



The Royal Liverpool and
Broadgreen University Hospitals
NHS Trust



Transport Statement - Proposed Bio
Innovation Centre, Daulby Street,
Liverpool

Report



Transport Statement - Proposed Bio Innovation Centre, Daulby Street, Liverpool

Report

JMP Consultants Limited
Castle Chambers
43 Castle Street
Liverpool
L2 9SH

T 0151 231 6140
F 0151 231 6141
E liverpool@jmp.co.uk

www.jmp.co.uk

Job No. M076017

Report No.

Prepared by Rhian Lewis

Verified Hasan Nasreddine

Approved by Phil Sapiro

Status Draft

Issue No. 1

Date 28 November 2011



Transport Statement - Proposed Bio Innovation Centre, Daulby Street, Liverpool

Report

Contents Amendments Record

This document has been issued and amended as follows:

| Status/Revision | Revision description | Issue Number | Approved By | Date |
|-----------------|----------------------|--------------|-------------|------------|
| Draft | | 1 | Phil Sapiro | 28/11/2011 |
| Updated | | 2 | Phil Sapiro | 14/12/2011 |

Contents

| | | |
|---|---------------------------------------------------------------|----|
| 1 | INTRODUCTION | 1 |
| | Background..... | 1 |
| | Scope of Report..... | 1 |
| 2 | POLICY CONTEXT | 2 |
| | Overview | 2 |
| | National Policy | 2 |
| | Local Policy..... | 3 |
| | Conclusion | 4 |
| 3 | EXISTING CONDITIONS | 5 |
| | Site Description | 5 |
| | Site Access | 5 |
| | Highway Network..... | 5 |
| 4 | SUSTAINABLE TRANSPORT..... | 6 |
| | Site Audit | 6 |
| | Sustainable Transport | 6 |
| | Public Transport Provision..... | 6 |
| | Pedestrian and Cyclist Provision | 8 |
| | Minimum Accessibility Standard Assessment | 9 |
| | Conclusions | 9 |
| 5 | PROPOSED DEVELOPMENT | 10 |
| | General | 10 |
| | Access | 10 |
| | Parking Provision..... | 11 |
| 6 | TRAFFIC GENERATION AND DEVELOPMENT IMPACT | 12 |
| | Introduction | 12 |
| | Vehicle Trip Generation..... | 12 |
| 7 | VISIBILITY SPLAYS AND TURNING MOVEMENTS WITHIN THE SITE | 13 |
| 8 | CONCLUSIONS AND RECOMMENDATIONS | 14 |
| | Conclusions | 14 |
| | Recommendations..... | 14 |

Tables and Figures

| | |
|--------------------------------------------------------------------------------------|----|
| Table T4.1 Existing Bus Services Serving Proposed Development from Lime Street | 6 |
| Table T6.1 Trip Rate per Employee | 12 |
| Table T7.2 Traffic Generation for Proposed Office Use..... | 12 |



Appendices

APPENDIX A Site Location Plan

APPENDIX B MASA

APPENDIX C Site Layout Plan

APPENDIX D TRICS Output

APPENDIX E Turning Movements and Visibility Splays

1 Introduction

Background

- 1.1 JMP Consultants Ltd (JMP) has been commissioned by Royal Liverpool and Broadgreen University Hospital (RLBUH) to prepare a Transport Statement for a proposed new research building. The site is currently used as car parking for the hospital. .
- 1.2 This Transport Statement has been produced in line with the latest DfT 'Guidance on Transport Assessment'.
- 1.3 Preliminary information regarding the development proposals was received from Gary Lynch at Taylor Young and Matthew Cromack at Nightingales Architects.
- 1.4 JMP agreed the scope of the Transport Statement through liaison with Highways Development Control Officers at Liverpool Council.

Scope of Report

- 1.5 This report aims to provide an assessment of the transport impacts of the proposed development. The report has been produced in eight sections including this introduction.
- 1.6 Section two of this report provides a relevant policy overview.
- 1.7 Section three discusses the existing transport conditions at the site whilst section four details the sustainable travel options available to site users.
- 1.8 Section four sets out the sustainable transport options available to access the site.
- 1.9 Section five details the proposed development at the site.
- 1.10 Estimated trip generations associated with the development are included in section six.
- 1.11 Section seven discusses the visibility splays and servicing arrangements.
- 1.12 The conclusions and recommendations of the study are included as section eight.

