matrix to compare the intervention against eight different criteria namely:

- Transport policy compatibility;
- Trip distribution / traffic impact / capacity constraints;
- Engineering feasibility;
- Land ownership;
- Land use planning;
- Environmental issues;
- Compatibility with HA objectives; and
- Engineering cost.
- **2.2.43** Each of these elements were assigned a co-ordinator responsible for collating information on the specific section and filling in the matrix based on a 5 point scale scoring system as follows:
 - Dark Green Major Beneficial
 - Light Green Minor Beneficial
 - White Negligible
 - Yellow Minor Adverse
 - Red Major Adverse
 - N/A Not Appropriate / Not an Issue
- **2.2.44** All of the stakeholders were then tasked with filling in the appropriate section of the matrix relevant to them with the above information.
- **2.2.45** The study as described above produced an overarching matrix for each of the development areas. The Whiteley matrix (**Table 4.2**) is provided at **Appendix B**.
- **2.2.46** The results of this matrix then went on to inform a summary of preferred recommendations for the North Whiteley site which were as follows:

Highway Access

- Completion of Whiteley Way through to Botley Road in the north;
- Segensworth Roundabout, M27 Junction 9 and Whiteley Way Roundabout should be optimised and progressed as a linked scheme;



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- The opening of Yew Tree Drive to all traffic should be reviewed following trial opening and pending further discussions with Fareham Borough Council;
- Rookery Avenue should be completed subject to further investigation;
- Measures to manage through traffic should be introduced on the A3051 Botley Road between North Whiteley and A334 Station Hill;
- Junction improvements and measures to manage through traffic should be introduced on the A3051 Botley Road West / A334 Station Hill junction; and
- Measures to manage through traffic should be introduced in Botley.

Public Transport Access

- Signal optimisation as a linked scheme taking into account the potential for bus priority should be introduced at Segensworth Roundabout, M27 Junction 9 and Whiteley Way roundabout; and
- Whiteley Way should be completed to include bus priority where necessary.

Rail Access

The Fareham to Eastleigh track should be doubled and the Eastleigh Chord should be provided.

Pedestrian and Cyclist Access

- Cycle improvements should be implemented on the A3051 between North Whiteley and Botley Station;
- M27 underpass between Segensworth and Whiteley should be improved as pedestrian and cycle link.
- **2.2.47** Figure 4.2 provided within the study illustrated these suggested measures and is provided at Appendix C.

Winchester District Local Plan Part 1 – Joint Core Strategy – Pre-submission January 2012

- 2.2.48 Following consultation on the Core Strategy Preferred Option, as detailed above, Winchester City Council prepared and issued the Pre Submission Draft for consultation in January 2012 following amendments to reflect changes in Government policy.
- 2.2.49 The North Whiteley site is recognised in the Winchester District Local Plan Part 1: Joint Core Strategy as providing an important opportunity to secure infrastructure and community facilities, and to locate new residential development close to major employment areas. In particular the development offers the opportunity to complete the Whiteley Way as a new road primarily aimed at serving the new development but which will provide a new link to the



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Botley Road. The development should provide for a new secondary school and two new primary schools which, in addition to meeting the needs of the new development, will also serve to meet existing shortfalls in educational facilities in the area.

2.2.50 The site is also specifically referenced in Policy SH3 – Strategic Housing Allocation – North Whiteley which was amended since the preferred option draft and states that:

"Land to the North of Whiteley is allocated for the development of about 3,000 dwellings together with supporting uses. The development should reflect Whiteley's predominantly wooded character and setting by maximising the opportunities presented by the substantial areas of green space within and adjoining the allocated area, which are either unsuitable for built development or needed to mitigate potential impacts on protected sites. Development proposals should be accompanied by a comprehensive masterplan which includes an indicative layout and phasing plan, and sets out details of how this will be achieved.

The development should also complement and take advantage of facilities in the nearby town centre and major employment at the Solent Business Park. It should accord with Policy DS1, in addition to the following site-specific requirements:

- Protect and enhance the various environmentally sensitive areas within and around the site, avoiding harmful effects or providing mitigation as necessary. This will include any measures as necessary to mitigate the impact of noise and light pollution on the adjoining areas. The existing woodlands on and adjoining the site should be used to create attractive neighbourhoods with a distinctive sylvan character, improve biodiversity, provide recreational facilities including areas of children's play, and possibly be managed to as a source of renewable energy;
- Provide for pre-school facilities, and two additional primary schools and a secondary school to accommodate the development, along with other physical and social infrastructure, including provision for primary health care in the locality to serve the new community;
- Provide a comprehensive assessment of existing access difficulties affecting Whiteley, agree solutions prior to planning permission being granted, and incorporate specific proposals to ensure that these are implemented at an early stage of the development;
- Undertake a full Transport Assessment to ensure that the package of mitigation measures are incorporated into the scheme, including pedestrian and cycle links, a public transport strategy and any off-site contributions as deemed necessary;
- Completed Whiteley Way at an early stage of development, in an environmentally sensitive manner which does not cause undue severance for the new community or encourage traffic from adjoining area to use the new routes to gain access to the strategic road network;
- Provide measures to ensure that smarter transport choices are made to achieve a modal shift which minimises car usage, manages the impact of private cars on the highway network, and implements measures necessary to accommodate additional traffic. These



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should improve Whiteley's level of self-containment and make a significant contribution towards reducing community levels; and

- Include a Green Infrastructure Strategy which sets out measures to avoid harmful impacts and mitigate the local and wider impacts of the development. The strategy will also need to include any off-site measures required to mitigate harmful impacts on European sites".
- 2.2.51 The Winchester District Local Plan Part 1: Joint Core Strategy states that Hampshire's Local Transport Plan (LTP, see Section 2.2.55 below) promotes a development strategy which will accommodate much of the development required in the District through large-scale extensions to the existing urban areas of Winchester, Whiteley and Waterlooville. This will ensure that development is of a sufficient scale to incorporate all the necessary facilities within the site and through off-site improvements, and ensure that it is located in the most sustainable locations, helping to reduce the need to travel.

Winchester District Local Plan Part 1 – Joint Core Strategy – Pre-submission January 2012 Proposed Modifications

- 2.2.52 Winchester City Council submitted the Winchester District Local Plan Part 1: Joint Core Strategy to the Secretary of State on Monday 18 June 2012, following the requisite six-week consultation period on the Pre-submission document. The plan will now be considered by an independent Planning Inspector at a Public Examination, which is expected to take place at the end of October 2012.
- 2.2.53 The Council have compiled a schedule of proposed modifications to the Pre-submission Local Plan, based on representations received. This has also been submitted to the Secretary of State. Policy SH3 Strategic Housing Allocation North Whiteley with proposed modifications is set out below.

"Land to the North of Whiteley (as shown on the following map) is allocated for the development of about 3,000 dwellings together with supporting uses. The development should reflect Whiteley's predominantly wooded character and setting by maximising the opportunities presented by the substantial areas of green space within and adjoining the allocated area, which are either unsuitable for built development or needed to mitigate potential impacts on protected sites.

Development proposals should be accompanied by a comprehensive masterplan which includes an indicative layout and phasing plan, and sets out details of how this will be achieved.

The development should also complement and take advantage of facilities in the nearby town centre and major employment at the Solent Business Parks. It should accord with Policy DS1, in addition to the following site-specific requirements:

Protect and enhance the various environmentally sensitive areas within and around the site, avoiding harmful effects or providing mitigation as necessary. This will include any measures as necessary to mitigate the impact of noise and light pollution on the adjoining areas. The existing woodlands on and adjoining the site should be used to



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create attractive neighbourhoods with a distinctive sylvan character, improve biodiversity, provide recreational facilities including areas for children's play, and possibly be managed to as a source of renewable energy (woodfuel);

- Provide for pre-school facilities, and two additional primary schools and a secondary school to accommodate the development, along with other physical and social infrastructure (as set out in the Infrastructure Delivery Summary at Appendix E), including provision for primary health care in the locality to serve the new community;
- Provide a comprehensive assessment of existing access difficulties affecting Whiteley, agree solutions prior to planning permission being granted, and incorporate specific proposals to ensure that these are implemented at an early stage of the development;
- Undertake a full Transport Assessment to ensure that the package of mitigation measures are incorporated into the scheme, including pedestrian and cycle links, a public transport strategy and any off-site contributions as deemed necessary;
- Complete Whiteley Way at an early stage of development, in an environmentally sensitive manner which does not cause undue severance for the new community or encourage traffic from adjoining areas to use the new route to gain access to the strategic road network;
- Provide measures to ensure that smarter transport choices are made to achieve a modal shift which minimises car usage, manages the impact of private cars on the highway network, and implements measures necessary to accommodate additional traffic. These should improve Whiteley's level of self-containment and make a significant contribution towards reducing commuting levels;
- Undertake a full assessment of the impact on habitats and biodiversity (especially those
 of national and international importance such as the River Hamble and the Solent) of
 development both on site and in combination with other nearby sites;
- Include a Green Infrastructure Strategy which sets out measures to avoid harmful impacts and mitigate the local and wider impacts of the development. The strategy will also need to include any off-site measures required to mitigate harmful impacts on European sites;
- Avoid harmful impacts on water resources, given the proximity of the site to European sites of nature conservation interest. The development should provide a fully integrated Sustainable Drainage System to mitigate against any potential flood risk and apply a flood risk sequential approach to development across the site; and
- Assess the potential for prior extraction of minerals resources before development commences."



Hampshire Local Transport Plan 2011 – 2031 (March 2011)

- 2.2.54 The Local Transport Plan (LTP) sits within the national policy context for local transport, namely that set out within 'Creating Growth, Cutting Carbon: Making Sustainable Local Travel Happen' (DfT, Jan 2011). It also takes into account the central Government priority for greater local authority autonomy as set out in the Decentralisation and Localism Bill (Dec 2010).
- 2.2.55 The South Hampshire Joint Strategy with respect to transport has been developed by three Local Transport Authorities Hampshire County Council, Portsmouth City Council and Southampton City Council working together as 'Transport for South Hampshire' (TfSH).
- **2.2.56** The transport vision of the TfSH authorities is to create:
 - "A resilient, cost effective, fully-integrated sub-regional transport network, enabling economic growth whilst protecting and enhancing health, quality of life and environment".
- 2.2.57 Fourteen area-based policies are set in the South Hampshire sub-section of the LTP to deliver the vision set out above. The policies set out the policy framework through which the TfSH will seek to address the transport challenges of the area. The policies constitute a package with a toolkit of delivery options attributable to each policy. Each Local Authority will select the most appropriate tool for inclusion within their future Implementation Plans.
 - **a.** To develop transport improvements that support sustainable economic growth and development within South Hampshire.
 - b. Work with the Highways Agency, Network Rail, ports and airports to ensure reliable access to and from South Hampshire's three international gateways for people and freight.
 - **c.** To optimise the capacity of the highway network and improve journey time reliability for all modes.
 - **d.** To achieve and sustain a high-quality, resilient and well-maintained highway network for all.
 - e. To deliver improvements in air quality.
 - **f.** To develop strategic sub-regional approaches to management of parking to support sustainable travel and promote economic development.
 - **q.** To improve road safety across the sub-region.
 - **h.** To promote active travel modes and develop supporting infrastructure.
 - i. To encourage private investment in bus, taxi and community transport solutions, and where practical better infrastructure and services.



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- j. To further develop the role of water-borne transport within the TfSH area and across the Solent.
- **k.** To work with rail operations to deliver improvements to station facilities and, where practical, better infrastructure and services for people and freight.
- I. To work with Local Planning Authorities to integrate planning and transport.
- m. To develop and deliver high-quality public realm improvements.
- n. To safeguard and enable the future delivery of transport improvements within the TfSH area.
- **2.2.58** Enabling developer-led road improvements to facilitate access to planned development areas such as North Whiteley is a delivery option of this policy.

2.3 Summary

- 2.3.1 As identified above, the development principles and transport implications of the proposed North Whiteley development have been the subject of extensive assessment and consideration throughout the development of the Core Strategy allocation.
- 2.3.2 This has provided a framework upon which a more detailed Access and Movement Strategy in support of the development proposals has emerged, taking into account the existing site context, opportunities and constraints, as identified above.



3 Site Analysis

3.1.1 This section of the AMS provides analysis of existing conditions, constraints and opportunities in relation to movement issues associated with the development potential of the site.

3.2 Strategic Location

- **3.2.1** The site is located north of the M27 (Junction 9), to the east of the A3051 Botley Road, to the south east of Hedge End and to the east of Southampton. The Solent Business Parks, which provide a location for a wide variety of employers and services, are located to the south of the North Whiteley site served by junction 9.
- 3.2.2 The M27 provides strategic connections towards Fareham, Havant and Portsmouth to the east and to Eastleigh and Southampton to the west, where interchange with the M3 enables on-going connections to London, the South East and other destinations nationally.

3.3 Accessibility

3.3.1 Figure 3-1 illustrates the location of the North Whiteley site in relation to key local facilities and amenities in Whiteley and beyond. It demonstrates that there is an extensive range of retail, employment, education, health and leisure facilities within two kilometres of the site.

Local Amenities

- 3.3.2 The closest amenities to the site will be located at Whiteley Town Centre approximately 800m and 1.6km south of the southern and northern parts of the development site respectively. Currently there is only a Tesco superstore at this location but a town centre of various high street shops and facilities including restaurants and leisure facilities are being constructed and are due to open in spring 2013 ahead of development at North Whiteley coming forward. It is intended that when finished this facilities hub will form a 'town centre' for the residents of Whiteley.
- **3.3.3** There is a local centre located on Yew Tree Drive between approximately 1.2km and 2.4km from the site that contains a convenience store, private healthcare, takeaways, hairdresser and a community centre and a local centre located at the Solent Business Park, which contains takeaways, a salon and a travel agent.
- 3.3.4 Healthcare within Whiteley is provided in the form of a doctor's surgery located between 1.4km and 2.4km from the development on Yew Tree Drive and a dentist surgery located at the local centre at Solent Business Park.
- 3.3.5 There are two pubic houses located within the vicinity of the development, one is located on Botley Road directly west of the development and there is another close to the junction of Rookery Avenue and Whiteley Way within Whiteley.



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Employment

- 3.3.6 There are extensive employment opportunities within close proximity of the site at the Solent Business Parks located just north of the M27, J9, approximately 2km south of the site and Segensworth Industrial Estate to the south of the M27, J9 approximately 2.5km 3km south of the site.
- 3.3.7 Hedge End, Fareham and Locks Heath all provide a wide range of employment opportunities and the employment hubs of Southampton, Portsmouth and Winchester are all readily accessible from the site by train either from Botley or Swanwick rail stations or by bus.

Education

- 3.3.8 Currently primary education for the majority of residents of the existing Whiteley area is provided within Whiteley and secondary education is provided at the Henry Cort Community College in Fareham. It is recognised that there is a shortage of primary education in Whiteley at the current time and therefore some residents currently have to travel outside of Whiteley to access primary education.
- 3.3.9 As part of the proposals for the development, two primary schools and one secondary school will be provided to serve residents of the development and any existing over subscription of current schools in the area.

Leisure

3.3.10 There are a large range of leisure facilities in and around Whiteley including a leisure centre located within close proximity of Whiteley Town Centre and Burridge Sports and Social Club on Botley Road south west of the development which provides cricket, football and tennis facilities, as well as private facilities at Solent Hotel and YMCA Fairthorne Manor.

Accessibility to North Whiteley

- 3.3.11 In considering the proximity of these key facilities and amenities with regards to walking distances, the most recent transport statistics are set out within the DfT 'National Travel Survey: 2010' (NTS).
- **3.3.12** This indicates that 22% of all journeys and 77% of journeys under one mile are made on foot. **Table NTS0306** within the NTS also indicates that the average walking trip length is 0.7miles (1.1km).
- **3.3.13** The NPPF now supersedes the PPGs, however PPG13 states that:
 - 'Walking is the most important mode of travel at the local level and offers the greatest potential to replace short car trips, particularly under 2 kilometres.'
- **3.3.14** In addition, the most recent guidance on this issue is provided by Manual for Streets (MfS) which, at Para 4.4.1, states that:



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"Walkable neighbourhoods are typically characterised by having a range of facilities within 10 minutes' [up to about 800m] walking distance of residential areas which residents may access comfortably on foot. However, this is not an upper limit and PPG13 states that walking offers the greatest potential to replace short car trips, particularly those under 2km."

- **3.3.15** PPG13 also identifies the contribution that cycling can make to transport sustainability and accessibility, identifying this mode of travel as a good substitute for short car trips, particularly those under 5km.
- **3.3.16** PPG13: A Guide to Better Practice builds on this concept indicating that in practice, this threshold could be higher at 8km for cycle trips.
- 3.3.17 Again, this is reiterated and substantiated in the recent NTS which identifies that the average trip length by bicycle is 2.8 miles (4.5km). Furthermore, Table NTS0308 identifies that 85% of all cycle trips are over 1 mile (1.6km), 55% over 2 miles (3.2km) and 85% of all cycle journeys are for distances up to 5 miles (8km).
- **3.3.18** These statistics would indicate, therefore, that trips to the majority of these facilities and services could reasonably be expected to be undertaken on foot or by cycle, except where car use is an obvious prerequisite or indeed the reason for the trip.

