

Kensington Neighbourhood Health Centre

Edge Lane



Transport Assessment

April 2011



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Galliford Try

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1. Introduction

1.1 Background

This Transport Assessment (TA) has been prepared on behalf of Galliford Try (working on behalf of Liverpool and Sefton Health Partnership) to accompany a planning application for a Neighbourhood Health Centre on land bounded by Edge Lane, Holt Road, Wedgewood Street and commercial property occupied by Wilson Henry Chartered Accountants in Kensington, Liverpool.

The main aims of this TA are:

- To predict travel demand for the development;
- To demonstrate safe and effective multi-modal accessibility to the development; and
- To identify, assess and propose mitigation for any net transport related impacts likely to arise from the development.

The scope of this TA was discussed with Liverpool City Council Highways Development Planning team and Merseytravel. Comments received are included in Appendix A for reference.

1.2 Report Structure

This report presents the findings of the TA, along with recommended mitigation measures. The report is structured as follows:

- Section 2 outlines national and local planning policy and guidance;
- Section 3 describes the existing site;
- Section 4 outlines the development proposals;
- Section 5 discusses the future accessibility of the site;
- Section 6 assesses the traffic impact of the development on the local highway network;
- Section 7 assesses the proposed parking provision against national and local parking standards;
- Section 8 contains a road safety assessment for the development;
- Section 9 introduces the Travel Plan Framework for the development; and
- Section 10 provides a summary of the findings of the assessment

2. Policy Context

2.1 Introduction

The purpose of this section is to review relevant planning policy in order to clarify the context within which the TA for this proposed development has been developed.

2.2 National Policy

2.2.1 Planning Policy Guidance 13: Transport

Planning Policy Guidance notes (PPG) set out the framework within which local authorities are advised by Government to create their planning policy. The current version of PPG13, which is the note pertaining to transport, was published in March 2001 by the then Department of the Environment, Transport and the Regions.

It was updated in January 2011 by the Department for Communities and Local Government. The guidance was written to ensure that land use planning and transport planning are integrated at the national, regional and local level to:

- 'promote more sustainable transport choices both for people and for moving freight';
- 'promote accessibility to jobs, shopping, leisure facilities and services by public transport, walking and cycling'; and
- 'reduce the need to travel, especially by car'

To achieve these objectives, guidance is given to local authorities regarding how developments and transportation should be integrated through the planning process. The general guidance is reinforced by more detailed advice relating to each major land use.

With regards to healthcare developments, PPG13 advises local authorities to consider the following points:

"A key planning objective is to ensure that jobs, shopping, leisure facilities and services (including health) are accessible by public transport, walking, and cycling."

"Local Authorities should locate day to day facilities which need to be near their clients in local and rural service centres, and adopt measures to ensure safe and easy access, particularly by walking and cycling. Such facilities include primary schools, health centres, convenience shops, branch libraries and local offices of the local authority and other local service providers"

"New health facilities should be planned to maximise accessibility by non-car modes of transport, whilst at the same time providing good access arrangements for emergency vehicles and those who need to use cars. It is important that those considering new health facilities have early discussions with the local authority, ideally at Capital Investment Appraisal Stage (i.e. Strategic or Outline Business Case Stage for all schemes over £1m), to ensure proposals meet the objectives of this guidance. New intermediate health care facilities should, where possible, be located in town, district or local centres, where they will be highly accessible by non car modes of transport and where the facilities can reinforce the range of services provided by these centres."

"The Government considers that travel plans should be submitted alongside planning applications which are likely to have significant transport implications, including those for:

all major developments comprising jobs, shopping, leisure and services

and;

smaller developments comprising jobs, shopping, leisure and services which would generate significant amounts of travel in, or near to, air quality management areas, and in other locations where there are local initiatives or targets set out in the development plan or local transport plan for the reduction of road traffic, or the promotion of public transport, walking and cycling. This particularly applies to offices, industry, health and education uses”.

2.3 Local Policy

2.3.1 Third Local Transport Plan for Merseyside 2011-2016

The third Local Transport plan (LTP3) was published in April 2011 superseding LTP2 published in 2006. It aims to provide a transport system that supports sustainable economic growth whilst addressing carbon reduction. LTP3 also aims to support local policies in promoting and improving health and wellbeing, in order to address inequality and social exclusion. The plan has the following goals which all have equal status.

- *Help create the right conditions for sustainable economic growth by supporting the priorities of the Liverpool City Region, the Local Enterprise Partnership and the Local Strategic Partnerships*
- *Provide and promote a clean, low emission transport system which is resilient to change to climate and oil availability.*
- *Ensure the transport system promotes and enables improved health and wellbeing and road safety.*
- *Ensure equality of travel opportunity for all, through a transport system that allows people to connect easily with employment, education, healthcare, other essential services and leisure and recreational opportunities.*
- *Ensure the transport network supports the economic success of the city region by the efficient movement of people and goods.*
- *Maintain our assets to a high standard.*

2.3.2 Liverpool Unitary Development Plan

The Liverpool Unitary Development Plan (UDP) was adopted in November 2002 and provides a framework for how the city will develop by setting out policies governing new development in Liverpool. The UDP aims to provide a balanced provision of transport infrastructure which:

- *‘provides access to employment, leisure, retail and other facilities for all of the City’s residents;*
- *meets the transport needs of people who are economically and socially disadvantaged;*
- *allows for the safe, efficient and easy movement of goods into and throughout the City, in order to help secure the regeneration of the local economy;*
- *protects and enhances the environment through reducing the reliance on the private car;*
- *promotes, in conjunction with the Passenger Transport Authority, investment in the public transport network and associated facilities;*
- *improves facilities for cyclists and pedestrians;*
- *provides a framework for investment in the efficiency of the road system; and*
- *reduces the availability of car parking facilities which would attract car borne commuters’*

The policies reflect the overarching aims of national transport policy to promote sustainable travel choices, including walking, cycling and public transport.

Chapter 11 of the UDP outlines the targets for transport in Liverpool. Targets relating to new developments include:

- Policy T6: *'The City Council will promote and support initiatives designed to maximise the role of cycling as a transport mode by:*
 - iv. Improving road signage, road conditions, junction priorities and carriageway crossings where cycle routes join highways;*
 - vi. Ensuring that secure cycling parking facilities are provided at locations regularly visited by the public and requiring new developments to provide secure cycle parking facilities'*
- Policy T7: *'Catering for pedestrians' needs in the design of all new highway improvement schemes, traffic management schemes, the road maintenance programme, and giving consideration to the provision of safe and convenient walking routes through all major development and redevelopment sites'*
- Policy T12: *'All new developments including changes of use, which generate a demand for car parking will be required to make provision for car parking on site, to meet the minimum operational needs of the development'*
- Policy T13: *'Car parking for the disabled should be provided in accordance with...specific standards'*

2.3.3 Ensuring a choice of travel – Supplementary planning document

Ensuring a Choice of Travel Supplementary Planning Document (SPD) provides guidance to developers on access and transport requirements for new developments across the wider Merseyside area. Its overall objectives are:

- *'Ensure a reasonable choice of access by all modes of transport to new development;*
- *Reduce the environmental impact of travel choices, by reducing pollution, and improving the local environment;*
- *Improve road safety;*
- *Promote healthier lifestyles by providing opportunities for people to walk or cycle for work or leisure purposes;*
- *Reduce the level of traffic growth and congestion on the strategic and local road network; and*
- *Encourage opportunities to improve the quality of development proposals by better use of space through the provision of less car parking spaces where appropriate'*

The SPD should also:

- *'Enable the provision of a balanced transport infrastructure which provides access to employment, leisure, retail and other facilities for all the city's residents and visitors; and*
- *Provide a framework for future investment in the City's strategic road and rail network where new development would create additional travel demand.'*

2.4 Conclusion

The proposed development has been designed and located with the transport requirements as set out in national and local planning policy in mind. The proposed location is close to its end users and public transport services helping to promote sustainable transport choices by reducing the need to travel especially by car.

3. Existing Site

3.1 Introduction

This section provides details of the existing usage and accessibility of the proposed development site.

3.2 Location

The site is located in Kensington on the eastern outskirts of Liverpool City Centre. on land bounded by Edge Lane to the south, Holt Road to the east, Wedgewood Street to the north and commercial property to the west.

3.3 Present Site Usage

The proposed development site is currently vacant following demolition of 61 residential and commercial properties in late 2010/early 2011 in preparation for highway improvements to the Edge Lane corridor and Edge Lane/Holt Road corridor. Photographs of the existing site are included in Appendix B.

3.4 Site Accessibility

3.4.1 Bus and Rail

There are bus stops located on Edge Lane, Durning Road and Holt Road, all within approximately 200 metres of the centre of the site. During peak times there are 6 buses per hour in both directions along Holt Road and with 4 buses per hour in both directions during peak times along Edge Lane.

Bus stops on Durning Road and Holt Road are provided to a high standard with raised bus boarding kerbs, shelters, timetable information and bus stop road markings. Bus facilities on Edge Lane eastbound are located outside the development with a post and timetable board. Westbound facilities are provided 150 metres west of the site with shelter, timetable information and bus stop road markings.

As part of the Edge Lane improvement scheme upgraded bus facilities are currently being constructed along the route.

Within 500 metres of the site there are two high frequency bus corridors on Kensington (32 buses per hour in each direction) and Wavertree Road (26 buses per hour in each direction) during peak hours.

Figure 3.1 illustrates the bus services and routes within the vicinity of the development site. Table 3.1 outlines the operating times and frequency of these services.

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<http://pims01/pims/llisapi.dll/Open/1472922582>

Table 3.1: Bus Services in the vicinity of the development

Service Number	Route	Hours of operation	Frequency (daytime)	Operator
Holt Road				
26	Liverpool One - Everton Valley - Sheil Road - Gardners Drive - Princes Park - Liverpool One (Clockwise only)	Mon - Sat - 05:00 - 23:55 Sun - 6:15 - 23:55	Mon - Sat - Every 10mins Sun - Every 20 mins	Arriva
27	Liverpool One - Princes Park - Gardners Drive - Sheil Road - Everton Valley - Liverpool One (Anti-Clockwise only)	Mon - Sat - 05:15 - 23:55 Sun - 6:15 - 23:56	Mon - Sat - Every 10mins Sun - Every 20 mins	Arriva
Edge Lane				
6 (inc 116)	Queens Square - Edge Lane - Huyton - Cronton - Penketh - Warrington	Mon - Sat - 5:47 - 18:52 Sun - No services	Mon - Sat - Every 30mins	Arriva
7, 7A, 7B	Queens Square - Edge Lane - Broadgreen Hospital - Huyton - Rainhill - Cronton - Penketh - Warrington	Mon - Sat - 5:47 - 00:02 Sun - 8:25 - 00:02	Mon - Sat - Every 30mins	Arriva
7 terminates at Huyton, 7A terminates at Rainhill, 7B terminates at Warrington				
Kensington High Street				
8	City Centre - Kensington - Old Swan - Huyton - Old Swan - Kensington - City Centre	Mon - Sat - 5:47 - 18:52 Sun - No services	Mon - Sat - Every 20mins	Arriva
9	City Centre - Kensington - Old Swan - Huyton - Old Swan - Kensington - City Centre	Mon - Sat - 6:17 - 18:47 Sun - No services	Mon - Sat - Every 20mins	Arriva
10	St Helens - Page Moss - Old Swan - Royal Liverpool Hospital - Liverpool One	Mon - Sat - 06:15 - 00:02 Sun - 7:15 - 00:02	Mon - Sat - Every 10mins Sun - Every 30 mins	Arriva
10A	St Helens - Page Moss - Old Swan - Royal Liverpool Hospital - Liverpool One	Mon - Sat - 04:58 - 23:52 Sun - 06:00 - 23:52	Mon - Sat - 12 per hour Sun - 5 per hour	Arriva/ Stagecoach
10B	Huyton - Page Moss - Old Swan - Royal Liverpool Hospital - Liverpool One	Mon - Sat - 06:59 - 00:24 Sun - 09:15 - 00:24	Mon - Sat - 8 per hour Sun - 4 per hour	Arriva/ Stagecoach
Wavertree Road				
14/14C	Runcorn/Widnes - Hough Green - Belle Vale - Wavertree Clock Tower - Queens Square	Mon - Sat - 05:47 - 23:20 Sun - 08:37 - 22:55	Mon - Sat - Every 15 mins Sun - Every 20 mins	Halton Transport
61/61c/161	Runcorn/Widnes - Rainhill - Huyton - Wavertree Clock Tower - Queens Square	Mon - Sat - 06:51 - 20:31 Sun - 08:20 - 17:27	Mon - Sat - Every 15 mins Sun - Every Hour	Halton Transport
78	Halewood - Woolton Village - Wavertree Clock Tower - Queens Square	Mon - Sat - 05:48 - 19:39 Sun - 08:39 - 18:30	Mon - Sat - Every 20 mins Sun - Every 30 mins	Arriva
79/79C	Netherley - Belle Vale - Wavertree Clock Tower - Queens Square	Mon - Sat - 05:48 - 00:10 Sun - 07:00 - 00:10	Mon - Sat - 16/14 per hour Sun - 6 per hour	Arriva

The closest railway station is Edge Hill, located approximately 700 metres from the centre of the site which is a 10 minute walk based on a walk speed of 1.4 metres per second. Table 3.2 shows the routes and frequency of services operating from Edge Hill station.

