



14-006-02A

Part 1

Text Only



**PROPOSED MIXED USE DEVELOPMENT
LAND NORTH OF MARKET PARADE, HAVANT, HAMPSHIRE**

Transport Assessment

**Report No. 14-006-02A
September 2015**

**PROPOSED MIXED USE DEVELOPMENT
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Transport Assessment

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1.0 INTRODUCTION

1.1 Odyssey Markides (OM) have been commissioned by Hampshire and Regional Property Group (HRPG) to provide transport advice in support of a proposed mixed use development at Land North of Market Parade, Havant. This Transport Assessment (TA) has been prepared by OM in accordance with those instructions and will accompany an outline planning application for the development.

1.2 The development site is located on Market Parade in Havant town centre. The site location is shown in **Figure TA1**.

1.3 Scoping discussions have been held with Hampshire County Council (HCC) as the highways authority as well as the highways officer at Havant Borough Council (HBC) as the planning authority. An initial scoping meeting was held at HCC's offices on 20 May 2015. This was subsequently followed by scoping emails and phone calls; a copy of which are contained in **Appendix A**.

1.4 During the scoping meeting, HCC highlighted their concerns over parking provision of the proposed development. It was made clear to OM that the level of parking provided as well as the servicing and construction of the site were the principal matters to be assessed although the development impact on local junctions would also have to be considered.

1.5 Accordingly **Section 2.0** sets out relevant national and local transport planning policy, while **Section 3.0** discusses the existing local highway network and the walking, cycling and local public transport facilities in the vicinity of the site.

1.6 The background traffic is set out in **Section 4.0** while the site access and development proposals are set out in **Section 5.0**. The trip generation, distribution and assignment is discussed in **Section 6.0**. **Section 7.0** includes the traffic impact of the development on the local highway network, whilst **Section 8.0** presents a summary and conclusions.

2.0 POLICY CONTEXT

2.1 There are a number of sustainable transport policies at both national and local level which are of relevance to the proposed development. Nationally this is the National Planning Policy Framework (NPPF), while the local level policy is set out in the Hampshire Local Transport Plan 3 (LTP3) and the Havant Borough Core Strategy.

National Planning Policy Framework (NPPF, March 2012)

2.2 The key golden-thread that the government sets out throughout the National Planning Policy Framework (NPPF) is that *'The NPPF introduces a presumption in favour of sustainable development'*.

Promoting Sustainable Transport

2.3 Transport is covered in Section 4, Promoting Sustainable Transport. This is set out with the following ethos: *The transport system needs to be balanced in favour of sustainable transport modes, giving people a real choice about how they travel.*

2.4 All developments that generate significant amounts of movement should be supported by a Transport Statement or Transport Assessment and should be required to provide a Travel Plan.

2.5 Local authorities should support development which facilitates the use of sustainable modes of transport. To this end it states that *'Development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe'*.

2.6 It goes on to state that *'Plans and decisions should ensure developments that generate significant movement are located where the need to travel will be minimised and the use of sustainable transport modes can be maximised'*.

2.7 Developments should be 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 conflicts between traffic and cyclists or pedestrians, avoiding street clutter and where appropriate establishing home zones;*
- *Incorporating facilities for charging plug-in and other ultra-low emission vehicles; and*
- *Consider the needs of people with disabilities by all modes of transport.*

Delivering a Wide Choice of High Quality Homes

2.8 Housing is covered in Section 6, Delivering a Wide Choice of High Quality Homes, and aims to *'boost significantly the supply of housing'*. Housing applications should be considered in the context of the presumption in favour of sustainable development.

Local Transport Plan 3 (2011-2026)

2.9 The third Local Transport Plan (LTP3) for Hampshire covers the period 2011 – 2031 and was adopted in February 2011. The Transport Vision set out is for 'safe, efficient and reliable ways to get around a prospering and sustainable Hampshire'

2.10 The site is situated in South Hampshire, Chapter 7 of the LTP3 which covers Havant sets out 14 objectives through which the authorities will seek to achieve the vision, these are:-

- i. To develop transport improvements that support sustainable economic growth and development within South Hampshire;
- ii. 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;

- iii. To optimise the capacity of the highway network and improve journey time reliability for all modes;
- iv. To achieve and sustain a high-quality, resilient and well-maintained highway network for all;
- v. To deliver improvements in air quality;
- vi. To develop strategic sub-regional approaches to management of parking to support sustainable travel and promote economic development;
- vii. To improve road safety across the sub-region;
- viii. To promote active travel modes and develop supporting infrastructure;
- ix. To encourage private investment in bus, taxi and community transport solutions, and where practical, better infrastructure and services;
- x. To further develop the role of water-borne transport within the South Hampshire area and across the Solent;
- xi. To work with rail operators to deliver improvements to station facilities and, where practical, better infrastructure and services for people and freight;
- xii. To work with Local Planning Authorities to integrate planning and transport;
- xiii. To develop and deliver high-quality public realm improvements; and
- xiv. To safeguard and enable the future delivery of transport improvements within the TfSH area.