3.4 Pedestrian and Cycle Provision

- 3.4.1 Existing key walk and cycle infrastructure is illustrated at Figure 3-2. Pedestrians and cyclists are well catered for within Whiteley itself with numerous foot and cycleways linking the developed areas and leisure routes through Whiteley with the exception of a connection along Whiteley Way. There is a footway on the eastern edge of Whiteley Way between its junction with Rookery Avenue and Marjoram Way, however the remainder of this link has no provision.
- **3.4.2** Connections between Whiteley and the wider community are lacking however, with the exception of a foot / cycleway between Whiteley and Swanwick Station.
- 3.4.3 There is currently no provision for these sustainable modes crossing the M27 which leads to very few people choosing to walk and cycle in this direction as this represents a significant barrier. Walk and cycle travel is also limited to the north along Botley Road which has no facilities along much of its length and is a rural road with a derestricted speed limit.

3.5 Public Transport Provision

Existing Services

Bus Services

3.5.1 Although the South Hampshire area generally is covered by a dense network of both urban and inter-urban services, with a few exceptions this is limited to south of the M27. To the north, coverage both in terms of routes and frequencies is considerably lighter.



- 3.5.2 As Whiteley has traditionally been virtually a cul-de-sac with the main access to and from the M27 Junction 9 and the only other route over the M27 being Leafy Lane, bus access to the site has historically been difficult as it is not desirable to serve the area as an intermediate call on north-south services, due to the considerable additional route mileage and extended journey time for through passengers. As a result, only those buses terminating in Whiteley were able to serve the area until the opening of the Yew Tree Drive bus link; this has enabled further journey opportunities to be established, although use of the link has not been as great as intended.
- **3.5.3** The following public bus routes serve the Whiteley and Burridge areas:

Table 3.1 Existing Local Bus Services

Service/	Route	Frequency	
Operator		Mon - Sat	Eve & Sun
26 First	Fareham – Segensworth – Park Gate – Burridge – Curbridge – Botley – Hedge End	7 journeys	No service
28 First	Fareham – Segensworth – Whiteley – Park Gate – Locks Heath	7-8 journeys Mon-Fri; 5 journeys Sat	No service

Note: Bus routes and frequencies correct as at time of reporting (July 2012).

- 3.5.4 The table indicates that services operating within the Whiteley and Burridge areas are characterised by a small number of routes, relatively low frequencies and a limited range of destinations.
- 3.5.5 Service 28 serves the existing Whiteley area, including stops at Parkway (for the employment area), Whiteley Village (the leisure and retail area) and Sweethills Crescent (for the residential area). Service 26 does not serve Whiteley but operates via the A3051 via Burridge between Swanwick and Botley; this is adjacent to parts of the proposed development at its northern end.
- 3.5.6 Service 26 offers 7 journeys per day between Fareham, Burridge, Botley and Hedge End. Route 28 operates approximately every two hours during Monday to Friday daytimes (every 2 hours on Saturdays) between Fareham, Whiteley and Locks Heath, including peak time journeys in both directions. There is no evening or Sunday service on either route.
- 3.5.7 In addition to these services, the two major employers at Whiteley Zurich and National Air Traffic Services (NATS) operate their own private shuttle services. Zurich's network include buses from Gosport, Portsmouth, Waterlooville, Fareham and Locks Heath, whilst NATS operate shuttles from Swanwick and Southampton Airport Parkway railway stations, plus an intersite service to their Swanwick operations.
- **3.5.8** Whiteley village and the immediate surrounding area are therefore relatively poorly served at present.



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3.5.9 A map of existing bus services in the Whiteley and Locks Heath areas is shown in Appendix D.

Rail Services

- **3.5.10** There are two National Rail stations within 2km of the site boundaries, at Swanwick to the south and Botley to the north. The two stations lie on different rail routes and have differing levels of service and access to a varied number of destinations.
- **3.5.11** Swanwick station lies on the main 'West Coastway' route along the south coast between Southampton and Brighton. The table below indicates the key routes serving this station:

Table 3.2 Train Services from Swanwick Station

Operator	Route	Frequency	
Operator		Mon - Sat	Sundays
South West Trains	Southampton Central – St Denys – Bitterne – Woolston – Hamble – Bursledon – Swanwick – Fareham – Cosham – Fratton – Portsmouth & Southsea	60 mins	60 mins
Ocasila and Delilares	Southampton Central – Swanwick – Fareham – Cosham – Havant – Emsworth – Chichester – Barnham – Horsham – Crawley – Three Bridges – Gatwick Airport – East Croydon – Clapham Junction – London Victoria	60 mins	No service
Southern Railway	Southampton Central – Swanwick – Fareham – Cosham – Havant – Emsworth – Chichester – Barnham – Durrington on Sea – West Worthing – Worthing – Lancing – Shoreham by Sea –Portslade – Hove – Brighton	60 mins	No service

Note: Some minor intermediate stations omitted for brevity.

Rail routes and frequencies correct at time of reporting (July 2012).

- 3.5.12 The table above indicates that Swanwick is served by three trains per hour in each direction between Southampton Central and Fareham. One train per hour then operates to Portsmouth & Southsea, whilst two trains per hour then continue to Havant and Chichester; from this point, one train operates via Horsham and Gatwick Airport to London Victoria and one operates to Worthing and Brighton.
- **3.5.13** Only the South West Trains service between Southampton Central and Portsmouth & Southsea operates on a Sunday with a frequency of one train per hour. There is considerable difference in the frequency of train services from Swanwick to Southampton (three per hour) and Portsmouth (one per hour).
- 3.5.14 Botley station lies to the north-west of North Whiteley and is on the Fareham to Eastleigh line

 a route which currently is not of strategic importance but may become so in the future with
 the proposed re-opening of the Eastleigh Chord. This would allow direct access from



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Portsmouth and Fareham to Southampton Airport Parkway, as well as creating additional capacity for services between Portsmouth and Southampton.

3.5.15 Train services currently utilising Botley station are shown in the table below:

Table 3.3 Train Services from Botley Station

Operator	Route	Frequency	
Operator		Mon - Sat	Sundays
South West Trains	London Waterloo – Woking – Farnborough – Basingstoke – Winchester – Eastleigh – Hedge End – Botley – Fareham – Cosham – Fratton – Portsmouth & Southsea – Portsmouth Harbour	60 mins (30 mins Mon-Fri peak)	60 mins

Note: Some minor intermediate stations omitted for brevity.

Rail routes and frequencies correct as at time of reporting (July 2012).

- 3.5.16 The table indicates that an hourly service operates at all times (except for an enhanced service during Monday to Friday peak periods) between London Waterloo and Portsmouth Harbour via Basingstoke and Fareham. Journey times are relatively slow, reflecting the stopping/semi-fast nature of the service which primarily provides for local needs, as well as providing the only direct service from Fareham to London Waterloo.
- **3.5.17** In the past hourly services also operated on this line between Basingstoke and Brighton, some of which served Botley, but these have since been withdrawn.

Current Proposed Improvements

- **3.5.18** As Hampshire County Council acknowledged that services to Whiteley are currently relatively poor, the authority has been investigating means of delivering a better network of bus services for the area and how these may be funded. It should be noted there are no firm proposals for implementation at present, nor a timescale associated with it.
- **3.5.19** A new bus network for Whiteley has been designed by the County Council, and the proposals consist of two new services which would replace much of routes 26 and 28. The new services are as follows:
 - Fareham Segensworth Park Gate Swanwick Whiteley: every 30 minutes Monday to Saturday daytimes between 0700 and 2000; and
 - Hedge End Botley Burridge Whiteley Swanwick Locks Heath Warsash: every 30 minutes Monday to Saturday daytimes (60 minutes to Hedge End) between 0700 and 1900.
- 3.5.20 These services would provide four buses per hour between Whiteley and Swanwick railway station for connections to Fareham, Portsmouth, Havant and Southampton, as well as providing a step change in frequency and coverage of destinations; this is particularly true of services to the north, where there is no current provision from Whiteley. They would also



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- increase the options for sustainable access to the Segensworth and Titchfield Park industrial areas to the south of the M27.
- 3.5.21 The proposed service between Fareham and Whiteley replaces routes 26 and 28, and operates from the Bus Station via the rail station and either the A27 (in the off-peak periods) or Highfields (in the AM peak towards Whiteley and the PM peak towards Fareham) between the town centre and Titchfield; from here it would operate via Cartwright Drive to the Titchfield Park area.
- 3.5.22 Within the Segensworth industrial area the route would be convoluted in order to serve all three main east-west routes through the estate plus the northern spur to Witherbed Lane. The route then serves the Segensworth West and Park Gate areas, and serves Swanwick station either directly or through stops on the A3051 at Beacon Bottom. The route enters Whiteley via the Yew Tree Drive bus link, operates a loop around Sweethills Crescent and then runs via Parkway (peak hours only) and Whiteley Way to the Whiteley Centre.
- 3.5.23 The journey time from Fareham to Whiteley Centre is 40 minutes in the peak and 34 minutes off-peak (by comparison the current journey time is 33 minutes peak and 25 minutes off-peak). There would also be a loss of service for Segensworth Road and Mill Lane in Titchfield as services are diverted via Cartwright Drive.
- 3.5.24 The new route from Hedge End to Warsash replaces the relevant sections of services 26 and 28, and provides new links from some areas in Locks Heath. The frequency would be one bus per hour between Hedge End and Whiteley, with two buses per hour on to Warsash. Services would commence from Hedge End Superstores, operating via Turnpike Way and Upper Northam Road to the village centre, and from there via the B3033 and A334 to Botley village and King's Corner (the junction with the A3051, which is the nearest stop to Botley station). From there services operate via the A3051 via Burridge to Swanwick, where they use the Yew Tree Drive link to access Whiteley and operate as per the Fareham service to Whiteley Centre (except Parkway is served at all times). Buses then retrace their route to Yew Tree Drive and then operate via Park Gate and Locks Heath Centre to Warsash Clock Tower, providing enhanced services to Heath Road, Peter's Road, Brook Lane and Lockswood Road.
- 3.5.25 Journey time from Hedge End Superstores to Park Gate is increased from 20 to 40 minutes due to the lengthy diversion via Whiteley. It is unlikely that this service would be attractive to end-to-end users, and that residents of Whiteley will be the main beneficiaries of this service.
- 3.5.26 These services would break the existing direct bus link between Fareham and Hedge End provided by service 26; although there is theoretically a rail alternative, both stations are distant from their respective centres and in the case of Hedge End connecting bus services are infrequent. However, passengers from Hedge End would be able to access Fareham by interchanging with rail services at Swanwick station.
- 3.5.27 Initially it was expected that a 'Kickstart' bid for Government funding would be submitted by Hampshire County Council in summer 2009, but this was not the case and other funding sources are now being investigated; these include potential for use of monies from the



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Segensworth Business Improvement District (BID), which has the ability to raise its own levies for transport. It is understood that the County Council expect that these services will be in place prior to commencement of the North Whiteley development and, if they are not, then they will expect the services to be provided (although not wholly at the cost of the developer).

3.5.28 The proposed timetables and plans of these routes (as supplied by Hampshire County Council) are shown in **Appendix E**.

3.6 Local and Strategic Road Network

Whiteley Way

3.6.1 To the south of the North Whiteley development lies Whiteley Way which currently provides the main access point for all of the existing Whiteley settlement. Whiteley Way stretches from junction 9 of the M27 in the south to its junction with Bluebell Way in the vicinity of Whiteley Town Centre in the north. Whiteley Way is a four lane dual carriageway between M27, J9 and the roundabout junction with Rookery Avenue. From this junction north the link is a two lane single carriageway road providing access to the residential areas of Whiteley, the Solent Business Parks and Whiteley Town Centre.

Yew Tree Drive

3.6.2 Yew Tree Drive is a key link between Whiteley Way and the main residential areas of Whiteley. At its western end Yew Tree Drive has a connection to Botley Road that is currently closed to traffic with the exception of buses through the use of a bus gate.

A3051 Botley Road

3.6.3 The A3051 Botley Road forms the frontage of the North Whiteley site along its western edge. The road forms a key link between Swanwick in the south and Botley and Hedge End in the north. The road is generally rural in nature with a derestricted speed limit along the majority of its length with the exception of the points where it passes through Burridge and Curbridge.

Bluebell Way

3.6.4 Bluebell Way currently forms the access road for a limited amount of residential development and a Tesco superstore and links with the northern end of Whiteley Way.

Leafy Lane

3.6.5 Leafy Lane provides the only other means of access and egress to Whiteley other than using Junction 9 of the M27 as well as providing access to residential dwellings in the eastern part of Whiteley, as a result of this the link is heavily traffic calmed to prevent excessive use of this link as a rat run.



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M27

3.6.6 The M27 provides the primary route for strategic movement from Whiteley providing access to key destinations such as Southampton and Portsmouth as well as linking with the M3 and the national motorway network.

3.7 Existing Traffic Conditions

- 3.7.1 In order to set out a consistent baseline position to be used throughout PBAs technical work a suite of traffic surveys have been undertaken or purchased from HCC in order to fully understand the traffic conditions surrounding the North Whiteley site. Traffic surveys obtained included:
 - Manual Classified Traffic Counts at key junctions;
 - Automatic Traffic Counts on key links;
 - Roadside Interview Surveys at key locations on the network; and
 - Journey Time Surveys on key routes through the network.
- **3.7.2** Using this information computer models will be developed to allow the development impact on the surrounding traffic network to be tested.
- 3.7.3 Although this work is yet to be completed the policy review conducted above and local observations can confirm that the road network in the vicinity of the North Whiteley development site suffers from congestion during the peak periods. Specifically Junction 9 of the M27 is constrained and this bottleneck in the network causes congestion on the surrounding road network including Whiteley Way and roads south of the motorway junction.



4 Key Deliverables

- 4.1.1 In view of the constraints and opportunities outlined in **Sections 2** and **3** of this report, a number of key deliverables emerge in relation to access and movement to support future development at the proposed North Whiteley development. The key deliverables are:
 - Improved Road Infrastructure, including site access arrangements and connectivity with surrounding road network to provide a safe and sustainable road network within the vicinity of the site.
 - Local traffic management and road safety improvements.
 - High quality pedestrian and cycle access connecting the site to Whiteley and beyond.
 - Improved public transport accessibility and service provision, linking the site with key local destinations and local public transport interchange.
 - Improved integration for the existing community at Whiteley with the surrounding communities and transport links serving them.
 - Travel Planning / Smarter Choices Commitment.
- **4.1.2** In delivering these objectives a number of supporting transport measures will be drawn upon as follows:
 - Infrastructure;
 - Access and Circulations Strategy;
 - Public Transport Strategy;
 - Travel Planning and Smarter Choices;
 - ITS and Demand Management; and
 - Masterplanning.
- **4.1.3** These measures are discussed further in the following sections of this document.



5 Development Framework

5.1 Introduction

5.1.1 This Section sets out an overview of the emerging masterplan framework for the proposed North Whiteley development and provides details of the development vision and objectives. A description of the indicative masterplan layout and mix of development uses are also provided.

5.2 Vision and Objectives

- **5.2.1** The following principles are to inform the development of masterplan proposals at North Whiteley:
 - The masterplan will be structured around a well-connected movement framework that will increase permeability and allow flexible multi-modal movement within and across the development area, particularly along key desire lines.
 - Routes will be developed based on prioritising users as follows:
 - Pedestrians;
 - Cyclists;
 - Public Transport; and
 - Other Vehicles.
 - A hierarchy of streets and public spaces will be identified in the context of the masterplan movement framework; based upon the relative importance of different user functions, including:
 - Place;
 - Movement:
 - Access;
 - Parking; and
 - Services.
 - Each level of the hierarchy will have different street character types, which set out how typical street parameters relate to surrounding built and natural form along a route responding to the intended living environment / character.
 - With the exception of Whiteley Main Street (30mph) all streets within the development area will be subject to a 20mph design speed (no requirement for repeater signs) and vehicle speeds will be managed by design and well positioned street features rather than



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- traditional traffic calming. Design speeds will vary between 10mph and 20mph depending upon the function of the street.
- Public transport corridors will be identified and designed accordingly to ensure that bus movement can be accommodated successfully through the development area. It is envisaged that buses will mix with general traffic along these corridors with priority provided at key junctions. All residential areas will be located within 400m (5min walk) of a bus stop.

5.3 Masterplan Framework

- 5.3.1 The emerging masterplan for the development is illustrated at Appendix F. It is intended that the site will consist primarily of residential development with up to 3,500 dwellings provided to complement the existing employment and retail offerings present within Whiteley at the current time. Notwithstanding this a number of ancillary uses will be provided including:
 - Two primary schools;
 - A secondary school;
 - Two local centres including A1, A3, B1 or D1 uses;
 - Two community facilities;
 - A leisure centre (associated with the secondary school); and
 - Leisure space including sports pitches and play areas.
- 5.3.2 Furthermore the proposed masterplan has been strongly influenced by existing ecological and landscape features and will seek to provide habitat enhancement and protection to ecologically sensitive areas, together with a strong internal landscape structure that includes publicly accessible green space connected to the rural landscape will provide a development absorbed within and integrated with the existing landscape and development.



6 Movement Framework: Vehicle Access and Highways

6.1 Principles and Objectives

- 6.1.1 The strategy for accommodating vehicular movement in relation to the North Whiteley development has been developed having regard to a number of over-arching principles and in line with the suite of strategy and policy documents reviewed at **Section 2**. The over-arching objectives of the vehicular access strategy are to:
 - Mitigate against development impact;
 - Enable the delivery of development on the site;
 - Improve road safety on the surrounding highway network; and
 - Compliment the aspirations for more sustainable travel in the Whiteley area.
- 6.1.2 In combination these principles form a framework for the delivery of development at North Whiteley that would provide sufficient highway capacity for local and strategic vehicular movements whilst improving transport conditions in the surrounding settlements and on the local highway network.