Table 3.2: Rail routes and frequency from Edge Hill Station

Route	Daytime Frequency per hour per direction		
	Weekday	Saturday	Sunday
Liverpool Lime Street - Warrington Central - Manchester Oxford Road	1	1	1
Liverpool Lime Street - Huyton - Earlestown - Warrington Bank Quay	1	1	0
Liverpool Lime Street - Huyton - Newton-le-Willows - Eccles - Manchester Victoria	1	1	0
Liverpool Lime Street - Huyton - St Helens Central - Wigan North Western	2	2	0

Additional services also operate in the morning and afternoon commuter peaks during weekdays and Saturdays on the routes to and from Manchester Oxford Road and Manchester Victoria. Figure 3.2 shows the wider Merseyrail network.

Legend:

- Northern Line
- Wirral Line
- City Line
- Other Lines

Ticket Validity:

- Trio, Trioplus, Railpass, Saveaway tickets and Free Travel Passes valid in this area
- Trioplus tickets, Railpass and Free Travel Passes valid on rail only in this area

Regular bus links to Liverpool John Lennon Airport run from the City Centre and Liverpool South Parkway.

Frequent bus links between CHESTER STATION and CHESTER CITY CENTRE free to rail passengers.

Map Labels: SOUTHPORT, Meols Cop, Birkdale, Hillsdale, Ainsdale, Freshfield, Formby, Hightown, Hall Road, Blundellsands & Crosby, Waterloo, Seaforth & Litherland, BOOTLE New Strand, BOOTLE Oriel Road, Bank Hall, Sandhills, MOORFIELDS, LIVERPOOL, LIME ST., Wavertree Technology Park, Edge Hill, Mossley Hill, West Allerton, Aigburth, Cressington, RIVER MERSEY, HUNTS CROSS, Liverpool South Parkway, Hough Green, Halewood, Widnes, WARRINGTON Central, WARRINGTON Bank Quay, CREWE, Shrewsbury, Wrexham, Shotton, Chester, Overpool, ELLESMERE PORT, Stanlow & Thornton, Ince & Elton, Frodsham, Helsby, Runcorn, Runcorn East, Acton Bridge, Hartford, Winsford, Warrington, Wigan, Wigan Wallgate, Wigan North Western, Bryn, Garswood, Earlestown, St. Helens Central, Thatto Heath, Eccleston Park, Prescott, Rainhill, St. Helens Junction, Lea Green, Huyton, Whiston, Broad Green, Roby, Kirkdale, Rice Lane, Walton, Orrell Park, Aintree, Old Roan, Maghull, Aughton Park, Town Green, Burscough Junction, Burscough Bridge, New Lane, Bescar Lane, Croston, Rufford, Hoscar, Parbold, Appley Bridge, Gathurst, Pemberton, Orrell, Upholland, Leyland, Preston, East Lancashire, Bolton Manchester Manchester Airport, Manchester Yorkshire East Anglia, Manchester Airport East Anglia, North Wales Coast, Wrexham, Shrewsbury Birmingham Cardiff London.

3.4.2 Highway

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To the south of the site, Durning Road and Tunnel Road provide access to South Liverpool and the districts of Wavertree, Toxteth and Aigburth. While northwards Holt Road and Quorn Street provide access to the districts of Kensington, Tuebrook and Anfield.

Local residential roads including Wedgewood Street and Quorn Street, adjacent to the development are traffic calmed using speed humps and cushions and rat-run opportunities are limited by road closures.

Table 3.3 presents the principal approach routes to the site.

Table 3.3: Principal approach to development

Approach	Primary Roads	Distributor Roads
North	Holt Road (A5089), Kensington (A57)	Gilead St, Quorn St, Wedgewood St, Brae St
East	Edge Lane (A5047)	Wedgewood St, Brae St
South	During Road (A5089)	Wedgewood St, Brae St
West	Edge Lane (A5047)	Wedgewood St, Brae St

3.4.3 Parking

Car parking for the residential and commercial properties that previously occupied the site was provided on-street. The site is currently vacant and has no dedicated parking.

3.4.4 Pedestrian Access

The site is currently vacant and currently has no dedicated pedestrian access. There are existing pedestrian routes around the development on Wedgewood Street, Wimpole Street, Edge Lane and Holt Road.

There are currently no dedicated pedestrian facilities on the signalised junction on Edge Lane/Holt Road junction. Dedicated pedestrian crossing facilities on Edge Lane to the west are within 15 metres of the site and on Holt Road within 50 metres north of the site

3.4.5 Cycle Access

The site is currently vacant and currently has no dedicated cycle access. . Jubilee Road to the west of the site is an on-road cycle route and Harbold Street/Wavertree Road/Wavertree Boulevard is a part of an on-road signed cycle route from Liverpool City Centre to east Liverpool.

Figure 3.3 shows the routes in the vicinity of the site as recommended in the Liverpool cycle map 2008. Those routes in solid yellow are official on-road routes, while the dashed yellow lines are recommended routes.

Figure 3.3: Cycle routes in the vicinity of the development



Source: Liverpool Cycle Map

3.5 Conclusion

The existing site is well located for local short trips. It is well served by public transport with several high frequency bus routes in its vicinity and has a railway station close by. It is also well placed on the strategic and local highway network.

4. Proposed Development

4.1 Location

The site is located in Kensington on the eastern outskirts of Liverpool City Centre. Figure 4.1 shows the site boundary (indicative red line). A plan for the proposed development is also shown in drawing 5397_SH_SP(90)001_Landscape_Plan accompanying the planning application.

Figure 4.1: Proposed Kensington Health Centre Site



Source: Openmap

4.2 Description

The proposed development is a 2,500 sqm neighbourhood health centre that comprises of the following

- 2 GP surgeries
- Pharmacy
- Dental surgery
- Associated staff and administration space
- Associated services – plant and sub station
- Landscaping
- 66 car parking spaces inc 5 disabled spaces
- Cycle and motorcycle parking

Its opening hours are proposed to be 08:00 to 18:30 Monday to Friday for GP surgeries and early morning to late evening, weekends and bank holidays for clinics and other services on site. It is proposed that 56 staff will work at the development.

4.3 Accessibility

4.3.1 Vehicular Access

The proposed vehicle access is via Quorn Street. This will be accessed via Wedgewood Street which it is proposed to become one-way in a westbound direction. Brae Street will become one-way in an eastbound direction and is being delivered as part of the Edge Lane improvement scheme.

4.3.2 Parking

It is proposed to provide 66 car parking spaces (including 5 disabled parking spaces) as part of the development. Parking is discussed further in section 7.

4.3.3 Servicing

The main servicing requirement for the development will be the collection of refuse. It is proposed that dedicated NHS health screening vehicles of goods vehicle size would use the site on an ad hoc basis.

4.3.4 Pedestrian and cycle access

Upgraded pedestrian facilities will be provided as part of the Edge Lane improvements and the new development. Pedestrian access will be available from Holt Road, Edge Lane and Quorn Street into the site. Cycle access will be via the proposed vehicular access on Quorn Street.

4.3.5 Public Transport

High quality public transport facilities are provided on Holt Road and upgrade high quality facilities are being provided as part of the Edge Lane Improvement Scheme. These are accessible via existing and upgraded pedestrian facilities to and from the proposed development pedestrian access points.

4.3.6 Taxis/other vehicles

A vehicular drop off point is proposed adjacent to the building rear entrance, within the site.

4.4 Opening year

The development is proposed to open between November 2012 and January 2013.

5. Future Site Accessibility

5.1 Introduction

The purpose of this section is to review proposed development and highway schemes in the vicinity of the development which could affect the accessibility of the proposed site.

5.2 Committed developments

Liverpool City Council advised Mott MacDonald that there are no committed developments in the area which need to be considered as part of this TA. Liverpool City Council advised that a Housing Market Renewal Initiative development was occurring south of the site. However as the development was replacing previous residential properties and there was no requirement to assess the impact.

5.3 Committed highway schemes

Liverpool City Council advised Mott MacDonald that Edge Lane West and Edge Lane/Holt Road junction are both undergoing major improvement adjacent to the site. It is proposed that Wedgewood Street will become one –way in a westbound direction and Brae Street will become one-way in an eastbound direction as part of the Edge Lane/Holt Road junction improvement. Mott MacDonald was advised that these junctions did not require significant capacity modelling as part of this Transport Assessment and assessment should focus on;

- Holt Road/Kensington.
- Edge Lane/Hold Road, and
- Durning Road/Wavertree Road.

5.4 Public Transport developments

Merseytravel were consulted regarding the suitability of existing public transport provision to the development site. The comments received are included in Appendix A for reference and summarised below.

- *Given the presence of over 70 car parking spaces on site, and what appears to be a large vehicular lay-by on Edge Lane frontage of the site, we want to be sure LCC are satisfied that all traffic that would be generated by the Health Centre could be accommodated on the highway network, close to such an important and busy junction in a manner that would not cause congestion and delays to bus services.(Covered in section 6 (Traffic Impact Assessment) of this report)*
- *The long lay-by on the site frontage would appear to include the present bus stop location on the north side of Edge Lane. We'd want the Health Centre project to provide an appropriate level of funding for the location and upgrade of bus stops on both sides of Edge Lane and Holt Road to ensure good public transport links to / from the healthcare facilities. The walking routes to / from these stops should be to a good standard and easily within DDA compliance. (Covered in section 4 (Proposed Development) of this report)*
- *We'd like to see the Health Centre have a good functioning Travel Plan which would be of a suitable standard, and which would be subject to regular audit. (Covered in section 9 (Travel Plan Strategy) of this report)*

- *In order to ensure good accessibility for all members of the community, within the grounds, we'd like to see appropriate access / facilities for Merseylink dial-a-ride vehicles, to get these vehicles and taxis close to the principal building entrances / exits. (Covered in section 4 Proposed Development of this report)*

5.5 Accessibility Score

Liverpool City Council requested that a Minimum Accessibility Standard Assessment (MASA) be undertaken. Using the checklist contained within SPD: Ensuring a Choice of Travel, the score for the development has been calculated using the following criteria:

- Development Type – C2 and D1 Residential and non-residential institutions (medical centres, museums and galleries, public hall and meeting places)
- Location - Other Urban
- Development Size – All

Table 6.1 below contains a comparison of the MASA scores achieved and the minimum required for the development. A completed MASA form is included in Appendix C.

Table 5.1: MASA Assessment Score

	Minimum Score	Actual Score
Walking	4	4
Cycling	5	5
Public Transport	6	5
Vehicle Access	1	3

The public transport score is 1 point below the minimum score, however the current Edge Lane improvement scheme will provide improved bus infrastructure along Edge Lane. Bus facilities on Holt Road already include shelters, timetable information, boarding kerbs and bus stop road markings.

The proposed development exceeds the MASA score for vehicle access by providing less parking than the maximum allowance.

6. Traffic Impact Assessment

6.1 Introduction

The purpose of this section is to assess any traffic impacts likely to arise as a result of the proposed development

6.2 Assessment Scope

Liverpool City Council has raised concerns about the impact of the development on the following junctions:

- Kensington/Holt Road;
- Edge Lane/Holt Road and
- Durning Road/Wavertree Road

Following discussions with the Council a junction assessment has been undertaken at the junction of Kensington/Holt Road and the change in traffic flows at the other two junctions has been presented within this report.

Liverpool City Council recommended that traffic flows contained within a Transport Statement compiled by Savell Bird and Axon (SBA) for a proposed residential development off Gilead Street be used as base traffic flows for the purposes of this report. Therefore traffic flows in Figures 17 and 18 of the Statement have been taken as the base flows in this TA. A copy of the Transport Statement is included in Appendix D.

6.3 Trip Generation

6.3.1 Existing Development Trips

The existing site comprises of vacant land but did contain approximately 61 residential properties. The trips generated by these properties have not been taken off the highway network in the 'with development' scenario to create a robust assessment.

The proposed health centre will replace two existing GP surgeries:

- Kensington Health Centre, Jubilee Drive; and
- Edge Hill Medical Centre, Crosfield Road

Again, the trips generated from these two existing health centres have not been removed from the highway network in the 'with development' scenario to create a robust assessment. No discount was applied for pass by trips to the new development with 100% of new trips assumed for the trip generation.

6.3.2 Proposed Development Trips

The TRICS database version 2011(a) 6.7.2 was used to estimate the number of trips that can be expected at the proposed development. The following criterion was entered into the program:

- Class 05/E – Health/Clinics
- Gross Floor Area – 1000-4000
- Location – Town Centre, edge of Town Centre and Suburban area.
- Survey Days – Weekdays

Table 6.1 below shows the trip rates and trip numbers expected in the a.m. and p.m. peaks. The full TRICS output is included in Appendix E.

Table 6.1: Estimated Trips from TRICS

Time	Arrivals		Departures	
	Trip Rate (per 100 m ²)	No. Trips (based on 2,500 m ²)	Trip Rate (per 100 m ²)	No. Trips (based on 2,500 m ²)
AM Peak (08:00-09:00)	2.220	56	0.644	16
PM Peak (17:00-18:00)	0.763	19	1.596	40

The trip rates calculated in Table 6.1 are derived from survey data from similar existing developments. The proposed development trips have been assigned to the network based on the existing turning proportions at each junction as per Figures 1 and 2 of the SBA Transport Statement.

6.3.3 Committed Development Flows

The proposed residential development in the SBA Transport Statement is currently under construction and due to be complete in 2011 according to the Statement. The estimated development flows for the residential development are presented in Figures 15 and 16 of the SBA report and have been included within the base year assessments of this TA.

6.3.4 Growth Factors

Table 6.2 below presents the growth factors applied to the base traffic count data to calculate the opening year background flows.