2 Policy Context

Overview

- 2.1 Communities and Local Government [CLG] issue the Planning Policy Statements [PPS] which set out the Government's policies in relation to various aspects of planning.
- 2.2 Relevant local policy to the proposed development in Merseyside can be found in the Merseyside Local Transport Plan Three.
- 2.3 This section of the report examines the relevant guidance for the proposed development in terms of both transport and accessibility issues.

National Policy

Planning Policy Statement 1: Delivering Sustainable Development

- 2.4 PPS1 was published in 2005 as a replacement for Planning Policy Guidance [PPG] Note 1: General Policies and Principles. It sets out the Government's national policies on different aspects of land use planning in England; PPS1 establishes the overarching planning policies on the delivery of sustainable development through the planning system.
- 2.5 Within the objectives that the Government lays out in PPS1, it proposes that planning should facilitate and promote sustainable and inclusive patterns of urban and rural development by:
- 2.6 "making suitable land available for development in line with economic, social and environmental objectives to improve people's quality of life" whilst also "ensuring that development supports existing communities and contributes to the creation of safe, sustainable, liveable and mixed communities with good access to jobs and key services for all".
- 2.7 PPS1 states that planning for sustainable development requires a number of vital factors to be adhered to, these are; social cohesion and inclusion, protection and enhancement of the environment, prudent use of natural resources, sustainable economic development and integrating sustainable development in development plans.

Planning Policy Guidance 13: Transport

- 2.8 PPG13 sets out the national planning policy framework for transport issues. The guidance builds on policies developed within the Government's 1998 White Paper, "A New Deal for Transport: Better for Everyone" [DETR] which highlighted the need to deliver an integrated transport policy and sustainable development patterns.
- 2.9 The most recent version of PPG13 was published in January 2011 and contains the core aim of increasing co-ordination between land use planning and transport, at the national and local level. It also emphasises the need to reduce the need to travel, especially by car. Thus, travel by foot, cycle and public transport should be promoted within new developments.
- 2.10 PPG 13 is based on the following key objectives:
 - "...to:
 - Promote more sustainable transport choices for both 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.” (Paragraph 4).
- 2.11 When preparing documentation plans and considering planning applications, local authorities are also advised to:
- “...ensure that development comprising jobs, shopping, leisure and services offers a realistic choice of access by public transport, walking and cycling...,
 - ...use parking policies, alongside other planning and transport measures to promote sustainable transport choices and reduce the reliance on the car for work and other journeys.” (Paragraph 6)
 - “...seek to make maximum use of the most accessible sites, such as those in town centres and others which are, or will be, close to major transport interchanges.” (Paragraph 21)
- 2.12 PPG 13 provides considerable guidance and commentary on the role of maximum parking standards for new development, reflecting the fact that car parking has a major influence on transport mode choice. The guidance suggests that Local authorities should:
- “ensure ... levels of parking provided in association with development will promote sustainable transport choices;
 - Not require developers to provide more spaces than they themselves wish;
 - Encourage the shared use of parking, particularly in town centres and as part of major proposals: for example offices and leisure uses (such as cinemas) might share parking because the peak levels of use do not coincide...”
- 2.13 With regard to transport assessments, PPG13 states the importance of demonstrating that the development is accessible by a range of transport modes, including public transport, walking and cycling. This is to take into account journey times, public transport frequency, quality, safety and access for disabled people.

Department of Communities and Local Government (2011) - National Planning Policy Framework (Draft for Consultation)

- 2.14 The document which sets out the Government’s requirements for the planning system aims to replace all Planning Policy Guidance notes (PPG) and Planning Policy Statements (PPS) with a single document and. It provides a framework within which local people and their accountable councils can produce their own distinctive local and neighbourhood plans, which reflect the needs and priorities of their communities. Regarding transport the framework sets out that development should be in highly accessible and sustainable locations.