6.2 Vehicular Access Strategy

6.2.1 Figure 6-1 illustrates the key points of the vehicular access strategy for the North Whiteley development. The developments vehicular access strategy can be broken down into 4 key areas as set out below.

Vehicular Access

- **6.2.2** The development will be accessed via 4 new / amended junctions onto the public highway, these will be as follows:
 - Northern signalised access junction onto the A3051 Botley Road. This junction is numbered 1 on Figure 6-1.
 - Western signalised access junction onto the A3051 Botley Road. This junction is numbered 2 on Figure 6-1.
 - Southern access junction to connect into the existing Roundabout between Whiteley Way and Bluebell Way. This junction is numbered 3 on Figure 6-1.
 - Southern access connecting onto Bluebell Way. This access is numbered 4 on Figure
 6-1
- 6.2.3 As well as providing access for the North Whiteley development, these access points will provide a connection between the existing Whiteley settlement and Botley Road in the north in line with local policy guidance such as the Winchester District Local Plan Core Strategy, which requires:



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"Complete Whiteley Way at an early stage of development, in an environmentally sensitive manner which does not cause undue severance for the new community or encourage traffic from adjoining areas to use the new route to gain access to the strategic road network".

Infrastructure Improvements

- 6.2.4 In order to fully mitigate the impact of the North Whiteley development and in line with the other measures described within this report a number of improvements will be required along key links and at key junctions in the local road network. Currently it is considered that the following junctions / links are likely to require some improvement works, these are numbered on Figure 6-1.
 - A3051 Botley Road / A334 Mill Hill / A334 Station Hill junction (Junction 1);
 - Whiteley Way / Bluebell Way roundabout junction (Junction 2);
 - Proposed Whiteley Way / Whiteley Town Centre roundabout junction (Junction 3);
 - Whiteley Way / Marjoram Way / Whiteley Town Centre roundabout junction (Junction 4);
 - Whiteley Way / Parkway priority junction (Junction 5);
 - Whiteley Way / Rookery Avenue / Parkway roundabout junction (Junction 6);
 - M27, Junction 9 (Junction 7); and
 - Potential new / improved traffic calming measures within Botley / Curbridge and Leafy Lane.
- 6.2.5 The improvements proposed at these junctions / locations will be designed to deliver some or all of the following benefits depending on the junction's situation and location:
 - Mitigate the traffic impact of the development through capacity improvements such as signalisation and / or enlargement;
 - Provision of bus priority measures where necessary and appropriate; and
 - Provision of pedestrian and cycling facilities.
- 6.2.6 It should be noted that there has been discussions between the North Whiteley Consortium, the Highway Authority and Local Planning Authorities regarding the potential opening of the Yew Tree Drive bus gate to all traffic and the potential for completion of Rookery Avenue to provide an additional link to Botley Road.
- 6.2.7 With regards to Yew Tree Drive, the transport strategy retains flexibility in the future operation of this link. Should this remain a bus only connection, it will provide a valuable direct link for the proposed bus services between the site and Swanwick rail station. Once Whiteley Way is extended north to the Botley Road (north of Curbridge), it is understood that this could be opened to all traffic. On this basis, the traffic implications of opening the bus



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gate to all traffic will also be tested through the Transport Assessment and the comparative results set out.

- 6.2.8 However it will be for the Local Highway Authority to determine whether or not this link will be opened to all traffic following this more detailed understanding of the implications.
- 6.2.9 With regards to Rookery Avenue, the North Whiteley Consortium do not own the land required to bring this link forward. The delivery of this connection is therefore outside of the control of the Consortium and is subject to potential development opportunities within Fareham Borough. At this stage in the production of the Transport Strategy it is not considered that it will be necessary to construct this link to enable development at North Whiteley to go ahead, with the provision of 2 additional accesses onto Botley Road providing the necessary permeability and route choice opportunities. Further detail will be set out within the Transport Assessment following completion of the detailed modelling exercise

Demand Management and ITS

- 6.2.10 In combination with the physical infrastructure improvements, set out above, demand management will be used to ensure that the impact of the development and opening of the Whiteley Main Street link onto Botley Road is adequately regulated to ensure that the environment is not detrimentally effected within local populations and habitats. The focus of the demand management strategy is on four key areas:
 - Northern Access and Botley Environmental Management Strategy;
 - Southern Access and M27 Junction 9 Area Strategy;
 - Botley Road Access Strategy; and
 - Informed Traveller.
- 6.2.11 The need for, and details of any demand management strategy, will be determined through the Transport Assessment process as details of likely future impacts across the local and strategic road network are more thoroughly understood. The following strategy options are to be considered.

Northern Access and Botley Environmental Management Strategy

- 6.2.12 The Northern Access and Botley Environmental Management Strategy would incorporate the proposed northern site access junction onto A3051 Botley Road and the A3051 Botley Road / A334 Station Hill / A334 Mill junction. The key objectives of the strategy are to:
 - Prevent Whiteley Way inducing through traffic between the M27 Junction 9 and Botley.
 - Manage traffic travelling into Botley to a level that can be accommodated without significant congestion within Botley through gating traffic.
 - Provide public transport priority through signalling and queue management in combination with the physical bus priority measures.



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 Effectively balance the different demands for traffic flow into Botley between existing demand and from the new development.

demand and from the new development

• Ensue that when queues are re-located they do not have a significant adverse impact on

residential properties.

Ensure efficient operation with minimal delay and stops in off peak times when the

network is operating within capacity.

Incorporate good quality pedestrian / cycle links.

6.2.13 It is envisaged that these objectives will be achieved through the implementation of the

following measures:

Traffic signal control at the junctions of Whitely Main Street and the Botley Road and the

Botley Road (A3051) and A334. The A334 junction will be used to manage the flow of

traffic into Botley at peak times.

Dedicated bus lanes to bypass the traffic queues.

Management of the Botley Road / Whiteley Main Street junction to manage flow to the

A334 junction at peak times.

 Package of monitoring measures within Botley and through the development, combined with Urban Traffic Management and Control (UTMC) measures to enable the network to

be effectively managed.

Information from monitoring measures to be used for the Informed Traveller Strategy.

6.2.14 Package of Network Management Tools:

UTMC compliant package of measures linked to HCC's ROMANSE centre;

Advanced traffic signal control – dual SCOOT /MOVA;

Congestion monitoring – Queue detection /ANPR for journey times;

Automatic incident detection:

Traffic CCTV cameras;

VMS signs to provide driver advice;

Fault management system; and

Management strategies to be set up to provide a combination of signal timing changes

and information to reflect particular scenarios – e.g. Congestion in Botley.

Southern Access and M27 Junction 9 Area Strategy



- 6.2.15 The Southern Access and M27 Junction 9 Area Strategy would incorporate the Whiteley Way / Rookery Avenue / Parkway junction, the M27 Junction 9 and the Segensworth Roundabout. The key objectives of the strategy are to:
 - Ensure safety of operation through queue management on J9 slip roads to minimise queuing onto the M27.
 - Improve operational efficiency and ensure a balance of capacity through the network.
 - Provide effective priority to public transport.
 - Incorporate good quality pedestrian / cycle links.
- **6.2.16** Package of Network Management tools:
 - UTMC compliant package of measures linked to HCC's ROMANSE centre.
 - Advanced traffic signal control dual SCOOT /MOVA to replace existing fixed time operation of J9 and Segensworth.
 - Congestion monitoring Queue detection /ANPR for journey times. Main focus is on Junction 9 and the safety implications of queuing back onto the M27. Monitoring will enable strategies to be implemented that prioritise particular movements within the network in congested conditions to maintain junction operation and keep public transport moving.
 - Automatic incident detection.
 - Traffic CCTV cameras for monitoring and public information.
 - VMS signs to provide driver advice.
 - Fault management systems.
- 6.2.17 Management strategies to be set up to provide a combination of signal timing changes and information to reflect particular scenarios e.g. queuing onto motorway.

Botley Road Access Strategy

- 6.2.18 Access onto the Botley Road includes the northern access in the northern access strategy. It will also provide access to the south to bypass Junction 9 for trips across the motorway. Access will need to be controlled to manage impact on Burridge and on the A27 junctions. The key objectives of this strategy are to:
 - Use traffic signals to manage traffic exiting the development in the peak periods to acceptable levels on the Botley Road and in particular through Burridge.
 - Provide public transport priority through signalling and queue management in combination with the physical bus priority measures.



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- Provide congestion monitoring through Burridge and at key A27 junctions to enable management strategies to be implemented.
- Ensue that when queues are re-located they do not have a significant adverse impact on residential properties.
- Ensure efficient operation with minimal delay and stops in off peak times when the network is operating within capacity.
- Incorporate good quality pedestrian / cycle links.

6.2.19 Package of Network Management Tools:

- UTMC compliant package of measures linked to HCC's ROMANSE centre.
- Advanced traffic signal control dual SCOOT /MOVA.
- Congestion monitoring Queue detection /ANPR for journey times. Main focus will be within Burridge and at the A27 junctions to south but will also need to understand where congestion blocks bus services.
- Automatic incident detection.
- Traffic CCTV cameras.
- VMS signs to provide driver advice.
- Fault management systems.
- **6.2.20** Management strategies to be set up to provide a combination of signal timing changes and information to reflect particular scenarios e.g. level of flow through Burridge or congestion at A27 junctions.

Informed Traveller Strategy

- **6.2.21** The Informed Traveller Strategy is intended to help residents and workers within Whiteley to make informed decisions about travel in and around the Whiteley area. Key aspects of this strategy could include:
 - Real time travel and traffic information delivered through the ROMANSE travel information system. Full integration of systems.
 - Data collected from the network management systems, e.g. congestion, journey times etc. to be utilised to provide travel information.
 - Additional data sources to include real time passenger information for the buses, real time rail information, and the traffic and travel information for the wider area and the motorways from the existing ROMANSE system.
 - Journey planning software.



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- Dissemination of information through ROMANSE systems but potential to also incorporate into development specific website and mobile website so that it can be accessed at home, in the office and on the move.
- Mobile phone applications to be considered link to developments being made for ROMANSE or development specific apps.
- Information to also be displayed via Variable Message Signs at the roadside, via real time displays at bus stops and public information screens in foyers of apartment blocks, community centres, schools and retail outlets. Bus stop signs to provide more information than just next bus e.g. information about future service changes or road works which could affect the routing of buses.
- Will help travellers make more informed choices of how and when to travel, avoid incidents and peak periods of congestion. Supports smarter choices initiative.
- Travel plan kiosks at key locations.
- Smart cards and contactless payment or off bus ticketing to be considered to make travel by public transport easier – subject to HCC proposals.

6.3 Internal Circulation

- 6.3.1 Vehicular movement would be accommodated within the proposed development by a network of streets that provide good connectivity and permeability throughout. The roads will be designed to meet the functional transport requirements of the proposed development, alongside wider placemaking, landscape and ecological objectives.
- 6.3.2 At this stage the exact location and standard of highways within the development is yet to be finalised and would ultimately be dependent upon the detailed design process and the layout of individual plots within the development. However, it is envisaged that the internal road network would be based on a simple hierarchy of routes as described below.

Primary Access and Circulation Routes

Movement Function

- Principal movement corridor on the development;
- Facilitates vehicle circulation around the site;
- Frequent vehicle movements including principle HGV route on the site;
- Provides connections with Secondary Access Routes;
- Provides direct access to development plots;
- Adjacent off-street pedestrian / cycle provision;



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- Provision of safe and conveniently located pedestrian / cycle crossings; and
- Provides limited function as a through route for traffic between Whiteley and Botley.

Place Function

- Strong landscape character;
- Shared space at key local squares; and
- Other natural influences including landscaping and the incorporation of SuDS, where appropriate.

Secondary Access and Circulation Routes

Movement Function

- Provides connection from Primary Access and Circulation route to the rest of the site;
- Generally lower traffic volumes;
- Predominantly access based movements;
- Provides direct access to development plots;
- Adjacent off street pedestrian / cycle provision; and
- Provision of safe and conveniently located pedestrian / cycle crossings.

Place Function

 Other natural influences including landscaping and the incorporation of SuDS, where appropriate.

Local Plot Access Route

Movement Function

- Internal plot access with residential frontage;
- Relatively low traffic volumes;
- Increased volumes of pedestrians and cyclists;
- Adjacent off street pedestrian provision;
- On street cycle provision; and
- Provision of safe and conveniently located pedestrian / cycle crossings.

Place Function



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- Residential streets with frontage access;
- Increased pedestrian activity; and
- Other natural influences including landscaping and the incorporation of SuDS, where appropriate.

Junctions

6.3.3 It is envisaged at this stage that the on-site junctions will be formed primarily of priority giveway junctions either in a traditional form or built in to shared space within the key local squares within the development.



7 Movement Framework: Public Transport

7.1 Principles and Objectives

7.1.1 Public Transport provision will form an important part of the access strategy for the North Whiteley development as it provides a real alternative to the private car in forming either complete journeys or part of longer journeys, for example providing access to rail stations for onward travel to strategic destinations.

7.2 Public Transport Strategy

- **7.2.1** Proposed improvements relating to the North Whiteley development can be separated into two distinct categories:
 - Enhancements relating to the provision of bus services; and
 - Improvements to bus-related infrastructure such as bus stops and priority measures.
- **7.2.2** Each of these is explored in further detail below.

Bus Service Proposals

- **7.2.3** The bus service proposals for North Whiteley are related to four phases of development (dates indicated are indicative only at this time):
 - Phase 1a (expected 2014): On commencement of development following completion of road access into North Whiteley and to the A3051 south of Curbridge;
 - Phase 1b (expected 2018): Upon occupation of the 1,000th dwelling in North Whiteley;
 - Phase 2 (expected 2020): Upon occupation of the 1,500th dwelling in North Whiteley;
 and
 - Phase 3 (expected 2022): Upon occupation of the 2,500th dwelling in North Whiteley.
- 7.2.4 At each phase, a different level of service will be provided in order to satisfy the growing level of travel demand resulting from the development. Given that Section 3 of this note has identified a very poor level of provision currently in Whiteley, it is assumed that North Whiteley will be served by completely new routes which initially will be based on the proposals for future improvement set out in section 4 and that the existing routes will be withdrawn.
- **7.2.5** Bus service proposals for each stage of the development are detailed below.

Phases 1a and 1b

7.2.6 The first phases of development will see the occupation of dwellings in the south, south west and north-west of the North Whiteley development site. Both Whiteley Way and Bluebell Way will be extended from their current termini into the area, and new connecting routes will link to the A3051 Botley Road at points both below and above the settlement of Curbridge.



- 7.2.7 If the services proposed in Section 4 of this report are not already operating, then they can be provided at this point. The existing Hampshire County Council plans do not include North Whiteley but alterations can be made to the package to incorporate the development and improve the level of service without requiring significant additional resource. For Phases 1a and 1b, there would be no change to the existing vehicles used on the routes if they were already in service, and single deck vehicles would be used on all services at this stage.
- **7.2.8** In order to accommodate North Whiteley and improve the package as a whole the following amendments are proposed for Phase 1a:
 - The pattern of services is amended so that a direct link is restored between Hedge End and Fareham, and that additional services run between Warsash and North Whiteley only;
 - Services to/from Hedge End are diverted between Swanwick and Curbridge to operate via Yew Tree Drive, Whiteley Way and North Whiteley in both directions;
 - Sweethills Crescent is no longer served and Parkway is only served by Hedge End to Fareham services in the peak periods (Warsash services call here at all times);
 - Buses to/from Warsash operate in a one way clockwise loop north of Swanwick station, serving Burridge, North Whiteley local centre, Whiteley Town Centre, Whiteley Parkway and Yew Tree Drive;
 - The service to Segensworth Road and Mill Lane in Titchfield is restored, at the loss of service to Cartwright Drive; and
 - Buses operate either via Segensworth Road or via Brunel Way in the Segensworth industrial area.
- 7.2.9 Frequencies on all services remain as per the Hampshire County Council proposals with the exception that services are extended to Hedge End every 30 minutes. Journey time savings are achieved on many journeys due to the omission of Sweethills Crescent in Whiteley, the availability of a new link for buses into the North Whiteley development and the shortening of routes in Segensworth; Hedge End to Swanwick journey time reduces from 40 minutes to 28 minutes, and journey time between Whiteley Town Centre and Fareham reduces from 34 minutes to 30 minutes.
- **7.2.10** The frequency of services between Whiteley and Swanwick station is unaltered, although the pattern is amended slightly to provide uneven headways on journeys from Swanwick; this is required to accommodate sufficient layover time at Hedge End Superstores and Warsash Clock Tower.
- **7.2.11** Although Sweethills Crescent is no longer directly served by buses as a result of the extended journey times and inconvenience to through journeys, most residents of this area will be within 400 metres of bus stops on Yew Tree Drive or within North Whiteley, from where a pedestrian connection is anticipated.