Table 6.2: Growth Factors

Year	Growth Factor
2011-2013 AM	1.0428
2011-2013 PM	1.0423
2011-2018 AM	1.1251
2011-2018 PM	1.1235

Growth factors for this analysis were calculated using TEMPRO (Trip End Modelling PROgram) version 6.2 (dataset 54) with the following Criteria selected:

- NTM (National Transport Model) Dataset: AF08
- Area type: Urban
- Road type: Principal
- Geographic Region: 00BYA Liverpool (main)

6.4 Junction Assessment Scenarios

The junction of Kensington/Holt Road has been assessed for the following scenarios:

- 2011 a.m. Base Case
- 2011 p.m. Base Case
- 2013 a.m. Reference Case (base case plus growth)
- 2013 p.m. Reference Case

- 2013 a.m. Reference plus Development Flows
- 2013 p.m. Reference plus Development Flows
- 2016 a.m. Reference Case
- 2016 p.m. Reference Case
- 2016 a.m. Reference plus Development Flows
- 2016 p.m. Reference plus Development Flows

Flow diagrams for these scenarios are contained in Appendix F.

6.4.1 Assumptions

The following data has been extracted from Linsig output contained in Appendix 5 of the SBA Transport Statement:

- Lane widths
- Turning radii
- Lane storage

6.5 Junction Assessment Results

6.5.1 Results

The junction of Kensington/Holt Road is a 3-arm signalised junction and has been modelled using Linsig version 3.0.5.0. A summary of the assessment results is given in Tables 6.3 to 6.4 below. Linsig outputs are contained in Appendix G.

Table 6.3: Kensington/Holt Road - AM Base and Reference Flows

Scenario	2011 Base		2013 Reference		2018 Reference	
Arm	DoS (%)	Mean Max. Queue (pcu)	DoS (%)	Mean Max. Queue (pcu)	DoS (%)	Mean Max. Queue (pcu)
Kensington (W) Ahead	44.4	9.6	46.4	10.1	50.0	11.3
Kensington (W) Ahead and Right	36.7	1.6	40.4	1.7	46.2	1.9
Kensington (E) Ahead and Left	62.9	13.8	66.2	15.0	71.1	16.9
Kensington (E) Ahead	64.4	17.2	66.6	18.2	72.2	20.8
Holt Road Left	29.0	3.7	30.4	3.8	32.8	4.2
Holt Road Right	64.0	10.3	66.7	10.9	72.1	12.2
	PRC = 39.7% Cycle Time-120s		PRC = 34.9% Cycle Time-120s		PRC = 24.7% Cycle Time-120s	

Table 6.4: Kensington/Holt Road - PM Base and Reference Flows

Scenario	2011 Base		2013 Reference		2018 Reference	
Arm	DoS (%)	Mean Max. Queue (pcu)	DoS (%)	Mean Max. Queue (pcu)	DoS (%)	Mean Max. Queue (pcu)
Kensington (W) Ahead	65.5	17.1	68.3	18.3	73.5	20.8
Kensington (W)	24.2	1.6	26.1	1.7	30.3	1.9

Scenario	2011 Base		2013 Reference		2018 Reference	
Arm	DoS (%)	Mean Max. Queue (pcu)	DoS (%)	Mean Max. Queue (pcu)	DoS (%)	Mean Max. Queue (pcu)
Ahead and Right						
Kensington (E) Ahead and Left	47.5	8.9	50.7	9.7	53.5	10.4
Kensington (E) Ahead	48.6	10.9	49.6	11.1	54.5	12.7
Holt Road Left	29.9	4.3	31.1	4.6	33.6	5.0
Holt Road Right	65.5	12.2	68.2	13.2	73.6	14.9
	PRC = 37.5% Cycle Time-120s		PRC = 31.8% Cycle Time-120s		PRC = 22.3% Cycle Time-120s	

Table 6.5: Kensington/Holt Road – Reference Case plus Development

Scenario	2013 AM		2018 AM		2013 PM		2018 PM	
Arm	DoS (%)	Mean Max. Queue (pcu)	DoS (%)	Mean Max. Queue (pcu)	DoS (%)	Mean Max. Queue (pcu)	DoS (%)	Mean Max. Queue (pcu)
Kensington (W) Ahead	46.4	10.1	50.0	11.3	69.3	18.8	74.6	21.3
Kensington (W) Ahead and Right	43.8	1.8	48.2	2.2	27.1	1.8	31.3	2.0
Kensington (E) Ahead and Left	67.6	15.40	72.7	17.5	51.2	9.7	54.7	10.6
Kensington (E) Ahead	68.1	18.8	73.4	21.4	51.8	11.7	56.0	13.0
Holt Road Left	30.8	3.9	33.2	4.3	31.6	4.7	34.0	5.1
Holt Road Right	67.7	11.1	73.0	12.4	69.3	13.8	74.5	15.4
	PRC = 32.2% Cycle Time-120s		PRC = 22.6% Cycle Time-120s		PRC = 29.8% Cycle Time-120s		PRC = 20.6% Cycle Time-120s	

The results show that the junction operates satisfactorily in all scenarios. The minimum practical reserve capacity (PRC) was calculated to be 20.6%. The PRC is the amount by which traffic demand can grow before practical capacity is reached. Practical capacity is the point at which the junction is assumed to work inefficiently (usually when the degree of saturation reaches 90%). The maximum queues calculated can be accommodated within the existing junction layout.

6.6 Summary

It is concluded that the proposed development would not significantly increase the traffic flow in the vicinity of the development and the junction assessment shows that the junction of Kensington/Holt Road operates within capacity and with no significant queuing. The junctions at Edge Lane/Holt Road and Wavertree Road/Durning Road have minimal increase in trips following the development. It is worth noting that within this assessment existing trips to the existing GP surgeries and trips from the existing site have not been removed from the network, making this assessment robust.

7. Parking Assessment

7.1 Background

The purpose of this section is to assess the appropriateness of the proposed development parking supply against policy requirements.

7.2 Parking Policy

It is present policy to set standards for maximum parking levels in developments and, in some cases, minimum levels also. As described in Section 2 above, national recommended parking standards are set out in PPG13 and local standards in SPD Ensuring Choice of Travel. The usual procedure is to adopt whichever of the standards is most restrictive. Table 7.1 below sets out the car parking standards for each vehicle type.

Table 7.1: Parking Policy Standards

Land Use	Vehicle Type	PPG13	SPD-Ensuring Choice of Travel
D1 - Non-Residential Institutions	Cycles	No Standards	1 secure covered space and locker per 5 members of staff (minimum of 2 spaces), plus 2 visitor cycle stands per consulting room (minimum)
	Motorcycles		1 space per 2 consulting rooms (minimum)
	People with Disabilities		Up to 200 bays – A space for each disabled employee, plus 2 spaces or 5% of the total maximum standard, whichever is greater
	Service Vehicles, coaches and taxis		No minimum requirement, on-site provision should be on the basis of early negotiation supported by the Transport Assessment
	Other Staff/ operational parking (Maximum)		1 space per 2 staff plus 4 per consulting room

7.3 Proposed Parking Provision

The proposed car and cycle parking provision is compared against the standards set within SPD Ensuring Choice of Travel in Table 7.2.

All cycle parking will be of Sheffield stand type construction, covered and lit for security reasons. Staff parking will be provided in a secure lockable shelter.

Table 7.2: Proposed Provision

User Group	SPD Policy Parking Visitor	SPD Policy Parking Staff	SPD Policy Parking Total Minimum	Proposed Provision Visitor	Proposed Provision Staff	Proposed Provision Total
Cycles	64	11	75	20*	10**	34
Motorcycles			16			4
People with Disabilities	8		8	4	1	5
Service Vehicles, coaches and taxis	No minimum			Dedicated Service, taxi and drop off area provided		
Other Staff/ operational parking (Maximum)	128	28	156	50	11	61
Parking %	82%	18%	100%	82%	18%	100%

- *20 spaces initially with additional up to standard on demand
- **10 spaces secure initially with additional on demand

7.4 Conclusion

The proposed car parking provision is below the maximum allowance stated in the SPD, and will meet the operational requirements of the development. The development is in close proximity to frequent public transport services and is located in close proximity to its patients which will reduce the demand for car based trips to the site and hence car parking. The provision of a site specific travel plan in conjunction with the organisational wide travel plan for Liverpool PCT will help discourage car journeys to the site.

Motorcycle and cycle parking is proposed at the development but in lesser numbers stated in the SPD standards. It is proposed that a demand based approach is implemented, allowing further spaces to be provided when demand dictates rather than providing the SPD minimum standard from the opening year. It is considered that this will utilise space effectively, provide facilities to suit demand and fit into the travel plan and its objectives.

8. Road Safety Assessment

8.1 Introduction

The purpose of this section is to examine any existing or potential highway safety issues from analysis of recent recorded personal injury accident data in the vicinity of the proposed development.

8.2 Study Area

It was agreed with LCC to study accident data on roads around and within the perimeter of the site.

Accident Data has been obtained from 2020 Liverpool covering this area for a three year period. The data covered the period 13/04/2007 to 12/04/2010. A plan of the study area and the data obtained is included in Appendix H.

8.3 Severity

During the study period a total of 15 accidents occurred; Table 8.1 below shows the severity and year these accidents occurred.

Table 8.1: Accident Severity

Year	Slight	Serious	Total
2007	1	0	1
2008	7	1	8
2009	5	1	6
2010	0	0	0

8.4 Contributory Factors

Table 8.2 below contains a summary of each accident that occurred during the study period including a description of how each accident occurred. Unclassified roads are indicated with a "U".

Table 8.2: Accident Summary

No	Location*	Injury	Date	Day	Month	Year	Time	Lighting	Road Surface	weather	Description	Factors
1	A5047 EDGE LANE AT JUNCTION WITH U QUORN STREET	Slight	08/03/20 08	Sat	March	2008	11:00	Day no lights	Dry	Fine	V2 TRAVELLING ALONG ROAD, PASSING STAT TRAFFIC, V1 PULLS OUT FROM SIDE ROAD BETWEEN STAT TRAFFIC & COLLISION OCCURS.	Right turn
2	A5047 EDGE LANE AT JUNCTION WITH U QUORN STREET	Slight	06/05/20 08	Tue	May	2008	13:15	Day with Lights	Dry	Fine	V1 TRAV. O/SIDE LANE NEGOTIATES SLIGHT L/H/BEND V2 TURNING RIGHT FROM SIDE ROAD COLLIDES WITH O/SIDE OF V2	Right turn
3	A5047 EDGE LANE AT JUNCTION WITH U QUORN STREET	Serious	07/05/20 09	Thu	May	2009	14:35	Day with Lights	Dry	Fine	V2 TURNS RIGHT THROUGH GAP LEFT IN STAT TRAFFIC WHEN M/CYCLE V1 O/TAKING STAT TRAFFIC COLLIDES WITH SAME	Right turn
4	U BRAE STREET 50 METRES WEST OF B5173 HOLT ROAD	Slight	30/11/20 07	Fri	November	2007	15:17	Day with Lights	Wet/ Damp	Fine	C1 (PED) RUNS INTO PATH OF V1 CAUSING A COLLISION.	Single Vehicle
5	A5047 EDGE LANE AT JUNCTION WITH B5173 DURNING ROAD	Slight	24/09/20 08	Wed	September	2008	17:10	Day with Lights	Dry	Fine	V1 STAT AT ATS IS HIT IN THE REAR BY V2 WHICH THEN FTS	Overtake Right turn
6	A5089 HOLT ROAD AT JUNCTION WITH A5047 EDGE LANE	Slight	27/02/20 08	Wed	February	2008	01:15	Dark with lights	Wet/ Damp	Fine Wind	V1 MOVES OFF AS LIGHTS CHANGE TO TURN RIGHT & IS HIT IN THE REAR BY V2	Right turn
7	B5173 DURNING ROAD AT JUNCTION WITH A5047 EDGE LANE	Slight	03/10/20 09	Sat	October	2009	01:07	Dark with lights	Dry	Fine	V2 STATIONARY WAITING AT ATS JUNCTION WHEN V1 COLLIDES WITH ITS REAR.	None stated
8	B5173 DURNING ROAD AT	Slight	19/11/20 08	Wed	November	2008	18:45	Dark with lights	Dry	Fine	VEH(2) STATIONARY, VEH(1) COLLIDES INTO VEH(2)	None stated

No	Location*	Injury	Date	Day	Month	Year	Time	Lighting	Road Surface	weather	Description	Factors
	JUNCTION WITH A5047 EDGE LANE											
9	A5047 EDGE LANE AT JUNCTION WITH B5173 DURNING ROAD	Serious	08/07/20 08	Tue	July	2008	15:30	Day with Lights	Dry	Fine	VEH HEADING DOWN EDGE LANE WHEN PED WALKS OUT INFRONT OF HIM, VEH HITS PED IN DRIVERS SIDE	Single Vehicle
10	A5047 EDGE LANE AT JUNCTION WITH B5173 DURNING ROAD	Slight	02/12/20 08	Tue	December	2008	14:54	Day with Lights	Wet/ Damp	Fine	VEH(1) BEHIND VEH(2) IN SLOW MOVING TRAFFIC VEH(2) STOPS AND VEH(1) COLLIDES WITH REAR OF VEH(2)	None stated
11	A5047 EDGE LANE AT JUNCTION WITH B5173 DURNING ROAD	Slight	17/07/20 09	Fri	July	2009	15:10	Day no lights	Dry	Fine	V1 IN MIDDLE OF JUNCTION WAITING TO MAKE A RIGHT TURN. AS V1 BEGINS TO TURN, THE FRONT N/S OF THE VEHICLE COLLIDES WITH V1 (PED).	Right Turn Single Vehicle
12	B5173 HOLT ROAD AT JUNCTION WITH U TOFT STREET	Slight	05/02/20 09	Thu	February	2009	16:21	Dark with lights	Wet/ Damp	Snow	C1 (PED) RAN INTO PATH OF V1 FROM BETWEEN PARKED VEHICLES AND COLLIDED WITH FNS OF V1.	Single Vehicle
13	B5173 HOLT ROAD AT HOUSE NAME 116 AT JUNCTION WITH U WEDGEWOOD STREET	Slight	30/05/20 09	Sat	May	2009	18:00	Day with Lights	Dry	Fine	V1 DRIVER GLANCES AWAY FROM THE ROAD FOR A SPLIT SECOND - V2 DRIVER BRAKES & V1 COLLIDES WITH THE REAR OF V2	None stated
14	B5173 HOLT ROAD AT JUNCTION WITH U BRAE STREET	Slight	02/12/20 08	Tue	December	2008	15:05	Day with Lights	Dry	Fine	TRAFFIC STATIONARY IN LINE, PED STEPS OUT WITHOUT LOOKING AND RUNS INTO VEH(1) WHICH WAS OVERTAKING	Right turn
15	A5047 EDGE LANE 150 METRES WEST OF U BOTANIC PARK	Slight	09/03/20 09	Mon	March	2009	07:00	Day with Lights	Dry	Fine	VEH(2) MOVING SLOWLY VEH(1) IN NEARSIDE LANE COLLIDES WITH VEH(2) AS ROAD NARROWS	None stated

Two-thirds of the accidents (10) involved two vehicles while the remaining accidents involved a vehicle and a pedestrian (five). Right-turns were identified as contributing factors in seven of the accidents.

