

Report No. 025.0025/TA/3
July 2012

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**RESIDENTIAL DEVELOPMENT
RANELAGH ROAD
HAVANT**

TRANSPORT ASSESSMENT



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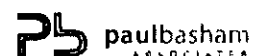
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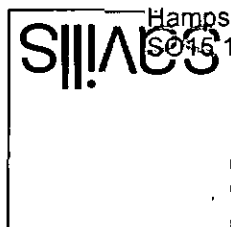
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RESIDENTIAL DEVELOPMENT RANELAGH ROAD HAVANT TRANSPORT ASSESSMENT

1.	INTRODUCTION.....	3
2.	EXISTING CONDITIONS.....	6
3.	POLICY.....	22
4.	PROPOSED DEVELOPMENT	25
5.	COMMUNITY CONSULTATION	35
6.	SUMMARY AND RECOMMENDATIONS.....	41

Tables

Table 1 - Local Bus Services Summary
Table 2 - Route No. 75 Bus Service Summary
Table 3 - Bedhampton Railway Level Crossing Operation - AM Peak Hour (0800-0900hrs)
Table 4 - PIA Casualty Summary
Table 5 - Accommodation Schedule
Table 6 - HBC Parking Standards (Nov 2010)
Table 7 - Proposed Car Parking Provision
Table 8 - HBC Parking Standards – Cycle Provision (Nov 2010)
Table 9 - TRICS Trip Rates 2012(a)
Table 10 - TEMPRO Projected Trips for Application Site for 2015
Table 11 - PICADY Junction Modelling Outputs - Ranelagh Road/Brockhampton Road AM Peak
Table 12 - PICADY Junction Modelling Outputs - Ranelagh Road/Brockhampton Road PM Peak
Table 13 - TRICS Trip Rates 2012(a) – Multimodal Trips
Table 14 - Supposed Accommodation Schedule for 'Phase 2'
Table 15 - Application Aite + Prospective Sites Trips 2018
Table 16 - TEMPRO Projected Trips for Application Site for 2018
Table 17 - PICADY Ranelagh Road/Brockhampton Road AM Peak 2018 (Baseline + Development + 'Phase 2')
Table 18 - PICADY Ranelagh Road/Brockhampton Road PM Peak 2018 (Baseline + Development + 'Phase 2')

Figures

Figure 1 - Application Site Location
Figure 2 - Local Accessibility in Relation to Application Site Location
Figure 3 - Havant Borough Council Cycle Map Extract
Figure 4 - Application Site Proximity to Wider Road Network
Figure 5 - Local Road Network – Key Junctions
Figure 6 - PIA Map for Key Routes Relating to Application Site.
Figure 7 - Approved Ranelagh Road TROs
Figure 8 - Internal Site Layout and Highways Arrangement
Figure 9 - Prospective Application Sites from Havant SHLAA
Figure 10 - SHLAA Land Availability
Figure 11 - Proposed Development Site with 'Phase 2' Potential Developable Land

Appendices

Appendix A – Traffic Surveys Full Data

Appendix B – PIA Data (Full)

Appendix C – Proposed Site Layout

Appendix D – Access Visibility and Vehicle Tracking Drawing

Appendix E – TRICS (2012a) Outputs

Appendix F – Traffic Distribution and Flow Diagrams

Appendix G – PICADY Assessment Full Outputs



Ranelagh Road, Havant
Transport Assessment

Paul Basham Associates Ltd
Report No. 025.0025/TA/3

1. INTRODUCTION

- 1.1 This Transport Assessment (TA) has been prepared by Paul Basham Associates (PBA) on behalf of Orchard Homes and Developments Ltd to support a planning application for a residential development of 81 dwellings, comprising of 59 houses and 22 flats located south of Ranelagh Road, Havant.
- 1.2 This report has been prepared to consider the transport impacts of the proposed development. The application site covers approximately 2 hectares in total and is located approximately 1km west of Havant town centre. The Application site is identified within **Figure 1**.

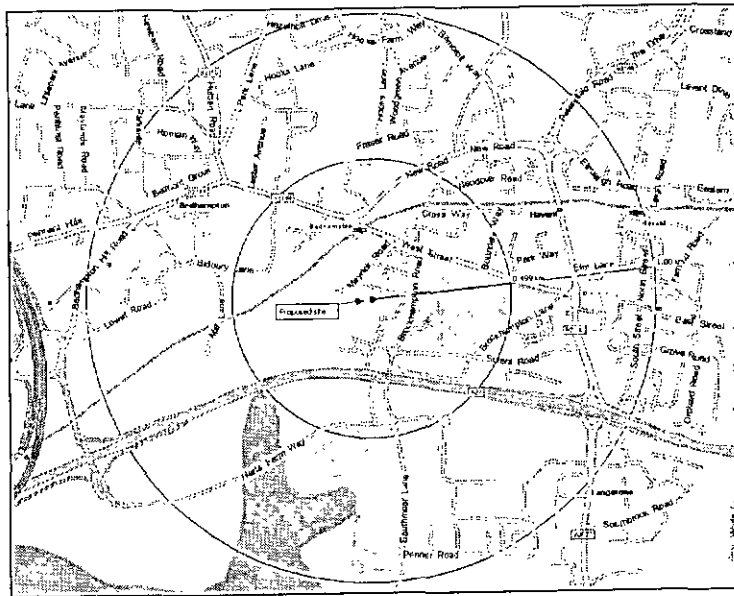
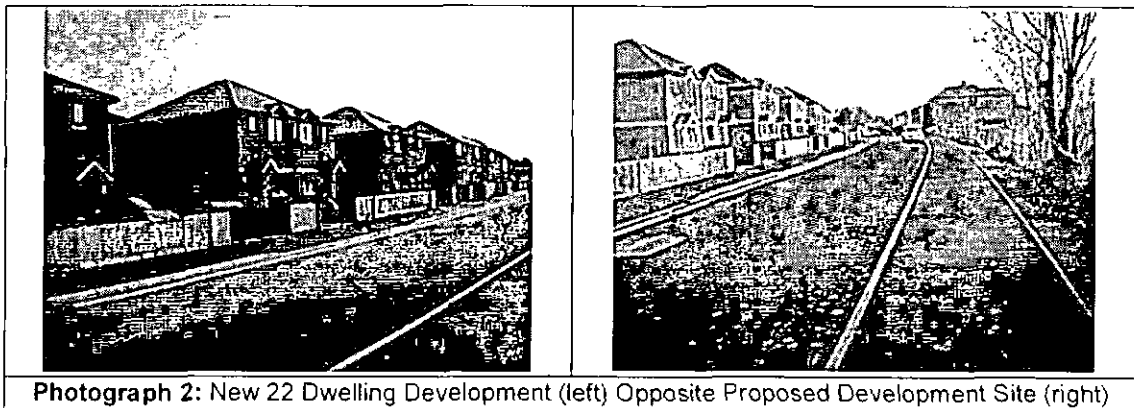
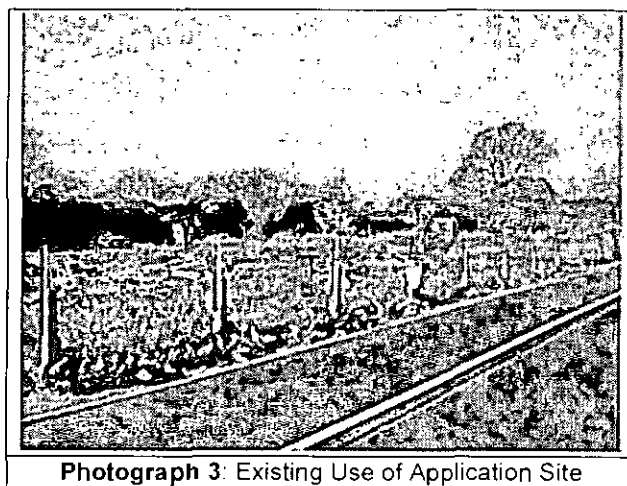


Figure 1: Application Site Location

- 1.3 The application site forms part of Havant Borough Council's (HBC) Strategic Housing Land Availability Assessment (SHLAA) which also considers land located to the south west of the application site as a potential future housing site. Land to the north of Ranelagh Road is also considered within the SHLAA and has recently been completed, following permission at a planning appeal in January 2008 (original planning application ref: 06/67936/002, appeal ref: APP/X1735/A/07/2052716/NWF) for 22 houses. The development north of Ranelagh Road is demonstrated within **Photographs 1 and 2**.

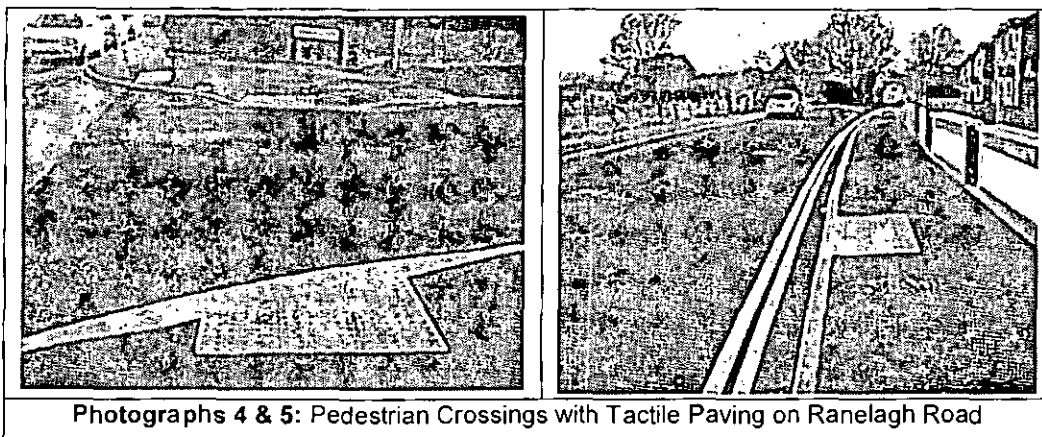


- 1.4 The existing development site south of Ranelagh Road currently contains open fields partly used for grazing horses, with disused farm buildings, stables and a former allotment site. The site is bordered by Ranelagh Road to the north, Brockhampton Road to the east, Meyrick Road to the west and open agricultural/horse fields and industrial/commercial units to the south, as demonstrated within **Photograph 3**.

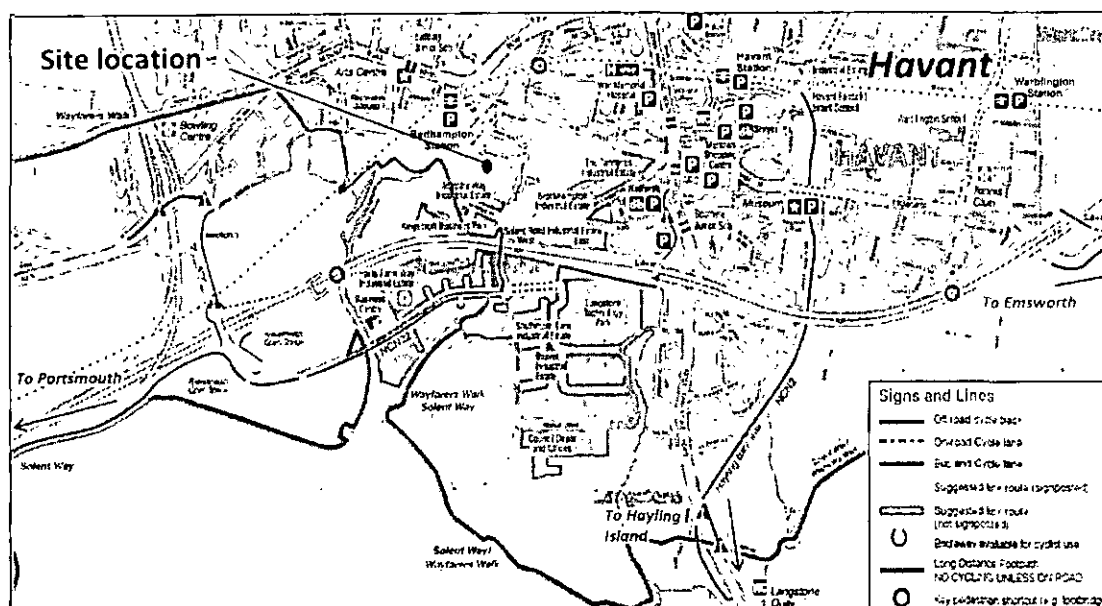
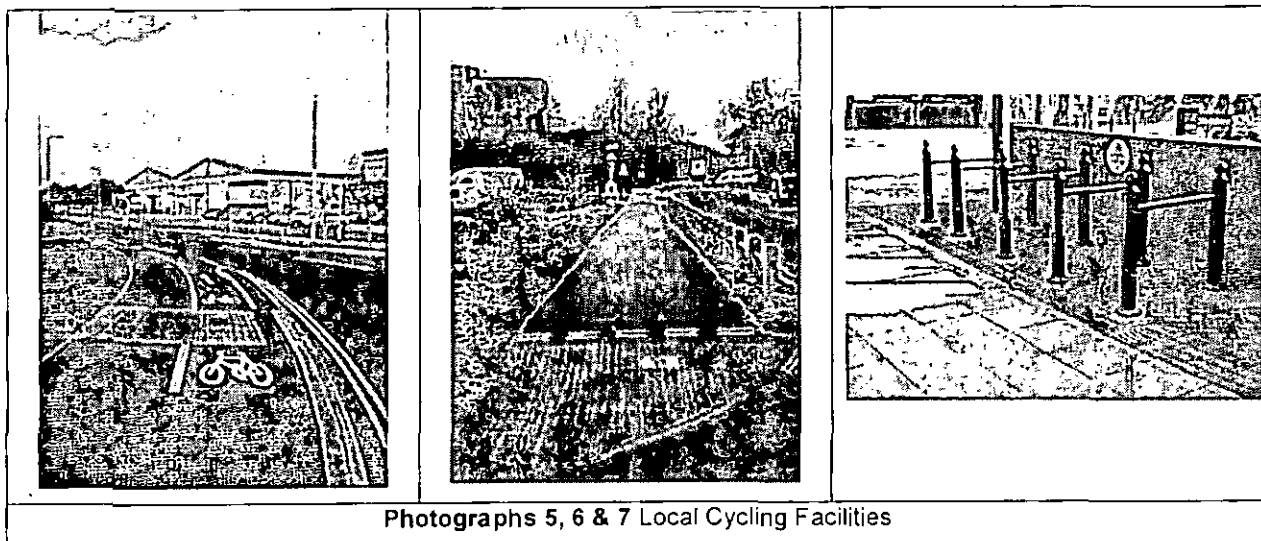