7.2.12 This package of services provides the North Whiteley area with the following connections in Phase 1a:

Service	Route	Frequency	
		Mon - Sat	Eve & Sun
W1	Fareham – Segensworth – Park Gate – Swanwick – Whiteley – North Whiteley – Curbridge – Botley – Hedge End	30 mins	60 mins
W2	Warsash – Locks Heath – Park Gate – Swanwick – Burridge – North Whiteley – Whiteley	30 mins	No service

- 7.2.13 At this early stage of the development, frequencies of every 30 minutes on both services are anticipated to meet demand and assist in stimulating growth in patronage from the Whiteley area as a whole, as well as improving frequencies and connections to Warsash, Locks Heath, Segensworth and Hedge End.
- 7.2.14 In the evenings and on Sundays, an initial service of every 60 minutes is proposed to operate between Hedge End and Fareham only, with no services to Warsash. These services will operate directly along Southampton Road instead of via Segensworth West, and will not serve Brunel Way.
- 7.2.15 In Phase 1b, which commences from the completion of the 1,000th dwelling, the service between Hedge End and Fareham is amended to operate via Whiteley Way between Whiteley Town Centre and Botley, therefore serving development areas that are commencing in the north and central areas of the site and omitting Curbridge as a result.
- **7.2.16** The routes are shown on Figures 7-1 and 7-2.

Phase 2

- 7.2.17 Phase 2 commences following completion of the 1,500th dwelling, which is shortly after the start of development in the northern sector of North Whiteley. In order to respond to growth in travel demand from the site the routeing and pattern of bus service will be amended to provide a more efficient network, faster journeys between the key points and more frequent services.
- 7.2.18 At this stage it would seem appropriate to introduce a higher quality of vehicle to the services. New, high quality, branded vehicles are now an established part of bus company attempts to drive revenue growth and encourage additional trips on key services. Small, single deck vehicles can be used on services to/from Warsash, but in preparation for Phase 3 it may be necessary to use double decked vehicles for services to Hedge End and Fareham.
- **7.2.19** The key characteristics of the Phase 2 service provision will be as follows:



- The service between Hedge End and Fareham remains along Whiteley Way through North Whiteley and becomes a 'strategic service', with some limited-stop elements and a new, faster route between Whiteley and Segensworth;
- The North Whiteley to Warsash service is significantly amended with a revised route in the Whiteley area and is extended to operate through to the Segensworth industrial area;
- Service frequencies on the key corridor through North Whiteley are increased, with the strategic nature of the service resulting in higher vehicle quality and shorter journey times to Segensworth and Fareham; and
- Frequency of service between Whiteley and Swanwick is unaltered.
- 7.2.20 The new 'strategic service' between Hedge End and Fareham will be increased in frequency during Monday to Saturday daytimes and a higher quality of vehicle introduced with specific route branding to enhance awareness, providing a positive message about the attributes of public transport. Instead of operating via Swanwick station and Park Gate, the route will operate direct between Whiteley Town Centre and Segensworth industrial area via M27 Junction 9, reducing journey times between Whiteley Centre and Fareham to 23 minutes off-peak. In addition, the route will serve the northern sector of North Whiteley instead of Curbridge.
- **7.2.21** Within Segensworth, buses will continue to serve either Segensworth Road or Brunel Way, with preference for Segensworth Road where there is an imbalance of frequency.
- 7.2.22 In addition, two sections of limited-stop operation are proposed to be introduced between Hedge End Superstores and King's Corner the service would only serve Wildern School, Hedge End Barleycorn, Botley School and Botley Square; and between Titchfield and Fareham the service would only call at Fareham College, Fareham railway station and Fareham bus station. The section of route between Hedge End and Botley is already served by Bluestar route 3, and between Titchfield and Fareham there are already up to four buses per hour for much of the route. This will enable faster end-to-end journey times with Hedge End Superstores to Fareham taking just 44 minutes off-peak.
- 7.2.23 The 'local service' will be significantly amended to take account of the introduction of the strategic route and to accommodate the journeys to other areas that can not be made on this service. The section of route between Warsash and Whiteley will remain as Phase 1a, but will then be extended to Segensworth via Park Gate to provide additional services to this area and also establish a new direct link between Warsash, Locks Heath and Segensworth.
- 7.2.24 Any journey between Warsash and Segensworth will operate in both directions along the A3051 between Park Gate and Swanwick, effectively creating a two-way loop around Whiteley and North Whiteley. Two buses per hour will operate towards Warsash in an anti-clockwise direction around Whiteley, North Whiteley and Burridge, with Segensworth-bound services operating in the clockwise direction.
- **7.2.25** The connection between North Whiteley and Swanwick station will remain at four buses per hour, but this will be provided wholly by the local service as the strategic service will operate



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directly via M27 Junction 9. Buses in both directions combine for a broadly even headway between North Whiteley and Swanwick, although signage and information will need to be clear to enable prospective passengers to wait at the correct stop.

7.2.26 This package of services provides the North Whiteley area with the following connections in Phase 2:

Service	Route	Frequency	
		Mon - Sat	Eve & Sun
W1 ('Strategic Service')	Fareham – Segensworth – Whiteley – North Whiteley – Botley – Hedge End	20 mins	60 mins (via Swanwick)
W2 ('Local Service')	Warsash – Locks Heath – Park Gate – Swanwick – Burridge – North Whiteley – Whiteley – Swanwick – Segensworth	30 mins	No service

- 7.2.27 At this stage of the development, the frequency on the new strategic service has been increased to every 20 minutes to cater for the increasing demand of residents in North Whiteley and the other growth expected on services operating to the major employment areas as a result of the improved provision. On the local service, a frequency of every 30 minutes is retained during Monday to Saturday daytimes.
- 7.2.28 In the evenings and on Sundays, the strategic service will operate an amended service which will continue to operate every 60 minutes between Hedge End and Fareham but will operate via Yew Tree Drive, Swanwick station and Park Gate between Whiteley and Segensworth. These services will not serve Brunel Way in the Segensworth industrial area.
- **7.2.29** The routes are shown on Figure 7-3.

Phase 3

- **7.2.30** Commencement of Phase 3 is coincident with the commencement of the 2,500th dwelling in North Whiteley.
- **7.2.31** Relatively few alterations are made to the package as part of Phase 3; the evening and Sunday service is increased to operate every 30 minutes. There are no changes to the local service which remains as per Phase 2 timings and routes.
- **7.2.32** This package of services provides the North Whiteley area with the following strategic connections in Phase 3 and beyond:



Service	Route	Frequency	
		Mon – Sat	Eve & Sun
W1 ('Strategic Service')	Fareham – Segensworth – Whiteley – North Whiteley – Botley – Hedge End	20 mins	30 mins (via Swanwick)
W2 ('Local Service')	Warsash – Locks Heath – Park Gate – Swanwick – Burridge – North Whiteley – Whiteley – Swanwick – Segensworth	30 mins	No service

- **7.2.33** The frequency on the new strategic service remains at every 20 minutes whilst the evening and Sunday service is enhanced to every 30 minutes. On the local service, a frequency of every 30 minutes is retained during Monday to Saturday daytimes.
- 7.2.34 The routes are shown on Figure 7-4.

Infrastructure

- **7.2.35** Whilst high quality bus services are integral to the success of the development, a similar quality of infrastructure provision will be vital in attracting users to the service. The provision of a number of types of infrastructure has been considered:
 - High quality bus stops;
 - Bus priority measures such as bus lanes or bus gates; and
 - Off-site enhancements that are required to improve the flow of buses or enable passengers to access facilities.
- **7.2.36** High quality bus stops are crucial to the success or otherwise of bus services. They act as the gateway to the network and as such are the 'shop window' that is seen by travellers on all modes as they make their journeys.
- **7.2.37** Bus stops situated on the development should be equipped with the following:
 - A high quality, 3 sided shelter;
 - Seating and lighting;
 - Comprehensive timetable information, including network maps and fare details;
 - A flag indicating services calling at the stop;
 - Off-bus ticketing facilities to speed boarding times;
 - Real Time Passenger Information (RTPI) screens indicating departure times of the next bus;



- A raised kerb to allow the less mobile or those with pushchairs to access the bus easily;
- Litter bins in close proximity but not obstructing access to and from the bus;
- Cycle stands to allow cycle-bus interchange; and
- 'Bus stop' cage markings and an associated clearway order to keep bus stops free of other parked vehicles.
- **7.2.38** Provision of these facilities and their prompt maintenance and repair will ensure that the point of access to bus services is kept to a high standard and will act as an attractor to public transport services within the development.
- 7.2.39 It has been estimated that five pairs of bus stops on the development site will allow access to bus services for all residents of North Whiteley within 400 metres for the local and strategic services. Two of these will need to be provided in Phase 1, with a third added to serve the central area of the site in Phase 2 and the remaining two pairs located on the new route in Phase 3 to the Botley Road north of Curbridge.
- 7.2.40 The use of existing bus gates to control access to and from Whiteley has been a contentious issue, with the Yew Tree Drive gate not particularly well used by buses and the high level of congestion at M27 Junction 9. Further use of bus gates and other priority measures would need to be carefully managed in this location.
- **7.2.41** Bus priority measures could be provided as follows:
 - Use of Selective Vehicle Detection (SVD) technology at any traffic signals controlling entrances to the site, which will detect approaching buses and alter signal phases accordingly; and
 - Priority for buses turning at signalised junctions.
- **7.2.42** In terms of off-site enhancements that will provide benefits to the site, it is considered that the following would be potentially desirable:
 - Improvement to bus stops in Whiteley, Solent Business Park, Hedge End, Botley village, by Botley and Swanwick railway stations and in Segensworth, including provision of crossing facilities where necessary;
 - Potential bus priority measures at key locations such as M27 Junction 9, Park Gate,
 Southampton Road/Mill Road and Segensworth Roundabout;
 - Investigation of the possibility of opening the link between the two parts of Segensworth Road to buses, to avoid a dog-leg via Whiteley Lane and Cartwright Drive; and
 - Bus priority measures on the A27 corridor into Fareham.
- **7.2.43** These improvements will allow and enhance access to the bus network in the south Hampshire area, and increase patronage on the strategic service to not only facilitate greater



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public transport use, but potentially reduce the subsidy payable in the early years of operation. It will be important to enhance bus stops to the same standard as those on the site (where practical) to allow a continuous journey experience to be delivered.

Ticketing, Information and Incentives

7.2.44 In addition to securing a high quality bus service operating reliably on dedicated infrastructure, other important areas to consider are those of ticketing, information and incentives to use the buses. Each of these elements plays a pivotal role in creating an attractive package for the potential user, leading to maximised patronage and revenue growth.

Ticketing

- 7.2.45 One of the key themes of the public transport strategy is to ensure that an attractive fares package is in place. The ability to purchase tickets for more than one mode and by a variety of means is crucial to securing additional mode share to/from the development and the Whiteley area generally.
- **7.2.46** Typical barriers to successful integration of fares include:
 - Bus services being operated by different companies, neither of whom accept each other's tickets; and
 - Journeys between bus and rail requiring two separate tickets.
- 7.2.47 South Hampshire, including the Whiteley area, is currently covered by the 'Solent Travelcard' scheme which enables holders to use any bus service in the area bounded by Totton in the west, Havant in the east and Winchester to the north. At £7 per day or £27 per week it is more expensive than any one company's ticket range but allows much greater freedom of travel around the Southampton and Portsmouth areas on any of 9 operators' services. In the future it is intended to extend the validity of the pass to include rail services, but this currently requires further negotiation with operators South West Trains, First Great Western and Southern.
- 7.2.48 Smartcards are increasingly popular as a means of paying for travel. Systems such as Oxford Bus Company's 'the key' smartcards allow unlimited travel in a zone or on a particular route, where passengers place the card on the machine on joining the bus without the need to remove it from their wallet. Ticketing schemes such as this reduce boarding times and help speed up the journey for all users a further example is the provision of off-bus ticket machines at stops.
- 7.2.49 Transport for South Hampshire have recently been awarded £9.3m through the Local Sustainable Transport Fund to develop a fully interoperable ITSO-compliant smartcard product for bus and ferry services in the area. Benefits of the scheme include improved integration between different bus operators, greater customer insight, flexible journey based product development, automatic top ups and the potential ability to extend to other modes such as rail, car clubs and cycle hire. The bus and ferry elements of the smartcard are expected to be operational by the end of 2014.



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7.2.50 Tickets could potentially also be purchased by a wide variety of means – on the buses, at bus stops, at local shops, online, by telephone or by SMS text messaging. Making tickets easily available enhances the accessibility of bus services and in many cases avoids the need for cash on the bus.

Information and Incentives

- **7.2.51** Travel planning is now a well-established method of reducing car use and increasing trip numbers by sustainable modes such as public transport, walking and cycling. As part of the 'smarter choices' agenda, provision of information and incentives to potential users is seen as a major contributor to travel planning measures and the success rate of interventions.
- 7.2.52 Information on public transport services should be readily available to residents and employees in the Whiteley area, be it at the bus stop, by telephone, SMS text messaging or the Internet. Portals are already available for remote access to bus information, for example through http://www.travelinesw.com (timetables) or www.bustimes.hants.gov.uk (which provides RTPI information). Traveline also operate a telephone service.
- 7.2.53 Bus stop information should be well maintained with clear guidance as to who is responsible for what. Any alterations to services should be advertised in advance and correct timetables inserted at stops as close as possible to the change date. This includes alterations to the wider network which are shown on timetable panels in the shelters.
- 7.2.54 One possibility may be to consider the introduction of RTPI devices in individual homes and workplaces. This is a recent innovation whereby a small screen, similar in size to a thermostat, shows real time bus information where people really need it, and costs per dwelling for installation and maintenance are relatively low.
- 7.2.55 The provision of tailored information and incentives through residential travel plans and personalised travel planning schemes is now being seen as a mainstream method of attracting additional patronage to public transport networks around the UK. Research has indicated that a lack of understanding of the travel options available acts as a significant barrier to travel by more sustainable modes, and in recent years a number of high profile personalised travel planning projects have been undertaken to provide residents with targeted, specific information about the public transport services in their vicinity. Results have been encouraging in areas ranging from cities such as London, Peterborough and Nottingham, to smaller sized towns such as Bracknell and rural areas such as the Truro area.
- **7.2.56** As part of the process travel packs can be provided to households and workplaces from first occupation, and can include information such as:
 - Timetables and network maps for bus services;
 - Summarised rail timetables from the nearest station (in this case Swanwick);
 - Motivational messages to encourage use of sustainable transport modes;
 - Stickers, key rings, air fresheners etc with sustainable travel messages;



- Walking and cycling maps of the development and Whiteley as a whole;
- Discount vouchers for local facilities;
- Details of bus services and access points;
- Passes for free travel; and
- Travel diaries (if appropriate) to record before and after travel habits and measure the success of the project.
- 7.2.57 The project could be monitored to test the effectiveness of such methods in this location and with the mix of uses. A travel plan co-ordinator role can be established to undertake this monitoring and to continue engagement with employers and residents in the years following development completion, maintaining initial success and building long-term sustainable travel patterns within and around the development.



8 Movement Framework: Pedestrian and Cycle Provision

8.1 Introduction

- **8.1.1** Walking and cycling represent the most sustainable means of travel. The potential of these modes as alternatives to car travel is acknowledged and advocated in national and local planning policy alongside best practice guidance.
- **8.1.2** The availability of walking and cycling facilities and journey distance has a critical role in the attractiveness of these modes.
- **8.1.3** The importance of walking and cycling in contributing towards sustainable travel patterns is emphasised not only as modes in their own right but also the considerable role they play in forming parts of longer journeys by public transport. These themes are reiterated within local planning policy.
- **8.1.4** Therefore a comprehensive pedestrian and cycle strategy is being proposed for the North Whiteley development to encourage modal shift away for private car travel towards pedestrian, cycle and public transport movement.

8.2 Principles and Objectives

8.2.1 The North Whiteley development provides the opportunity to bring significant improvements to the surrounding pedestrian and cycle network for both the local community and future residents of the development. The overarching objectives of the proposed pedestrian and cycle strategy are as follows:

Off Site

- Connect the North Whiteley development with key strategic movement corridors to accommodate safe and convenient pedestrian and cycle movement to Whiteley and beyond.
- Improve connectivity and safety for pedestrians and cyclists between the site and local amenities and public transport infrastructure.
- Improve access to the existing footpath network.

On Site

- Provide a network of safe, convenient and attractive routes within the development area, connecting off-site provision with internal uses and facilities based on a simple hierarchy.
- Improve the local network of recreational routes by making the site more accessible to the public and providing new permitted footpaths.



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8.3 Pedestrian and Cycle Strategy

8.3.1 The likely pedestrian and cycle strategy is illustrated within **Figure 8-1** and incorporates the following elements:

Off Site

- Continuous segregated off road foot / cycleway between Botley Rail Station in the north and Segensworth Roundabout in the south connecting with HCCs Segensworth Action Plan proposals.
- Strategic signage providing directional information.

On Site

- Segregated or shared pedestrian and cycle routes adjacent to the vehicle routes to allow separation of vulnerable users from vehicles.
- A network of pathways within the development plots to facilitate movement between the main route network and destinations across the development.
- A network of permitted recreation routes taking the form of foot / cycle paths connecting with existing routes in the area.
- Local signage.