2.11 Additionally the Transport authorities for South Hampshire will *‘work to reduce the need to travel, maximise the use of existing transport infrastructure and deliver targeted improvements’*.

Havant Borough Core Strategy

2.12 The Havant Borough Core Strategy was adopted on 1st March 2011 to guide the future development of the borough up to 2026. This includes policies and strategies to provide new housing, jobs, infrastructure and other services and amenities.

2.13 Policy CS20 Transport and Access Strategy sets out *'Development will be permitted that:-*

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

2.14 Also contained within the Core Strategy are five Development Management policies, DM11 to DM16, pertaining to transport. As a summary these five policies seek to:

- i) Increase integration of sustainable travel modes and availability of non-motorised modes by appropriate measures;*
- ii) Not permit development where it is prejudicial to the future provision of strategic transport infrastructure; and*
- iii) Mitigate against impacts of travel.*

2.15 The proposed development is the first planning application to be submitted as part of the wider town centre regeneration scheme.

3.0 EXISTING CONDITIONS

3.1 This section discusses the existing conditions in the vicinity of the site, accessibility by foot, cycle and public transport to local facilities and those further afield. The latest five years collision statistics are also discussed in relation to the highway network.

Existing Site Uses

3.2 The site is currently occupied by nine small commercial units at ground floor level, totalling approximately 516sqm GFA and 14 two-bed dwellings at first and second floor level. The commercial units are currently unoccupied whilst some of the residential dwellings are occupied on rolling Assured Shorthold Tenancies (AST) in preparation for the re-development.

3.3 The current site includes provisions for a maximum of 16 unmarked car parking spaces situated on an uncovered hard standing area located in the centre of the detached buildings. Access to these parking spaces is gained from Market Parade via Elm Lane.

3.4 A public house was previously present on site, however this has since been demolished and temporary planning permission granted for its use as a car park although this has not been implemented.

Local Highway Network

3.5 The site is located within Havant town centre, and is located approximately 100m south of Havant Railway Station.

3.6 The development boundary is made up of Market Parade plaza to the west, Market Parade road to the south and North Street to the east and north, refer **Figure TA2**.

3.7 Vehicular access to the proposed development is to be gained via North Street. North Street is a single carriageway with c2.5m wide footways either side and is subject to a 30mph speed limit.

3.8 North Street forms a priority junction with Waterloo Road and provides access into the railway station car park and taxi rank turning facility to the north, whilst to the south it forms a roundabout junction with Elm Lane and a priority junction with South Street / West Street.

3.9 Directly to the south of the site North Street forms a crossroads junction with Market Parade and Prince George Street. Market Parade is a one-way street from Elm Lane to North Street.

3.10 Waterloo Road and Prince George Street are subject to 20mph speed limits while Market Parade is subject to a 30mph speed limit; it is not however considered that vehicles reach this speed due to the winding and active nature of the road.

3.11 As can be seen on **Figure TA2**, to the west Elm Lane forms a crossroads junction with the B2149 Park Road whereby access can be gained further afield to Horndean, Waterlooville, Hambledon, Cosham and Wickham.

3.12 The B2149 also provides a connection to the A27, to the south of the site, which in turn provides links east to Chichester and Brighton and west to Junction 5 of the A3(M), Portsmouth and Junction 12 of the M27 for access west to Fareham and Southampton.

Walking & Cycling

3.13 A comprehensive network is present for both pedestrians and cyclists within the vicinity of the proposed development providing safe links to local facilities in and beyond Havant.

3.14 Footways, c.2.0m wide, are present along the site frontage onto North Street while c.2.5m wide footways are present on both sides of the carriageway to the south of the site on Market Parade. Dropped kerb crossings are also present at all junctions within the vicinity of the site.

3.15 At the junction with Market Parade and Elm Lane, c.150m to the south, a signalised pedestrian crossing facility is present whereby safe access can be gained to the Meridian Shopping Centre / Havant town centre and Havant bus station.

3.16 To the north of the site two zebra crossing facilities are provided on North Street thus providing safe access from the site to the railway station.

3.17 Access can also be gained locally to on and off road cycle routes through the railway station car park and Havant Park which in turn provide connections to the wider National Cycle Network (NCN) Routes 2 and 22.

3.18 To the east, via a dedicated on-road cycle lane through the railway station car park, access is gained to NCN route 2 which in turn connects westbound to Cosham and Fareham and eastbound to Emsworth and Chichester.