Local Policy

Merseyside Local Transport Plan 2011 - 2015

- 2.15 The third Local Transport Plan for Merseyside (LTP) provides the statutory framework for the policies and plans that will guide the future provision of transport in Merseyside. The vision for transport on Merseyside is:
- “A city region committed to a low carbon future, which has a transport network and mobility culture that positively contributes to a thriving economy and the health and wellbeing of its citizens and where sustainable travel is the option of choice.”*
- 2.16 In order to support the city region and achieve the transport vision the LTP has six goals of equal importance:

- 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 changes 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
- Maintain our assets to a high standard.

Ensuring a Choice of Travel – Supplementary Planning Document

- 2.17 The Supplementary Planning Document (SPD) has been developed to provide developers with guidance on access and transport requirements for new development across Merseyside. The document which was prepared in partnership by Merseytravel and the five Merseyside Local Authorities key objective is to;
- 2.18 'Enable the provision of a balanced transport infrastructure which provides access to employment, leisure, retail and other facilities for the city's residents and visitors; and
- 2.19 Provide a framework for future investment in the City's strategic road and rail network where new development would create additional demand'.
- The document contains guidance on;
 - Minimum Accessibility Standard Assessment (MASA)
 - Parking Standards
 - Transport Assessments
 - Travel Plans
 - Air Quality

Conclusion

- 2.20 The proposed development at Daulby Street is compliant with the main principles of the objectives and criteria as stated in the national and local policy guidance. The proposed development site benefits from the proximity of the existing, and well-established public transport infrastructure.
- 2.21 The proposed development satisfies the key objectives within PPG13 by being able to promote more sustainable transport choices to access the site, thus reducing the reliance on the use of the private car.

3 Existing Conditions

Site Description

- 3.1 The proposed development site is located on Daulby Street/Prescot Street on the existing Royal Liverpool and Broadgreen University Hospitals NHS Trust (RLBUH) site.
- 3.2 The site is bounded by the RLBUH to the south and east, Daulby Street to the west and Prescot Street to the north.
- 3.3 The proposed development site is currently used as car parking for RLBUH. Land use in the immediate vicinity of the site are healthcare institutions with some retail outlets being situated on Prescot Street to the north. The site location is illustrated at Figure 1.1 at Appendix A.

Site Access

- 3.4 The site is currently accessed from Daulby Street where access to the existing car park can be gained. The main access to the hospital for other modes of travel such as walking and cycling can be found at the hospital's main entrance on Prescot Street.

Highway Network

- 3.5 Prescot Street, to the north of the proposed development site, is a single carriageway road with a width of approximately 12m providing two lanes in each direction and has a speed limit of 30mph. Prescot Street provides access to the Royal Liverpool University Hospital Accident and Emergency department. A signal controlled pedestrian crossing is provided with zigzag marking near the hospital's main pedestrian entrance. It has footway with street lighting, bus stops near the main entrance and there are double yellow lines waiting restrictions on each side of the road. However, disabled parking was observed to be taking place on both sides of the road.
- 3.6 Pembroke Place, to the south of the proposed development site, is a single carriageway road with a width of approximately 11m providing two lanes in the westbound direction and one lane in the eastbound direction. It has footway with street lighting on both sides, bus stops on both sides near the main entrance to the dental hospital. The road has a speed limit of 30mph with double yellow lines with No Waiting/ Loading restrictions on each side of the road.
- 3.7 London Road, to the northwest of the proposed development site, is a one-way single carriageway road with a width of approximately 11m providing three lanes in the eastbound direction. It has footway with street lighting on both sides, bus stops on the northern side and a speed limit of 30mph. There are double yellow lines with No Waiting/ Loading restrictions on each side of the road with pay and display parking bays on the southern side.
- 3.8 Daulby Street, to the west of the proposed development site, is a one-way single carriageway road with a width of approximately 11.5m providing three lanes in the southbound direction and has a speed limit of 30mph. It has footway with street lighting on both sides and a bus stop to the north of the existing staff car park entrance providing for city-bound services. There are double yellow lines with No Waiting/ Loading restrictions on each side of the road with pay and display parking bays for about six cars (with a maximum stay of two hours) on the western side near the northern end. The northern end of the road forms a signal controlled cross junction with London Road, Prescot Street and Moss Street. This junction has signal controlled pedestrian crossings with dropped kerb and tactile paving. The southern end of the road also forms a signal controlled T junction with Pembroke Place. This junction has signal controlled pedestrian crossings with dropped kerb, tactile paving and pedestrian railing

4 Sustainable Transport

Site Audit

- 4.1 An audit of existing conditions was undertaken by JMP to assess the layout and accessibility of the proposed mixed-use site and the surrounding area.