9 Travel Planning / Smarter Choices Strategy

- 9.1.1 A Travel Plan is a package of measures aimed at providing a choice of modes and promoting walking, cycling and public transport and reducing social exclusion. Reducing reliance on the car also has global, local and individual benefits related to reduced pollution and congestion. Reduction of particulates in the local air quality has a positive impact on health, particularly respiratory conditions, whilst reduced CO2 emissions in the atmosphere reduce global warming which could have wide-reaching impacts.
- **9.1.2** The measures within Travel Plans can also improve general health and wellbeing of staff and visitors by promoting more active means of travel into daily lifestyles. A Travel Plan allows an organisation to make positive social responsibility statements which may motivate staff and visitors alike.
- **9.1.3** A wider effect of the Travel Plan can be the reduced noise associated with reduction in traffic. Traffic noise can affect local residents and has been proven to contribute towards stress and concentration issues, so any audible reduction in traffic levels can have secondary beneficial impacts on the surrounding population.
- **9.1.4** In support of the proposed North Whiteley development, a Travel Plan will be produced in close consultation with HCC and the HA. The key aim of the Travel Plan will be to:
 - "Reduce single occupancy car trips associated with the development by promoting more sustainable alternatives to the car including car sharing, public transport and walking and cycling."
- **9.1.5** This objective will be achieved through a combination of measures aimed at discouraging single occupancy car use and facilitating the use of alternative modes of transport.
- 9.1.6 As with all other Travel Plan's, the Travel Plan for North Whiteley will need to be site specific with the choice of measures partly determined by the existing opportunities and constraints offered by the site.
- 9.1.7 This Travel Plan will include the delivery of 'soft measures' such as marketing and awareness arising as a result of the Travel Plan package to further encourage travel by sustainable modes. The Travel Plan will also need to acknowledge the important role of hard (physical) measures such as site design, infrastructure provision and enhanced bus services to be delivered as part of the site proposals.
- 9.1.8 The specified measures will be tailored to provide a holistic package in which individual measures are integrated into the design, marketing and occupation of the site rather than being 'retrofitted' once the development is established. The measures will therefore aim to achieve more sustainable travel patterns from the outset in order to take advantage of the fact that travel behaviour change is more likely to come about when other lifestyle changes such as moving house are occurring.
- **9.1.9** The main objectives of the Travel Plan are to:



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- Reduce the need for unnecessary travel to and from the development and assist those who need to travel to do so by sustainable modes.
- Reduce the traffic generated by the development to a lower level of car trips than would be predicted for the site without the implementation of the travel plan in order to minimize the traffic impact on the local highway network.
- Encourage those travelling to and from the development and wider Whiteley area to use public transport, cycle or walk in a safe and secure manner.
- Promote healthy lifestyles and sustainable, vibrant local communities by extending the benefits of the Travel Plan through the local area where possible.
- 9.1.10 The Smarter Choices Strategy approach is in line with current policy which promotes a more sustainable approach to travel rather than the 'predict and provide' approach to highway construction adopted in the 1980s and early 1990s. The Highways Agency (HA) are in full support of this more sustainable approach, indeed, the HA has a key role within the planning process to ensure large developments do all that they can to curtail the amount of vehicle traffic generated by development through the submission and implementation of travel plans and other softer interventions to reduce traffic impact.

Developing the Strategy

- 9.1.11 The methodology for developing the strategy can be divided into 5 broad stages, designed to determine the likely trips generated from the development, determine how the existing network operates, introduce measures to ensure the level of traffic generated does not have a detrimental impact on the existing network, monitor the effectiveness of the measures and intervene if necessary. As such, the strategy is divided into the following sections:
 - Modelling;
 - Targets;
 - Smarter Choices Strategy;
 - Monitoring; and
 - Mitigation.

Modelling

9.1.12 Trip generation from the development, together with existing trip levels are currently being evaluated in traditional models to determine the current operation in the surrounding area and the impact that the development would have without intervention. The results of this modelling work will be set out within the Transport Assessment, in support of the future planning application.



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Targets

- **9.1.13** The modelling will provide an indication of the operation on the strategic road network in future years and as such, the acceptable level of traffic which can be accommodated.
- **9.1.14** The modal split targets will be set to correspond with the maximum level of traffic which can be accommodated by the strategic road network, as determined by the modelling assessment.

The Smarter Choices Strategy

9.1.15 The smarter Choices Strategy will be developed based on the targets and on the level of traffic reduction necessary to meet those targets.

Monitoring

- 9.1.16 Alongside the Smarter Choices Strategy will be a detailed monitoring strategy to measure the impacts of the interventions and to ensure the targets for site traffic generation are not exceeded.
- 9.1.17 ITS solutions, including monitoring equipment such as traffic loops, will be laid at all entrances to the site and the data received from this equipment will be supplemented with more traditional stated and revealed preference surveys arranged by the travel plan coordinator. It would be expected that the surveys would take place annually for five years after the completion of the development and an Annual Progress Report (APR) submitted to the Council and the Highways Agency.

Mitigation

9.1.18 From the outset a mitigation strategy must also be in place which will set out which further measures will be implemented should the targets not be met. In the first instance this is likely to be an agreement to implement additional measures over a wider area, or increasing the magnitude of the implemented measures (for example increasing public transport frequencies) but should this strategy still not be successful in meeting the agreed targets more draconian measures may have to be taken, such as setting traffic signals on new developments to only allow a certain level of traffic to enter the network in the peak hours.

The Smarter Choices Strategy

9.1.19 Once the targets are set, the Smarter Choices Strategy can be developed accordingly. It is proposed that The Strategy will consist of a mix of on-site and off-site measures and in turn these will consist of more traditional measures alongside some new and innovative interventions.

On-site interventions

9.1.20 A number of site-wide interventions will be introduced to benefit all employees and residents of the site such as travel information points, public transport provision, transport forums and car share clubs. Such interventions become more effective when a critical mass is reached,



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- so are more effective over a wider area than for individual employers. Of course, the site design will also include a network of walk and cycle links to ensure these modes are given as much priority as cars within the site.
- 9.1.21 The first stage of the strategy would be the implementation of traditional travel plans for the development site, including workplace and residential travel plans. There will be an overall framework for the whole site, setting out site-wide objectives and all individual travel plans will sit within this framework.
- 9.1.22 All employers on the site will we required, as part of their lease agreement, to implement workplace travel plans which will fit within an overall travel plan framework. This will include monitoring and mitigation strategies for all businesses, should their individual targets not be achieved.
- 9.1.23 Likewise, the residential element of the site will have its own travel plan with its own measures which will consist of the provision of information packs to all dwellings, together with introductory or subsidised options for the car club or for public transport, to compliment the site-wide interventions being introduced and to give the new residents the opportunity to try out the various travel options available to them.
- 9.1.24 Whilst travel plans have proven to be very successful, it is noted that the provision of generic travel information alone does necessarily mean that people will use sustainable transport, given that much of the information is superfluous to people's individual needs. Personalised Travel Planning (or PTP) provides tailor-made information to people in order that they receive only the information they wanted and that is relevant to their particular travel patterns.
- 9.1.25 As such, personalised, targeted travel advice for residents (PTP) will also be offered and it is envisaged that this will take place during the purchasing process, or immediately after the residents have moved into their new home. This kind of intervention has been shown to reduce single occupancy car trips by 10% on average (akin to the peak hour traffic reduction noticed in 'school holidays') and is an extremely cost effective way of reducing traffic levels; especially when compared with infrastructure costs of trying to build our way out of congestion.
- 9.1.26 Other incentives may also be offered as part of the residential travel plan, such as cycling or walking equipment, but this would be targeted dependant on the outcome of the PTP discussions, to ensure that best and most effective use of the incentives on offer is achieved.

Area-wide Interventions

- **9.1.27** The HA have adopted a 'Corridor Travel Plan' approach to influencing Travel Behaviour. Rather than targeting an individual business or individual business park/industrial estate, the 'corridor' approach takes a broader geographical view in order to work with as many organisations and developments as possible within a certain area.
- **9.1.28** It is thought that this wider approach could consist, in part of more widespread PTP programmes introduced in residential areas surrounding the proposed site. PTP



- programmes are more effective in removing local 'short journey' car trips from the highway network, by promoting change to walk, cycle or public transport.
- 9.1.29 In the same way PTP could be used at local businesses. Travel advisors could undertake workshops for all staff at various significant employers in the locality to provide personalised travel advice and so remove some existing single occupancy car trips from the highway network.
- **9.1.30** The employers and areas initially identified as having potential to benefit from PTP programmes are as follows:
 - Solent Business Park;
 - Solent 2;
 - Whiteley Town Centre;
 - Meadowside Leisure Centre;
 - Segensworth West:
 - Park Gate:
 - Swanwick;
 - Locks Heath; and
 - Warsash.
- 9.1.31 However, despite the success of traditional PTP programmes, it is felt that the doorstep interview techniques alone could still potentially miss a proportion of the community, as it can only target the actual individual that opens the door, and if that person isn't engaged, the whole household is potentially lost to the programme, even though some of the household may have had interest in trying alternative travel options.
- 9.1.32 Therefore, a more innovative approach is proposed alongside the traditional PTP, to use other emerging methods to engage with other parts of the community to influence their travel behaviour. This proposed intervention involves engaging with people within their social and community groups and also on-line within their internet communities.
- 9.1.33 These methods are based on Behavioural Change research into what influences travel behaviour and have been used in other sectors such as the health sector. Research indicates that people are more likely to engage with their peers, friends and relatives and are more likely to change their habits, or try different ways of travelling if their peers, friends and relatives are doing so, (this is known as the 'authentic voice'), rather than if they are 'told' to do so by the government, local authority etc (the 'authority' voice). Techniques are being trialled which use Social Media and Community Participation to spread 'word-of-mouth' campaigns.



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- 9.1.34 Social Media communicates with online communities. Initial research is undertaken to build a comprehensive map of the online target audience, to find out where they are spending time online and how influential they are, and then time is spent documenting and understanding what they are talking about and what they are interested in. In this way a campaign can be introduced that will captivate the target audience. Likewise, community participation programmes adopt similar techniques of engaging with people in their existing communities, but this includes 'offline' community groups such as golf clubs, mother and toddler groups, libraries etc. These new community based techniques would create a 'buzz' about particular topics in order to generate conversation between peer groups in the hope that more sustainable transport use will be encouraged by word of mouth.
- 9.1.35 It is proposed that key influencers within the community will be identified in the first instance as these are the people most likely to have the greatest reach and influence in their communities and are the people who others listen to. We will engage with these people and through this encourage people to talk to each other about their travel habits, investigate options available to them and try different modes of travel for different trips to benefit their health, to save money, or just for enjoyment. These techniques build on the more traditional marketing campaigns for information provision, by still providing the information but via a different source, i.e. by trusted individuals within the community.
- 9.1.36 The potential for these sorts of campaigns is enormous, as they enable contact with a wide target audience. Furthermore, although these types of campaigns take longer to embed into a community, by targeting and challenging social norms, any change in behaviour that is achieved is generally long-lasting.

Travel Plan Coordinator

- 9.1.37 A Travel Plan Coordinator (TPC) will be employed to oversee the various elements of the Smarter Choices Strategy. That person will be responsible for organising the PTP programme, liaising with employers, providing travel information when required, arranging meetings, introducing new measures where necessary and monitoring the travel plans to ensure targets are being met. The TPC will also be responsible for maintaining momentum in the Social Media and Community Participation campaigns.
- **9.1.38** As part of the role the TPC would also liaise with existing groups such as the Whiteley Action Group (who look at ways of saving energy at home to help climate change) to find connections and joint aims and objectives on which they could join forces.



- 10.1.1 This report has set out a comprehensive access and movement strategy in support of the proposed urban extension to the north of Whiteley, South Hampshire. The strategy has drawn upon both national and local planning policy, as well as considering the development proposals in the context of the baseline conditions including a description of local facilities, walk and cycle routes in the area, public transport and the local highway network.
- **10.1.2** The following key deliverables were identified as required to support the development:
 - Improved Road Infrastructure;
 - Local traffic management and road safety improvements;
 - High quality pedestrian and cycle access;
 - Improved public transport accessibility and service provision;
 - Improved integration for the existing community at Whiteley with the surrounding communities and transport links serving them; and
 - Travel Planning / Smarter Choices Commitment.
- **10.1.3** The resulting access and movement strategy to achieve these objectives will be based on the following:
 - Development Framework A vision and objectives for the development in terms of the transport and accessibility elements of masterplanning have been considered that ensure:
 - The masterplan will be permeable and allow flexible multi-modal movement;
 - Routes will designed to prioritise sustainable transport users over car users;
 - A hierarchy of streets and public spaces will be developed based on different user functions;
 - Streets will be subject to a 20mph design speed with the exception of Whiteley Main Street; and
 - Public transport corridors will be identified and designed accordingly with all residential areas within 400m of a bus stop.
 - Vehicle Access and Highways The strategy for accommodating vehicular movements in relation to the North Whiteley development considered the following elements:
 - Vehicular access into the development including providing a connection between the existing Whiteley settlement and Botley Road;



- Infrastructure improvements to the local highway network including local junction and link improvements;
- Demand management and ITS implementation to ensure that the impact of the development and opening of Whiteley Main Street is not detrimental to the local environment; and
- Internal circulation within the development including the design principles behind the proposed street hierarchy.
- Public Transport A comprehensive phased public transport strategy has been developed to serve the development and local community. Final phase service proposals include the following elements:
 - A local bus route serving Warsash, Locks Heath, Park Gate, Swanwick, Burridge, the development, Whiteley and Segensworth;
 - A strategic bus route serving Fareham, Segensworth, Whiteley, the development, Botley and Hedge End;
 - Infrastructure proposals or improvements are suggested including bus stops, real time information systems and dedicated priority measures; and
 - Proposals for ticketing, information and incentives are also discussed and would form a part of the smarter choices strategy for the site.
- Pedestrian and Cycle Provision A comprehensive pedestrian and cycle strategy is proposed for North Whiteley as these modes represent the most sustainable means of travelling. The strategy incorporates the following elements:
 - A continuous, segregated, off road foot / cycleway between Botley Rail Station and Segensworth roundabout;
 - Off-site strategic directional signage;
 - On-site pedestrian / cycle routes adjacent to vehicle routes;
 - A network of pathways to facilitate movement between the main routes and destinations across the development;
 - A network of permitted recreation routes across the development; and
 - On-site local signage.
- Travel Planning / Smarter Choices A travel planning and smarter choices strategy for the site and immediate local area has been prepared that includes the following elements:



- A travel plan will be prepared for the residential, education and commercial elements of the North Whiteley development that will include a comprehensive package of measures;
- Area wide personalised travel planning would be provided to local residents and businesses in the vicinity of the North Whiteley development to improve the sustainability of the whole community and encourage a shift to sustainable modes of travel; and
- Provision of a Travel Plan Coordinator and commitment to a monitoring and management arrangement.
- **10.1.4** The final package of mitigation measures and implementation plan will be agreed with the Authorities through the Transport Assessment process.



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11 Next Steps...

- 11.1.1 The access and movement strategy set out in this document provides a basis for undertaking the Transport Assessment, which will form part of the planning application for the North Whiteley development.
- **11.1.2** The Transport Assessment will allow the proposed design concepts and principles to be developed in detail prior to detailed testing and refinement, working in conjunction with the project team, the local highway authority and the Highways Agency.