3.19 To the west, via Havant Park, access is gained to NCN route 22. Via a culmination of on and off-road facilities access is gained southbound to Portsmouth and northbound to Rowlands Castle and Petersfield.

3.20 The cycle routes are shown on **Figure TA3** whilst a copy of the Cycling in Havant map is contained in **Appendix B**.

Public Transport - Buses

3.21 The nearest bus stop is located c.60m south of the site on Market Parade. Havant bus station is also easily accessible, being c.240m from the centre of the site, whereby access to bus routes 20, 21, 23, 27, 28, 30, 31, 36, 37, 38, 39 & 700 is gained.

3.22 These bus routes provide connections to multiple towns and villages such as Hayling Island, Chichester, Bognor Regis, Southbourne, Gunwharf Quays, Waterlooville, Portsmouth and Southsea.

3.23 A summary of these bus services and their frequencies are shown in **Table 3.1** overleaf, whilst **Figure TA4** shows the local routing of the bus services and the nearest bus stops to the site. **Appendix C** contains the full timetable information and route maps.

3.24 As can be seen the aforementioned bus routes provide high frequency services to a range of towns and facilities therefore encouraging the use of sustainable transport modes.

Public Transport - Rail

3.25 Havant railway station is located only c.100m north of the centre of the site; refer **Figure TA4**. The station is operated by South West Trains and has facilities including sheltered cycle storage, parking for motorcycles and a car park for 290 cars.

3.26 Havant railway station is served by regular services that operate westbound to Portsmouth, Fareham and Southampton, eastbound to Chichester, Brighton, Gatwick Airport and London Victoria and northbound to Petersfield, Guildford, Woking, Clapham Junction and London Waterloo.

3.27 **Table 3.2** overleaf, provides a summary of the rail services and their frequencies whilst **Appendix C** contains full timetable information.

Table 3.1: Summary of Bus Service Frequencies

No.	Route	Service Frequency (minutes)							
		Monday - Friday			Saturday			Sunday	
		Early	Day	Eve	Early	Day	Eve	Day	Eve
20	Havant Bus Station - Leigh Park - Queen Alexandra Hospital - Cosham - Portsmouth - Gunwharf Quays	30	30	60	30	30	60	-	-
21	Havant Bus Station - Leigh Park - Farlington - Portsmouth - Gunwharf Quays	20	30	30	30	30	30	60	60
23	Leigh Park - Havant Bus Station - Cosham - Portsmouth - Southsea	20	10	30	10	10	30	20	30
27*	Rowlands Castle - Leigh Park - Havant Leisure Centre - Havant Bus Station - Emsworth Hospital	120	120	-	120	120	-	-	-
28	Southbourne - Emsworth - Havant Bus Station - Emsworth - Southbourne	60	60	-	60	60	-	-	-
30/31	Havant Bus Station - West Town - Beechlands Bus Stand - West Town - Havant Bus Station	15	15	60	15	15	60	60	-
36*	Southbourne - Westbourne - Emsworth - Havant Bus Station - ASDA	-	120	-	-	-	-	-	-
37	Havant Bus Station - WaterlooVille - Horndean - Clanfield - Petersfield Railway Station	30	60	60	60	60	60	-	-
39	Havant Bus Station - Leigh Park - ASDA - Purbrook - WaterlooVille - Wecock	20	10	30	20	10	30	60	-
700	Flansham Park - Bognor Regis - Chichester Bus Station - Emsworth - Havant Bus Station - Portsmouth - Gunwharf Quays	20	20	30	20	20	30	30	30

* - Infrequent service.

Table 3.2: Summary of Rail Service Frequencies

Route	Service Frequency (minutes)							
	Monday – Friday			Saturday			Sunday	
	Early	Day	Eve	Early	Day	Eve	Day	Eve
Emsworth - Rowlands Castle - Havant - Bedhampton - Fratton - Portsmouth / Southsea - Portsmouth Harbour	20	10	12	20	10	12	15	15
London Waterloo - Clapham Junction - Woking - Guildford - Liphook - Rowlands Castle - Havant - Bedhampton	20	20	20	20	20	20	30	30
Brighton - Chichester - Havant - Fareham - Southampton Central	15	15	15	12	12	12	15	15
London Victoria - Gatwick Airport - Chichester - Emsworth - Havant	60	30	30	30	30	30	60	60

Local Facilities

3.28 The area surrounding the site mainly comprises of residential homes served by education, recreational, local retail and employment sites. There are a number of these in the immediate vicinity which are within easy walking or cycling distance. These include, but are not limited to, the following:

- Havant Park – Market Parade (50m);
- Local Shopping Parade – Market Parade (100m);
- Fairfield Infant School – Fairfield Road (250m);
- St Faith's Church Havant – West Street (250m);
- Glenhurst Nursery and Pre-School – Beechworth Road (400m);
- Meridian Shopping Centre – Elm Lane (450m);
- Central Retail Park – B2149 Park Road North (450m);
- Havant Leisure Centre – Civic Centre Road (650m);
- Havant College – Barncroft Way (850m);
- Havant Community Health Clinic – Lavant Drive (850m);
- Warblington School – Southleigh Road (1.4km); and
- Langstone Technology Park – Brookside Road (1.4km)

3.29 This shows that the development site is within comfortable walking distance of everyday facilities to cater for the day-to-day needs of potential future residents.

Collision Data

3.30 Collision data has been obtained from Hampshire Police for the area of North Street, Market Parade and Elm Lane in the vicinity of the site.

3.31 A total of six accidents were recorded over the latest available five-year period (1 May 2010 to 30 April 2015), all of which resulted in slight injuries. The accident data is included in **Appendix D**.

3.32 Three of the accidents occurred at the junction of Elm Lane with North Street. Two of these involved cyclists who collided with vehicles whose

drivers failed to give way. The third accident involved a pedestrian who was hit by a reversing car whilst crossing Elm Lane.

3.33 One accident happened at the junction of Market Parade and North Street where a pedestrian, was hit by a car whilst crossing the road.

3.34 Another accident involving a young pedestrian occurred when the child attempted to cross North Street on a red signal, near the pedestrian crossing south of Elm Lane.

3.35 The final accident occurred on Elm Lane when a pedestrian was injured by a mobility scooter whilst crossing Elm Lane.

3.36 The collision data reveals that whilst no serious or fatal accident occurred in the vicinity of the site during the period considered, all involved vulnerable road users. However, none suggests that there are highway related patterns and cause for accidents.

4.0 BACKGROUND TRAFFIC

4.1 This section of the report discusses the background traffic conditions in the vicinity of the site. This includes the traffic and parking utilisation surveys that have been undertaken and background traffic growth calculated from the TEMPRO database.

Traffic Background Surveys

4.2 Following the scoping meeting comprehensive traffic surveys, in the form of manual classified turning counts, were undertaken on Wednesday 3rd and Saturday 6th June 2015 at a number of junctions within the town centre in order to inform the base conditions for the assessment of the traffic impact from the proposed development. These were undertaken at the following junctions;

- North Street / Waterloo Road priority junction;
- North Street / Prince George Street / Market Parade crossroads;
- North Street / Elm Lane roundabout;
- Market Parade / Elm Lane priority junction;
- Park Road / Elm Lane / Park Way signalised junction;
- North Street / The Pallant priority junction; and
- North Street / East Street / South Street priority junction.

4.3 These peak period surveys were undertaken for the weekday between 07:00 to 10:00 & 16:00 to 19:00 and the Saturday between 12:00- 15:00. The survey data is attached in **Appendix E**.

4.4 The surveyed turning movements for the calculated AM (08:00 – 09:00), PM (17:00 – 18:00) and Saturday (12:00 – 13:00) peak hours are shown on **Figures 1, 2 and 3** respectively.

4.5 In addition to the manual classified turning counts, on-street and car park utilisation surveys were undertaken on Thursday 16th, Saturday 18th and Sunday 19th July 2015. The Thursday and Saturday surveys were undertaken

between the hours of 11:00 – 13:00, 18:00 – 21:00 within the car parks and 18:00 – 21:00 on-street while the Sunday survey period was between 11:00 – 13:00 and 18:00 – 21:00 for both the car parks and on-street.

4.6 These parking utilisation surveys were undertaken on the following roads and council owned car parks (all located within 400m of the site);

- North Street
- Market Parade
- Fairfield Rd
- Beechworth Rd
- Eastern Rd
- Leigh Rd
- Centenary Gardens
- Mavis Crescent
- Waterloo Rd
- Elmleigh Rd
- Civic Centre East Car Park
- Elmleigh Rd Car Park
- Prince George St Car Park
- East Pallant Car Park

4.7 A summary of the survey results are presented in **Tables 4.1 to 4.3** overleaf while a full copy of the survey results are contained in **Appendix E**.