- 1.5 The scope of this TA reflects the principles of DfT's 'Guidance on Transport Assessments' (March 2007). **Chapter 2** reviews site accessibility, whilst **Chapter 4** considers the proposed accommodation schedule, car and cycle parking requirements, visibility and access arrangements. Servicing arrangements, proposed trip impact on the local road network (LRN) and parking provision are also reviewed and concluded within the Assessment.
- 1.6 A Travel Plan has been prepared, as part of the planning application and in conjunction with this TA, to promote the use of sustainable transport modes, through providing a package of measures, detailed Action Plan and related travel modal shift targets.

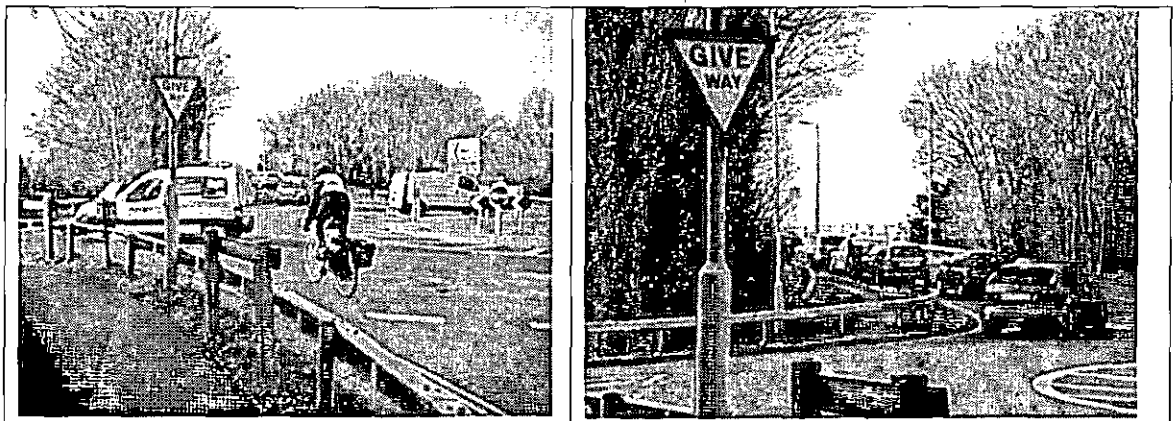
- 1.7 In compiling this TA, PBA consulted with HBC and Hampshire County Council (HCC) highways officers and attended local public consultation events. Areas raised within this consultation period are considered and addressed within **Chapter 5** of this report.



- 2.3 A continuous footway network links the application site with key facilities in Havant town centre located less than 1km away. This is further supported with recent footway and streetlighting improvements south of the application site on Solent Road (providing access to health, employment, education and retail facilities), as part of a recent development at the nearby supermarket (planning application reference: 09/58840/017).
- 2.4 Pedestrian/cycle access to Havant Railway Station and facilities located north of the railway line (including the sixth form college, leisure centre and civic centre for example) would be facilitated by HBC's proposed infrastructure improvements. Such improvements include improved signage and cyclist right of ways, and bicycle gullies for the railway footbridge at Staunton Road (located approximately 350m north of the application site).
- 2.5 Cycling accessibility and facilities in the vicinity of the application site are relatively good with the town centre located within 1km of the application site. The National Cycle Network (NCN) (including Routes 2 and 22) can be accessed within 300m of the application site, providing continuous local cycle-friendly routes between Havant and Portsmouth as well as to Emsworth and Hayling Island.
- 2.6 Local cycle-friendly routes and town centre cycle parking is demonstrated within **Photograph 5, 6, & 7** whilst the application site is identified in relation to the local cycle network within **Figure 3**.



2.7 Conditions for cyclists between the application site and the local section of the NCN are relatively poor with improvements desired to facilitate cycling in this area, as confirmed by HBC highways officers. It is understood that local sections of the road network, including the Solent Road/Brockhampton Road mini-roundabout and Harts Farm Way/Brockhampton Road may be a potential scheme to be supported through the Section 106 transportation contributions associated with the proposed development. The existing cycling conditions at the Solent Road/Brockhampton Road roundabout are demonstrated within **Photographs 8 and 9**.



Photograph 8 & 9: Existing Cycling Conditions on Solent Road/Brockhampton Road Roundabout

Bus

- 2.8 A number of bus services and stops are located approximately 500-600m or 5-10 minutes from the application site.
- 2.9 Four services (Stagecoach services 23 and 30, Emsworth & District service 36, and First Hampshire service 145) currently operate at bus stops on New Road. These bus stop locations, including North Street, Brunswick Gardens, Ingledene Close and James Road, are within 500-600m walking distance (approximately 5-10 minutes walking time) from the application site.
- 2.10 Stagecoach Service 23 provides the primary service for local users, operating an extensive timetable between Leigh Park and Southsea every 10 minutes from approximately 0530 to 2330hrs. Services 30, 36 and 145 provide less frequently operated services but cater well for access to local schools and colleges. These local bus services are summarised within **Table 1**.

Route	Freq. per Hour	First Bus at Nearest Stop	Last Bus at Nearest Stop	Peak Hour Journey Time to Final Destinations	Route Summary
23	Every 10 minutes	0536 / 0617	2307 / 2336	56mins to Southsea 28 mins to Leigh Park	Leigh Park, Havant College, Havant Bus Station, Farlington, Drayton, Cosham, North End, Portsmouth Guildhall, Southsea
30	2 AM peak services	0807	0832	19 mins; Oaklands School 13 mins; South Downs College	Bedhampton, Farlington, Purbrook
36	3 AM services	0925 / 0946	1122 / 1135	23mins; Southbourne 7mins; Bedhampton ASDA	Bedhampton, Emsworth, Westbourne, Southbourne
145	3/1 AM 2/3 PM	0841 / 0813	1641 / 1607	13mins; Emsworth 29mins; W'looville 42mins; Hambledon	Hambledon, Denmead, Cowplain, Waterloooville, Purbrook, Leigh Park, Bedhampton, Havant, Emsworth, Cosham

Table 1: Local Bus Services Summary

2.11 Havant Bus Station is a modern transport hub located less than 1km east of the application site (approximately 15 minutes walking time), and utilised by frequent bus services to destinations including Portsmouth, Chichester, Emsworth, and Waterlooville. National Express coach services also operate from this station.

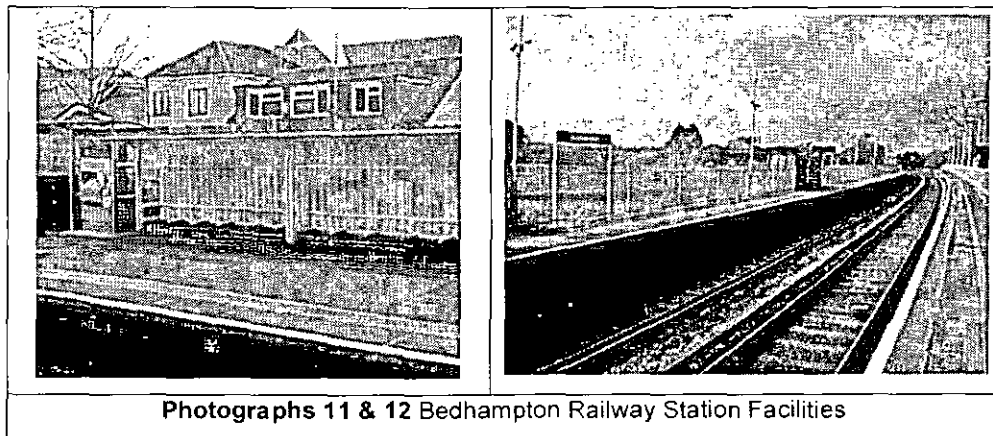
2.12 The Emsworth & District 'Hail & Ride' Bus Service 75 runs along Solent Road 3 times per hour, with a designated stop at Bosmere Medical Centre. This service connects Havant Bus Station with Langstone Business Park, with journey durations of 4 minutes to either destination from Bosmere Medical Centre stop. Service 75 is summarised within **Table 2** with the Solent Road bus stop demonstrated within **Photograph 10**.

Route	Frequency per Hour	First Bus	Last Bus	Route Summary	
75 to Langstone Technology park	3	0710	2045	Langstone, Langstone Business Park. Havant, Havant Tesco Superstore. Havant, Solent Road. Havant, Market Parade	
75 to Havant Bus Station	3	0725	2055	Havant. Havant, Havant Bus station	
Table 2: Route No. 75 Bus Service Summary					Photograph 10 Solent Road Bus Stop

Rail

2.13 Bedhampton Railway Station is accessible by foot and bicycle, located less than 0.5km northeast of the application site (as demonstrated previously within **Figure 2**). This station provides access to frequent services running on the Portsmouth Direct Line between Portsmouth and London and the West Coastway Line between Brighton and Southampton.

2.14 Bedhampton Railway Station is supported by facilities including secure cycle storage, accessible self-service ticket machines, customer help points, part-time staffing, and sheltered seating areas. Such facilities are demonstrated within **Photographs 11 and 12**.



2.15 Havant Railway Station is the following stop from Bedhampton Station for eastbound train services and as a main transport hub, operates wider connecting and more frequent services to Southampton Central, London Victoria, Portsmouth and Southampton, Brighton and Bristol Temple Meads.

Local Road Network

2.16 The application site is located approximately 1km from the A27 which merges in the westbound direction into the M27 and M275 providing links to Southampton and Portsmouth, and connects with London, Chichester and Brighton in the eastbound direction. The A3(M) is conveniently accessible to vehicle drivers from the application site through use of Harts Farm Way accessed to the south of the application site. The location of the application site in relation to the wider road network is demonstrated within **Figure 4**.

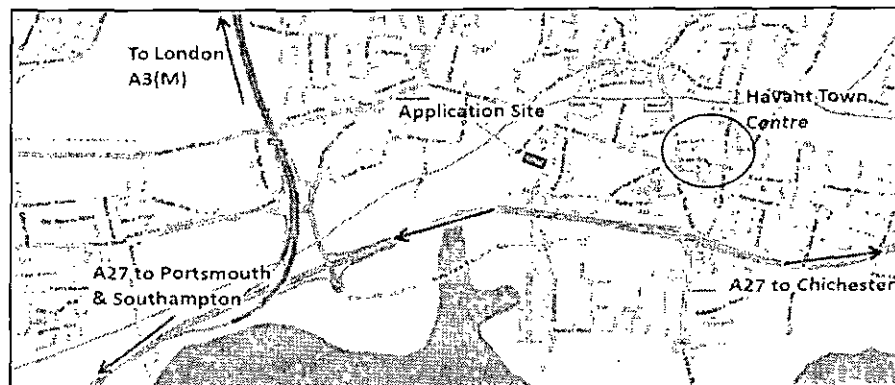


Figure 4: Application Site proximity to Wider Road Network

2.17 HBC have requested that consideration is given to the LRN comprising Ranelagh Road, Meyrick Road, Knox Road, Borckhampton Road, West Street and Harts Farm Way, including those junctions identified within **Figure 5**.