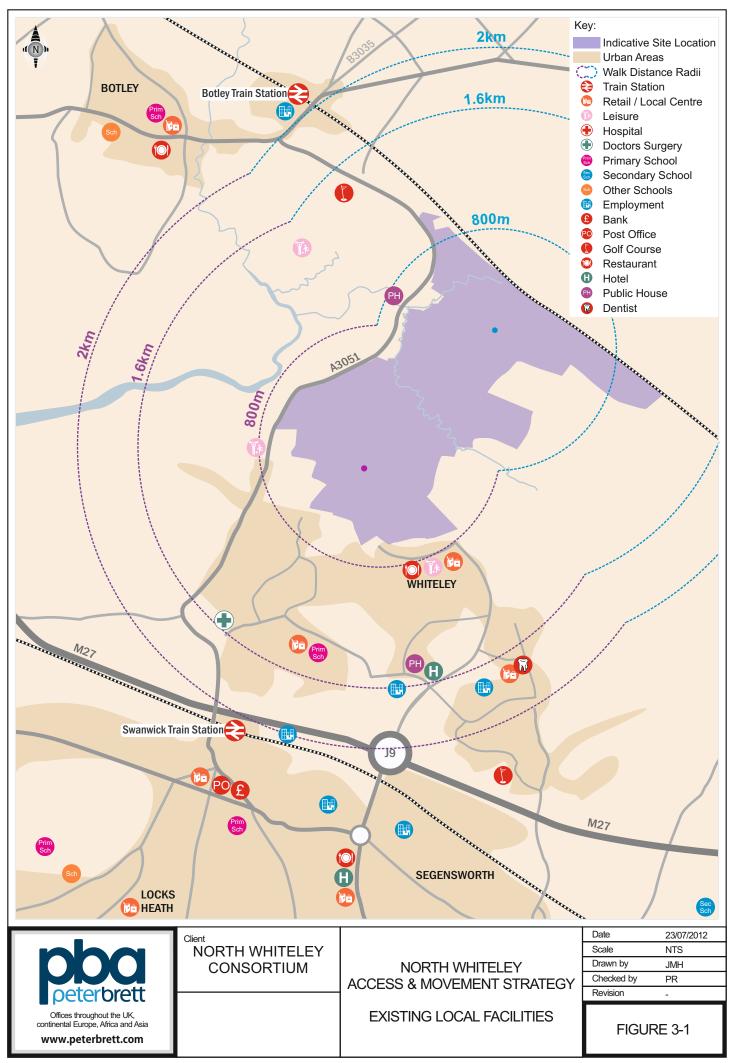


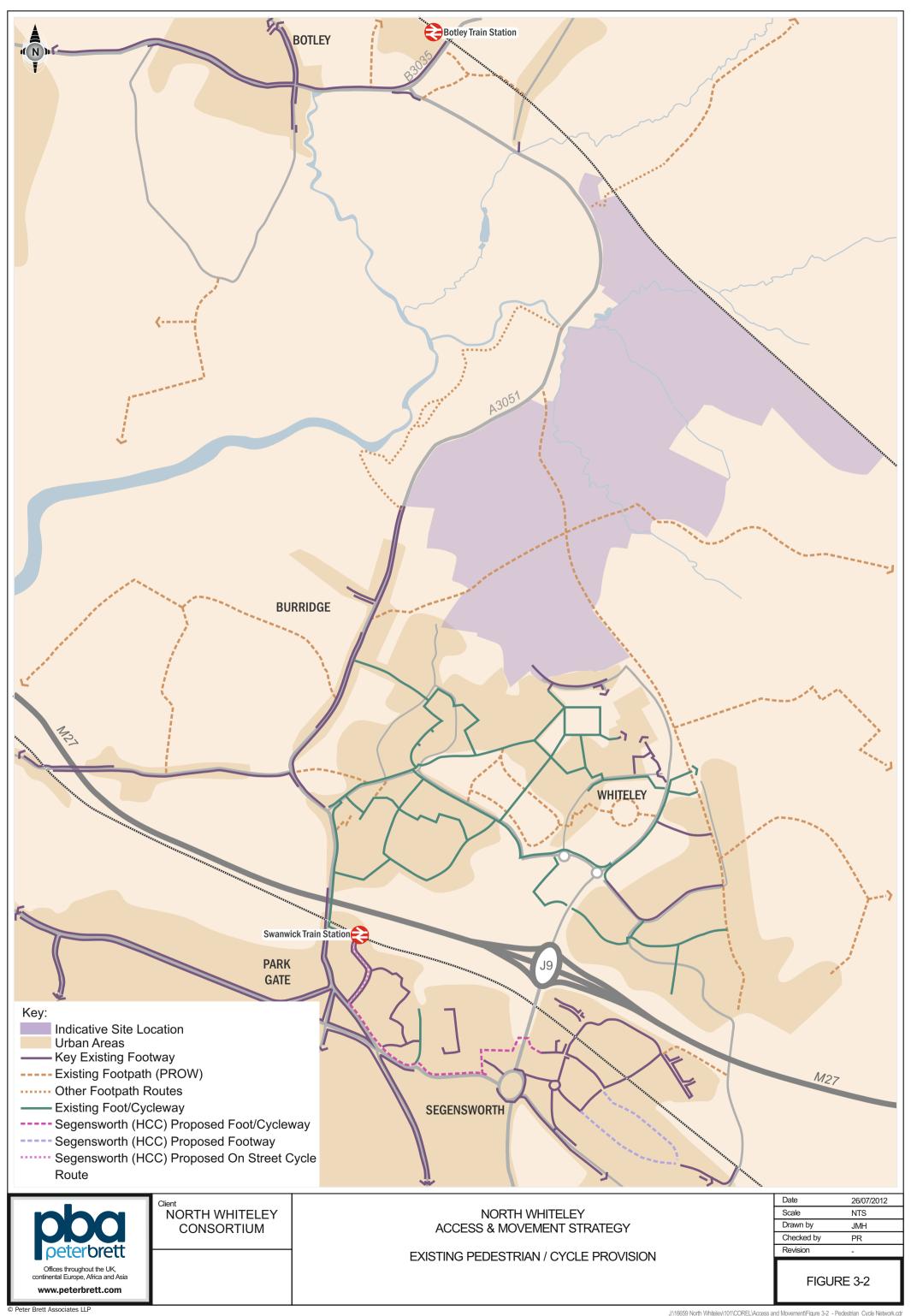
Access and Movement Strategy

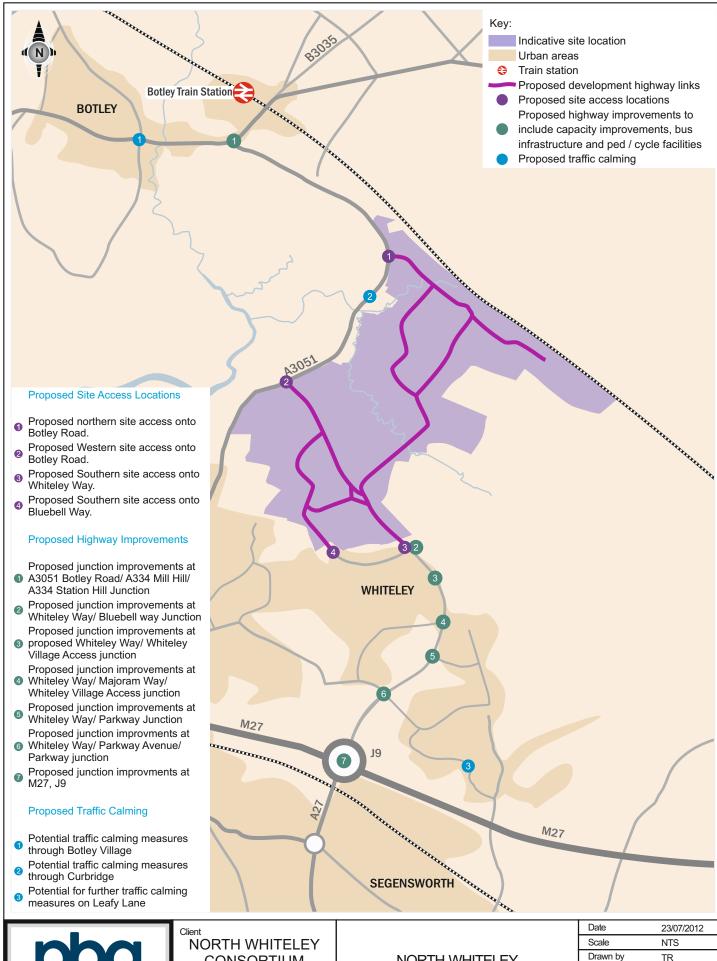
Figures













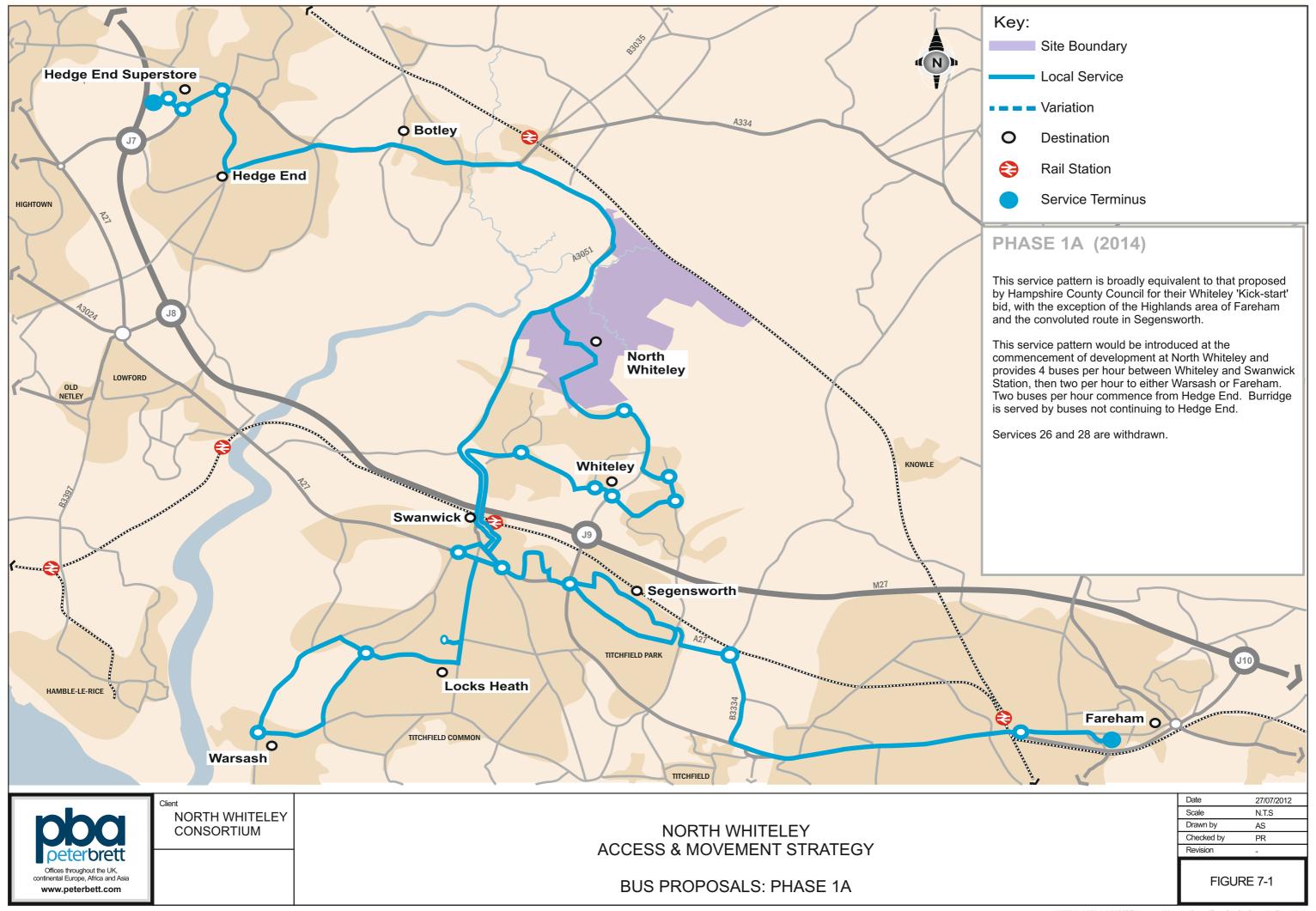
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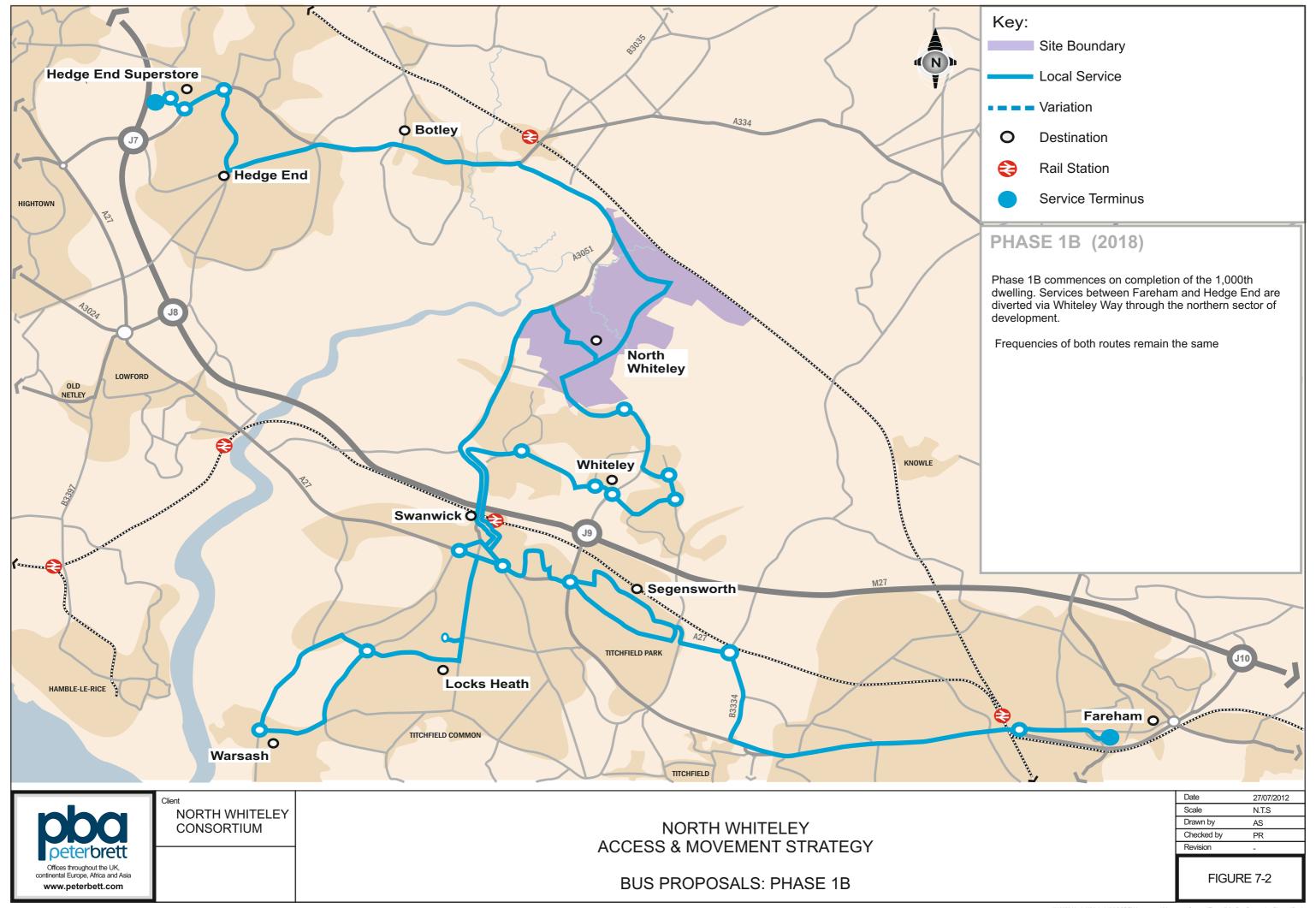
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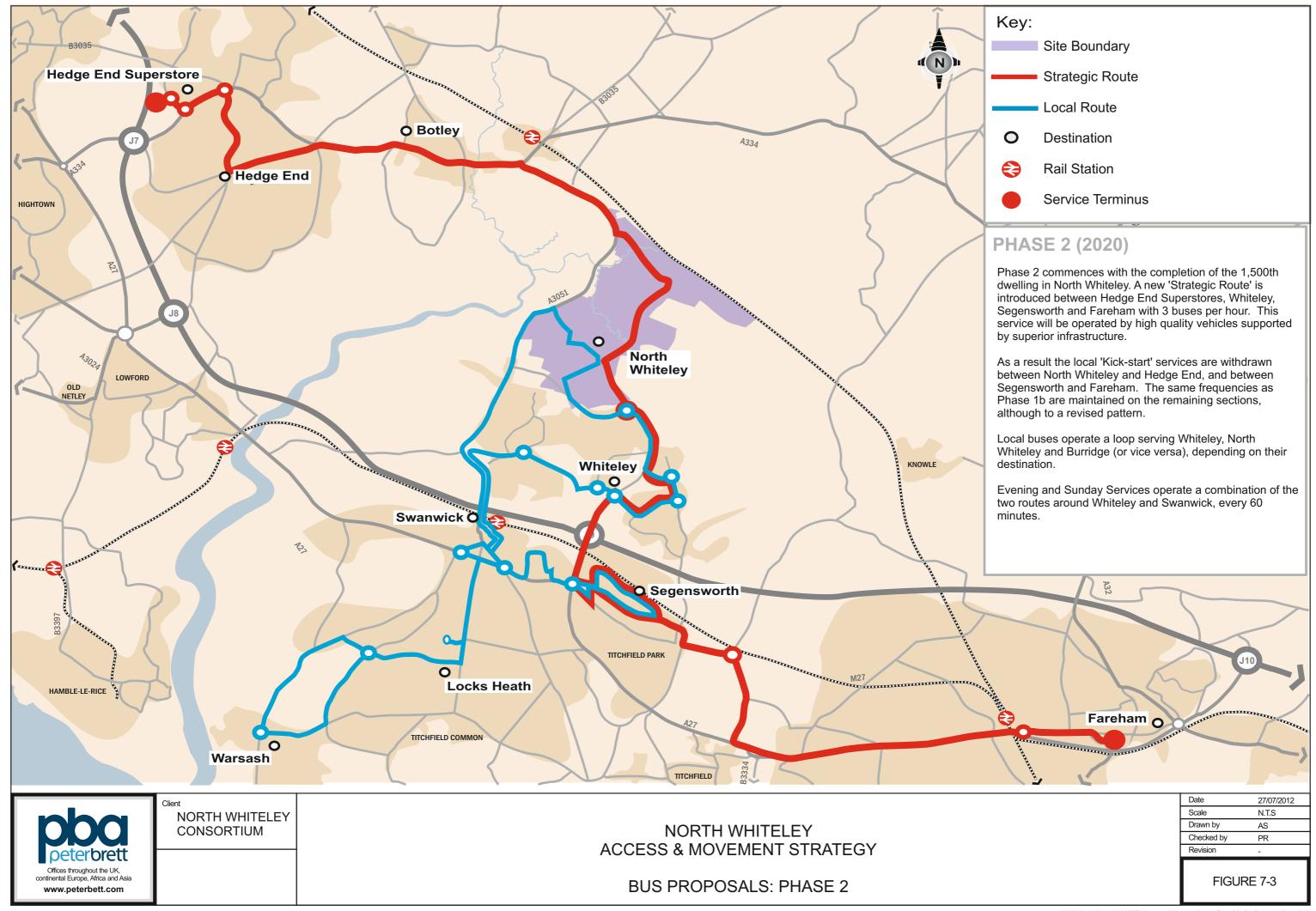
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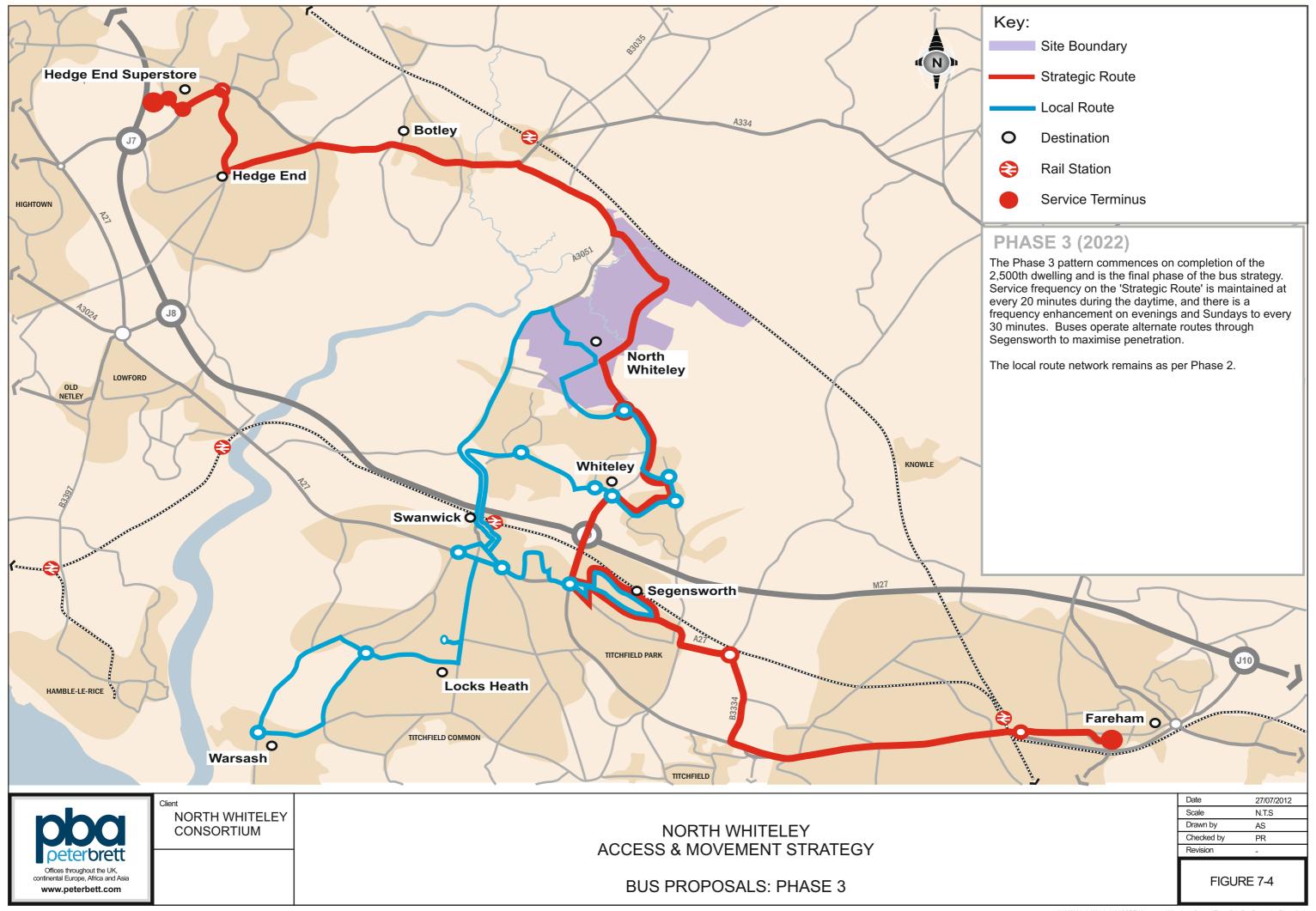
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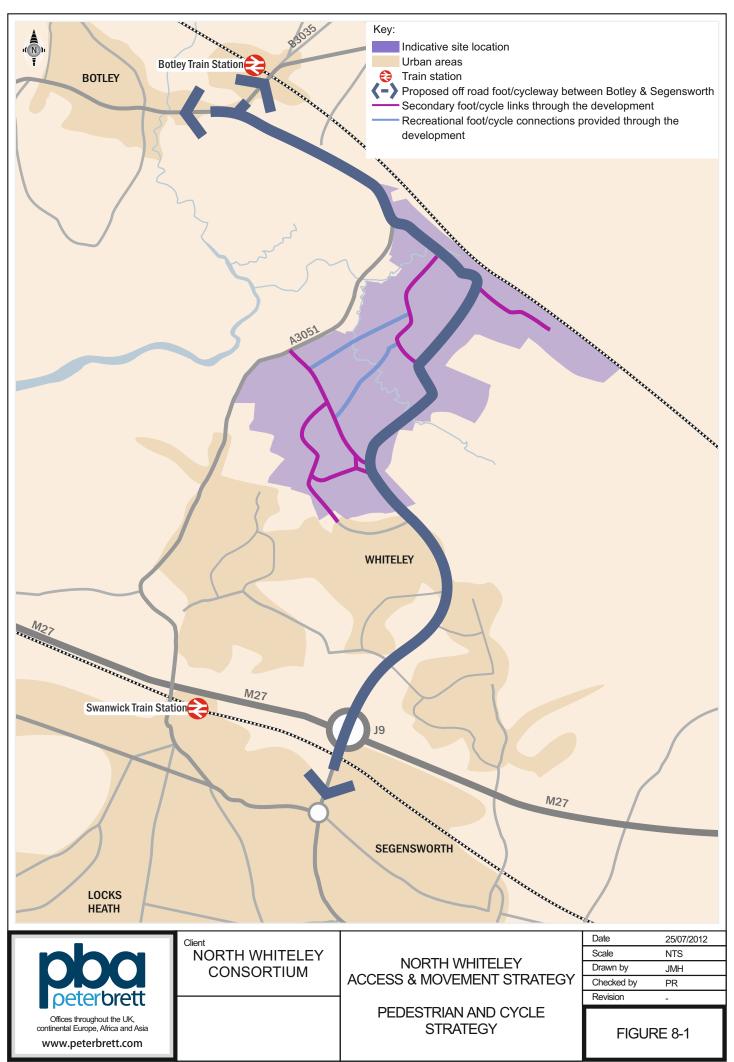
FIGURE 6-1