Table 4.1: On-Street Parking Utilisation

<u>Road</u>	<u>Side</u>	<u>Total Spaces</u>	<u>Sunday</u> <u>AM (11am - 1pm)</u>			<u>Thursday</u>			<u>Saturday</u> <u>PM (6pm - 9pm)</u>			<u>Sunday</u>		
			Maximum Utilisation	Average Utilisation	Average number of spaces available	Maximum Utilisation	Average Utilisation	Average number of spaces available	Maximum Utilisation	Average Utilisation	Average number of spaces available	Maximum Utilisation	Average Utilisation	Average number of spaces available
Centenary Gardens	N	6	100%	93%	0	100%	79%	1	100%	100%	0	100%	95%	0
North St	W	8	75%	68%	3	88%	71%	2	75%	63%	3	63%	54%	4
North St	E	11	73%	78%	2	100%	82%	2	91%	78%	2	55%	48%	6
Market Parade	N	2	100%	100%	0	100%	71%	1	100%	64%	1	100%	79%	0
Market Parade	S	10	100%	98%	0	100%	93%	1	100%	93%	1	90%	76%	2
-Disabled space-		1	100%	100%	0	100%	29%	1	100%	29%	1	100%	71%	0
Fairfield Rd	E	6	83%	77%	1	100%	50%	3	67%	57%	3	50%	40%	4
Beechworth Rd	W	10	60%	60%	4	90%	66%	3	90%	70%	3	60%	54%	5
Beechworth Rd	E	4	100%	100%	0	100%	89%	0	100%	96%	0	100%	93%	0
Eastern Rd	N	14	14%	14%	12	7%	4%	13	7%	4%	13	21%	18%	11
Leigh Rd	E	2	50%	20%	2	100%	14%	2	50%	50%	1	100%	71%	1

Table 4.2: Car Park Utilisation – AM

<u>Car Park</u>	<u>Total Spaces</u>	<u>Thursday</u>			<u>Saturday</u> <u>AM (11am - 1pm)</u>			<u>Sunday</u>		
		Maximum Utilisation	Average Utilisation	Average number of spaces available	Maximum Utilisation	Average Utilisation	Average number of spaces available	Maximum Utilisation	Average Utilisation	Average number of spaces available
Civic Centre East Car Park	199	69%	65%	71	56%	50%	100	27%	26%	148
-Disabled space-	5	40%	32%	3	60%	60%	2	60%	32%	3
Elmleigh Rd Car Park	24	100%	92%	2	92%	83%	4	58%	55%	11
-Disabled space-	2	100%	70%	1	0%	0%	2	0%	0%	2
Prince George St Car Park	51	51%	41%	30	76%	68%	16	65%	62%	20
-Disabled space-	2	50%	50%	1	0%	0%	2	0%	0%	2
East Pallant Car Park	29	72%	59%	12	79%	74%	8	59%	54%	13
-Disabled space-	2	100%	100%	0	0%	0%	2	0%	0%	2

Table 4.3: Car Park Utilisation – PM

<u>Car Park</u>	<u>Total Spaces</u>	<u>Thursday</u>			<u>Saturday</u> <u>PM (6pm - 9pm)</u>			<u>Sunday</u>		
		Maximum Utilisation	Average Utilisation	Average number of spaces available	Maximum Utilisation	Average Utilisation	Average number of spaces available	Maximum Utilisation	Average Utilisation	Average number of spaces available
Civic Centre East Car Park	199	64%	50%	100	47%	35%	129	18%	7%	186
-Disabled space-	5	60%	40%	3	60%	37%	3	20%	6%	5
Elmleigh Rd Car Park	24	58%	33%	16	83%	76%	6	38%	29%	17
-Disabled space-	2	0%	0%	2	0%	14%	2	0%	0%	2
Prince George St Car Park	51	31%	23%	39	96%	73%	14	33%	26%	38
-Disabled space-	2	0%	0%	2	50%	14%	2	0%	0%	2
East Pallant Car Park	29	72%	51%	14	86%	67%	10	14%	12%	25
-Disabled space-	2	0%	0%	2	0%	0%	2	0%	0%	2

4.8 It can be determined from the summary survey results that there is limited availability for parking on-street, however there is ample space available within the local public car parks. These local car parks could therefore accommodate potential visitor parking to the development.

4.9 An attempt has been made to obtain car parking information from the operators of the main private car parks in Havant town centre, the Meridian Shopping Centre car park. OM were advised that the information was confidential and could not be supplied, however we were advised that 24/7 car parking permits are currently available for purchase from the Meridian car park centre management, indicating that the car parks are not typically used to their full potential. The developer therefore has the scope, if desired, to enter into negotiations with the operator of the car park regarding a wider permit arrangement to benefit the Market Parade scheme at a later date during detailed design planning and implementation stages.

Vehicle Speeds

4.10 In order to inform the visibility splay requirements at the location of the proposed site access onto North Street speed surveys were carried out on Wednesday 3rd June and Thursday 4th June, refer **Appendix E** for the output data.