Sustainable Transport

- 4.2 Planning Policy Guidance identifies the need for proposals to be accessible by various modes of travel to reduce the reliance on the private car and therefore reduce the number of individual private car journeys.
- 4.3 This section discusses the walking, cycling and public transport links within the vicinity of the Site. **Figure 1.1 in Appendix A** illustrates the approximate locations of the sustainable transport infrastructure provisions.

Public Transport Provision

Bus Provision

- 4.4 PPG13 states that developments should be located at or near public transport networks.
- 4.5 The development site benefits from being located within approximately 50 metres walking distance of the southbound bus stop on Daulby Street; the eastbound bus stop is located on Prescott Street A57 100 metres away and the westbound bus stop a little further away. It is approximately 150 metres walking distance of the bus stops on the eastbound carriageway of Pembroke Place A5047.
- 4.6 The recommended walking distance from a development to a bus stop by IHT in their 'Guidelines for Planning for Public Transport in Development' is 400m. The walking distances from the development site to the local bus services are therefore within the recommended distance.
- 4.7 The main bus stops within the vicinity of the site are indicated on Figure 1.1 in **Appendix A**.
- 4.8 All the bus stops in the area have good waiting facilities for passengers with shelters, seating and bus timetable information. The bus routes serving the site via the bus stops on Prescott Street are outlined in Table 4.1. These routes provide a good service to destinations in the local area including Liverpool city centre, Huyton and St Helens.

Table T4.1 Existing Bus Services Serving Proposed Development from Daulby Street

| Service Number | Serving | Operator | Monday to Friday | | |
|----------------|-----------------------------------------------------------------|----------------------|------------------|-----|---------|
| | | | Peak | Day | Evening |
| C1 | Citylink Circulars: Crown Street, Parliament Street – Pier Head | Merseytravel | 30 | 30 | 30 |
| C3 | Citylink Circulars: RLUH – Pier Head | Merseytravel | 30 | 30 | 30 |
| C4 | Citylink Circulars: Dingle Mount – city centre – Dingle Mount | Merseytravel service | 30 | 30 | 30 |
| C5 | Citylink Circulars: Dingle Mount – city centre – Dingle Mount | Merseytravel service | 30 | 30 | 30 |

- 4.9 Bus stops servicing Daulby Street/Prescott Street from Lime Street are located on London Road / Fraser Street Stop A.

Table T4.2 Bus Services from Pembroke Place

| Service Number | Serving | Operator | Monday to Friday | | |
|----------------|----------------------|-----------|------------------|-----|---------|
| | | | Peak | Day | Evening |
| 76/77 | Halewood – Liverpool | Arriva | 30 | 30 | 30 |
| 78 | Liverpool - Halewood | Arriva | 20 | 20 | 20 |
| C3 | City centre circular | Cumfy Bus | 20 | 20 | |
| C5 | City centre circular | Cumfy Bus | 20 | 20 | |

Table T4.3 Bus Services from Prescot Street (westbound)

| Service Number | Serving | Operator | Monday to Friday | | |
|----------------|---------------------------------------|---------------------|------------------|---------|---------|
| | | | Peak | Day | Evening |
| 8/9* | Kensington/ Knowsley Moss - Liverpool | Arriva | 20 | 20 | - |
| 10* 10a | St Helens – Liverpool | Arriva | 6 | 6 | - |
| 10b* 10c* | Huyton - Liverpool | Arriva | 10 | 10 / 20 | - |
| 12/13 | West Derby – Liverpool | Arriva | 10 | 10 | |
| 14 | Croxteth – Liverpool | Arriva / Stagecoach | 6 – 12 | 6 – 12 | |
| 15 | Huyton – Liverpool | Arriva | 12 | 12 | 30 |
| 17 | | | | | |
| 18a | Croxteth Park – Liverpool | Arriva | 6 | 6 | |
| 19 | Kirkby- Liverpool | Stagecoach | 8 – 14 | 8 – 14 | |
| 101 | Kirkdale – Liverpool | Halton Transport | 30 | 30 | |

(* also serve Prescot Street eastbound; remaining services call in London Road instead)

- 4.10 Bus connections link the site to the city centre stations, providing a practical commute from stations along the Wirral and Northern Lines.
- 4.11 In summary, the development site is served by high frequency of bus services providing links to a number of local and regional destinations.