The majority of accidents involving pedestrians occurred when pedestrians walked/ran out into the carriageway.

8.5 Location

Eight accidents occurred at the signalised junction of Edge Lane/Holt Road/Durning Road. As this junction is on the main route from the M62 into the city and a key North-South route this is unsurprising and an indication why a major improvement of this junction with right turn lanes is proposed.

Three accidents occurred at the junction of Quorn Street and Edge Lane and involved right turns out of Quorn Street. The majority of accidents occurred at junctions, again this is unsurprising as vehicular and vehicular/pedestrian conflicts occur at junctions.

8.6 Time of Day

The times at which the accidents occurred were generally spread across the day. Only one accident occurred in the Monday-Friday peak periods, it occurred in the p.m. peak on a Wednesday. The only cluster in time was between 14:35 and 15:30 where six accidents occurred. Tuesday was the day with the most accidents (four) with three accidents on Saturday and Wednesday.

8.7 Conclusion

Over the study period the majority of accident occurred at the junction of Edge Lane/Holt Road/Durning Road. This is unsurprising given the traffic flow and pedestrian desire lines around this junction and is a justification for the proposed Edge Lane/ Holt Road junction improvement scheme. With two serious accidents in the period studied at this busy location it is considered that there isn't a major accident issue, considering the traffic flows in the area.

Three of the accidents involved right-turns at the junction with Quorn Street, which is now closed as part of the development site proposals removing this conflict. The Edge Lane improvement scheme with an improved junction layout at Edge Lane/Holt Road/Durning Road will provide better facilities for right turners, pedestrians and two lanes of traffic and will address the accidents in this study that relate to overtaking, right-turns and pedestrians crossing the carriageway.

9. Travel Plan Strategy

9.1 Introduction

This preliminary Travel Plan Strategy (TPS) or Travel Plan Framework states the intention of Liverpool PCT to manage travel and access at the proposed Kensington Neighbourhood Health Care Centre located to the North-West of the junction of Edge Lane and Holt Road, Liverpool. This TPS will provide a framework for managing staff and patient travel to the development site.

This Travel Plan framework will support the organisation wide travel plan that is adopted by Liverpool PCT and is available on request. The TPS will sit as a daughter document of the Liverpool PCT Travel Plan.

It is however important to note that it is not a static document developed to address a transport problem at a single point in time. This document will be required to evolve and to accommodate improvements in local/regional transport infrastructure.

9.2 What is a Travel Plan Strategy?

A Travel Plan Strategy is a package of measures designed to reduce the number and length of car trips generated by a development. Travel Plans can reduce social and environmental impacts and can help to reduce economic costs.

There are three ways of managing the transport impacts that a development can generate;

- Improve the quality of non car modes; or
- Provide disincentives for the use of the car; or
- A combination of both of these.

A TPS can address a range of travel types such as staff travel, patient trips, business trips, journeys made by visitors and clients to the site, how a company's fleet is managed and travel made by suppliers.

9.3 The Objectives of the Travel Plan Strategy

The availability of sustainable travel modes to the proposed development is established, in which case a Travel Plan for this development will be primarily required to encourage patients and staff to travel by the means available. Given that patients will not pay for health services at the point of deliverance, there is little leverage that can be applied to encourage travel by sustainable modes other than the provision of quality information.

The objectives of the TPS are therefore to:

- Address parking management and access at the development; and
- Develop and offer an improved choice of travel options to all users in line with the objectives of the Merseyside Local Transport Plan.

9.4 The Travel Plan Measures

Table 9.1 contains a summary of the measures planned and for each, a suggested date for completion.

It is proposed that these measures will form the basis of a Kensington Health Centre Framework Travel Plan. Travel Plan Monitoring and Assessment will have a key role in updating the strategy. It is recommended to establish a baseline survey either six months after the development opens or using existing data from the GP surgeries moving into the development.

This will include an action programme with both short and long term targets. It will also be necessary to appoint a Travel Co-ordinator to administer and promote the Travel Plan Strategy and the Liverpool PCT Travel Plan to all site occupants.

Table 9.1: Travel Plan Strategy Action Plan

Strategy	Measure	Date for Completion
Healthy Transport Strategy	HT1: Provide adequate lighting at the site that encourages walking during the hours of darkness.	Complete before Occupation
	HT2: Provide sheltered areas for cycle parking at the development and monitor use of facilities.	Complete before Occupation/ continuous
	HT3: Investigate negotiating a discount for staff at local cycle shops.	Complete before Occupation
	HT4: Promote and encourage walking through the production of promotional material which indicates the environmental and health benefits of walking.	Complete before Occupation
Public Transport Strategy	PT1: Work with Merseytravel to ensure that local bus waiting facilities contain timetable information.	Complete before Occupation
	PT2: Provide information in a 'Welcome Pack' for staff on public transport timetables and services.	Continuous
	PT3: Promote public transport special offers such as the TRIO tickets;	Continuous
	PT4: Investigate the feasibility of offering financial assistance with the start-up costs of travel by sustainable modes (e.g. loans to purchase long-term season tickets).	Complete before Occupation
Car Park Management	CMS1: Investigate the feasibility of Establishment of a Travel Database to match information about travel opportunities to employees' home addresses and working hours.	Complete before Occupation
	CMS2: Provide information in a staff 'Welcome Pack' on reducing car use.	Complete before Occupation
Marketing & Comms Strategy	MC1: Provide travel information on staff notice boards and in the main entrances on how to travel to this and other health facilities	Complete before Occupation
	MC2: Provide information on the travel plan in a 'Welcome Pack' for all staff prior to their arrival at the development.	Complete before Occupation
	MC3: Travel Awareness events run in conjunction with national campaigns to make staff aware of all possible sustainable means of access to their place of work.	Continuous
	MC4: Establish and maintain a continued process of marketing to maintain awareness of existing initiatives and new initiatives once they have been implemented.	Continuous
	MC5: Monitor effectiveness of TPS & communicate results.	Continuous
	MC6: Undertake a travel survey once fully operational to establish baseline data or use existing GP surgery data from Kensington Park and Edge Hill medical centre.	Complete within first six months of occupation./ complete before occupation
	MC7: Set sustainable transport targets.	Complete within first 6 months of occupation.
	MC8: If M6 targets are not achieved seek advice from Travelwise to formulate a revised action plan.	Annual Progress Note

10. Summary and Conclusions

This Transport Assessment (TA) has been prepared on behalf of Galliford Try (working on behalf of Liverpool and Sefton Health Partnership) to support a planning application for a Neighbourhood Health Centre to be located in Kensington at the junction of Edge Lane/Holt Road.

The main aims of the TA are as follows:

- To predict travel demand for the development;
- To demonstrate safe and effective multi-modal accessibility to the development; and
- To identify, assess and propose mitigation for any net transport related impacts likely to arise from the development.

The main outcomes of the TA are as follows:

- The location, usage and density of the proposed development has been designed with current transport policy in mind;
- The site is located within 400 metres of several bus stops including those located on Edge Lane and Holt Road which has a high frequency bus service. Within 450 metres walking distance of the proposed development there is high frequency bus routes on Kensington High Street and Wavertree Road. Edge Lane railway station is also approximately a ten minute walk from the centre of the site.
- It is concluded that the proposed development would not significantly increase the traffic flow in the vicinity of the development and the junction assessments show that the junctions operate within capacity and with no significant increase in delay.
- The proposed car and cycle parking provision meets policy requirements and is therefore considered appropriate for the development.
- 15 road traffic accidents have occurred in the past three years which equates to an average of five per year over the study period. From the data, it is considered that the majority of accidents occurred due to right-turn movements and pedestrian movements which will be addressed by the proposed new junction layout as part of the Edge Lane improvement scheme.
- A Travel Plan Framework has been produced setting out how Liverpool PCT intends to manage travel patterns associated with the proposed development. A full travel plan will be submitted to the planning authority on occupation of the development or within 6 months.

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Appendix A. Scoping Comments

Osborne, Mark L

From: Walker, Stephen [Stephen.Walker@liverpool.gov.uk]
Sent: 14 April 2011 16:05
To: Osborne, Mark L
Subject: Kensington Health Centre Scope

Hi Mark,

Thanks for your email.

I tried to send the TS for a residential development at Kensington which has data for the Holt Road junction but it was too large to send it is available on LCC Planning Explorer reference no. 09F/2126

I can confirm that the area to consider accident data is appropriate.

I will endeavour to provide data for the Durning Road / Smithdown Road junction but Kensington is the more critical in terms of capacity.

I trust this is of assistance.

Regards,

Stephen

Regards,

Stephen Walker
Principal Engineer
Highways Development Control

Transportation
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21/04/2011

Osborne, Mark L

From: Walker, Stephen [Stephen.Walker@liverpool.gov.uk]
Sent: 12 April 2011 14:39
To: Osborne, Mark L
Subject: RE: Kensington Health Centre

Attachments: ELW General Arrangement.pdf



ELW General
Arrangement.pdf

Mark,

I have attached a GA drawing of the ELW proposals.

I think the lay-by was to house a bus stop and also provide a loading opportunity for any retail/business which may be located along this section of Edge Lane.

We would not want to see Quorn Street opened to traffic from Edge Lane as this may encourage drivers to 'short-cut' through it when turning left at the Edge Lane / Holt Road junction.

In terms of transport assessment the Holt Road / Durning Road corridor would need to be included in the assessment. The following junctions would therefore need to be considered;

1. Holt Road / Kensington
2. Holt Road / Edge Lane
3. Durning Road / Wavertree Road

It is accepted that the Edge Lane / Holt Road junction will operate satisfactorily as this will be upgraded as part of the ELW development however the Holt Road / Kensington junction is already experiencing problems and this is also true of the Durning Road / Wavertree Road junction during the peaks.

There are sufficient bus services on the Wavertree Road corridor and services also extend to Holt Road and Kensington (26/27 Sheil Road Circular).

There will be new pedestrian crossing facilities at Edge Lane / Holt Road as part of the junction works and there are some crossing facilities at Holt Road / Kensington but pedestrian crossing facilities are lacking at the Durning Road junction. This junction provides a pedestrian route to the rail station at Edge Hill.

The Edge Hill HMRI residential development will need to be considered as committed development in the assessment.

I trust this is of assistance.

Regards,

Stephen Walker

-----Original Message-----

From: Osborne, Mark L [mailto:Mark.Osborne@mottmac.com]
Sent: 12 April 2011 09:34
To: Walker, Stephen
Subject: RE: Kensington Health Centre

Hello Stephen,

Hope you are ok for tomorrow's meeting at 2pm ? I've got a couple of questions that relate to the application.

- There's a lay-by proposed on Edge Lane on the eastbound carriageway?
do you know what this is for, it runs the length of the site and seems very long for a bus only facility
- Does the highway improvements for Edge Lane West include for the redeveloped land uses along its route ?, just

want to check as a Health centre was proposed in the initial redevelopment plans.

- Also be interested in getting your input on using a entrance into the site from Quorn Street rather than Wedgewood Street.

Thanks

Mark Osborne BSc (Hons) MSc CMILT
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Our Liverpool office charity for 2011 is 'Claire House Children's hospice' - <http://www.claire-house.org.uk> with its registered Charity number, 1004058

This message is from Mott MacDonald Limited, registered in England number 1243967.
Registered office: Mott MacDonald House, 8-10 Sydenham Road, Croydon, Surrey, CR0 2EE

-----Original Message-----

From: Osborne, Mark L
Sent: Friday, April 08, 2011 12:13 PM
To: 'Walker, Stephen'
Subject: Kensington Health Centre

Hello Stephen

As discussed on the phone, please find attached details for the proposed Kensington Health Centre and a letter with our scoping proposals to support the application.

The client is hoping to submit by the 28th of April.

There is a proposed meeting to discuss planning issues with the client and LCC planning and urban design team on the 13th April at 14:00. Any questions let me know.