4.11 The 85th percentile speeds recorded were 23mph and 29mph in a northbound and southbound direction. These speeds equate to visibility splay Y-distances of 30m and 43m respectively in accordance with the Manual for Streets (MfS); these are illustrated on **Drawing 14-006/004**.

Background Traffic Growth

4.12 Future traffic growth has been taken into account for the assessment year of 2020, this being the standard five years from the date of the planning application.

4.13 NTM growth factors for the specific area of Havant were obtained from TEMPRO, refer **Table 4.4**.

Table 4.4: Havant Peak Hour Growth Factors

NTM Growth	AM Peak Hour	PM Peak Hour	Saturday Peak Hour
2015 - 2020	1.086	1.090	1.093

4.14 These growth factors have been applied to the 2015 base traffic flows in order to determine forecast 2020 base traffic turning movements, which are shown for the AM, PM and Saturday peak periods on **Figures 4, 5 and 6** respectively.

5.0 PROPOSED DEVELOPMENT AND ACCESS

5.1 The development comprises 130 residential one and two-bedroom dwellings over 12 floors and six commercial units at ground level. The accommodation schedule is shown below:

- 36 one-bed units
- 94 two-bed units
- Six Commercial / Retail units, totalling 1,170sqm

5.2 The design proposes an underground car park which will include stairwells and lifts to all floors and additional secure bicycle storage facilities.

5.3 The proposed site layout masterplan for the ground floor and basement / underground car park are contained in **Appendix F**. It should be noted that this TA relates to an outline planning application and as such the site layout is for indicative purposes only.

Proposed Site Access

5.4 The vehicular access to the site, whereby access is gained to the basement car park, will be taken from North Street c.20m south of the junction with Waterloo Road via a give-way junction; refer **Drawing 14-006/004**.

5.5 In order to accommodate the southbound visibility splay, looking north from the basement car park, there will be a requirement for the removal of c.18m of existing on-street car parking, which currently allows for up to three vehicles to park.

5.6 Pedestrian access to the residential units will be via four cores, one of which includes a lift. Two of the residential access cores will be served off Market Parade, one off North Street and one off the pedestrianised portion of Market Parade.

Parking

Car Parking

5.7 All on-site car parking, for the residential portion of the proposed development, will be provided in accordance with Havant Borough Council standards set out in the 'Havant Borough Residential Parking and Cycle Provision Supplementary Planning Document' adopted in March 2010.

5.8 **Table 4.1** below sets out the car parking standards.

Table 5.1: Car Parking Standards

Land Use	Unit Type	Standard for high accessibility zone (Havant Town Centre)
Residential	1 - 3 Bed Units	Max 1 space per unit
Commercial	B1(a) Office	1 space per 100sqm
	B1 (b)©	1 space per 167sqm
	B2	1 space per 167sqm
	B8	1 space per 303sqm
Retail	Non-food	1.5 spaces per 40sqm
	Food	1.5 space per 28sqm

5.9 All on-site car parking will be provided on the basement floor of the proposed development. A total of 58 allocated car parking spaces, six of which are tandem spaces, are proposed to be provided for the larger two bedroom apartments. The remaining apartments will be car free. This equates to an overall ratio of 0.45 spaces per dwelling.

5.10 Guidance contained within the Havant Borough Residential Parking and Cycle Provision SPD states for car parking within a high accessibility area within which the site falls, *'Proposals within Havant Town Centre boundaries will be expected to have a reduced or even zero standard of vehicle parking provision in order to maximise the use of land and discourage the use of private motor vehicles'*.

5.11 The proposed level of car parking is below the maximum standard for a site located within a high accessibility area, which is applicable as the proposed development is only c.100m and c.240m from Havant railway station and bus station respectively; as such the level of car parking proposed is in line with HBC's car parking policies and therefore considered to be appropriate and acceptable.

5.12 Furthermore it can be determined that the site looks to encourage the use of sustainable travel by making full use of its highly sustainable location while also reducing congestion by removing cars from the local highway network which would otherwise be present should the maximum standards be applied.

5.13 In addition the Car and Cycle Parking SPD has influenced compliant design where it states *'Tandem parking will be acceptable for individual properties. However only one space behind the other will be acceptable.'*

5.14 Where car parking has not been allocated residents will not be eligible to purchase on-street parking permits.

5.15 Due to the site's highly sustainable location, and as it is the intention to take advantage of this, there will be no car parking provision for the commercial element of the site.

5.16 Car parking for people with disabilities will be catered for via the provision of Lifetime Homes compliant parking spaces which will be provided within the basement car park.

5.17 Where the need arises for visitor parking this can be accommodated either on-street or within the car parks located only a short distance from the site.