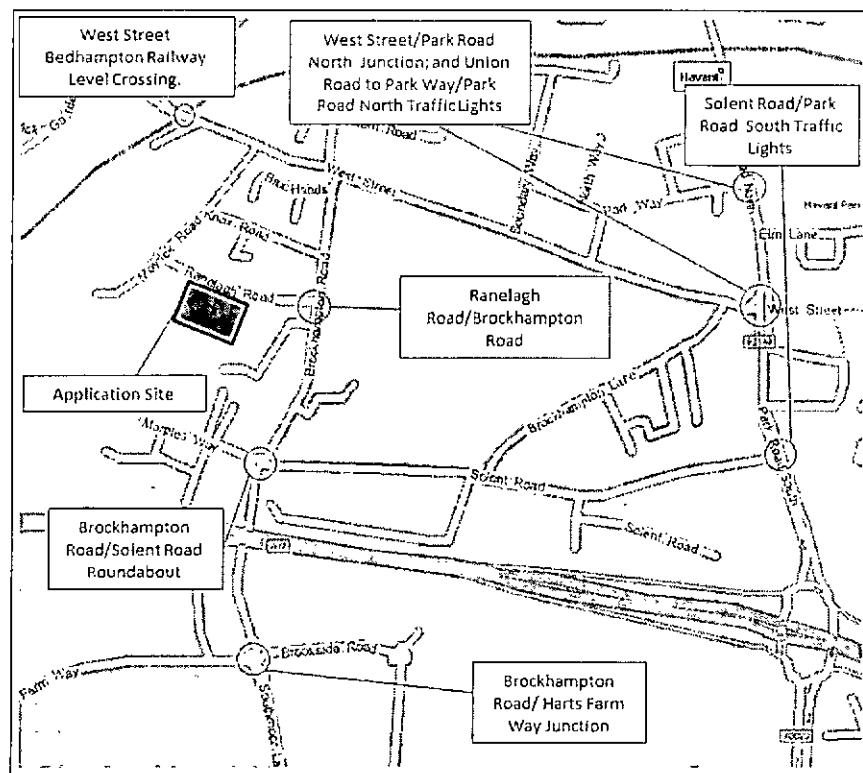


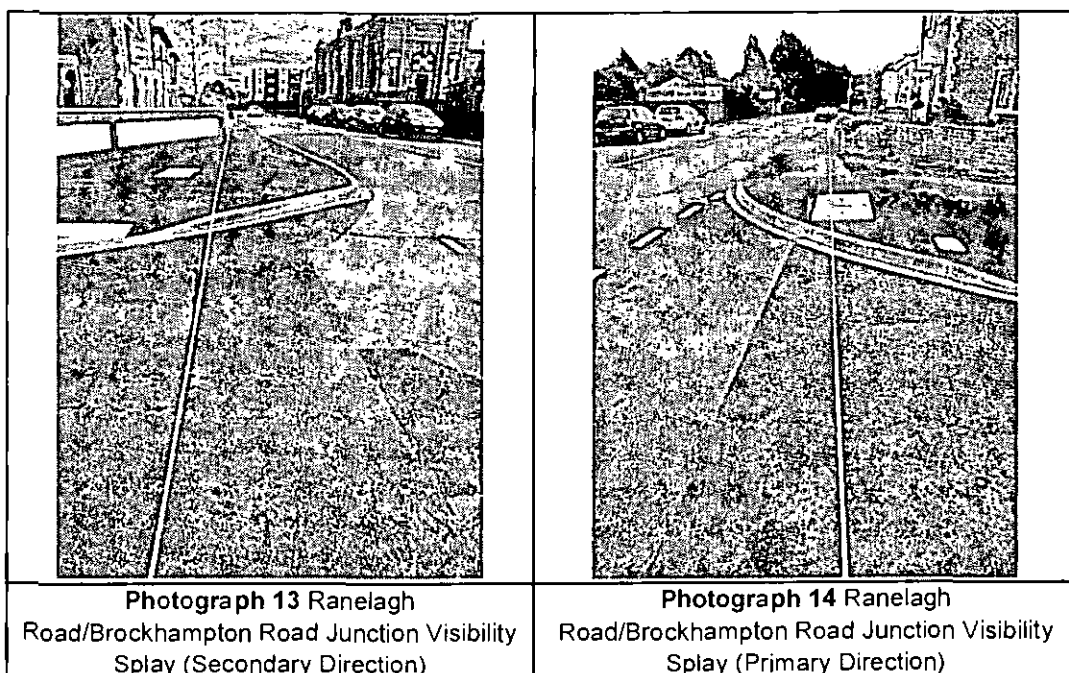
Figure 5: Local Road Network – Key Junctions

Ranelagh Road

- 2.18 The status of Ranelagh Road has been explored as part of the pre-application process and in dialogue with the LHA. As previously detailed, recent improvements have been implemented as part of the recent development to the north of Ranelagh Road, as required by Planning Condition 6; "the widening and improvement of Ranelagh Road to an adoptable standard". It has been confirmed through dialogue with the LHA that whilst the improved Ranelagh Road falls below an 'adoptable standard' (for example with the lack of streetlighting and level of drainage), the above planning condition was discharged.
- 2.19 An independent Road Inspection Report (Ref: 296.0007/SM/RW/HS/sb/94810Rev A) carried out on behalf of the developer of the land north of Ranelagh Road confirms that the inspected highways works at Ranelagh Road were carried in accordance with the Specification for Highway Works and Contract Drawings.
- 2.20 Ranelagh Road is currently an unadopted highway with no current proposals for the highways to be offered for adoption by the LHA. As has been confirmed through dialogue with the LHA and through the developer's dialogue with Portsmouth Water, the responsibility of any highways improvements required for Ranelagh Road does not lie with the developer for this proposed development.

Ranelagh Road/Brockhampton Road & Solent Road/Park Road South

- 2.21 To provide a robust assessment of the LRN, traffic count surveys have been carried out on two junctions (Ranelagh Road/Brockhampton Road and Solent Road/Park Road South) considered of particular significance to the application site, as agreed with HBC highways officers. Classified turning counts were recorded on the same weekday in March, between 0600hrs – 2000hrs at both junctions. The junction turning counts are included as **Appendix A**.
- 2.22 The Ranelagh Road/Brockhampton Road 'T'-junction provides appropriate widths for 2-way vehicle movements and turning at the junction. The condition of this junction has benefitted from the recent improvements associated with the Ranelagh Road north development, including increased carriageway widths and carriageway resurfacing and lining.
- 2.23 Adequate visibility is provided in both directions of this junction on to Brockhampton Road (on occasions visibility is restricted by on-street parking on Brockhampton Road, although this is considered within subsequent paragraphs of this report). The Ranelagh Road/Brockhampton Road junction is currently observed to be working within operational capacity. The Ranelagh Road/Brockhampton Road junction (including indicative visibility splay requirements) is demonstrated within **Photographs 13 and 14**.



2.24 The Solent Road/Park Road South traffic signal junction is a multiple arm junction (with pedestrian crossing phasing), for vehicle movements between Solent Road (to access destinations including the supermarket and industrial/business park), and Park Road North (towards Havant town centre, railway station and north of Havant) and Park Road South (towards the A27). Whilst this junction provides a key road network link for local vehicle movements, significant traffic congestion was not evident during observations made on a weekday AM peak hour. The Solent Road/Park Road South junction operation within the AM peak hour is demonstrated within **Photographs 15 and 16**.



Photograph 15 Solent Road/Park Road Junction in AM Peak (From Park Road South into Solent Road Junction)

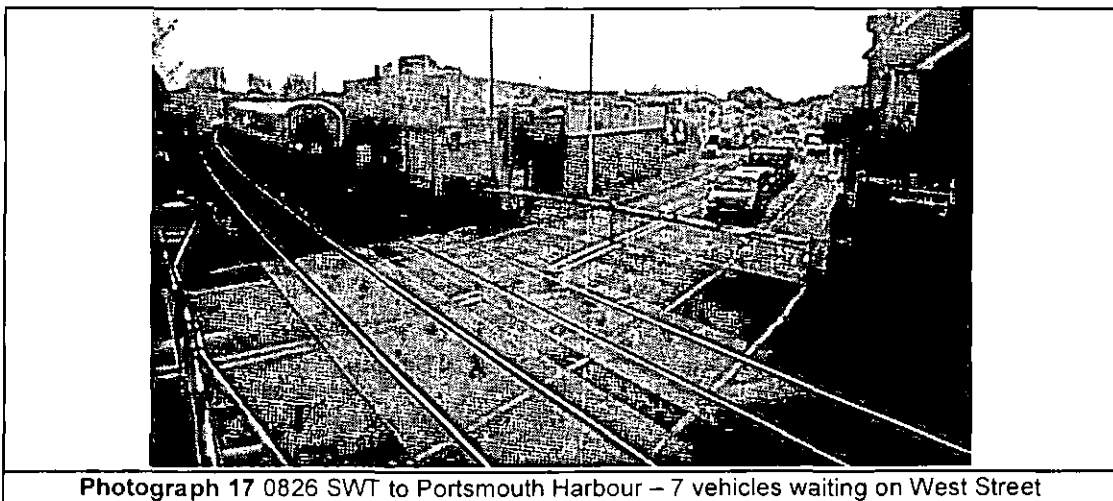


Photograph 16 Solent Road/Park Road Junction in AM Peak (From Solent Road into Park Road)

Bedhampton Level Crossing (West Street)

2.25 A survey was also carried out for the Bedhampton Level Crossing during the AM peak hour (0800hrs-0900hrs) on a weekday in March. This survey recorded the crossing being closed to traffic on 10 occasions between 0800hrs-0900hrs. The gates remained down for an average of 3 minutes with traffic returning to normal flows within a maximum of 15 seconds once the gates were fully raised again. On average 5 – 6 vehicles were recorded to be waiting on the south-western side of the crossing on West Street, when closed.

2.26 The AM peak hour level-crossing survey suggests that frequency of crossing use and vehicle queue times when the crossing is in use are reflective of level crossings in such locations, and do not cause significant concern with regards to current operation or queue capacity in the AM peak period. Such use of the level crossing during the AM peak hour (at the time of survey) is demonstrated within **Photograph 17**, with the survey summarised provided within **Table 3**.



Photograph 17 0826 SWT to Portsmouth Harbour – 7 vehicles waiting on West Street

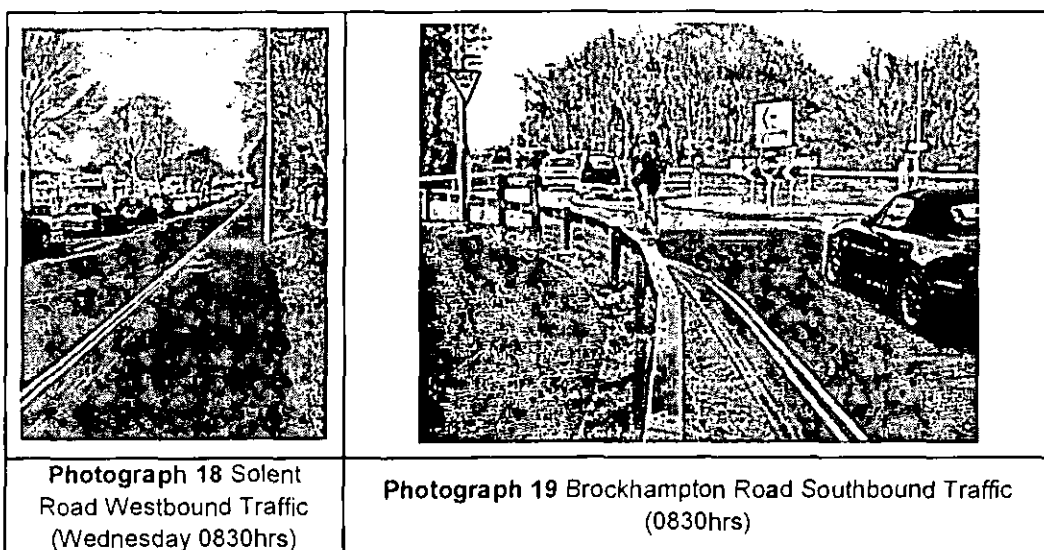
Time of Crossing /Gates Dropped	Gates Raised	Duration of Crossing in Operation	Queue length (HGVs = 2 vehicles)	Number/Destination of Trains	Time until normal traffic flow resumed
0802	0804	1:30	2	Southampton Central (Southern)	0:03
0807	0810	3:29	4	Brighton (Southern)	0:07
0813	0817	3:29	5	Littlehampton (Southern)	0:14
0821	0825	3:48	12	Portsmouth Harbour (Southern) London Victoria (Southern)	Gates down again before 7 th vehicle crossed
0826	0830	3:55	11	Portsmouth Harbour (SWT) London Waterloo (SWT)	0:27
0834	0839	4:58	5	London Waterloo (SWT) Southampton Central (Southern)	0:15
0842	0845	2:49	5	Littlehampton (Southern) Portsmouth Harbour (Southern)	0:10
0846	0849	2:14	6	London Victoria (Southern)	0:15
0849	0851	1:58	0	Portsmouth Harbour (SWT)	0:00
0858	0900	2:19	2	London Waterloo (SWT)	0:15

Table 3: Bedhampton Railway Level Crossing Operation - AM Peak Hour (0800-0900hrs); Wednesday 21st March 2012

Brockhampton Road/Solent Road Roundabout

2.27 The Brockhampton Road/Solent Road roundabout is located approximately 200m south of Ranelagh Road and provides access towards Harts Farm Way to the south (passing the industrial estates/business parks), a business park to the west, and Solent Road to the east.