Regards

Mark Osborne BSc (Hons) MSc CMILT
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Project Title Kensington Health Centre

Between (for MMG)

14/4/2011

16:10

Organisation

Stephen Walker

Liverpool City Council

0151 233 8123

Trip Generation and Junction Assessment

Following Stephens email on the 14/4/2011, phone to confirm the following.

1. Holt Road / Kensington
2. Holt Road / Edge Lane
3. Durning Road / Wavertree Road

The Edge Lane HMRI did not require assessment as the scheme was replacing like for like that was already in the TA by SBA that was being used to establish the base year.

Action

[illegible]

Osborne, Mark L

From: Cook, Steve [steve.cook@merseytravel.gov.uk]
Sent: 15 April 2011 17:36
To: Osborne, Mark L
Cc: Phillips, Julie
Subject: RE: Kensington Health Centre

Dear Mark,

Yes apologies Julie's had to switch her leave around due to childcare duties and the novel school holidays that have occurred on account of Easter being rather late.

In terms of comments upon the proposed healthcare facilities.

The junction of Edge lane and Holt Road appears to be a good location, close to the 6 & 7 radial bus routes and the 26/27 orbital routes. Given the presence of over 70 car parking spaces on site, and what appears to be a large vehicular lay-by on Edge Lane frontage of the site, we want to be sure LCC are satisfied that all traffic that would be generated by the Health Centre could be accommodated on the highway network, close to such an important and busy junction in a manner that would not cause congestion and delays to bus services.

The long lay-by on the site frontage would appear to include the present bus stop location on the north side of Edge Lane ? We'd want the Health Centre project provide an appropriate level of funding for the location and upgrade of bus stops on both sides of Edge Lane and Holt Road to ensure good public transport links to / from the healthcare facilities. The walking routes to / from these stops should be to a good standard and easily within DDA compliance.

We'd like to see the Health Centre have a good functioning Travel Plan which would be of a suitable standard, and which would be subject to regular audit.

In order to ensure good accessibility for all members of the community, within the grounds, we'd like to see appropriate access / facilities for Merseylink dial-a-ride vehicles, to get these vehicles and taxis close to the principal building entrances / exits.

I hope these comments assist you, but if you need further information, please don't hesitate to contact Julie or myself.

Cheers Steve

From: Osborne, Mark L [mailto:Mark.Osborne@mottmac.com]
Sent: 15 April 2011 13:53
To: Cook, Steve
Subject: FW: Kensington Health Centre

Hello Steve,

See below, had an out office reply from Julie (see below), I'm after some comments on the above scheme, really tight on deadlines so would appreciate any comments in the next couple of working days.

Thanks

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From: Osborne, Mark L
Sent: Friday, April 15, 2011 1:47 PM
To: 'Phillips, Julie'
Subject: Kensington Health Centre

Hello Julie,

Thanks for your comments on the Vauxhall Road scheme we are looking at.

We are looking another site for Liverpool PCT by the Edge Lane/Holt Road junction. I've attached some site plans and background information. 2 existing GP surgeries are moving to this site - Kensington Park and Edge Hill Medical Centre.

Any comments would be much appreciated, deadlines are tight on this so something by the middle of the week would be brilliant.

Regards

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21/04/2011

Appendix B. Existing site photos

Photo B.1: Wedgewood Street looking East



Photo B.2: Holt Road looking North



Photo B.3: Edge Lane looking westwards to the proposed site



Photo B.4: Proposed site looking eastwards



Appendix C. MASA

Proposal		Kensington Health Centre	
Address:		Land to the North West of Edge Lane/Holt Road Junction. Completed by Mott MacDonald.	
Completed By:			
Has a diagram been submitted which shows how people move to and through the development and how this links to the surrounding roads, footpaths and sight lines? (This can be included within the Design and Access Statement, see Section 2.25.) If a diagram has not been submitted your application may not be processed.			Yes / No
Access on Foot		Points	Score
Safety	Is there safe pedestrian access to and within the site, and for pedestrians passing the site (2m minimum width footpath on both sides of the road)? If no your application must address safe pedestrian access.		Yes
Location	Housing Development Is the development within 500m of a district or local centre (see Accessibility Map 1 in Appendix F)	Yes	2
	Other development: Is the density of existing local housing (i.e. within 800m) more than 50 houses per hectare (see Accessibility Map 4 in Appendix F)	No	0
Internal Layout	Does 'circulation' and access inside the sites reflect direct, safe and easy to use pedestrian routes for all; with priority given to pedestrians when they have to cross roads or cycle routes?	Yes No	1 0
External Layout	Are there barriers between site and local facilities or housing which restrict pedestrian access? (see Merseyside Code of Practice on Access and Mobility)e.g. No dropped kerbs at crossings or on desire lines; Steep gradients; A lack of a formal crossing where there is heavy traffic; Security concerns, e.g. lack of lighting.	There are barriers	-2
		There are no barriers	1
Other	The development links to identified recreational walking network (see Accessibility Map 1). If no, please provide reasons why not.		Yes
		Total (B) 4	
Summary	Box A: Minimum Standard (from Table 3.1)	4	Minimum Score achieved
	Box B: Actual Score	4	
Access by Cycle		Points	Score
Safety	Are there safety issues for cyclists either turning into or out of the site or a road junctions within 400m of		No
Cycle Parking	Does the development meet cycle parking standards, in a secure location with natural surveillance, or		Yes
Location	Housing Development Is the development within 500m of a district or local centre (see Accessibility Map 1 in Appendix F)	Yes	2
	Other development: Is the density of existing local housing (i.e. within 800m) more than 50 houses per hectare (see Accessibility Map 4 in Appendix F)	No	0
Internal layout	Does 'circulation' and access inside the site reflect direct and safe cycle routes; with priority given to cyclists where they meet motor vehicles?	Yes No	1 0
External Access	The development is within 400m of an existing or proposed cycle route (see Accessibility Map 1 in Appendix F) The development is not within 400m of an existing or proposed cycle route (see Accessibility Map 1 in Appendix F)	1 -1	1
Other	Development includes shower facilities and lockers for cyclists	Yes No	1 0
		Total (B) 5	
Summary	Box A: Minimum Standard (From Table 3.1)	5	Minimum Score achieved
	Box B: Actual Score	5	
Access by Public Transport		Points	Score
Location and access to public transport	Is the site within a 200m safe and convenient walking distance of a bus stop, and/or within 400m of a rail station? (See Accessibility Map 2 in Appendix F).	Yes No	2 0
	Are there barriers on direct and safe pedestrian routes to bus stops or rail stations? ¹⁴	There are barriers There are no barriers	0 1
	A lack of dropped kerbs;		1
Frequency	High (four or more bus services or trains an hour) Medium (two or three bus services or trains an hour) Low (less than two bus services or trains an hour)		2 1 0
Other	The proposal contributes to bus priority measures serving the site		1
	The proposal contributes to bus stops, bus interchange or bus or rail stations in the vicinity and/or		1
	The proposal contributes to an existing or new bus service		1
		Total (B) 5	
Summary	Box A: Minimum Standard (from Table 3.1)	5	Minimum Score achieved
	Box B: Total Score	5	
Vehicle Access and Parking		Points	Score
Vehicle access and circulation	Is there safe access to and from the road? If no, you must address safety issues.		Yes
	Can the site be adequately serviced? If no, you must address service issues.		Yes
	Is the safety and convenience of other users (pedestrians, cyclists and public transport) affected by the development?		Yes
	Has access for the emergency services been provided? If no, you must provide emergency service		Yes
	For development which generates significant freight movements, is the site easily accessed from the road or rail freight route networks (i.e. minimising the impact of traffic on local roads and neighbourhoods) (see Accessibility Map 3 in Appendix F)? If no, please provide an explanation.		N/A
Parking	The off-street parking provided is more than advised in Section 4 for		Yes / No
	The off-street parking provided is as advised in Section 4 for that development type	1	Yes / No
	The off-street parking provided is less than 75% of the amount advised in Section 4 for that development type (or shares parking provision with another development)	2	Yes / No
	For development in controlled parking zones: Is it a car free development?	1	Yes / No
	Supports the control or removal of on-street parking spaces (inc provision of disabled spaces), or contributes to other identified measures in the local parking strategy (including car clubs)	1	Yes
		Total (B) 1	
Summary	Box A: Minimum Standard (From Table 3.1)	1	Minimum Score achieved
	Box B: Total Score	1	

Appendix D. SBA Transport Statement

REPORT CONTROL

Document: Transport Statement

Project: Proposed Residential Development, Gilead Street, Liverpool

Client: Lovell Partnership

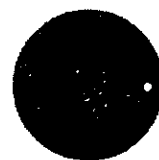
Job Number: N91695

File Origin: J:\2009\N91695 Gilead St Liverpool\Docs\Reports\TA_03.doc

Document Checking:

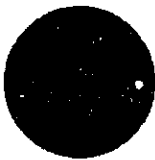
Primary Author	MR	Initialled:
Contributor	SP	Initialled:
Review By	PJW	Initialled:

Issue	Date	Status	Checked for Issue
1	08/10/09	Final	
2			
3			
4			



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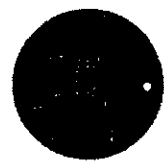
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PLANS

Plan 1	Site Location
Plan 2	2km Pedestrian Catchment
Plan 3	5km Cycle Catchment

APPENDICES

Appendix 1	Traffic Survey Data
Appendix 2	TRICS Outputs for Houses
Appendix 3	TRICS Outputs for Apartments
Appendix 4	Growth Factors
Appendix 5	LINSIG Outputs for Kensington/Holt Road
Appendix 6	LINSIG Outputs for Kensington/Sheil Road/Beech Street/Prescot Road
Appendix 7	Residential Travel Plan



1 INTRODUCTION

- 1.1.1 Savell, Bird & Axon have been instructed by Lovell Partnership to advise on traffic and transportation issues relating to the redevelopment of land off Gilead Street, Kensington, to the east of Liverpool City Centre.
- 1.1.2 The report provides information of the traffic and transport planning aspects of the development proposals and forms supplementary information to assist in the determination of a forthcoming planning application.
- 1.1.3 The development is located in a mostly residential area, with a number of retail and commercial properties fronting onto, or accessed directly off, Kensington and is located within close proximity to shops, community and other educational facilities.
- 1.1.4 The location of the development in relation to its surrounding area is indicated in **Plan 1**, with **Plan 2** showing the location of the site in a more local context.
- 1.1.5 The proposed development is in the order of 58 dwellings, which will comprise a mix of both houses and apartments. For the purposes of this Transport Assessment it has been assumed that the development will be based on a split of 33 houses and 25 apartments.
- 1.1.6 With a greater emphasis being placed on the integration of land use and transport planning to achieve the aims of sustainable development, this report will address the sustainability issues of non-car accessibility as well as the practical issues of traffic impact and vehicular access and internal site layout design.
- 1.1.7 The scope of the assessment has been formally agreed between Savell, Bird & Axon and Liverpool City Council. Following this introduction, Section 2 of this report provides a description of the existing site, highway provision and accessibility of the site by non-car modes. Section 3 outlines the development proposals for the site, including parking and access.
- 1.1.8 The trip generation and potential traffic impact of the proposals is detailed in Section 4, while the Travel Plan is described in Section 5.
- 1.1.9 The conclusions of the report are presented in Section 6.



2 **EXISTING CONDITIONS**

2.1 **Existing Site Information**

2.1.1 This section of the report considers the existing site and the local highway network in the area as well as detailing the level of accessibility for non car modes, such as public transport, walking and cycling.

2.2 **Site Location**

2.2.1 The location of the development in relation to its surrounding area is indicated in **Plan 1**.

2.2.2 The proposed development site is bounded by Kensington to the north, Holt Road to the east and Gilead Street to the west, with residential properties associated with Phase 1 of the development lying to the south.

2.3 **Existing Development**

2.3.1 The proposed site is located approximately 2 kilometres to the east of Liverpool City Centre and consists of a combination of existing residential, retail and commercial properties, including 40 houses, 2 garage workshops, 22 shops and 3 public houses.

2.3.2 The overall site area is approximately 0.64 hectares.

2.3.3 It is also noted that the adjacent highway network including Cotswold Street and Gilead Street is designated a 20 mph zone.

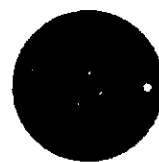
2.4 **Highway Provision**

2.4.1 The key roads and junctions in the vicinity of the site are described in the following paragraphs and a summary of their existing operation.

Kensington

2.4.2 The site is located in a predominantly residential area, although it is situated adjacent to the amenities provided on Kensington.

2.4.3 Kensington, which runs east/west along the northern boundary of the site, is a major route into Liverpool City Centre and has a 30mph speed limit.



- 2.4.4 This road forms part of a Quality Bus Corridor and is a busy route with frequent services and a high pedestrian flow during peak periods. An eastbound bus/cycle/taxi lane operates Monday to Friday between 16:00 and 18:30 hours and parking is prohibited at all times along both sides of the carriageway.

Holt Road

- 2.4.5 Holt Road runs to the east of the site and provides access to Minto Close. This is a 30mph road and provides access via signalised junctions between Kensington to the north and the A5047 Edge Lane to the south, the latter of which is the principal route between the M62 and Liverpool City Centre. Parking is prohibited at all times on Holt Road between the junctions with Kensington and Needham Road, and prohibited from 08:30 to 09:30 hours and 16:30 to 18:00 hours on the remainder of the road.