Rail Provision

- 4.12 The nearest rail station to the site is Liverpool Lime Street Railway Station which is located approximately 900m to the west of the proposed development site (as indicated on Figure 1.1).
- 4.13 The IHT 'Guidelines for Planning Public Transport in Development' recommend a maximum walking distance of 900m from a development site to a train station. The walking distance from the proposed development to a train station is within that stated.
- 4.14 The two city circular bus services provide links from the city centre including Liverpool One and Queen Square bus station and James Street station to the proposed development at a 30 minute frequency as detailed in the table above Table 4.2. Almost all services included above connect the site with Lime Street Railways Station and Queen Square Bus Station (over 80 buses per hour).
- 4.15 Lime Street rail station provides direct access to the Northern and Wirral Line. The services provide users at this station with access to numerous rail destinations including Southport, Ormskirk and

Hunts Cross stations on the Northern Line and Birkenhead Central, Hamilton Square, Ellesmere Port and Chester stations on the Wirral Line.

- 4.16 In conclusion, the development is located in an exceptionally convenient location for travel by public transport. The connecting bus services stop well within the recommended walking distance will encourage some individuals to choose to use rail services to access the site, particularly in combination with cycling or bus travel.

Pedestrian and Cyclist Provision

Pedestrian Facilities

- 4.17 PPG13 states that for distances under two kilometres walking offers the greatest potential to replace the use of the car,
- i. "Walking is the most important mode of travel at the local level and offers the greatest potential to replace short car trips, particularly those under 2km." (Paragraph 75 PPG 13).
- 4.18 There is clearly considerable variation in what may be regarded as an acceptable walking distance. The IHT Guidelines for Providing Journeys on Foot (IHT 2000) provides more comprehensive advice. For example the suggested acceptable walking distances for town centres is given as a range, from a desirable 200m to a preferred maximum of 1,200m.
- 4.19 In terms of commuting journeys by foot, the desirable distance is 500m, the acceptable distance is 1,000m and the preferred maximum is 2,000m. However, the distance that people are prepared to walk depends upon many factors. There are obvious physical factors such as age, health and disabilities, and there are factors concerning the quality of the route and the environment.
- 4.20 In general, all footways within the vicinity of the site are of good quality and are of acceptable width, with dropped kerbs provided at crossing points. A suitable level of street lighting is present throughout the area. Generally, the pedestrian facilities and enhanced crossing facilities on junctions to the west of the site encourage movement by foot within the vicinity of the development site and provide good links to the nearest bus stops on the Prescott Road, London Road and Daulby Street itself, thus encouraging sustainable travel by employees and visitors at the proposed site.
- 4.21 There are a numerous residential areas within the 2km maximum desirable walking distance such as Edge Hill, Everton, and the city centre. There are also good public transport facilities within easy walking distance of the site, The pedestrian links to surrounding residential areas and public transport facilities are adequate and hence should encourage travel on foot.

Cycle Facilities

- 4.22 There are currently no dedicated cycling facilities present on the A57 Prescott Street / London Road ; however, there are on-road cycle routes along the A57 Kensington. On-road cycle routes to the south of the site are available along Harbord Street and Hope Street with Hall Lane and Russell Street providing recommended cycle routes with which to access the site in part. There is also an on-road cycle route to the south of the site along Oxford Street linking with Lime Street Station to the west.
- 4.23 Liverpool Lime Street railway station itself also has cycle parking facilities. JMP consider that given the existing suggested cycle routes in the vicinity of the site that conditions are generally favourable to cyclists.

Minimum Accessibility Standard Assessment

- 4.24 The Minimum Accessibility Standard Assessment has been completed to ensure minimum accessibility standards will be met. Where necessary the assessment can then be used by the local council to seek modifications to the planning application and make recommendations to the local planning authority. The following factors are considered when assessing the accessibility of the development:
- 4.25 Location
- 4.26 Development Size
- 4.27 Walking
- 4.28 Cycling
- 4.29 Public Transport
- 4.30 Vehicle Access
- 4.31 The completed MASA forms are included as **Appendix B**.
- 4.32 As can be seen from the completed MASA forms the development meets the minimum accessibility requirements.