2.28 AM peak traffic flow observations of the above roundabout (at approximately 0830hrs on a weekday) identified significant local traffic levels generated as arrival trips for the nearby employment base. Traffic congestion was observed on Solent Road (east of the roundabout) in the direction of the employment base (south of the roundabout). This traffic did not impact on traffic flows for vehicles travelling towards the roundabout from the northern Brockhampton Road arm (the direction of the application site) and on to Solent Road. The observed congestion on Solent Road towards the Solent Road/Brockhampton Road roundabout during the AM peak hour period is demonstrated within **Photographs 18 and 19**.



2.29 It is anticipated that the same roundabout operation trends would apply, in the opposite directions, during the **PM** peak period. When departing in the PM peak period, the employment base's traffic approaches the roundabout from the southern arm and towards Solent Road, and therefore would not affect vehicles travelling from Solent Road towards the northern Brockhampton Road arm.

Personal Injury Accident (PIA) Assessment

2.30 PIA data for all recorded incidents within the immediate locale over the past 5 years (between 1st January 2007 and 31st December 2011) has been obtained from Hampshire Constabulary.

2.31 A total of 45 PIA incidents were recorded during this time period (resulting in 50 casualties). With specific focus to PIAs on the LRN relating to the application site's future traffic flows, a total of 35 accidents were recorded, of which 1 resulted in a serious casualty. A summary of the casualties is recorded within **Table 4** with all local recorded PIAs (and the area of LRN considered as relating to the application site) demonstrated within **Figure 6**.

	Fatal	Serious	Slight	Total
Vehicle Driver	0	0	23	23
Passenger	0	0	7	7
M/C Rider	0	2	7	9
Cyclist	0	1	7	8
Pedestrian	0	0	3	3
Other	0	0	0	0
Total	0	3	47	50

Table 4: PIA Casualty Summary

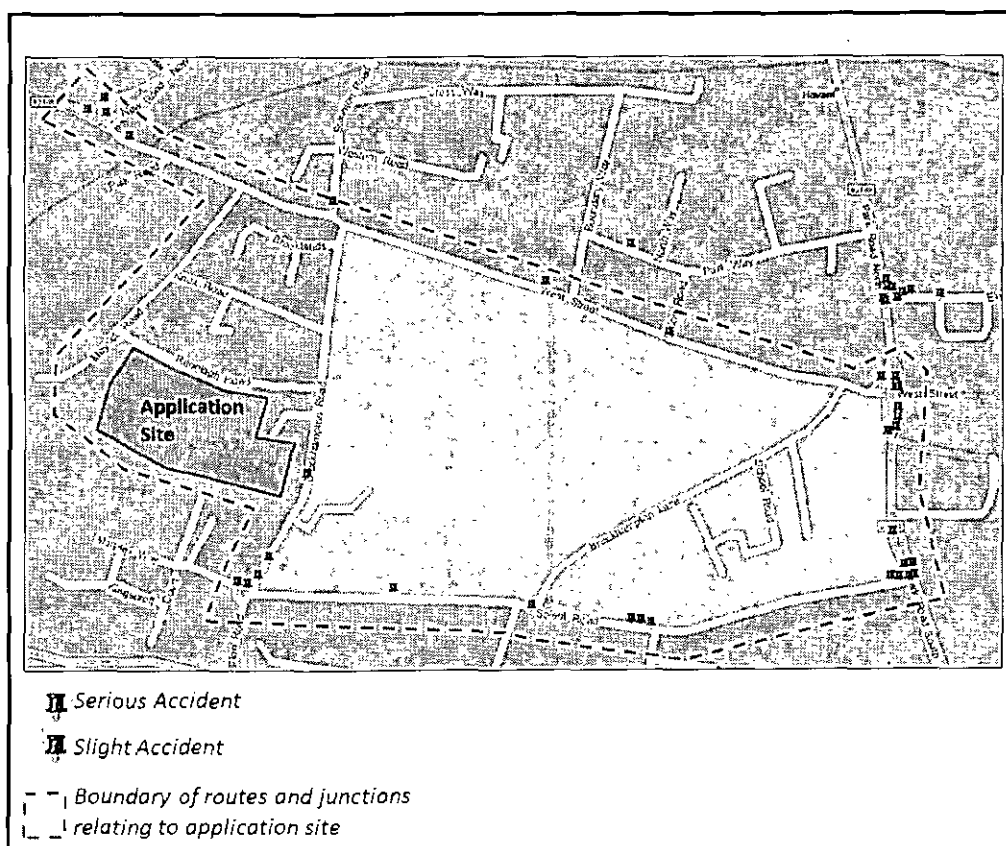


Figure 6: PIA Map for key routes relating to application site.

Brockhampton Road

- 2.32 A single 'slight' PIA occurring on Brockhampton Road is the nearest recorded incident to the application site. This PIA involved a speeding vehicle failing to negotiate a minor bend, losing control, and colliding with an unoccupied parked vehicle. This PIA is therefore attributed to human error and does not cause concern with regards to highways safety.

Solent Road/Park Road

- 2.33 A cluster of 6 'slight' PIAs have been recorded at the Solent Road/Park Road South junction, demonstrating a pattern considered as typical for a junction of this nature and location.

Bedhampton Road/Solent Road Roundabout

- 2.34 A cluster of 4 'slight' PIAs have been recorded within the last 5 years at the Bedhampton Road/Solent Road roundabout. Whilst this does not indicate a significant highways safety concern, 2 of these PIAs have involved cyclists negotiating the roundabout and therefore support the assessment provided previously within this report, of the unsuitable conditions for cyclists at this section of the LRN. Both PIAs involving cyclists resulted from vehicle drivers failing to give way to these cyclists at the roundabout junction. The 2 remaining PIAs at this location are attributed to human error including failing to give way at the junction and a rear shunt

Bedhampton Railway Level Crossing

- 2.35 4 'slight' PIAs have been recorded within the last 5 years within close proximity to the Bedhampton Railway level crossing, with 3 incidents involving rear shunts of vehicles travelling on to New Road from West Street, and 1 incident relating to a single driver suicide attempt. The PIA data does not indicate a concern with regards to highways safety in the vicinity of the level crossing.

Other Local PIAs

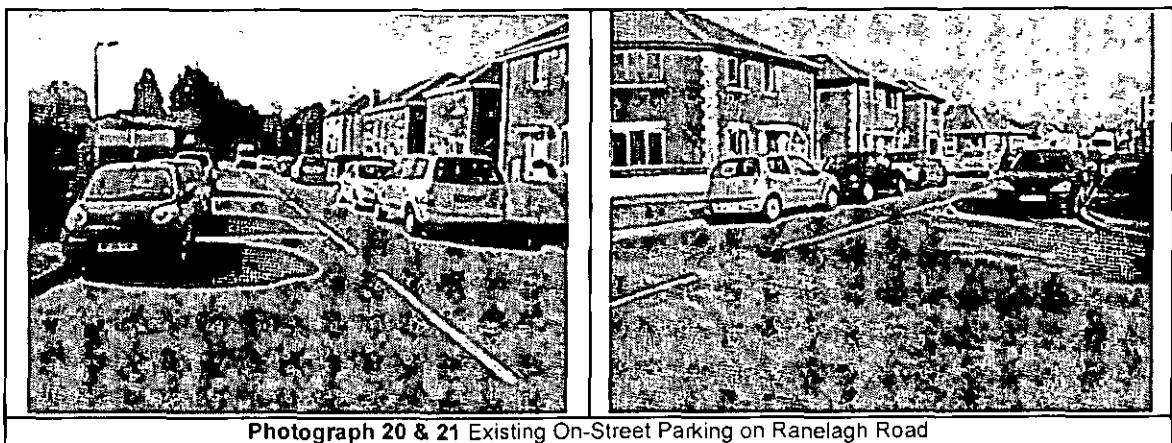
- 2.36 The 1 'serious' incident recorded within the LRN which relates to the application site involved a motor cyclist falling from their motor cycle after heavily braking for a vehicle turning into the supermarket car park. This PIA is attributed to human error and is isolated in its severity.
- 2.37 4 other 'slight' PIAs on the relevant section of the LRN have been recorded as involving cyclists and pedestrians. All 4 of these PIAs are recorded to have taken place in close proximity to the town centre, where the most intensive multi-modal travel occurs. 2 of these 4 incidents have involved pedestrians and are attributed to misuse of the pedestrian crossing facility in this location.

2.38 The clusters of incidents reviewed within this section of the report demonstrate a low recurrence of comparable types of incident, with no suggestion of PIAs being attributed to traffic levels or poor highways design, and with no significant relationship AM or PM peak hour flows. The PIA data reviewed within this section therefore does not indicate any highways concern that would be exacerbated by a minor intensification of use of the LRN, as a result of the development, or pose a highways safety concern for future site users. The PIA data is included in full as **Appendix B**.

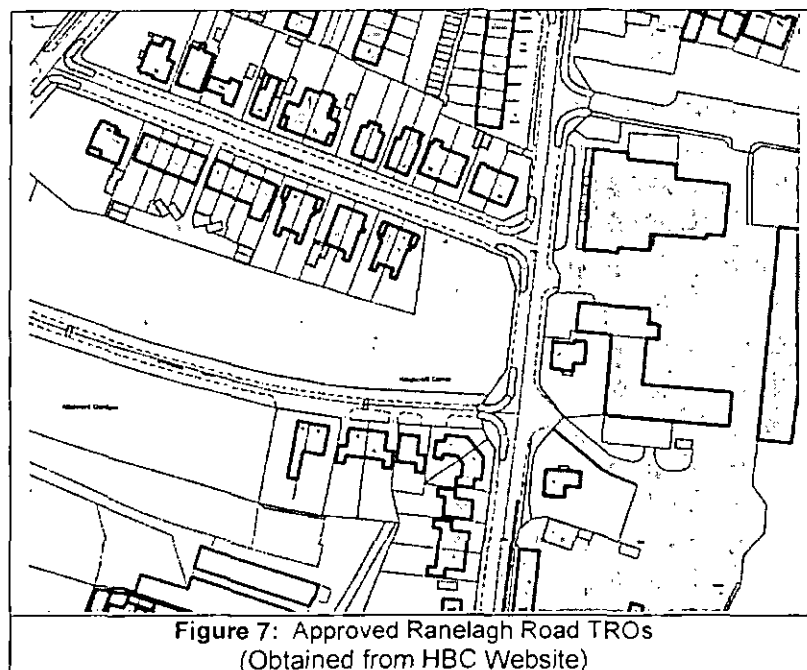
Local On-Street Parking

2.39 Improvements associated with the Ranelagh Road north development included the implementation of double yellow lines on the northern side of the carriageway. With Ranelagh Road's unadopted status, this lining does not require a Traffic Regulation Order (TRO), however liaison with HBC's Parking Management Team has indicated that this existing double yellow lining is being considered to become enforceable in the future. In its current condition, this double yellow lining may deter local vehicle occupants to park in this area, whilst the private management of Ranelagh Road may provide other enforcement options should on-street parking occur.