Gilead Street

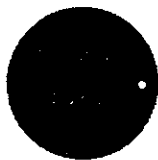
- 2.4.6 Gilead Street to the west of the site is also within the 20 mph zone. Parking is unrestricted along both sides although there is not the on-street parking problem that exists on Cotswold Street. At the southern end of Gilead Street is the priority junction with Anglezark Close, which provides access to the satellite area of development. During an AM peak site visit Gilead Street appeared to be infrequently used by vehicles.

Kensington/Holt Road

- 2.4.7 Holt Road forms a signalised junction with Kensington to the east of the site and the junction provides a formal pedestrian crossing point with dropped kerbs and tactile paving. Holt Road continues to the south and links the site to the Wavertree area of the City as well as leading directly to Edge Hill railway station.

Kensington/Beech Street/Prescot Road/Sheil Road

- 2.4.8 The Kensington/Beech Street/Prescot Road/Sheil Road junction is located approximately 300 metres to the east of the site and also benefits from pedestrian facilities.
- 2.4.9 Kensington forms the western arm of the signalised junction and Beech Street links to Edge Road to the south while Sheil Road to the north links the site to West Derby Road and beyond.



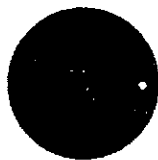
2.5 Existing Site Information

2.5.1 As previously mentioned, the site is currently occupied by a consists of a combination of existing residential, retail and commercial properties, including 40 houses, 2 garage workshops, 22 shops and 3 public houses.

2.6 Planning History

2.6.1 It is noted that the site benefits from planning consent for 89 residential units with around 17 of these being houses and the remaining 72 units being apartments.

2.6.2 In light of the above, the traffic impact calculations and base flow scenario will be based on the aforementioned consented residential scheme.



3 ACCESS BY A CHOICE OF MODE OF TRANSPORT

3.1 Introduction

3.1.1 In order to accord with the aspirations of Planning Policy Guidance (PPG) Note 13, entitled 'Transport', any new developments should extend the choice in transport and secure mobility in a way that support sustainable development.

3.1.2 The accessibility of the proposed development by the following modes of transport has, therefore been briefly considered;

- Accessibility on foot.
- Accessibility by cycle.
- Accessibility by bus.
- Accessibility by rail

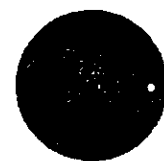
3.1.3 The non car accessibility of the site is an important ingredient to provide a viable alternative to the private car when considering travel to and from the proposed development.

3.1.4 The non car accessibility of the site is a vital ingredient to provide a viable alternative to the private car when considering travel to and from the proposed development.

3.2 Accessibility on Foot

3.2.1 PPG13 states that walking is the most important mode of travel at the local level and offers the greatest potential to replace short car journeys, particularly those under 2 kilometres.

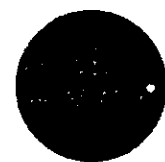
3.2.2 **Plan 2** shows the pedestrian catchment areas for 2 kilometres, and indicates the areas that can be reached based on a leisurely walk. The distance of 2 kilometres is derived from the Institution of Highways and Transportation (IHT) document entitled 'Guidelines for Providing for Journeys on Foot'. The 2 kilometre distance relates to the maximum preferred journey for commuting, school trips and sight seeing.



- 3.2.3 The 2 kilometres catchment in **Plan 2** encompasses the whole of Kensington, Fairfield and Edge Hill and also areas of Everton and Stanley. The catchment also encompasses several schools and further education facilities including Kensington Junior & Infants Primary School, Archbishop Blanch C of E High School and the University of Liverpool.
- 3.2.4 The site is located close to further amenities directly opposite the site along Kensington, these include Barbers, Bookies and the Kensington news store located approximately 200 metres from the site along Romer Road east of the site. There are also a number of other amenities including a post office, Pharmacy and Lidl located further east along Prescot Road.
- 3.2.5 Around the site the pedestrian facilities are good with wide footways and dropped kerbs along Kensington. There is also a number of Signal pedestrian crossings close to the site a number of these are located along Kensington one close to the junction with Holt Road and another further east at the junction with Deans Road.
- 3.2.6 The site can therefore be considered as highly accessible on foot.

3.3 Accessibility by Cycle

- 3.3.1 PPG3 emphasises that cycling has the potential to replace short car journeys, particularly those under 5 kilometres. It has been demonstrated that a wide area can be accessed by foot; therefore, in turn an even wider area of Salford could be accessed by cycle, based on journeys under 5 kilometres.
- 3.3.2 As can be seen in **Plan 3**, the 5 kilometre catchment encompasses the whole of Clubmoor, Wavertree, Kensington and Liverpool city centre. This would equate to a journey of 25 minutes using a leisurely cycle speed of 12 kilometres per hour.
- 3.3.3 An alternative mode of travel to the development could be achieved by bicycle. An existing bus, taxi and cycle lane operates eastbound along Kensington from Monday to Friday between 16:00 and 18:30, providing some encouragement to cycle trips. In addition the existing 20mph zone, in which the development area is located, results in low vehicle speeds, which is conducive to a cycle friendly environment.



3.3.4 It is possible that a cyclist could travel from the site to the City Centre in around 10 minutes using a leisurely speed of 12 mph.

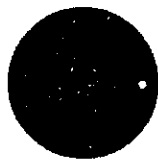
3.3.5 This would help encourage cycling as an alternative form of transport to access the site.

3.4 Accessibility by Bus

3.4.1 The development site is located on the A57 Quality Bus Corridor, and there are eastbound and westbound bus stops located on Kensington immediately adjacent to the site.

3.4.2 There are also bus stops located along Holt Road to the east of the site, these stops serve the bus services 26 and 27 which both also stop at the Kensington bus stops.

3.4.3 A summary of the bus services along with their frequencies are presented in **Table 3.1** below:



Service Number	Service Route	Monday – Friday (Frequency Per Hour)				SAT	SUN
		AM PEAK	MID	PM PEAK	EVE		
Kensington junction of Sheil Road							
8	James Street, Liverpool – Water Street, Liverpool	3	3	3	0	2	0
9	James Street, Liverpool – Water Street, Liverpool	3	3	3	0	2	0
10	Liverpool – St Helens Bus Station	6	6	6	3	6	2
10A	Liverpool One Bus Station – St Helens Bus Station	6	6	6	4	3	2
10B	Liverpool One Bus Station – Elizabeth Road, Huyton	6	6	6	2	4	4
110	Liverpool City Centre – St Helens Bus Station	0	0	0	0	0	2 AM Jnys
26	Liverpool One Bus Station – Kensington/Liverpool One Bus Station	8	8	7	2	8	2
27	Liverpool One Bus Station – Kensington/Liverpool One Bus Station	7	8	8	2	8	2

Table 3.1 – Summary of Bus Services in the Vicinity of the Site

- 3.4.4
- These bus services provide direct access to a number of destinations such as Liverpool City Centre, St Helens and Huyton. From the bus stops close to the site and the services operating via these stops there is an average journey time of approximately 15 minutes.
- 3.4.5
- From the list of bus services in the table above we can see that there are up to 40 services per hour which travel in each direction from bus stops close to the site.
- 3.4.6
- These bus services would provide the opportunity to access the numerous employment, retail and leisure facilities within these areas.
- 3.4.7
- As such it has been concluded that the site is highly accessible by bus.



3.5 Accessibility by Rail

- 3.5.1 The nearest Rail station to the proposed development site is Edge Hill Station located along Wavertree Road South of the site and within the 2 kilometres catchment in **Plan 2**. The Station provides frequent journeys to Wigan and Liverpool.
- 3.5.2 A summary of the train services along with their frequencies are presented in **Table 3.2** below:

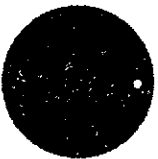
Edge Hill Rail Station		
Destination	Frequency	Duration
Liverpool Lime Street	5 per hour	10 minutes
Wigan North Western	2 per hour	40 minutes
Huddersfield	3 per day	1 hour 50 minutes
Manchester Oxford Road	4 per day	1 hour 10 minutes
Preston	2 per day	1 hour

Table 3.2 – Summary of Bus Services in the Vicinity of the Site

- 3.5.3 The table above shows the Frequency of rail services stopping at Edge Hill Rail Station. As we can see there is on average 7 trains passing the stations in both direction each hour.
- 3.5.4 As such it has been concluded that the site is highly accessible by Rail.

3.6 Summary

- 3.6.1 The location of the site would facilitate pedestrian and cycle connectivity between the proposed development site and the surrounding areas of Kensington.
- 3.6.2 The site is located along the A57 Quality Bus Corridor providing frequent journeys both on weekdays and weekends.
- 3.6.3 In summary, the site is accessible by a range of non car travel modes and ideally located to promote sustainable modes of travel.



3.7 Traffic Data

3.7.1 In order to establish the existing traffic situation in the vicinity of the site, and as requested by Highways Officers at Liverpool City Council, Savell Bird & Axon commissioned Signal Surveys to undertake traffic count surveys at the following locations:

- Kensington/Holt Road; and
- Kensington//Beech Street/Prescot Road/Sheil Road.

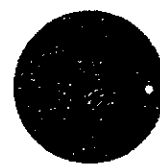
3.7.2 The turning count surveys at the above locations were undertaken on Thursday 24th September 2009 at the following times:

- AM Peak period from 0730 to 0930 hours; and
- PM Peak period from 1600 to 1800 hours.

3.7.3 The peak hours were shown to be 0800 to 0900 hours in the AM peak period and between 1700 and 1800 hours in the PM peak hour.

3.7.4 These peak hour flows are identified on **Figures 1** and **2** for the AM and PM peak hour periods. The full results of the traffic surveys are contained in **Appendix 1**.

3.7.5 The above junctions will form the basis for the traffic impact assessment of the surrounding highway network and has been agreed with LCC.



4 PROPOSED DEVELOPMENT

4.1 Introduction

- 4.1.1 The following paragraphs will describe the development proposals and report on proposed car parking and access arrangements.

4.2 Development Site

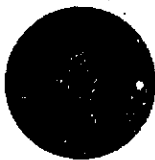
- 4.2.1 The development is located in a mostly residential area, with a number of retail and commercial properties fronting onto, or accessed directly off, Kensington and is located within close proximity to shops, community and other educational facilities.
- 4.2.2 The location of the development in relation to its surrounding area is indicated in **Plan 1**.

4.3 Built Development Proposals

- 4.3.1 The proposed development is in the order of 58 dwellings, which will be split into houses and apartments.
- 4.3.2 The proposed units will comprise a mix of 33 houses and 25 apartments, as follows:
- 2 bedroom flats – 25 units;
 - 3 bedroom houses – 17 units; and
 - 2 bedroom houses – 16 units.

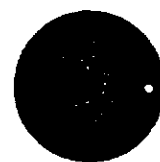
4.4 Parking Proposals

- 4.4.1 To cater for the proposed residential development, it is proposed to provide car parking provision at around 95%, as follows:
- Parking court – 37 spaces; and
 - Designated street bays – 18 spaces.
- 4.4.2 The above allocation equates to a total of 55 spaces and includes 4 accessible paces for use by disabled drivers and this provision has been deemed acceptable by LCC.
- 4.4.3 A plan to show the car parking strategy is presented in the Design and Access Statement.



4.5 **Summary of Development**

4.5.1 The proposals comprise the redevelopment of land for a residential scheme of 58 units.



5 TRAFFIC IMPACT ASSESSMENT

5.1 Introduction

- 5.1.1 The following section of the report will consider the likely traffic impact of the proposals on the local highway network. The scope of the traffic impact assessment has been discussed and agreed with Liverpool City Council.

5.2 Analysis Periods

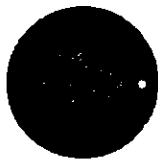
- 5.2.1 In light of the nature of the development and the location of the site in relation to the surrounding highway network, it is deemed appropriate that the assessment of traffic impact of the development proposals should consider the weekday AM and PM peak hours. The above analysis criteria have been deemed acceptable by LCC.

5.3 Growth Factors

- 5.3.1 It is envisaged that the opening year for the development will be 2011 and so the 2009 surveyed traffic flows will be factored to from 2009 to 2011 using Temprow growth factors.
- 5.3.2 The resulting 2011 factored flows for the weekday AM and PM peak hours are presented in **Figures 3 and 4**.
- 5.3.3 As requested by the Highways Officer at LCC a 5 year design horizon has also been considered and therefore the 2009 surveyed traffic flows will also be factored to from 2009 to 2016 using Temprow growth factors.
- 5.3.4 The resulting 2016 factored flows for the weekday AM and PM peak hours are presented in **Figures 5 and 6**.

5.4 Existing Trip Attraction

- 5.4.1 As previously described, the site is currently occupied by combination of existing residential, retail and commercial properties, including 40 houses, 2 garage workshops, 22 shops and 3 public houses.



5.4.2 However, as previously mentioned, as the site benefits from planning consent for 89 units, the baseline scenario will incorporate traffic flows associated with this scheme as described in the following paragraphs.

5.5 Trip Distribution

5.5.1 The directional distribution of development traffic has been based on the traffic flow on the local highway network, as agreed with Highways Officers at LCC in the original Transport Assessment.

5.5.2 The preliminary distribution is shown in Figures 7 and 8 for the PM peak and Saturday peaks respectively.

5.6 Consented Development

5.6.1 In order to assess the impact of the proposals the predicted traffic volumes have been compared to that generated by the consented scheme.

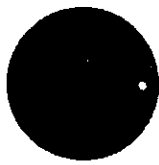
5.6.2 The extant consent refers to a total of 89 residential units with 17 of these being houses and the remaining 72 units being apartments.