Cycle Parking

5.18 All residential on-site cycle parking will be provided in accordance with Havant Borough Council standards set out in the 'Havant Borough Residential Parking and Cycle Provision Supplementary Planning Document' adopted in March 2010, while commercial / retail cycle parking will be provided as set out in the Havant Borough Council Core Strategy, Appendix 5: Non Residential Parking Standards Policy DM14.

5.19 **Table 4.2** below sets out the cycle parking standards.

Table 4.2: Cycle Parking Standards

Land Use	Unit Type	Long Stay	Short Stay
Residential	1 Bed Unit	1 space per unit	1 loop/hoop per unit
	2 Bed Unit	2 spaces per unit	1 loop/hoop per unit
Commercial	B1(a) Office	1 space per 150sqm (GEA)	1 space per 500sqm (GEA)
	B1 (b)©	1 space per 250sqm (GEA)	1 space per 500sqm (GEA)
	B2	1 space per 350sqm (GEA)	1 space per 500sqm (GEA)
	B8	1 space per 500sqm (GEA)	1 space per 1000sqm (GEA)
Retail	-	Greater of 1 space per 6 staff or 1 per 300sqm (GEA)	1 stand / 200smq (GEA)

5.20 A total of 245 cycle parking spaces, provided in a cycle store or Sheffield stands, are proposed. These will be provided on both the basement and ground floors.

5.21 As set out in the Car and Cycle Parking SPD guidance, a reduction in the number of cycle parking / storage for large flatted developments may be acceptable.

5.22 It is anticipated that ground level cycle parking will be for the residential units, although this will be finalised at the detailed design stage.

5.23 Should there a requirement for visitor cycle parking the client would be willing to make a contribution to its provision as part of the wider improvement works proposed in Havant town centre.

Vehicle Analysis

5.24 The layout of the site has been designed so that refuse vehicles can stop within 30m of all bin collection points within the site, in accordance with Manual for Streets. It is the intention for refuse collection to be undertaken from Market Parade, to the south of the site, via the proposed loading / unloading bay.

5.25 It is proposed to service the commercial units from the roadside on Market Parade via the service access or the front doors of the commercial units. Whilst the layout included in this report is indicative it suggests units 1, 4 and 6 have direct access to the internal core of the building whilst units 2, 3 and 5 have access from the outside only.

5.26 Given the size of the commercial / retail units it is anticipated that they will be serviced generally by smaller vehicles such as large vans and rigid HGVs.

5.27 It is envisaged that a Site Management Plan (SMP) is put in place once the development is occupied. This could include the suspension of short term parking bays along Market Parade at off peak times in order to allow delivery vehicles to park up safely to unload.

5.28 Swept path analysis has been undertaken for the most onerous car parking spaces within the basement car park, refer **Drawings 14-006/005 and 006**. This demonstrates that all are accessible.

6.0 TRAFFIC GENERATION, DISTRIBUTION & ASSIGNMENT

6.1 The vehicle trip generation for the proposed development has been calculated. These trips have then been distributed and assigned onto the existing highway network.

Vehicle Trip Generation

6.2 The TRICS database has been analysed in order to obtain trip rates for the proposed residential development. Surveyed sites have been selected within TRICS that are of a similar size and have similar characteristics to the development site for the proposed land use.

6.3 The AM (08:00-09:00), PM (17:00-18:00) and Saturday (12:00 – 13:00) peak hour trip rates and trip generation for the 130 residential one and two-bedroom dwellings are shown in **Table 6.1** below.

Table 6.1: Proposed 130 Dwelling Residential Development Trip Rates & Trip Generation

	AM Peak		PM Peak		Saturday Peak	
	In	Out	In	Out	In	Out
Trip Rates	0.057	0.176	0.139	0.071	0.072	0.112
Trip Generation	7	23	18	9	9	15

6.4 As can be seen from **Table 6.1** the proposed development would generate 30 two-way vehicle trips in the AM peak, 27 two-way vehicle trips in the PM peak and 24 two-way vehicle trips in the Saturday peak. All of the TRICS output data sheets are contained in **Appendix G**.

6.5 It should be noted that the existing residential units are occupied and hence the net trip generation of the proposed residential development will be lower than that presented above.

6.6 The small commercial units on the ground floor are not expected to generate any additional vehicular trips; instead they will be utilised by town centre shoppers who are already in the vicinity.

6.7 Given the location of the site, it is expected that a large proportion of staff at the commercial units will travel to work by public transport; however, those that drive will be able to park in the town centre car parks which have got sufficient capacity to accommodate the additional vehicles, as has been shown in the parking surveys.

Vehicle Trip Distribution & Assignment

6.8 In order to assign the vehicle trips onto the existing highway network the traffic has been distributed as per observed turning patterns, subject to logic checks; refer **Figures 7, 8 and 9** for the AM PM and Saturday peak hour vehicle trip distributions respectively.