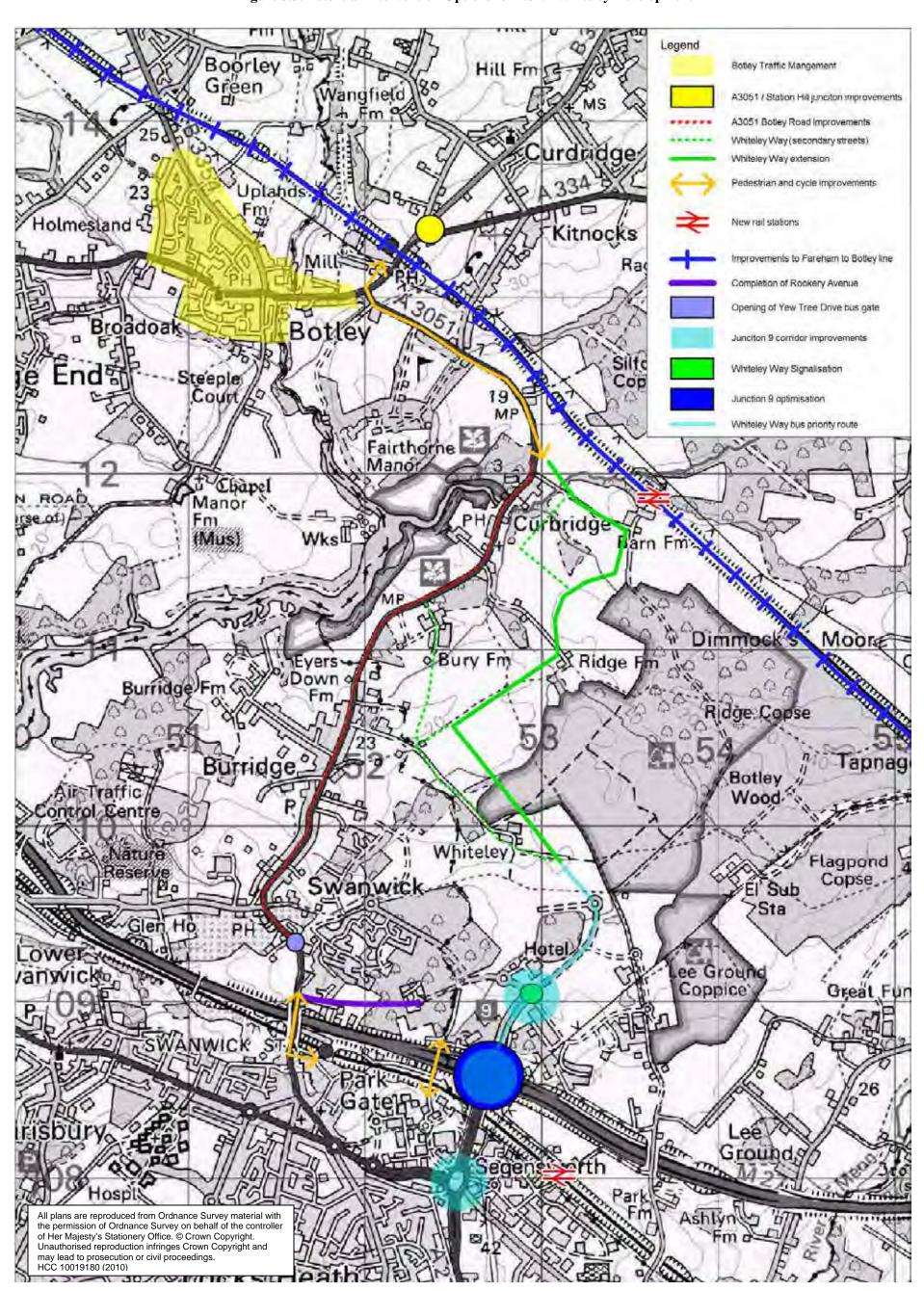


Appendix A – Figure 3.3, M27 Parallel Study





Figure 3.3: Potential Intervention Options for North Whiteley Development



Appendix B - Table 4.2, M27 Parallel Study







Table 4.2: North Whiteley Matrix

				North Whitele	,					
	INTERVENTIONS	TRANSPORT POLICY COMPATIBILITY	TRIP DISTRIBUTION / TRAFFIC IMPACT / CAPACITY / CONSTRAINTS	ENGINEERING FEASIBILITY /	LAND OWNERSHIP	LAND USE PLANNING ISSUES	ENVIRONMENTAL ISSUES	COMPATIBILITY WITH HA OBJECTIVES	ENGINEERING COST	SUMMARY
Α	INDIVIDUAL INTERVENTIONS WITHIN EXISTING HIGHWAY									
	Highway Improvements									
1	Opening Yew Tree Drive for all traffic (review following trial opening)				N/A					?Only as part of a package – more work required
	Highway / Public Transport Improvements									
2	Junction 9 Corridor (Whiteley Way / Park Gate Interchange / Segensworth Roundabout) Highway improvement HOV lane Bus priority measures Signalise Whiteley Way roundabout			In the process of being assessed by PBA						
3	A3051 Botley Road Improvement (between North Whiteley and A334 Station Hill)							N/A		✓
4	A3051 Botley Road / A334 Station Hill junction improvements							N/A		✓
5	Botley Traffic Management proposals							N/A		✓
	Walk / Cycle Improvements									
6	Cycle improvements on A3051 (North Whiteley to Botley Station)							N/A		In conjunction with 3 above
	Rail Improvements									
7	Improvements to Fareham to Eastleigh Line				N/A			N/A		Beneficial but part of longer term strategy beyond LDF Plan period
В	INDIVIDUAL INTERVENTIONS OUTSIDE EXISTING HIGHWAY							•		
	Highway Improvements									
8	Completion of Whiteley Way and feeder streets				N/A					Local access route
9	Completion of Rookery Avenue									Part of package – subject to further investigation
	Public Transport Improvements									
10	Whiteley Way Extension – bus priority route									✓
	Walk / Cycle Improvements									
11a	Option 1: Pedestrian / cycle link underneath M27 from Park Gate / Segensworth to Whiteley									Existing tunnel – opportunity arising from redevelopment
11b	Option 2: Pedestrian / cycle link beside Whiteley Way / Park Gate interchange / A27 Southampton Road									In conjunction with 2



	INTERVENTIONS	TRANSPORT POLICY COMPATIBILITY	TRIP DISTRIBUTION / TRAFFIC IMPACT / CAPACITY / CONSTRAINTS	ENGINEERING FEASIBILITY /	LAND OWNERSHIP	LAND USE PLANNING ISSUES	ENVIRONMENTAL ISSUES	COMPATIBILITY WITH HA OBJECTIVES	ENGINEERING COST	SUMMARY
	Rail Improvements									
12	New rail station at Whiteley				N/A					×

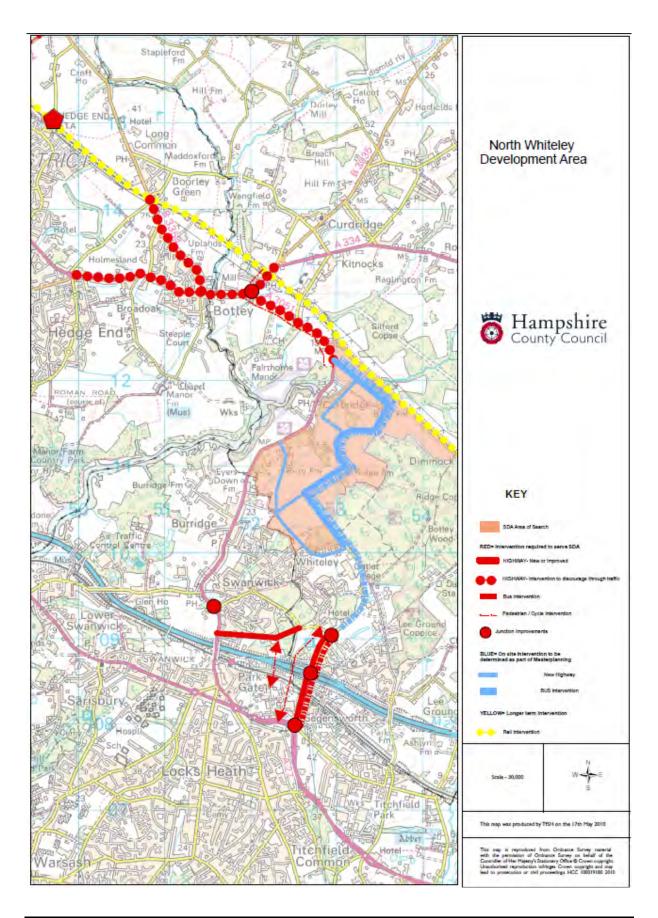
Appendix C - Figure 4.2, M27 Parallel Study