5.6.3 The TRICS database 2009(b) has been utilised to calculate the potential number of trips generated by the already consented development using the 'Private Owned Housing' and 'Privately Owned Flats' categories within the database. The trip rates and resulting flows based on a total of 17 houses are summarised in Table 4.1 below and the TRICS outputs are presented in Appendix 2;

Time Period	Trip Rates		Traffic Flows	
	Arrivals	Departures	Arrivals	Dep
AM Peak Hour	0.16	0.43	3	7
PM Peak Hour	0.40	0.24	7	4

Table 4.1 – Summary of Traffic Generation for Consented Houses

5.6.4 As detailed above, the proposed residential development will generate somewhere in the region of 10 two-way trips in the AM peak and around 11 two-way trips in the PM peak hour.



- 5.6.5 The TRICS database 2009(b) has also been utilised to calculate the potential number of trips generated by the already consented flats. The trip rates and resulting flows based on a total of 72 flats are summarised in **Table 4.2** below and the TRICS outputs are presented in **Appendix 3**;

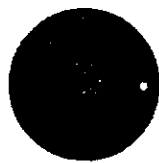
Time Period	Trip Rates		Traffic Flows	
	Arrivals	Departures	Arrivals	Dep
AM Peak Hour	0.06	0.16	4	12
PM Peak Hour	0.14	0.08	10	6

Table 4.2 – Summary of Traffic Generation for Consented Flats

- 5.6.6 As detailed above, the proposed residential development will generate somewhere in the region of 16 two-way trips in the AM peak and around 16 two-way trips in the PM peak hour.
- 5.6.7 The exercise has demonstrated that the consented development on the site would potentially have generated around 26 two-way trips in both the AM and PM peak hours.
- 5.6.8 The above trips associated with the consented development are presented in **Figures 9** and **10** for the weekday AM and PM peak hours respectively.

5.7 Baseline 'Without Development' Traffic Flows

- 5.7.1 In light of the above, the flows associated with the consented scheme has been added to the 2011 factored traffic survey data to form the baseline 'without development' scenario.
- 5.7.2 The resulting 2011 baseline 'without development' flows for the weekday AM and PM peak hours are presented in **Figures 11** and **12**.
- 5.7.3 The resulting 2011 baseline 'without development' flows for the weekday AM and PM peak hours are presented in **Figures 13** and **14**.



5.8 Development Proposals

- 5.8.1 As previously detailed, it is proposed to re-develop the site for a residential use comprising 58 units.
- 5.8.2 The TRICS database 2009(b) has been utilised to calculate the potential number of trips generated by the proposed houses again using the 'Private Housing' category within the database.
- 5.8.3 The trip rates and resulting flows based on a total of 33 units are summarised in **Table 4.3** below and the TRICS outputs are presented in **2**;

Time Period	Trip Rates		Traffic Flows	
	Arrivals	Departures	Arrivals	Dep
AM Peak Hour	0.16	0.43	5	14
PM Peak Hour	0.40	0.24	13	8

Table 4.3 – Summary of Traffic Generation for Proposed Houses

- 5.8.4 As detailed above, the proposed residential development will generate somewhere in the region of 19 two-way trips in the AM peak and around 21 two-way trips in the PM peak hour.
- 5.8.5 The trip rates and resulting flows based on a total of 25 units are summarised in **Table 4.4** below and the TRICS outputs are presented in **Appendix 3**;

Time Period	Trip Rates		Traffic Flows	
	Arrivals	Departures	Arrivals	Dep
AM Peak Hour	0.06	0.16	1	4
PM Peak Hour	0.14	0.08	3	2

Table 4.4 – Summary of Traffic Generation for Proposed Houses

- 5.8.6 As detailed above, the proposed residential development will generate somewhere in the region of 5 two-way trips in the AM peak and PM peak hours.



- 5.8.7 The above trips associated with the proposed development are presented in **Figures 15** and **16** for the weekday AM and PM peak hours respectively.

5.9 Comparison to Consented residential Scheme

- 5.9.1 To compare the consented residential development and the proposed scheme in terms of trip generation, the two way trips for each scheme are presented in **Table 4.4** below:

Scenario	AM	PM
Consented Scheme	26	27
Proposed Scheme	24	26
Net Impact	-2	-1

Table 4.4 – Comparison of Consented Scheme and New Proposals

- 5.9.2 As demonstrated in Table 3 above, the proposed scheme results in a net reduction of 2 trips in the AM peak and a net reduction of 1 trip in the PM peak hour when compared to the consented scheme.

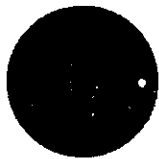
5.10 Baseline 'With Development' Traffic Flows

- 5.10.1 The predicted development traffic flows have been added to the factored 2011 flows and the resulting baseline 'with development' flows for the 2011 weekday AM and PM peaks are provided in **Figure 17** and **Figure 18** respectively.

- 5.10.2 Similarly, the development traffic flows have been added to the factored 2016 flows to form the baseline 'with development' flows for the 2016 weekday AM and PM peaks are provided in **Figure 19** and **Figure 20** respectively.

5.11 Junction Assessments

- 5.11.1 Clearly, as demonstrated below the proposed development will have no impact when compared to the already consented scheme.
- 5.11.2 However, as requested by the Highways Officer at LCC, junction assessments have been undertaken.



- 5.11.3 The resulting flows as described above have been used to assess the likely operation of the surrounding highway network and will allow comparisons to be made between the existing and proposed traffic volumes.
- 5.11.4 The following paragraphs present the junction capacity results from both the existing and proposed junction assessments for a PM weekday and Saturday peak hours.
- 5.11.5 As detailed in Section 2, these will include the following locations:
- Kensington/Holt Road; and
 - Kensington/Sheil Road/Prescot Road/Beech Street.

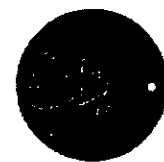
Kensington/Holt Road

- 5.11.6 The Kensington/Holt Road junction is located to the east of the site and is signal controlled and has therefore been assessed using LINSIG.
- 5.11.7 A summary of the results for 2011 base and post development flows are presented in **Table 4.5** below and the LINSIG outputs are presented in **Appendix 4**:

Link Description	2011 Base Flows				2011 Assessment Flows			
	AM Peak		PM Peak		AM Peak		PM Peak	
	% Sat	Q	% Sat	Q	% Sat	Q	% Sat	Q
Kensington (w) Ahead	21.5	3.7	34.2	7.3	21.8	3.7	34.2	7.3
Kensington (w) Ahead & Right	65.1	4.4	47.9	7.8	64.1	4.6	47.9	7.8
Kensington (e) Ahead & Left	62.4	29.5	42.3	17.3	64.4	30.6	42.3	17.3
Holt Road Left & Right	65.3	14.9	47.4	15.5	62.5	14.7	47.4	15.5

Table 4.5 – Summary of LINSIG Results for Kensington/Holt Road

- 5.11.8 The above assessment results show that the junction will operate within its theoretical capacity in the 2011 opening year assessment for both the AM and PM peak hours.



- 5.11.9 A summary of the results for 2011 base and post development flows are presented in **Table 4.6** below and the LINSIG outputs are presented in **Appendix 4**:

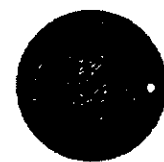
Link Description	2016 Base Flows				2016 Assessment Flows			
	AM Peak		PM Peak		AM Peak		PM Peak	
	% Sat	Q	% Sat	Q	% Sat	Q	% Sat	Q
Kensington (w) Ahead	23.2	3.9	29.3	6.1	23.2	4.0	36.3	7.9
Kensington (w) Ahead & Right	71.6	7.2	51.0	6.5	71.8	7.2	52.8	10.7
Kensington (e) Ahead & Left	70.8	35.1	46.3	19.1	70.8	35.1	44.8	18.6
Holt Road Left & Right	70.6	16.4	51.1	16.9	70.4	16.4	52.3	17.3

Table 4.6 – Summary of LINSIG Results for Kensington/Holt Road

- 5.11.10 The above assessment results show that the junction will operate within its theoretical capacity in the 2016 design year assessment for both the AM and PM peak hours and that the proposals will have no effect on the operation of the junction.

Kensington/Sheil Road/Prescot Road/Beech Street

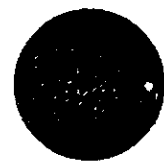
- 5.11.11 The Kensington/Sheil Road/Prescot Road/Beech Street is also signalised and is located approximately 300 metres to the east of the site and has also been assessed using LINSIG.
- 5.11.12 A summary of the results for 2011 base and post development flows are presented in **Table 4.7** below and the LINSIG outputs are presented in **Appendix 5**:



Link Description	2011 Base Flows				2011 Assessment Flows			
	AM Peak		PM Peak		AM Peak		PM Peak	
	% Sat	Q	% Sat	Q	% Sat	Q	% Sat	Q
Kensington Left & Ahead	107.1	30.9	110.7	50.0	107.1	30.9	110.7	50.0
Kensington Ahead & Right	95.3	18.3	97.8	26.7	95.3	18.3	97.8	26.7
Sheil Road Left & Ahead	43.0	6.3	54.7	7.1	43.0	6.3	54.7	7.1
Sheil Road Right	106.2	26.7	106.6	20.9	106.2	26.7	106.6	20.9
Prescot Road Ahead & Left	65.3	13.7	43.7	8.7	65.3	13.7	43.7	8.7
Prescot Road Ahead & Right	109.7	41.9	109.5	29.6	109.7	41.9	109.5	29.6
Beech Street Left & Ahead	106.6	16.6	107.4	18.9	106.6	16.6	107.4	18.9
Beech Street Right	18.4	0.9	33.3	1.9	18.4	0.9	33.3	1.9

Table 4.7 – Summary of LINSIG Results for Kensington/Sheil Road

- 5.11.13 The above assessment results show that the junction will operate within its theoretical capacity in the 2011 opening year assessment for both the AM and PM peak hours.
- 5.11.14 A summary of the results for 2016 base and post development flows are presented in **Table 4.8** below and the LINSIG outputs are presented in **Appendix 5**:



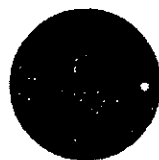
Link Description	2016 Base Flows				2016 Assessment Flows			
	AM Peak		PM Peak		AM Peak		PM Peak	
	% Sat	Q	% Sat	Q	% Sat	Q	% Sat	Q
Kensington Left & Ahead	115.4	45.4	119.3	72.0	115.4	45.4	119.3	72.0
Kensington Ahead & Right	102.8	26.8	105.4	41.7	102.8	26.8	105.4	41.7
Sheil Road Left & Ahead	46.7	7.0	58.9	7.8	46.7	7.0	58.9	7.8
Sheil Road Right	114.8	40.3	115.1	30.6	114.8	40.3	115.1	30.6
Prescot Road Ahead & Left	70.5	15.3	47.2	9.6	70.5	15.3	47.2	9.6
Prescot Road Ahead & Right	118.4	61.1	118.0	46.9	118.4	61.1	118.0	46.9
Beech Street Left & Ahead	114.9	23.6	116.0	27.1	114.9	23.6	116.0	27.1
Beech Street Right	20.0	1.0	36.2	2.0	20.0	1.0	36.2	2.0

Table 4.8 – Summary of LINSIG Results for Kensington/Sheil Road

- 5.11.15 The above assessment results show that the junction will operate within its theoretical capacity in the 2016 opening year assessment for both the AM and PM peak hours and that the proposals will have no effect on the operation of the junction.

5.12 Traffic Impact Summary

- 5.12.1 The junction assessments have shown that the proposed development can be easily accommodated on the surrounding highway network.
- 5.12.2 In light of the above, it is considered that the proposed development will not have a detrimental impact on the operation of the surrounding highway network.



6 PROMOTING SMARTER CHOICES VIA TRAVEL PLANS

6.1 Introduction

6.1.1 In order to manage the travel by residents on the new development, the applicant wishes to offer a Travel Plan to encourage travel to the site by non car modes.

6.2 Travel Planning Guidance

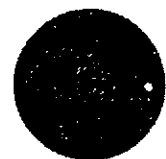
6.2.1 The preparation and adoption of a Travel Plan is an important element of managing the demand for travel to all modern developments. The Department for Transport (DfT) have produced guidance on the preparation of Travel Plans. The document, entitled 'Good Practice Guidelines: Delivering Travel Plans through the Planning Process' was published in August 2009.

6.2.2 The guidance explains how *"we often need to meet the demands of population and economic growth whilst simultaneously reducing our impact on the environment"* and identifies that *"The benefits of increases in sustainable travel, in particular cycling and walking, can extend beyond reduction in CO2 emissions and climate impacts, and include tackling congestion, tackling obesity and health issues, reducing social exclusion and improving quality of life"*.

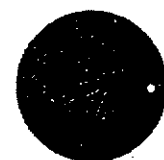
6.2.3 The document sets out an overview of the process and delivery of Travel Plans and states that *"A travel plan is a long-term management strategy for an occupier or site that seeks to deliver sustainable transport objectives through positive action and is articulated in a document that is regularly reviewed."*

6.2.4 The Guidance states that *"Travel Plans should involve the development of agreed explicit outcomes linked to an appropriate package of measures aimed at encouraging more sustainable travel, with an emphasis on reducing single occupancy car use..."* and;

"A Travel Plan should seek to establish clear outcomes to be achieved in relation to access and set out all the measures to be implemented in detail, including an action plan, timescales, targets and responsibilities for implementation, monitoring and review".