6.9 The vehicle trips have then been assigned onto the existing highway network in accordance with the above distribution. These vehicle trips, for the AM, PM and Saturday peak hours are shown on **Figures 12, 13 and 14** respectively.

7.0 DEVELOPMENT TRAFFIC IMPACT ANALYSIS

7.1 As set out in **Sections 4.0** and **6.0**, the forecast background traffic has been obtained from traffic surveys and growthed accordingly. Furthermore the development trip generation has been assigned onto the network as per the existing turning patterns, subject to logic checks.

7.2 The impact of the development traffic on the local highway network has been assessed at the following junctions;

- North Street / Waterloo Road priority junction;
- North Street / Prince George Street / Market Parade crossroads;
- North Street / Elm Lane roundabout;
- Market Parade / Elm Lane priority junction;
- Park Road / Elm Lane / Park Way signalised junction;
- North Street / The Pallant priority junction; and
- North Street / East Street / South Street priority junction.

7.3 **Table 7.1** overleaf sets out the development traffic impact on these junctions.

7.4 To enable a robust assessment the trip generation used has been based on developments with an average parking ratio of 1:1 as opposed to the proposed development whereby the parking ratio will be less than half, at c.1:0.45.

7.5 In addition, no allowance has been made for the existing residential units, thereby presenting a robust trip generation.

Table 7.1: Proposed Development Traffic Impact Analysis

Junction	<u>Existing flows into junction</u>			<u>Proposed flows into junction</u>			<u>Percentage Impact</u>		
	AM	PM	Saturday	AM	PM	Saturday	AM	PM	Saturday
North Street / Waterloo Road Priority Junction	295	306	286	295	306	286	0.0%	0.0%	0.0%
North Street / Prince George Street / Market Parade Crossroads	459	445	536	489	473	559	6.6%	6.1%	4.5%
North Street / Elm Lane Roundabout	1054	968	969	1078	992	986	2.3%	2.5%	1.8%
Market Parade / Elm Lane Priority Junction	932	967	1114	952	985	1127	2.1%	2.0%	1.2%

7.6 It can be seen from **Table 7.1** overleaf the highest impact of the proposed development on the local highway network is 6.6% during the AM peak period at the North Street / Prince George Street / Market Parade crossroads however this reduces significantly to a maximum of only 2.5% at the very next junction.

7.7 It can therefore be determined there will be no material impact on the local highway network as a result of the proposal, particularly given that the number of vehicles anticipated to be generated will be lower than that used in the calculation, as a consequence of the lower parking provision ratio.

7.8 Given this level of vehicle trip generation junction analyses are not required to determine the impact of the trips associated with the proposed development on the local highway network.

7.9 This is also considered appropriate given this application is only the first of many anticipated as part of the larger Havant town centre regeneration scheme whereby junctions may be improved / modified. Additionally the client would be willing to make appropriate contributions towards improvements proposed at the junctions impacted by this development, below anticipated daily fluctuations in traffic.

7.10 Furthermore, given the collision data set out in Section 3.0, the client would be willing to make appropriate contributions towards pedestrian and cycle improvements as part of the wider town centre regeneration scheme.

8.0 SUMMARY & CONCLUSIONS

8.1 This Transport Assessment set out the transport related aspects of a proposed mixed use development comprising of 130 residential one and two-bedroom dwellings over 12 floors and six commercial units at ground level.

8.2 The site is within easy walking distance of Havant town centre and other existing local facilities, whilst it is also located only c.100m from Havant railway station. It is also within close proximity, c.240m, of Havant bus station from which there are regular services to Hayling Island, Portsmouth, Southampton, Southbourne, Chichester and Bognor Regis.

8.3 As described in this Transport Assessment, the site is highly accessible via sustainable modes of travel. This high level of accessibility, especially to Havant railway station, Havant bus station and the town centre will result in a predominance of travel to / from the development via sustainable modes of transport.

8.4 The site access will comprise a give-way junction onto North Street. Access for pedestrians and cyclists will be taken from multiple points along the site boundary thus maximising the permeability of the proposed development.

8.5 All parking requirements, be it vehicular or cycle, have been provided in accordance with the standards set out by Havant Borough Council.

8.6 The local highway network has been assessed with respect to its capacity to cater for the vehicular generation of the development; this demonstrated that there will be little to no impact at the local junctions.

8.7 Overall this proposed development is in a highly sustainable location with respect to local facilities and public transport, whilst its impact on the local highway network is anticipated to be minimal therefore the site will not result in a 'material increase' or a 'material change in the character of traffic in the vicinity of the site'.