2.40 A high demand for on-street parking is evident on occasions on Brockhampton Road in the vicinity of the junction with Ranelagh Road. Through pre-application consultation with HBC highways officers and representatives of the local public (as detailed further within subsequent sections), it is understood that this existing parking demand is, in part, generated by the local employment base south of Solent Road, including a 24hour-operating regional centre for national utilities company Scottish and Southern Energy (SSE), located on Penner Road. The existing on-street parking demand on Brockhampton Road is demonstrated within **Photographs 20 and 21**.



- 2.41 Planning permission was granted for the SSE development (application ref: 05/62192/010), subject to a 'Green Transport Plan' to support a limited on-site car park. It is understood that amongst its measures, the SSE Green Transport Plan limits on-site car parking permits to 'car-sharers' only, with a knock-on effect of employees utilising local on-street parking including on Brockhampton Road. It is understood through liaison with HBC that continued efforts are being made to address the current parking demand on Brockhampton Road, including through liaison with SSE.
- 2.42 In May 2012 Phase 1 of HBC's TRO proposals were approved. The TROs include a 'No Waiting at Any Time' restriction at the Ranelagh Road/Brockhampton Road junction, for a length of 16m in either direction of Brockhampton Road, and 7.5m into Ranelagh Road from the give way line at Brockhampton Road. The approved TRO arrangement is indicated within Figure 7.



- 2.43 The approved TRO arrangement will mitigate the impact of the existing on-street parking on Brockhampton Road upon vehicles utilising this junction, and support inter-visibility between vehicles on Brockhampton Road and vehicles entering Brockhampton Road from Ranelagh Road. Whilst vehicles parking on Brockhampton Road may still partially restrict visibility splays of 2.4 x 43m for vehicles entering Brockhampton Road from Ranelagh Road, with the TRO in place, the junction conditions, which are typical of junctions in such locations, do not present a concern with regards to highway safety. This is supported within the following MfS paragraph:

Parking in visibility splays in built-up areas is quite common, yet it does not appear to create significant problems in practice...in some circumstances, where speeds are low, some encroachment may be acceptable. (MfS Paragraph 7.8.5)

- 2.44 The existing on-street parking in the vicinity of the application site is not the concern of this proposed development, and would be restricted at the Ranelagh Road/Brockhampton Road junction through the approved TRO. The sufficient on-street parking provision for the proposed development (detailed subsequently within this report) is in accordance with HBC parking standards and would prevent overspill parking and additional on-street parking pressure on the LRN.

3. POLICY

3.1 In determining planning decisions, consideration is given to national and local policies.

National Planning Policy

3.2 Adopted 1st April 2012, the National Planning Policy Framework ('The Framework') acts as the central guidance for development planning and replaces all national planning policy guidance including Planning Policy Guidance 13 (PPG13): Transport.

3.3 Designed to make the planning system less complex and more accessible, The Framework gives greater responsibility to Local Authorities, a 'presumption in favour of sustainable development', and encourages local planning authorities to 'positively seek' opportunities to meet the development needs of their area.

3.4 The Framework states that the overall transport system needs to be balanced in favour of sustainable transport modes, giving people a 'real choice' about how they travel with the aim of reducing congestion and greenhouse emissions. Significantly, The Framework states that development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe.

3.5 The Framework cites the following as key considerations with regards to transport and development planning:

- Opportunities for sustainable transport modes have been exploited depending on the local conditions of the site thus reducing the need for major transport infrastructure.
- Safe and suitable access to the site can be achieved for all users
- Improvements can be undertaken within the transport network that cost-effectively limit the impacts of the development.
- The development can accommodate the efficient delivery of goods and supplies
- The development gives priority to pedestrian and cycle movements, and has access to high quality public transport facilities
- The development has a safe and secure layout which minimises conflicts between traffic and cyclists or pedestrians, avoids street clutter and, where appropriate, establishes home zones
- The development considers the needs of people with disabilities

Local Planning Policy

- 3.6 The majority of transport policy that directly applies to the scale, type and location of the proposed development site is provided at the local borough level, through the policies set out in the Havant Borough Core Strategy (Adopted March 2011). Whilst the application considers those saved policies of the Havant District Wide Local Plan, no relevant transport policies are saved that require consideration in relation to the proposed development. The relevant local transport policy is reproduced below.

DM6 Coordination of Development

Proposals will only be permitted where they do not undermine the future development potential of adjacent sites.

DM11 Planning for More Sustainable Travel

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

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

DM12 Mitigating the Impacts of Travel

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

- a) Adequate provision is made for integrated and improved transport infrastructure or appropriate mitigation measures, through direct improvements and S106 contributions in accordance with the Hampshire County Council Transport Contributions Policy.
- b) The submission of a transport assessment and travel plan alongside any planning application on proposals for major development or where a proposal is likely to have significant transport implications.
- c) The submission of a transport statement must accompany planning applications to explain changes to travel demand.
- d) In relation to outline planning applications, a framework for the preparation of travel assessments and travel plans will be submitted with the planning application proposals.

DM13 Car and Cycle Parking on Residential Development

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



Ranelagh Road, Havant
Transport Assessment

Paul Basham Associates Ltd
Report No. 025.0025/TA/3

4. PROPOSED DEVELOPMENT

Accommodation Schedule and Site Layout

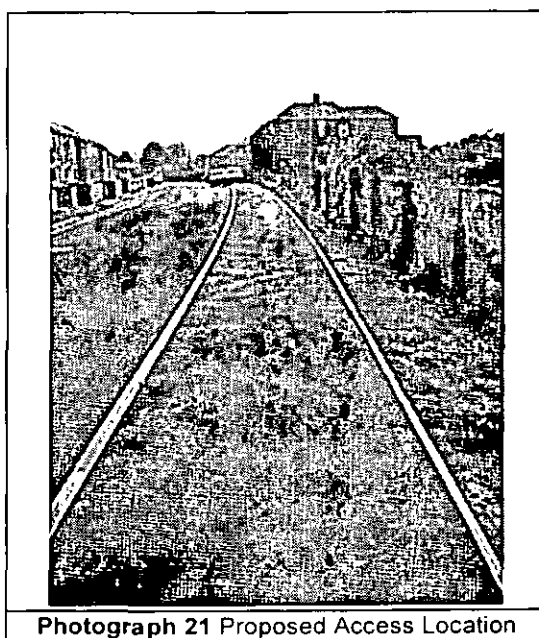
- 4.1 The proposed development consists of 81 units, as demonstrated within the site layout included as **Appendix C**, and summarised within **Table 5**.

Unit Type	Number of Dwellings
1 Bedroom Apartment	10
2 Bedroom Apartment	12
2 Bedroom House	6
3 Bedroom House	53
Total	81

Table 5: Accommodation Schedule

Proposed Access Arrangement

- 4.2 The proposed development site would be served by a single vehicular access located central to the site providing access onto Ranelagh Road. Visibility splays of 2.4m x 43m, as promoted in MfS guidance for 30mph roads, are achievable from the proposed access location. The proposed access location is demonstrated within **Photograph 21**, whilst the proposed access and achievable visibility is demonstrated within **Appendix D**.



Internal Highways Arrangements

- 4.3 The proposed internal site layout and highways design supports an attractive environment and the safe, harmonious and efficient movement of pedestrians, cyclists and vehicles. The proposed internal site layout adopts MfS and home zone principles, with a shared surface arrangement in sections, and active frontages at the edge of carriageways. The proposed development site layout is demonstrated within **Figure 8**.

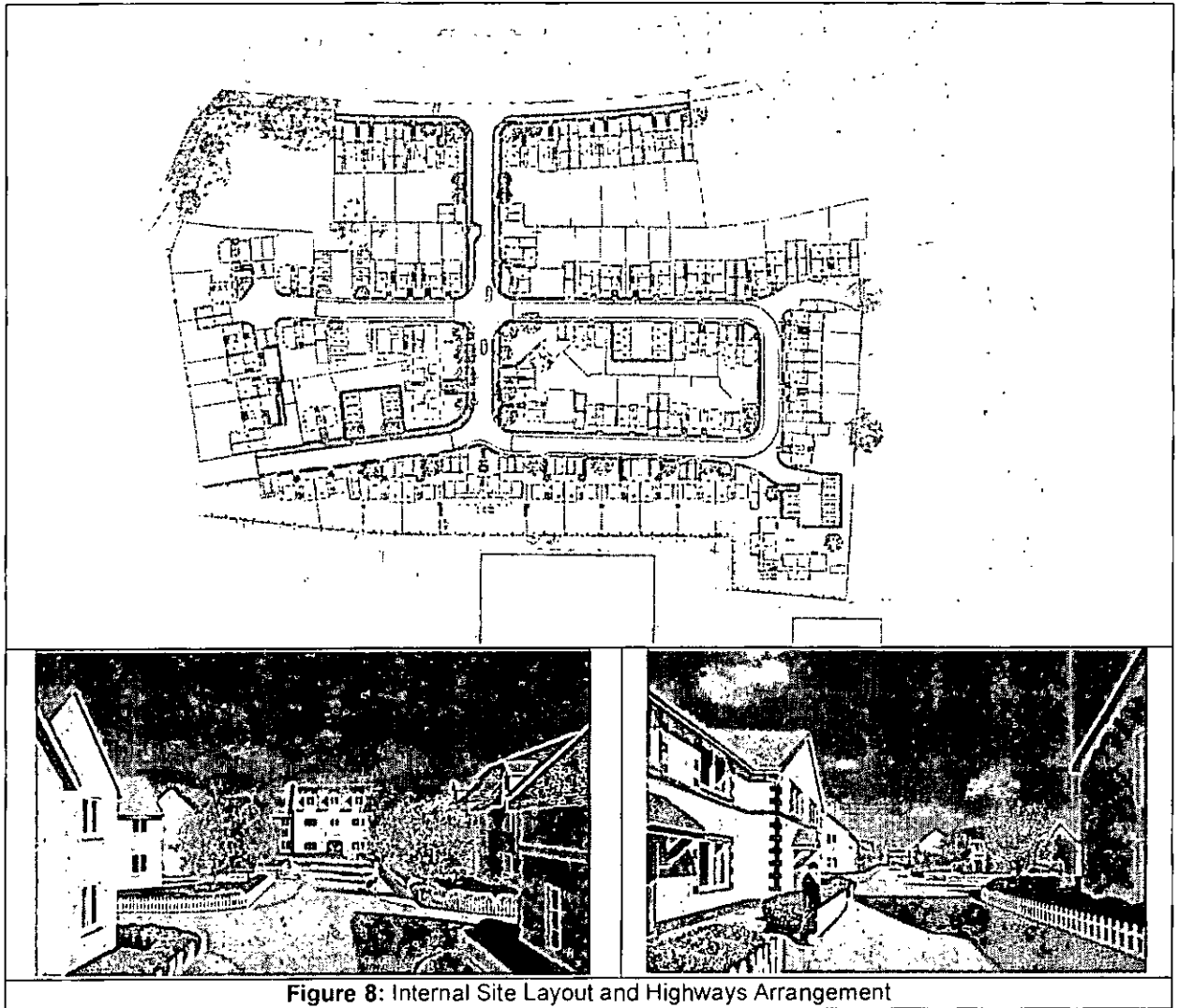


Figure 8: Internal Site Layout and Highways Arrangement

- 4.4 The 'home zone' sections of the proposed development are connected with the proposed site access to the north of the development site and any future development to the south through a proposed 'spine road'. The 'spine road' is designed to the LHA's adoptable standards, providing carriageway widths of 4.8m in the main and aligned by 2.0m wide footways on either side.

- 4.5 The proposed internal highway design avoids the use of road markings, including at the 'crossroad' arrangement which adjoins the shared surface carriageways and main 'spine road'. The benefits of such highways design to the general 'street' environment and different user's movements are discussed in the following MfS paragraphs:

7.3.7 Junctions can be marked to indicate which arms have priority, but on quieter streets it may be acceptable to leave them unmarked. A lack of marked priority may encourage motorists to slow down to negotiate their way through, making the junction more comfortable for use by pedestrians.

7.3.8 Crossroads are convenient for pedestrians, as they minimise diversion from desire lines when crossing the street. They also make it easier to create permeable and legible street networks.