- 6.2.5 It is made clear in the document that Travel Plans should focus on achieving the lowest practical level of single occupancy vehicle trips to or from a site and widening the use of other travel modes and assist in the wider aims of encouraging sustainable travel, improving health, reducing congestion, energy consumption and pollution. The Travel Plan it advises *"needs to address all the journeys that may be made to and from a site"*.
- 6.2.6 The guidance also specifies that *"It is important to note that Travel planning should be developed as one of the means of delivering an area's sustainable transport strategy. Travel Planning should feature in the policy framework and implementation programmes of Regional Spatial Strategies and Local Development Frameworks"*.
- 6.2.7 Further guidance relating specifically to residential Travel Plans is presented in the DfT document entitled *"Making Residential Travel Plans Work"* published in June 2007.
- 6.2.8 The document states that:
- "Travel Planning is one of a range of measures known as smarter choices which have been found to be effective on reducing traffic and improving accessibility in residential areas"*.
- 6.2.9 A Residential Travel Plan is a package of measures designed to reduce car use originating from new housing by supporting alternative forms of transport and reducing the need to travel in the first place. They are an important tool to help deliver accessible, sustainable communities and offer clear benefits to all the parties involved – public, private and the community. They involve meeting the access needs of residents in a new way and require partnerships between developers, local authorities, local communities and new residents.
- 6.2.10 The value of travel plans in reducing car use to workplaces and schools is widely recognised and many local authorities and developers have experience in their design and implementation.
- 6.2.11 However, until recently, little attention has been given to tackling the origins of journeys from people's homes. Now, forward-thinking developers and local authorities are developing packages of smarter choices to both reduce the traffic generated by new housing developments and increasing the travel choices available to residents. These smarter choices are being set out in Residential Travel Plans.



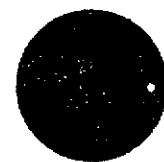
- 6.2.12 In addition to the above, the objective of the TP is the delivery of the objectives of National Planning Policy, i.e. to encourage staff to travel to work by bus, train, on foot and by bicycle. The TP outlines physical and management measures that are designed to achieve this objective, which can be discussed at later date.

6.3 Framework Residential Travel Plan

- 6.3.1 The objective of a Residential Travel Plan is the delivery of the objectives of National Planning Policy, i.e. to encourage residents to travel to work by bus, on foot and by bicycle.
- 6.3.2 A Residential Travel Plan has been prepared and is presented in **Appendix 6**.
- 6.3.3 The framework Residential Travel Plan outlines physical and management measures that are designed to achieve this objective.
- 6.3.4 However, the principle measure will consist of a Residents Travel Pack containing relevant material to promote non-car modes of travel and the provision of certain physical measures.
- 6.3.5 The Travel Pack will contain information to inform residents of the existing long-term strategy for reducing the dependence of residents and visitors on travel by private car.

6.4 Travel Plan Summary

- 6.4.1 The effectiveness of Travel Plans in assisting the use of non-car modes for journeys to work and for leisure is intrinsically linked to the accessibility of a given site by means other than the private car.
- 6.4.2 The current site has been demonstrated to benefit from very good non-car accessibility and it should, therefore, be expected that the adoption of a Travel Plan would be particularly effective.



7 CONCLUSIONS

7.1.1 Savell Bird and Axon have been instructed by Lovell Partnership to advise on the traffic and transportation issues relating to proposals to develop a site for a residential development off Gilead Street in the Kensington area of Liverpool.

7.1.2 A number of conclusions can be drawn from the Report, namely:

- i) This report has demonstrated that the proposed development would be accessible by non-car travel modes of walking, cycling and by public transport, in accordance with PPG13;
- ii) The provision of a Travel Plan will assist in reducing impact and help to create a wider choice of travel to residents;
- iii) The trip generation exercise has demonstrated that there will be no net increase in trips when compared to the already consented scheme; and
- iv) The junction assessment results show that the proposals will have no impact on the operation of the surrounding highway network.

7.1.3 In conclusion, this report has demonstrated there should be no objections to the proposed residential development off Gilead Street in Liverpool.

FIGURES

TRAFFIC FIGURES

FIGURE	TITLE	TIME	CALC
FIGURE 1	2009 Traffic Flows	AM PEAK	Observed
FIGURE 2	2009 Traffic Flows	PM PEAK	Observed
FIGURE 3	2011 Factored Flows	AM PEAK	F1 x NRTF&Tempo
FIGURE 4	2011 Factored Flows	PM PEAK	F2 x NRTF&Tempo
FIGURE 5	2016 Factored Flows	AM PEAK	F1 x NRTF&Tempo
FIGURE 6	2016 Factored Flows	PM PEAK	F2 x NRTF&Tempo
FIGURE 7	Trip Distribution	AM PEAK	See TA
FIGURE 8	Trip Distribution	PM PEAK	See TA
FIGURE 9	Consented Site Traffic	AM PEAK	See TA
FIGURE 10	Consented Site Traffic	PM PEAK	See TA
FIGURE 11	2011 Base Flows	AM PEAK	F3+F9
FIGURE 12	2011 Base Flows	PM PEAK	F4+F10
FIGURE 13	2016 Base Flows	AM PEAK	F5+F9
FIGURE 14	2016 Base Flows	PM PEAK	F6+F10
FIGURE 15	Proposed Traffic Flows	AM PEAK	See TA
FIGURE 16	Proposed Traffic Flows	PM PEAK	See TA
FIGURE 17	2011 Assessment Flows	AM PEAK	F3+F15
FIGURE 18	2011 Assessment Flows	PM PEAK	F4+F16
FIGURE 19	2016 Assessment Flows	AM PEAK	F5+F15
FIGURE 20	2016 Assessment Flows	PM PEAK	F6+F16

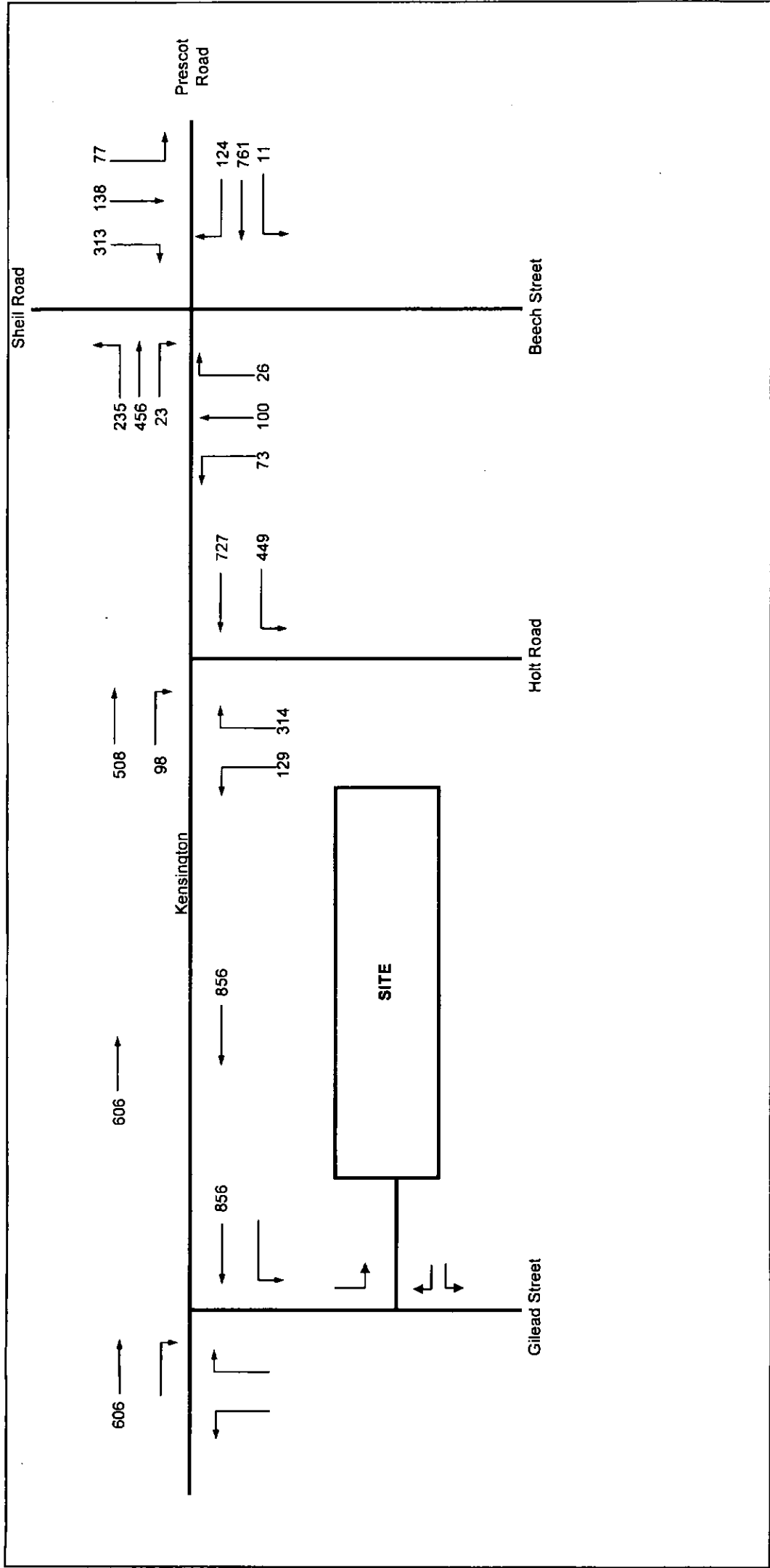
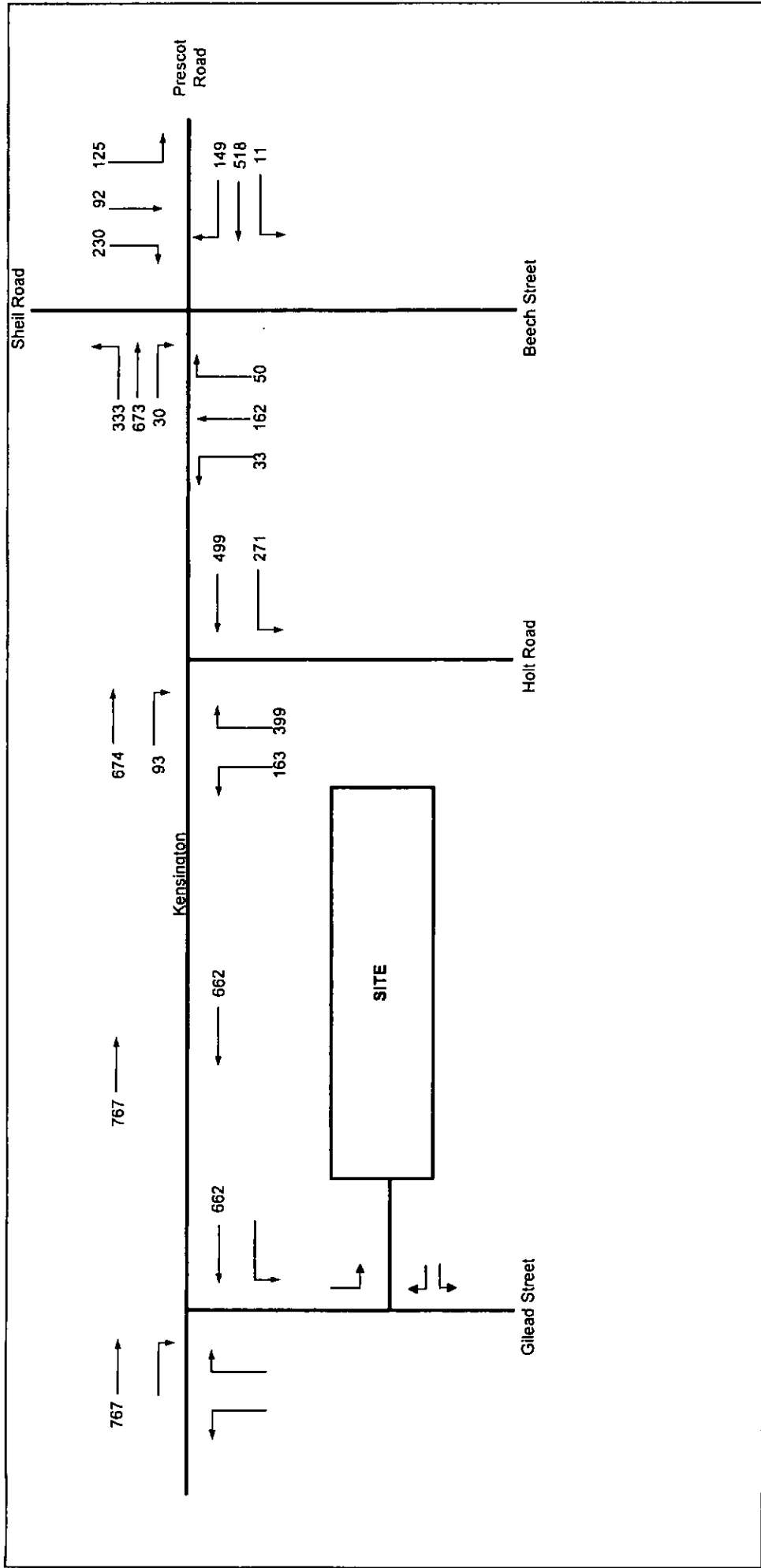


FIGURE 1 - 2009 AM PEAK (0800 - 0900) SURVEYED FLOWS

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FIGURE 2 - 2009 PM PEAK (1630 - 1730) SURVEYED FLOWS