Figure 4.2: North Whiteley Preferred Access Strategy

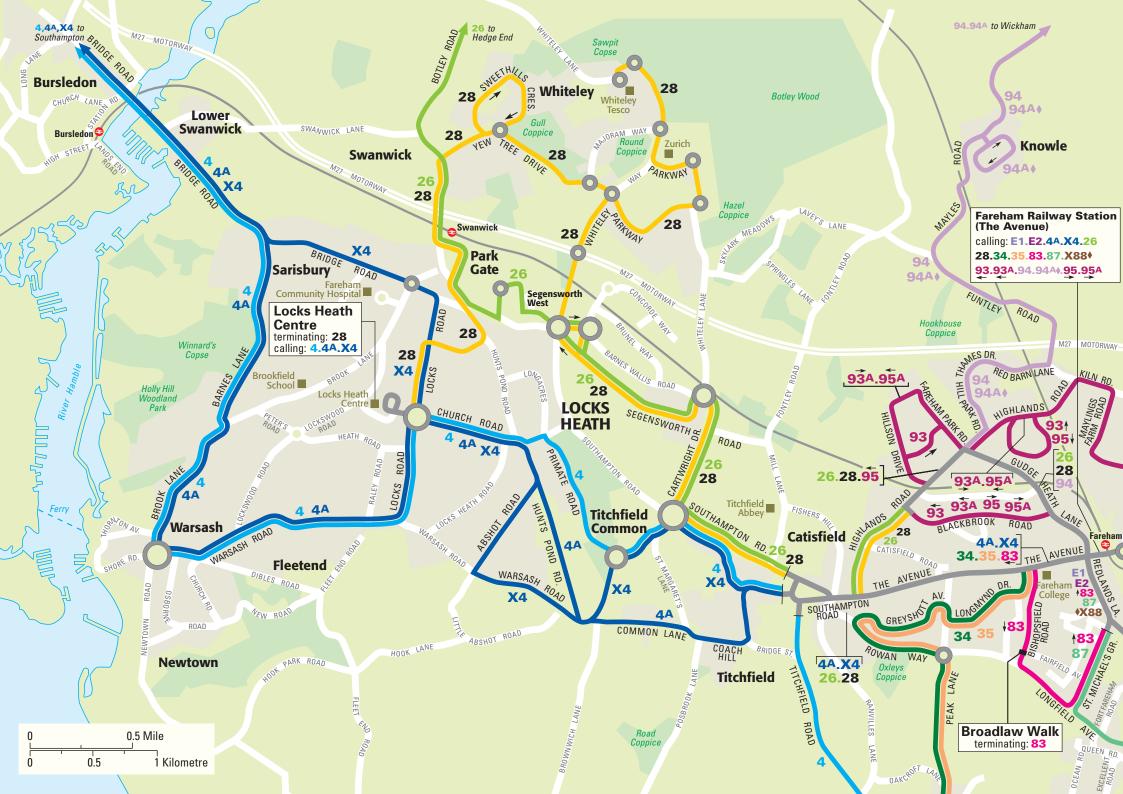


Access and Movement Strategy

Appendix D – Existing Bus Routes





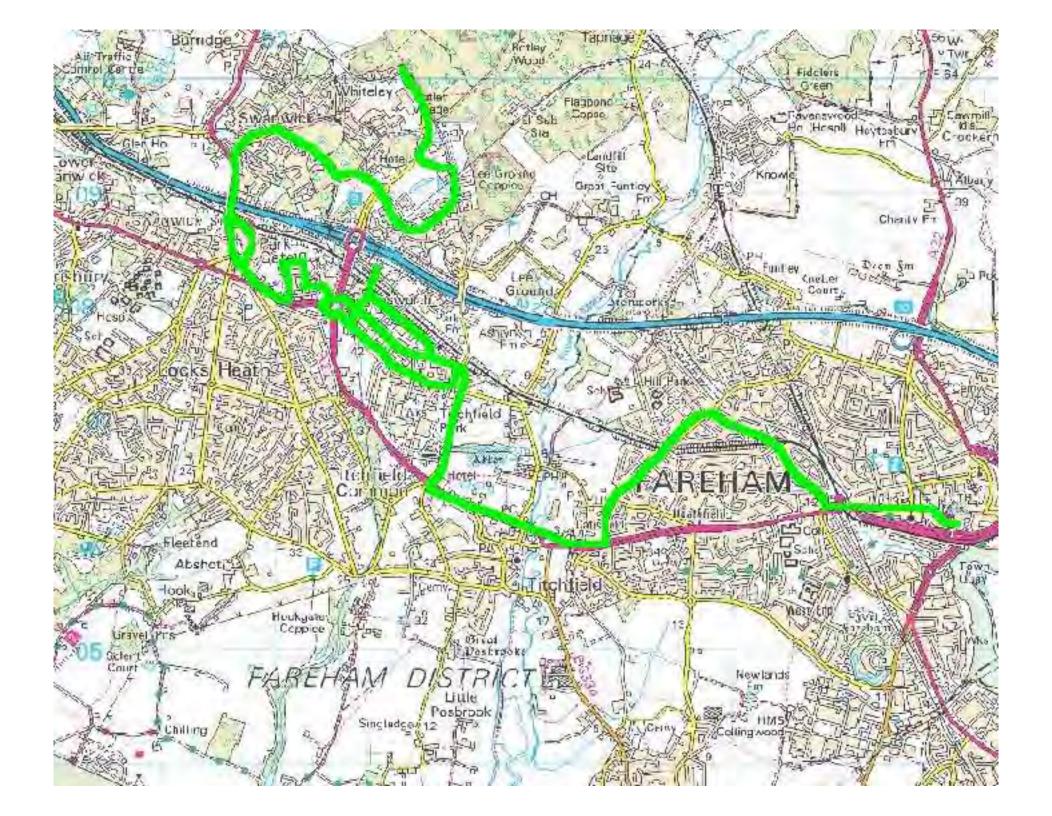




Appendix E – Current Hampshire County Council Public Transport Proposals

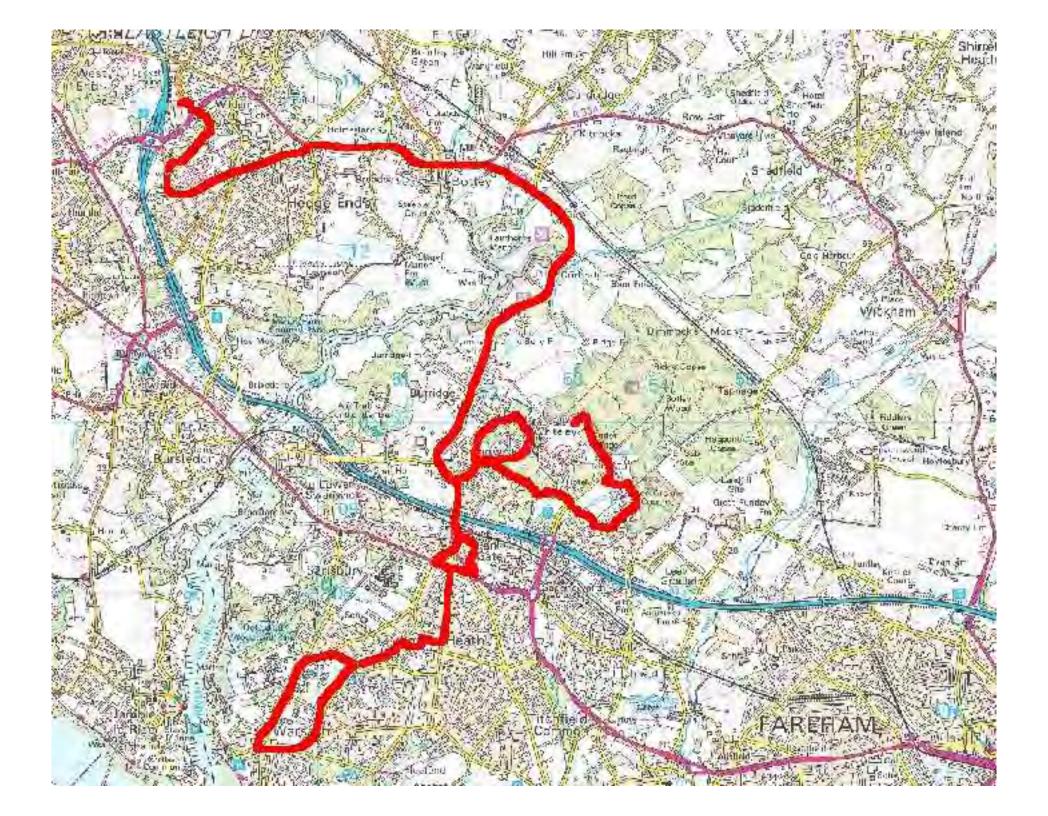






Fareham Bus Stn	0714	0744	0814	0844	0918	0951	1021	Then	51	21	Until	1521	1601	1636	1706	1736	1806	1936
Highlands Rd	0722	0752	0822	0852	0926	-	-		-	-		-	-	-	-	-	-	-
Titchfield A27	0726	0756	0826	0856	0930	1001	1031	at	01	31		1531	1611	1646	1716	1746	1816	1946
Segensworth	0730	0800	0830	0900	0934	1005	1035		05	35		1535	1615	1650	1720	1750	1820	1950
Segensworth West	0734	0804	0834	0904	0938	1009	1039		09	39		1539	1619	1654	1724	1754	1824	1954
Park Gate	0737	0807	0837	0907	0941	1012	1042		12	42		1542	1622	1657	1727	1757	1827	1957
eastbound trains arrive	0724	0753	0828	0853	0928	1009	1028		09	28		1528	1609	1653	1709	1753	1809	1953
westbound trains arrive	0724	0753	0831	0900	0906	1006	1006		06	06		1506	1606	1645	1706	1742	1806	1946
Swanwick, Railway Station	0739	0809	0839	0909	0943	1014	1044		14	44		1544	1624	1659	1729	1759	1829	1959
eastbound trains depart	0744	0818	0853	0928	0953	1028	1053		28	<i>53a</i>		1553	1628	1709	1753	1809	1847	2009
westbound trains depart	0753	0831	0900	1000	1000	1045	1059		45	59		1559	1645	1706	1742	1806	1846	2006
Whiteley, Sweethills Cres	0744	0814	0844	0914	0948	1018	1048		18	48		1548	1628	1703	1733	1803	1833	2003
Whiteley, Parkway	0751	0821	0851	0921	-	-	-		-	-		-	-	-	-	-	-	-
Whiteley Centre	0754	0824	0854	0924	0954	1024	1054		24	54		1554	1634	1709	1739	1809	1839	2009
Whiteley Centre	0710	0755	0825	0855	0925	0955	1025	Then	25	55		1525	1605	1635	1715	1745	1815	2015
Whiteley, Parkway	-	-	-	-	-	-	-		-	-		-	1608	1638	1718	1748	1818	-
Whiteley, Sweethills Cres	0717	0802	0832	0902	0932	1002	1032		32	02		1532	1615	1645	1725	1755	1825	2022
eastbound trains arrive	0648	0753	0828	0853	0928	0953	1028		28	53a		1528	1609	1628	1709	1753	1809	2009
westbound trains arrive	0706	0753	0831	0900	0906	1000	1006		06	59		1506	1606	1645	1706	1742	1806	2006
Swanwick, Railway Station	0722	0807	0837	0907	0937	1007	1037		37	07		1537	1620	1650	1730	1800	1830	2027
eastbound trains depart	0744	0818	0853	0928	0953	1028	1053		53a	28		1553	1628	1709	1753	1809	1847	2053
westbound trains depart	0742	0831	0900	1000	1000	1045	1045		45	45		1545	1645	1706	1742	1806	1846	2048
Park Gate	0724	0809	0839	0909	0939	1009	1039	at	39	09		1539	1622	1652	1732	1802	1832	2029
Segensworth West	0727	0812	0842	0912	0942	1012	1042		42	12	Until	1542	1625	1655	1735	1804	1835	2032
Segensworth	0732	0817	0847	0917	0947	1017	1047		47	17		1547	1630	1700	1740	1809	1840	2036
Titchfield A27	0737	0822	0852	0922	0952	1022	1052		52	22		1552	1635	1705	1745	1814	1845	2041
Highlands	-	-	-	-	-	-	-		-	-		-	1639	1709	1749	1819	1849	2045
Fareham Bus Stn	0750	0835	0905	0935	1005	1035	1105		05	25		1605	1647	1717	1757	1827	1857	2052

a - Not 1453 (previous train arrives 1428, next train departs 1509)



Hedge End Superstores	07:00		08:00		09:00		10:00		11:00			00			18:00		19:00
Hedge End, Barleycorn	07:06		08:06		09:06		10:06		11:06			06			18:06		19:06
Botley School	07:11		08:11		09:11		10:11		11:11			11			18:11		19:11
Burridge Stores	07:16		08:16		09:16		10:16		11:16			16			18:16		19:16
Swanwick, Elm Tree Inn	07:18		08:18		09:18		10:18		11:18			18			18:18		19:18
Whiteley Sweethills Cres.	07:20		08:20		09:20		10:20		11:20			20			18:20		19:20
Whiteley, Shopping Centre	07:27	07:58	08:27	08:58	09:27	09:58	10:27	10:58	11:27		58	27		17:58	18:27	18:58	19:27
Whiteley, Parkway	07:31	07:53d	08:31	08:53d	09:31	09:53d	10:31	10:53d	11:31		53d	31		17:53d	18:31	18:53d	19:31
Whiteley, Sweethills Cres*	07:38b	08:05	08:38b	09:05	09:38b	10:05	10:38b	11:05	11:38b	Then	05	38b	Until	18:05	18:38b	19:05	19:38b
eastbound trains arrive	0724	0753	0828	0853	0928	0953	1028	1053	1128		53a	28		1753	1828	1847	1928
westbound trains arrive		0753	0831	0900	0906	1000	1006	1059	1106		59e	06		1759	1806	1859	1906
Swanwick, Railway Station	07:40	08:10	08:40	09:10	09:40	10:10	10:40	11:10	11:40	at	10	40		18:10	18:40	19:10	19:40
eastbound trains depart		0818	0853	0928	0953	1028	1053	1128	1153		28	53a		1828	1847	1928	1953
westbound trains depart		0831	0900	1000	1000	1045	1059	1145	1159		45	59e		1846	1859	1946	1959
Locks Heath Centre	07:45	08:15	08:45	09:15	09:45	10:15	10:45	11:15	11:45		15	45		18:15	18:45	19:15	19:45
Warsash, Osborne Road	07:52	08:22	08:52	09:22	09:52	10:22	10:52	11:22	11:52		22	52		18:22	18:52	19:22	19:52
Warsash, Clock Tower	07:54	08:24	08:54	09:24	09:54	10:24	10:54	11:24	11:54		24	54		18:24	18:54	19:24	19:54
Warsash.	07:00	07:30	08:00	08:30	09:00	09:30	10:00	10:30	11:00		30	00		17:30	18:00	18:30	19:00
Locks Heath Centre	07:06	07:36	08:06	08:36	09:06	09:36	10:06	10:36	11:06	Then	36	06	Until	17:36	18:06	18:36	19:06
eastbound trains arrive		0724	0753	0828	0853	0928	0953	1028	1053		28	53a		1728	1753	1828	1847
westbound trains arrive		0724	0753	0831	0900	0906	1000	1006	1059		06	59e		1706	1759	1806	1859
Swanwick, Railway Station	07:11	07:41	08:11	08:41	09:11	09:41	10:11	10:41	11:11	at	41	11		17:41	18:11	18:41	19:11
eastbound trains depart		0753	0828	0853	0928	0953	1028	1053	1128		53a	28		1753	1828	1847	1928
westbound trains depart		0753	0831	0900	1000	1000	1045	1059	1145		59e	45		1759	1846	1859	1946
Whiteley, Sweethills Cres*	07:16	07:46	08:16	08:46	09:16	09:46	10:16	10:46	11:16		46	16		17:46	18:16	18:46	19:16
Whiteley, Parkway	07:23	07:53	08:23	08:53	09:23	09:53	10:23	10:53	11:23		53	23		17:53	18:23	18:53	19:23
Whiteley, Shopping Centre	07:27	07:57	08:27	08:57	09:27	09:57	10:27	10:57	11:27		57	27		17:57	18:27	18:57	19:27
Swanwick, Elm Tree Inn	07:35		08:35		09:35		10:35		11:35			35			18:35		19:35
Burridge Stores	07:37		08:37		09:37		10:37		11:37			37			18:37		19:37
Botley School	07:42		08:42		09:42		10:42		11:42			42			18:42		19:42
Hedge End, Barleycorn	07:47		08:47		09:47		10:47		11:47			47			18:47		19:47
Hedge End Superstores	07:53		08:53		09:53		10:53		11:53			53			18:53		19:53

*Bus Stops on Sweethills Cres. are on same side as Camargue/Rattigan

Routing in Warsash via Clock Tower and St Peters Road development (exact route dependent on other Warsash bus services)

Times of North-South bus service need to inter-work with other East-West bus service to provide frequency at Swanwick Railway Station.

All Whiteley bus services need to serve all sections of Whiteley (Sweethills Crescent, Shopping Centre and Parkway) a - Not 1453 (previous train arrives 1428, next train departs 1509)

b - Time at Yew Tree Drive, near Sweethills Crescent

d - Calls at Parkway before Shopping Centre, then returns to Sweethills Crescent direct via Whiteley Way

e - Not 1659 (previous train arrives 1645, next train departs 1706)

Access and Movement Strategy

Appendix F - Proposed Masterplan









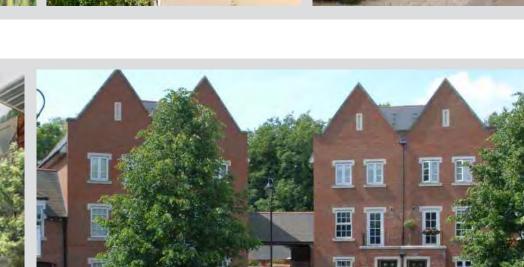


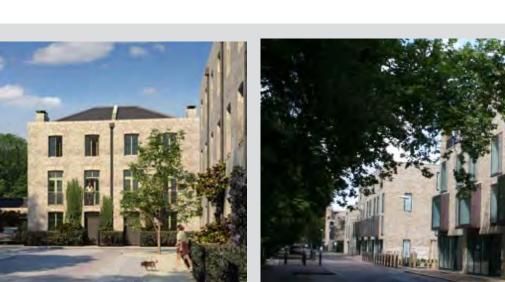


SOUTHERN NEIGHBOURHOOD







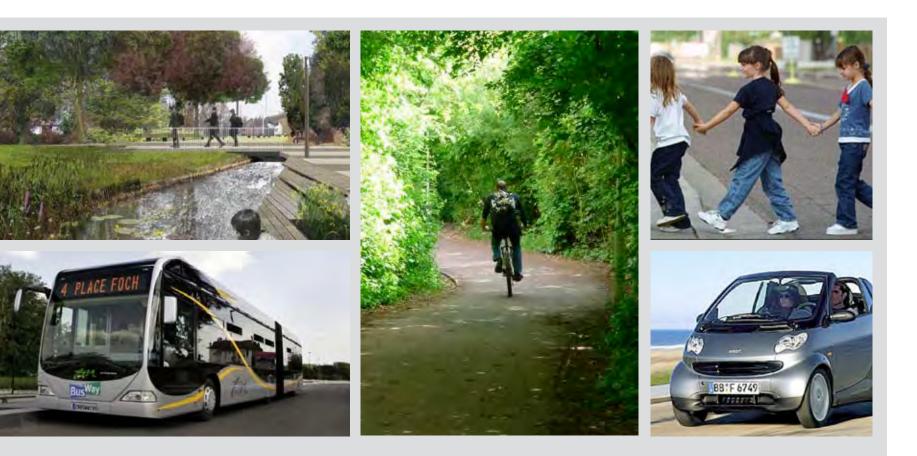












A PLACE KNOWN FOR ITS WALKABLE NEIGHBOURHOODS



A PLACE KNOWN FOR ITS WIDE RANGE OF HIGH QUALITY HOUSING



LEAP

Woodland

NEAP

Playing pitches



SUDS STREETS

This lower density northern quarter will be characterised by a high percentage of detached dwellings which front onto a network of greenways which will link the new community to major adjacent open spaces.

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