- 4.6 The 2 aligning footways cease to be provided towards the southern section of the 'spine road' to meet an appropriate balance between provision for vehicles and pedestrian in line with LHA adoptable standards, and the home zone environment. A pedestrian crossing with tactile paving and dropped kerbs is proposed at the point of the 'spine road' where the footway on the western side is discontinued, thus ensuring the safe provision for pedestrian movements is maintained for the full length of the 'spine road'.
- 4.7 All carriageways within the 'home zone' areas of the proposed development site are 6.0m in width, and would therefore accommodate the passing of 2 vehicles, cyclists and pedestrians. In accordance with MfS design guidelines, all carriageway bends within the 'home zone' areas of the proposed internal site design achieve the required inter-visibility for vehicles travelling up to 15mph within the site, supported by planting maintained below 600mm in height.
- 4.8 Sympathetically designed traffic calming features are built into the general proposed development design to support the movement of all road users. A pinch point 'gateway' feature is proposed to be located towards the site access to encourage appropriate road user movements, and providing a clear indication of the change in environment whilst maintaining appropriate widths of 3.2m in accordance with the LHA adoptable standards and MfS carriageway width recommendations.
- 4.9 A built-out deflection feature is proposed towards the south of the proposed site layout and at the frontage of the south central apartment block. This feature in conjunction with a priority junction is designed to prevent a long straight 'drag' from the shared surface road into the main 'spine road', to support continuation of low vehicle speeds. Safe vehicle and pedestrian movements are supported by 2 speed control bends at the eastern section of the development site.

- 4.10 Provision for servicing of the site is provided with adequate on-site turning facilities for refuse and emergency vehicles, and therefore ensuring such vehicles can enter and exit the proposed development site in a forward gear. Access to all dwellings can be achieved within 45m of the proposed units and would not require emergency vehicles to reverse more than 20m, in line with Building Regulation requirements.
- 4.11 The proposed site access and proposed internal highways design are in accordance with the LHA's adoptable standards, embrace MfS design guidance principles, and have been agreed in principle through pre-application dialogue with HCC and HBC highways officers. The internal highways arrangement is demonstrated within **Appendix D**, and includes tracking for refuse vehicles.

Parking Provision

- 4.12 The parking provision is in accordance with HBC's current parking standard guidelines (as set out within Residential Parking and Cycle Provision SPD, Adopted 2010), as summarised within **Table 6** and applied to the proposed development's accommodation schedule within **Table 7**.

Size of dwelling	Car Parking per Dwelling	
	Allocated	Unallocated
1 Bedroom	1	0.9
2 Bedroom	2	1.3
3 Bedroom	2	1.9

Table 6: HBC Parking Standards (Nov 2010)

	Ratio	Units	Provision
1 Bedroom unallocated	0.9	10	10
2 Bedroom unallocated	1.3	12	16
2 Bedroom allocated	2	6	12
3 Bedroom allocated	2	53	106

Table 7: Proposed Car Parking Provision

- 4.13 The car parking is disbursed across the proposed development site, accommodated within driveways and parking courts, ensuring conveniently located and secure parking facilities whilst preventing the car from dominating the street scene.
- 4.14 All on-site parking bays, whether 'in-curtilage' parking or parking courts, are supported by adjoining carriageway/aisle widths of 6.0m widths, to ensure efficient vehicle turning is achievable and therefore minimising the potential for vehicle conflict or disruption to local movements.

- 4.15 The proposed site layout's 6.0m wide, unrestricted, carriageways provide sufficient and appropriate capacity for any required visitor parking, whilst maintaining sufficient space for road-user movements (and sufficient resident parking provision off-street in line with local standards, as previously detailed).
- 4.16 Garages are proposed for 5 houses with each garage ensuring sufficient capacity for modern vehicles is accommodated through providing dimensions of 6.0m x 3.0m.
- 4.17 In providing sufficient on-site vehicle parking facilities in accordance with HCC parking standards, and with visitor parking accommodated within the site's design, the proposed development site would ensure that no overspill parking onto the LRN.
- 4.18 The proposed development provides sufficient cycle storage in line with HBC's cycle parking standards summarised within **Table 8**.

Size of dwelling	Long Stay	Short Stay
1 Bed Unit	1 space per unit	1 loop/hoop per unit
2 Bed Unit	2 spaces per unit	1 loop/hoop per unit
3 Bed Unit	2 spaces per unit	1 loop/hoop per unit

Table 8: HBC Parking Standards – Cycle Provision (Nov 2010)

- 4.19 Cycle storage is proposed for all houses through provision of secure and well overlooked storage areas, conveniently located within rear gardens, and directly accessible from the unit frontages and site carriageways. Sufficient cycle storage is proposed for the apartments through conveniently located, secure lockable cycle sheds.

Development Trip Rate Impact

- 4.20 This section of the TA assesses the likely vehicle trip generation associated with the proposed development. The national system of trip generation analysis, 'TRICS (2012a)' has been interrogated to gain an indication of the trip rates for houses and flats of a development of this size, demographic, and geography.
- 4.21 To provide a reflective trip rate to that of the proposed development, the TRICS sample data sets includes surveys carried out on weekdays only, for sites which are similar in size and demographic as the proposed development, and in 'edge of town centre' or 'suburban' locations outside of London. Samples were included for developments of houses and flats. Whilst an element of the proposed development would be allocated for 'affordable housing' (up to 30 per cent of the development), to provide the most robust assessment and present a 'worst-case scenario', the only TRICS sites used for this assessment are categorised as 'private'.

4.22 The proposed development trip rates are demonstrated within **Table 9**, and summary of the samples that were used to establish the trip rates and original data outputs can be seen in **Appendix E**.

TRICS 2012(a)	AM Peak (0800-0900)		PM Peak (1700-1800)		Total Daily Trips		
	Arrivals	Departures	Arrivals	Departures	Arrivals	Departures	Total
Vehicle Trip Rate (houses)	0.181	0.404	0.344	0.233	2.585	2.639	5.224
Vehicle Trip Rate (flats)	0.086	0.263	0.257	0.114	1.983	1.858	3.841
59 Proposed Houses	11	24	21	13	152	156	309
22 Proposed Flats	2	6	6	3	43	41	85
Total (Houses + Flats)	13	30	27	16	195	197	394

Table 9: TRICS Trip Rates 2012(a)

4.23 The initial TRICS trip rate analysis indicated a likely proposed trip generation of 394 daily vehicle trips, with 43 vehicle trips in the AM peak (0800-0900hrs) and 43 vehicle trips in the PM peak (1700-1800hrs). Vehicle trip rate growth factors for the year 2015 in the Havant area have been generated to reflect likely local traffic growth trends at the potential year of full occupation of a residential development at the land south west of the application site. Department for Transport's (DfT) transport economic appraisal tool 'TEMPRO' has been used for this purpose, with the generated growth factors are confirmed and applied to the proposed vehicle trip levels within **Table 10**.

TRICS 2012(a)	AM Peak (0800-0900)		PM Peak (1700-2000)		Total Daily Trips	
	Arrivals	Departures	Arrivals	Departures	Arrivals	Departures
Vehicle Trip Rate Growth Factor	1.0251	1.0281	1.0274	1.0263	1.0315	1.0314
Total (Houses + Flats) in 2015	13	30	27	16	201	203

Table 10: TEMPRO projected trips for application site for 2015

4.24 The application of the TEMPRO growth factor for a 2015 scenario indicates an increase in proposed trip generation (for when the proposed development is fully occupied) to 404 daily vehicle trips, 43 vehicle trips in the AM peak (0800-0900hrs), and 43 vehicle trips in the PM peak (1700-1800hrs).

Development Vehicle Trip Distribution

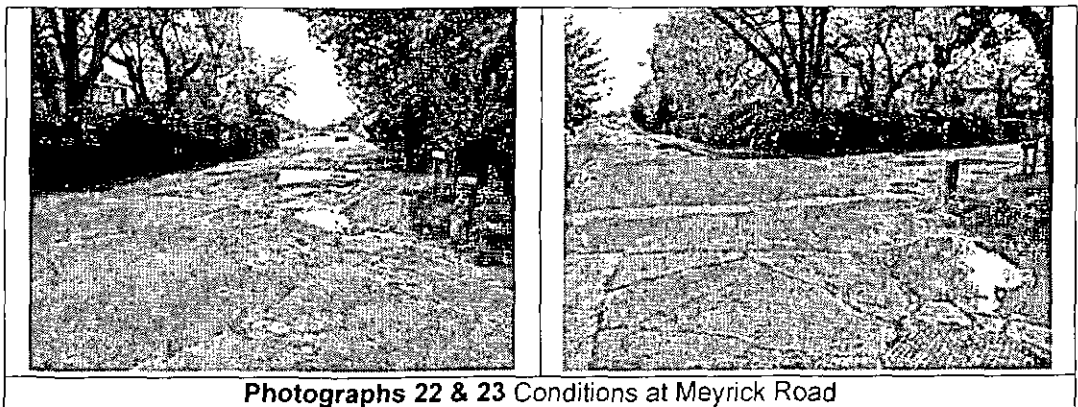
4.25 A series of traffic distribution and flow diagrams have been prepared to confirm the likely peak hour traffic impact of the proposed development upon the LRN, and particular key junctions which are considered to be used by the future site users. The traffic distribution and flow diagrams (included as **Appendix F**) include the following scenarios:

- Proposed Development Vehicle Traffic Flows on LRN in AM/PM Peak in 2012
- Proposed Development Vehicle Traffic Flows on LRN in AM/PM Peak in 2015 (first year of full site occupation)

- AM/PM Peak and Daily Flows + Proposed Development Vehicle Traffic Flows for 2 surveyed junctions (Ranelagh/Brockhampton Road and Solent Road/Park Road South) in 2012
- AM/PM Peak and Daily Flows + Proposed Development Vehicle Traffic Flows for 2 surveyed junctions (Ranelagh/Brockhampton Road and Solent Road/Park Road South) in 2015 (first year of full site occupation)

4.26 These diagrams are based on a traffic distribution network diagram which demonstrates how the proposed development traffic is anticipated to be spread across the local road network (LRN), when arriving at and departing from the development site. The demonstrated traffic distribution (presented as percentage splits) has been determined through local traffic flow observations and an established knowledge of the LRN, the location of, and likely routes to, key destinations and regions beyond Havant, proximity to local facilities and amenities, and traffic flows indicated within the commissioned traffic count survey.

4.27 For the proposed development traffic, the Ranelagh Road/Brockhampton Road junction would act as the primary junction for gaining access to the LRN, given its connections with the key routes identified previously. This is supported further by the substandard carriageway conditions of the potential alternative route provided by Meyrick Road. Providing access to the Portsmouth Water site predominantly utilised by LGVs/HGVs, Meyrick Road comprises an uneven surfaced gravel/dirt track with potholes and ponding, narrow carriageway widths and speed-bumps. The conditions of Meyrick Road are demonstrated within **Photographs 22 and 23**.



4.28 The traffic distribution network diagram indicates 98% of development traffic utilising the Ranelagh Road/Brockhampton Road junction to access the LRN (whilst allowing for 2% of vehicle drivers who decide to utilise Meyrick Road despite the substandard conditions).

4.29 To provide clarification on the likely traffic impact caused by the proposed development upon the Ranelagh Road/Brockhampton Road junction, an assessment has been carried out through use of 'PICADY', the industry standard modelling tool for such junctions. The outputs of this PICADY assessment are summarised within **Tables 11 and 12** whilst the full assessment outputs are included as **Appendix G**.