Conclusions

- 4.33 In conclusion, the site is suitably located to encourage use of sustainable modes of transport including bus, bicycle, journeys on foot and rail when linked with other modes.

5 Proposed Development

General

- 5.1 The proposed development use is comprised as follows:
- 3965 square metres of offices/laboratories (Use Class B1)
- 5.2 It is proposed that the remainder of the space will be used as a mixture of foyer, seminar and flexible floor space.
- 5.3 It is expected that approximately 300 employees will be based in the development split between those working in the laboratories and those working in the associated office space. The additional space available for seminars and flexible foyer space may accommodate an additional 100 individuals albeit on a temporary basis.
- 5.4 Discussions with Nightingale architects have revealed that the site is likely to operate in the main from 0800 – 1800 with some activities taking place outside of these hours due to the nature of the site.
- 5.5 An illustrative layout plan of the proposed development is shown in Figure 1.2 in **Appendix C**. That plan also shows the proposed access points. The access points are also shown on the access drawing which accompanies the application.

Access

Vehicle

- 5.6 Vehicular access to the proposed development is only possible from Daulby Street providing one way access from London Road. Access to the site is also possible from Prescott Street and Moss Street. The site is also situated within easy access from Islington, Scotland Road and the Mersey Tunnels providing links to Wirral, Chester and further afield.
- 5.7 Servicing vehicles will access the site via the same access point outlined above.

Pedestrian

- 5.8 The main pedestrian access to the development will be via entrances on the corner of Daulby Street / Prescott Street and one at the south of the development off Daulby Street. An additional entrance will be available at the back of the development where servicing and deliveries will take place.
- 5.9 Daulby Street has a footway with street lighting on both sides. The northern end of the road forms a signal controlled cross junction with London Road, Prescott Street and Moss Street. This junction has signal controlled pedestrian crossings with dropped kerb and tactile paving. The southern end of the road also forms a signal controlled T junction with Pembroke Place. This junction has signal controlled pedestrian crossings with dropped kerb, tactile paving and pedestrian railing

Emergency Access

- 5.10 Emergency vehicles will be able to access the site without the requirement for any additional emergency access arrangements.

Parking Provision

Vehicle Parking

- 5.11 Liverpool City Council's parking standards as set out in the SPD document 'Ensuring a Choice of Travel' states that a maximum total of one space per 40 square metres should be followed. This allows for a maximum of 99 spaces on the site.
- 5.12 In accordance with the maximum standards set out in 'Ensuring a Choice of Travel' a limited number of car parking spaces are to be available due to the sustainable location of the proposed development and the nature of the likely individuals working in the development.
- 5.13 Twenty spaces will be provided as part of the proposed development for use as disabled and visitor and some staff bays. Disabled bays will be provided in line with the SPD document.
- 5.14 20 car parking permits will be made available to staff working in the proposed development to park within the RLBUH car parking facilities permitting at least 20 individuals to park on-site. As part of the travel plan being prepared for the proposed development car sharing is to be promoted to encourage greater occupancy than one person per vehicle accessing the site in relation to the Bio Innovation Centre.
- 5.15 Changes to the number of staff accommodated within the existing Duncan building on the RLBUH site are to take place during 2012. The reduction in the number of staff based within this building will result in a reduction of demand and pressure on site car parking as a result thus making space available to accommodate a number of staff to be employed within the proposed development.
- 5.16 In addition, the medium term parking and Travel Plan strategy for the Royal Liverpool University Hospital is to reduce the number of parking spaces available on-site from the current 1100/1200 to 1000 spaces.
- 5.17 Other car parking is available nearby including the 500-space Q Park car park on Epworth Street and smaller pay by the visit car parks on Prescott Street, Pembroke Place and Daulby Street opposite the site access.