Period	Arm	Baseline 2012			Baseline + Development 2015		
		No. Vehs/ Min	RFC	Queue	No. Vehs/ Min	RFC	Queue
0745 – 0800	Ranelagh Road to Brockhampton Road Brockhampton Rd north to Ranelagh Rd	0.19 0.08	0.019 0.007	0	0.54 0.14	0.063 0.012	0
0800 – 0815	Ranelagh Road to Brockhampton Road Brockhampton Rd north to Ranelagh Rd	0.22 0.10	0.023 0.008	0	0.67 0.18	0.076 0.014	0
0815 – 0830	Ranelagh Road to Brockhampton Road Brockhampton Rd north to Ranelagh Rd	0.28 0.12	0.029 0.010	0	0.83 0.23	0.095 0.018	0
0830 – 0845	Ranelagh Road to Brockhampton Road Brockhampton Rd north to Ranelagh Rd	0.28 0.12	0.029 0.010	0	0.83 0.23	0.095 0.018	0
0845 – 0900	Ranelagh Road to Brockhampton Road Brockhampton Rd north to Ranelagh Rd	0.22 0.10	0.023 0.008	0	0.67 0.18	0.076 0.014	0
0900 – 0915	Ranelagh Road to Brockhampton Road Brockhampton Rd north to Ranelagh Rd	0.19 0.08	0.019 0.008	0	0.56 0.14	0.063 0.012	0

Table 11: PICADY Junction Modelling Outputs - Ranelagh Road/Brockhampton Road AM Peak

Period	Arm	Baseline 2012			Baseline + Development 2015		
		No. Vehs/ Min	RFC	Queue	No. Vehs/ Min	RFC	Queue
1645 – 1700	Ranelagh Road to Brockhampton Road Brockhampton Rd north to Ranelagh Rd	0.08 0.09	0.008 0.009	0	0.30 0.23	0.036 0.020	0
1700 – 1715	Ranelagh Road to Brockhampton Road Brockhampton Rd north to Ranelagh Rd	0.009 0.011	0.011 0.009	0	0.36 0.29	0.044 0.024	0
1715 – 1730	Ranelagh Road to Brockhampton Road Brockhampton Rd north to Ranelagh Rd	0.11 0.14	0.014 0.012	0	0.44 0.38	0.055 0.031	0
1730 – 1745	Ranelagh Road to Brockhampton Road Brockhampton Rd north to Ranelagh Rd	0.11 0.14	0.014 0.012	0	0.44 0.38	0.055 0.031	0
1745 – 1800	Ranelagh Road to Brockhampton Road Brockhampton Rd north to Ranelagh Rd	0.09 0.11	0.011 0.009	0	0.36 0.29	0.044 0.024	0
1800 – 1815	Ranelagh Road to Brockhampton Road Brockhampton Rd north to Ranelagh Rd	0.08 0.09	0.009 0.008	0	0.30 0.24	0.036 0.020	0

Table 12: PICADY Junction Modelling Outputs - Ranelagh Road/Brockhampton Road PM Peak

SAV

Ranelagh Road, Havant
Transport Assessment

Paul Basham Associates Ltd
Report No. 025.0025/TA/3

- 4.30 The PICADY assessment suggests that there would be no material impact upon the operation of the Ranelagh Road/Brockhampton Road junction as a result of the proposed development. In both the AM and PM peak periods, the Ratio of Flow to Capacity (RFC) would be maintained below the 0.85 threshold on all arms of the junction where traffic flows could be disrupted by the proposed development's traffic (i.e. exiting Ranelagh Road on to Brockhampton Road, or entering Ranelagh Road from Brockhampton Road to the north of the junction).
- 4.31 With the commissioned traffic surveys identifying a relatively low existing traffic level at this junction, the additional development traffic would inevitably result in a significant increase in traffic flow at this junction. However, as confirmed through the PICADY assessment, the level of impact is viewed as acceptable given the location and relatively low existing traffic levels, as agreed through liaison with the LHA.
- 4.32 At the Solent Road/Park Road South junction the proposed development's traffic is indicated to generate between 0.7-0.8% increase in peak hour traffic. This level of traffic impact upon the major LRN junction is considered immaterial, as supported by the Institute of Highways and Transportation (IHT) guidelines for Traffic Assessments. This document requires junctions to be tested where the traffic associated with the development traffic exceeds 10% of the existing traffic flow of any junction arm or 5% in congested or sensitive areas.
- 4.33 The traffic generated by the proposed development, once distributed amongst the LRN, results in a low overall increase across the day and at peak times. The proposed development's generated vehicle traffic would not result in an increase to existing local traffic levels that could be considered as significant or would have a detrimental or material impact upon the operation of the LRN and its junctions.
- 4.34 A multimodal trip impact assessment has also been carried out to suggest the likely level of trips generated by the development overall, considering all travel modes. The TRICS 2012(a) database was interrogated to identify the level of multimodal trips likely to be generated by the proposed development with the same parameters applied as were applied for the vehicle trip impact assessment presented previously.
- 4.35 The likely level of multimodal trip rates generated by the proposed development is demonstrated within **Table 13**, with the full TRICS outputs attached within **Appendix E**.

TRICS 2012(a)	AM Peak (0800-0900)		PM Peak (1700-2000)		Total Daily Trips		
	Arrivals	Departures	Arrivals	Departures	Arrivals	Departures	Total
<i>Multimodal Trip Rate (Private Houses)</i>	0.279	0.787	0.568	0.368	4.223	4.432	8.655
51 Proposed Houses (Private)	14	40	29	18	213	226	441
<i>Multimodal Trip Rate (Private Flats)</i>	0.196	0.661	0.578	0.305	3.621	3.755	7.376
6 Proposed Flats (Private)	1	4	3	2	22	23	44
<i>Multimodal Trip Rate Rented Houses)</i>	0.131	0.527	0.459	0.238	3.180	3.619	6.799
16 Proposed Houses (Rented)	8	8	7	4	51	58	109
<i>Multimodal Trip Rate (Rented Flats)</i>	0.180	0.395	0.316	0.265	4.155	4.029	8.184
8 Proposed Flats (Rented)	1	3	3	2	33	32	65
Average Trip Rate per Unit	0.24	0.68	0.51	0.34	4.05	4.23	8
Totals (Houses + Flats)	19	55	41	28	328	343	648

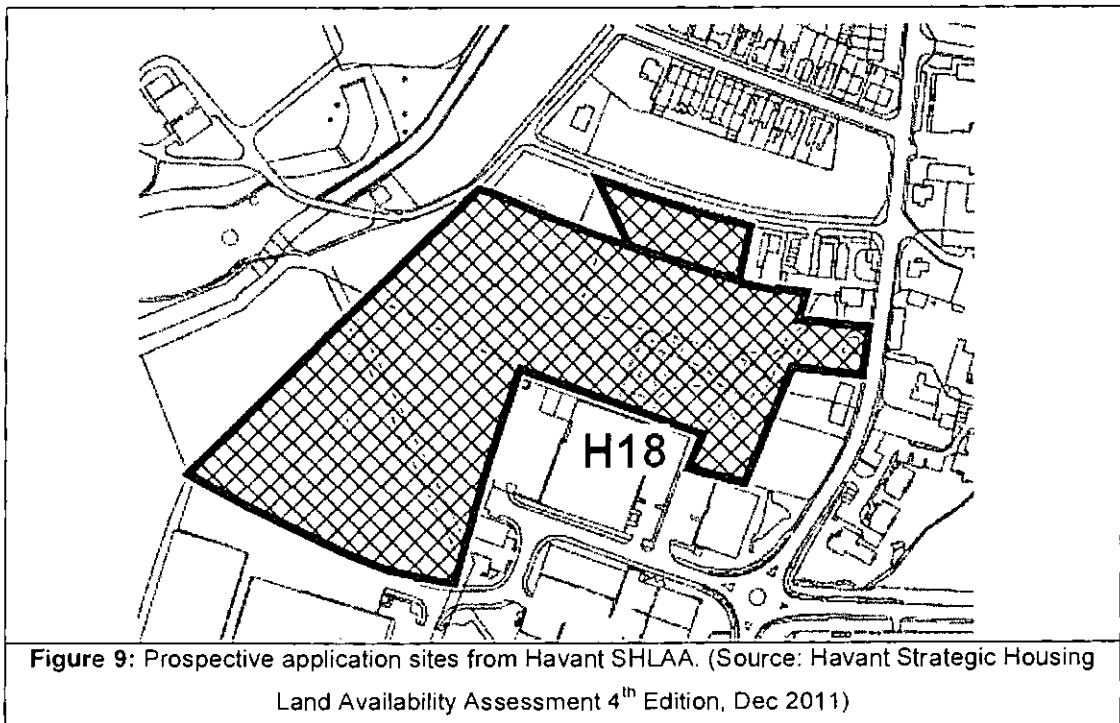
Table 13: TRICS Trip Rates 2012(a) – Multimodal Trips

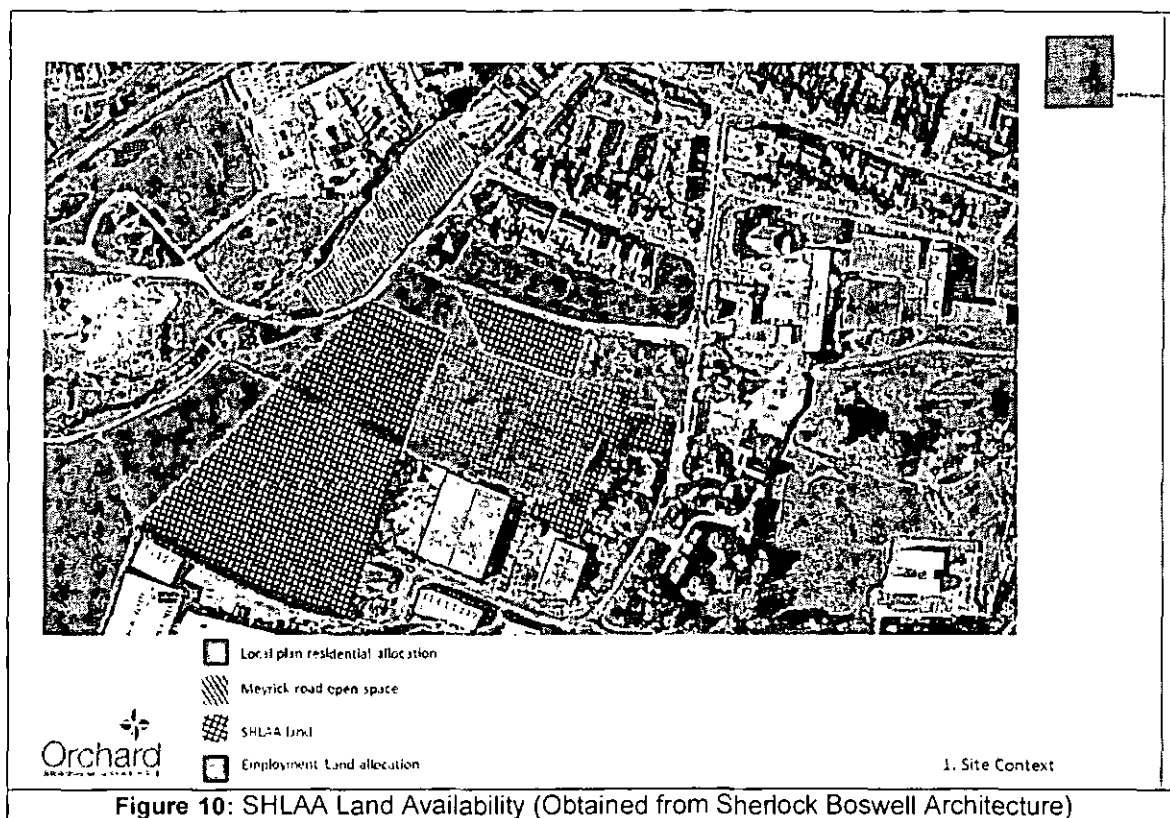
4.36 The proposed development is likely to generate in the order of 648 multimodal trips on to the local transport network, with the above multimodal trip assessment indicating an average trip rate of 8 trips per unit. The proposed level of multimodal trips is reflective of the 7 multimodal trips per 2-3 bedroom unit base set by HCC's Transport Contributions Policy (TCP; Appendix 3), to assist in determining transportation contribution values.

4.37 The implementation of the submitted Travel Plan would provide a further opportunity to monitor vehicle and multimodal trips and support trip generation and modal split at a sustainable level locally. The impact of the additional multimodal trips generated by the proposed development upon the LRN would be supported through transportation contributions to be negotiated with the LHA as part of the S106 Agreements during the application determination process.

5. COMMUNITY CONSULTATION

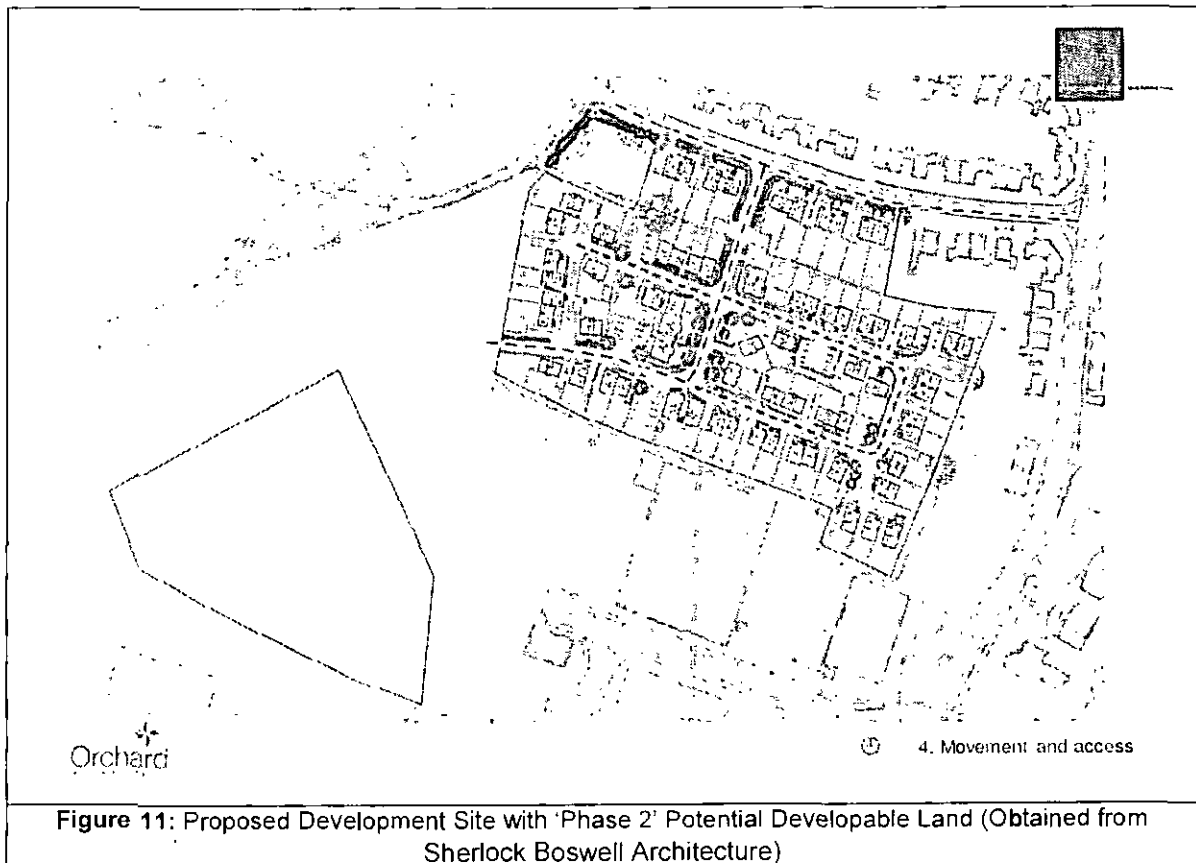
- 5.1 As part of the pre-application consultation process, the development team has taken the opportunity to gain the views of members of the local community, including local residents, community board representatives and local councillors, through HBC's established Development Forum process.
- 5.2 Through participating in 2 public consultation based meetings, specific areas of concern and interest from the local community's perspective with regard to highways considerations were expressed. The concerns raised that have not been addressed elsewhere within this report are considered within this additional section. Specific concern surrounded the cumulative traffic impact of potential proposed residential developments in addition to the application site.
- 5.3 Havant's Strategic Housing Land Availability Assessment's (SHLAA) identifies land which holds potential for development. The land identified by the SHLAA with in which the application site is located is demonstrated within **Figures 9 and 10**.





- 5.4 The potential SHLAA site 'H18' is identified in Havant's 'Allocation Development Plan Document' as allocable for residential development (although this document is currently out for consultation). The potential development on the southern portion of the 'H18' land parcel was referred to within the Development Consultation Forum as 'Phase 2' and the proposed development of this application as 'Phase 1'. Further detail regarding the planning policy position for 'Phase 2' is referred to within Savill's (the planning agent) planning statement accompanying the application.
- 5.5 The 'Phase 2' development would directly affect vehicle flows within the proposed development as well as the related LRN. The cumulative traffic impact should therefore be acknowledged.
- 5.6 Whilst this assessment considers the cumulative impact of 'Phase 1' and 'Phase 2', the material importance of 'Phase 2' with regards to this application should be limited to ensuring suitable access is maintained for future development (as has been assessed within previous sections of this report). Ultimately, a decision should be determined for this application based on the traffic impact of this development in isolation, as has been discussed with the LHA.

5.7 Whilst the site area for the land of 'Phase 2' would suggest a similar level of units proposed as the application site, the net developable area would be reduced due to power cable and sewer easements zones within the site area, allowing a developable area for approximately 40 units. The application site, potential land for residential development to the south west, and associated easements zones are demonstrated within **Figure 11**.



5.8 For the sake of this assessment, the prospective residential development to the south west of the application site is assumed to accommodate a similar demographic to this proposed development, with the same maximum ratio of private and affordable home ownership (30:70), and dwelling size mix. A proposed development schedule for the land south west of the application site, based on the assumed factors, is summarised within **Table 14**.

Unit Type	Number of Dwellings
1 Bedroom Apartment	2
2 Bedroom Apartment	3
2 Bedroom House	5
3 Bedroom House	30
Total	40

Table 14: Supposed accommodation schedule for 'Phase 2'

Vehicular Trips

- 5.9 Given the presumption of the application site and 'Phase 2' sharing similar site characteristics, the same TRICS data sets and obtained vehicle trip rates presented within previous sections of this report are applied to this assessment. Accordingly, the indicative vehicle trip generation for 'Phase 2' is summarised within **Table 15**.

TRICS 2012(a)	AM Peak (0800-0900)		PM Peak (1700-1800)		Total Daily Trips		
	Arrivals	Departures	Arrivals	Departures	Arrivals	Departures	Total
Vehicle Trip Rate (houses)	0.181	0.404	0.344	0.233	2.585	2.639	5.224
Vehicle Trip Rate (flats)	0.086	0.263	0.257	0.114	1.983	1.858	3.841
94 Proposed Houses	17	38	32	22	243	248	492
27 Proposed Flats	2	7	6	3	54	50	103
Total (houses + flats)	19	45	38	25	297	298	595

Table 15: Application site + Prospective sites trips 2018

- 5.10 Vehicle trip rate growth factors for the year 2018 in the Havant area have been generated to reflect likely local traffic growth trends at a hypothetical year of full occupation of the 'Phase 2' residential development. Department for Transport's (DfT) transport economic appraisal tool 'TEMPO' has been used for this purpose, with the generated growth factors are confirmed and applied to the proposed vehicle trip levels within **Table 16**.

TRICS 2012(a)	AM Peak (0800-0900)		PM Peak (1700-2000)		Total Daily Trips	
	Arrivals	Departures	Arrivals	Departures	Arrivals	Departures
Vehicle Trip Rate Growth Factor	1.0464	1.0494	1.0494	1.0485	1.0504	1.0504
Total (houses + flats) in 2018	20	47	40	26	313	313

Table 16: TEMPO projected trips for application site for 2018

- 5.11 The likely generated vehicle trip levels of the 'Phase 2' residential development have been applied to the distribution network diagrams utilised within previous sections of this report. The distribution diagrams are included as **Appendix F**.
- 5.12 The likely cumulative traffic impact upon the Ranelagh Road/Brockhampton Road junction by this application's proposed development, together with the 'Phase 2' residential development for the hypothetical opening year of 2018 has been determined here through use of 'PICADY'. The outputs of this PICADY assessment are summarised within **Tables 17 and 18** whilst the full assessment outputs are included as **Appendix G**.

Period	Arm	Baseline + Development 2018		
		No. Vehs/Min	RFC	Queue
0745 – 0800	Ranelagh Road to Brockhampton Road	0.80	0.090	0
	Brockhampton Rd north to Ranelagh Rd	0.17	0.014	
0800 – 0815	Ranelagh Road to Brockhampton Road	0.96	0.109	0
	Brockhampton Rd north to Ranelagh Rd	0.22	0.018	
0815 – 0830	Ranelagh Road to Brockhampton Road	1.17	0.136	0
	Brockhampton Rd north to Ranelagh Rd	0.28	0.022	
0830 – 0845	Ranelagh Road to Brockhampton Road	1.17	0.136	0
	Brockhampton Rd north to Ranelagh Rd	0.28	0.022	
0845 – 0900	Ranelagh Road to Brockhampton Road	0.96	0.109	0
	Brockhampton Rd north to Ranelagh Rd	0.22	0.018	
0900 – 0915	Ranelagh Road to Brockhampton Road	0.80	0.090	0
	Brockhampton Rd north to Ranelagh Rd	0.17	0.014	

Table 17: PICADY Ranelagh Road/Brockhampton Road AM Peak 2018 (Baseline + Development + 'Phase 2')

Period	Arm	Baseline + Development 2018		
		No. Vehs/Min	RFC	Queue
1645 – 1700	Ranelagh Road to Brockhampton Road	0.41	0.049	0
	Brockhampton Rd north to Ranelagh Rd	0.29	0.026	
1700 – 1715	Ranelagh Road to Brockhampton Road	0.49	0.060	0
	Brockhampton Rd north to Ranelagh Rd	0.36	0.032	
1715 – 1730	Ranelagh Road to Brockhampton Road	0.61	0.075	0
	Brockhampton Rd north to Ranelagh Rd	0.46	0.040	
1730 – 1745	Ranelagh Road to Brockhampton Road	0.61	0.075	0
	Brockhampton Rd north to Ranelagh Rd	0.46	0.040	
1745 – 1800	Ranelagh Road to Brockhampton Road	0.49	0.060	0
	Brockhampton Rd north to Ranelagh Rd	0.36	0.032	
1800 – 1815	Ranelagh Road to Brockhampton Road	0.41	0.049	0
	Brockhampton Rd north to Ranelagh Rd	0.29	0.026	

Table 18: PICADY Ranelagh Road/Brockhampton Road PM Peak 2018 (Baseline + Development + 'Phase 2')

- 5.13 The PICADY assessment suggests that the cumulative traffic impact upon the operation of the Ranelagh Road/Brockhampton Road junction from 'Phase 1' and 'Phase 2' developments (for those junction arms where the LRN's traffic flows could be effected by these developments' generated traffic flows) would remain insignificant and well within capacity with no resulting queuing.

5.14 Whilst this level of impact should not have a factor upon the determined decision for this application, this indicative cumulative level of traffic impact resulting from the proposed development and 'Phase 2' (a development to the south west of the proposed development), would be immaterial. The cumulative impact of both developments does not therefore cause concern with regards to highways operation or safety, given the location and relatively low existing traffic levels, as agreed through liaison with the LHA.

SAVILLS

Ranelagh Road, Havant
Transport Assessment

Paul Basham Associates Ltd
Report No. 025.0025/TA/3

6. SUMMARY AND RECOMMENDATIONS

- 6.1 This Transport Assessment (TA) has been prepared by Paul Basham Associates (PBA) on behalf of Orchard Homes and Developments Ltd to support a planning application for a residential development comprising 81 dwellings comprising of 59 houses and 22 flats located south of Ranelagh Road, Havant.
- 6.2 The application site presents a good opportunity to support sustainable development with its close proximity to local amenities, pedestrian and cycle networks, bus stops and train stations.
- 6.3 The proposed development would not generate a significant level of vehicle trips upon the local road network's (LRN) key junctions, whilst PIA data records do not identify any significant concern with regards to highway safety for the LRN.
- 6.4 Existing on-street parking arrangements on Brockhampton Road and in the vicinity of the application site are to be improved through local restrictions following implementation of the recently approved TRO. The proposed development's sufficient on-site parking provision is in accordance with HBC parking standards and would prevent overspill parking and additional on-street parking pressure on the LRN.
- 6.5 The proposed development complies with relevant national and local planning policy with regards to transport, demonstrating due consideration to providing sustainable integrated transport principles, considering and mitigating for transport impacts, proposing appropriate parking provision, and securing appropriate provision for and not undermining the future development potential of adjacent sites.
- 6.6 The proposed development site would be served by a single vehicular access located central to the site and providing suitable access onto Ranelagh Road with visibility splays of 2.4m x 43m achievable in either direction from the proposed access location.
- 6.7 The proposed internal site layout and highways design supports an attractive environment and the safe, harmonious and efficient movement of pedestrians, cyclists and vehicles, being designed in accordance with the LHA's adoptable standards and Manual for Streets design guidance principles.

- 6.8 As supported by a TRICS assessment and PICADY junction modelling assessment, the proposed development's generated vehicle traffic would not have a detrimental or material impact upon the operation of the LRN and its junctions. This would further be ensured through the implementation of the Travel Plan, submitted in association with this TA as part of the planning application.
- 6.9 During the pre-application resident consultation process, concern was expressed with regards to the cumulative traffic impact upon the LRN as a result of the proposed development and future residential development adjacent to the proposed development. Consideration has been given to such a potential future development, with no material traffic impact to the operation of the LRN indicated, including at the Ranelagh Road/Brockhampton Road junction.
- 6.10 Following from this TA's comprehensive analysis of the transportation effects of the proposed development, we would encourage HBC and HCC to look favourably upon this application in highway terms.