Cycle and Motorcycle Parking

- 5.18 Cycle parking will include spaces for 10 bicycles in secure covered areas on site for staff use as well as 13 spaces within covered areas for staff and visitors. This exceeds the minimum requirement outlined in 'Ensuring a Choice of Travel' which requests 1 space per 400 square metres for staff and 1 space per 300 square metres for customers/visitors.
- 5.19 Space for 5 motorcycles will also be included within the site; this fulfils the minimum requirement of 1 space per 875 square metres as outlined in 'Ensuring a Choice of Travel'.

6 Traffic Generation and Development Impact

Introduction

- 6.1 In order to determine the impact of the proposed development on the local highway network, JMP has calculated the trip generation of the development.
- 6.2 The latest version of the TRICS database has been utilised to generate the traffic generation, as set out below.

Vehicle Trip Generation

Employment – Office

- 6.3 The employment 'office' use class within TRICS has been utilised as no specific research and development comparisons are currently available. The average weekday morning and evening peak generations have been produced and these are shown in Tables T7.1 and T7.2 below. The full TRICS output is included in **Appendix D**.

Table T6.1 Trip Rate per Employee

| Time Period | Arrivals | Departures | Total two-way |
|---------------------|----------|------------|---------------|
| AM Peak (0800-0900) | 0.23 | 0.18 | 0.261 |
| PM Peak (1630-1730) | 0.036 | 0.204 | 0.24 |

- 6.4 Based on the proposed development make up as set out in Section 3 the following trip generations have been calculated.

Table T6.2 Traffic Generation for Proposed Office Use

| Time Period | Arrivals | Departures | Total two-way |
|---------------------|----------|------------|---------------|
| AM Peak (0800-0900) | 69 | 9 | 78 |
| PM Peak (1700-1800) | 10 | 61 | 71 |

- 6.5 From the above table the development is likely to generate a total of 78 traffic movements during the morning peak period and 71 traffic movements during the evening peak period.
- 6.6 From a highway operation and safety perspective, given the calculated traffic generation of the developments it is not anticipated that there would be any difficulty in accommodating the development traffic on the local network.
- 6.7 It is also important to stress that class B1 use has been used for the purpose of trip generation whereas the development is a mix of laboratory and office space not solely office. Our assessment provides a worst case scenario of assuming all the space will be used as offices whilst in practice it is envisaged that the office space will be utilised by the same individuals working in the laboratories.
- 6.8 As agreed with Liverpool City Council, junction analysis is not required as part of this Transport Statement. It is expected that the traffic around the site will not be adversely affected by the proposed development given the amount of trip generation expected and the capacities of the junction.

7 Visibility Splays and Turning Movements within the Site

- 7.1 Liverpool City Council asked JMP to look into the visibility splays at the proposed site vehicle access junction as well as the turning movements within the site for servicing vehicles. Figure 1.3 Turning Movements and Visibility Splays in **Appendix E** shows the arrangements of the movements for servicing and refuse collection vehicles as well as the visibility splays at the access to the site.
- 7.2 Our analysis using Autotrack for the turning movements within the site indicate that servicing vehicles will be able to negotiate the site access and internal layout without difficulty. The internal road network within the site allows for appropriate internal turning areas enabling service vehicles to access the service bays and arrive at and leave the site in forward gear.
- 7.3 A 7.5t box van was used in the assessment which is likely to be bigger than the service/ refuse vehicles expected to call at the site.
- 7.4 A standard 2.4m “X” distance was used for the assessment of the visibility splay envelope. A satisfactory “Y” distance of over 90m was achieved; all the way back to the London Road/ Prescott Street/ Moss Street/ Daulby Street junction.

8 Conclusions and Recommendations

Conclusions

8.1 Based on the findings of this assessment it can be concluded that:

- The development is well linked to the existing pedestrian and public transport network. The development site is located within the IHT recommended walking distance of bus services which provide access to a number of destinations.
- The traffic generation of the development has been estimated using trip rates from the TRICS database. The traffic generation of the proposed development will not have a material impact on the surrounding highway network.
- Parking provision for the development is in accordance with Liverpool City Council's parking standards. JMP conclude that the level of parking demand generated by the site will not have a material impact on the surrounding highway network. There is sufficient capacity within the RLBUH site and in nearby car parks to absorb demand.
- A travel plan is being developed to promote sustainable travel options to staff based within the development.
- The required visibility splays at the vehicular access point and servicing arrangements are appropriately accommodated by the development proposals.

8.2 On this basis of this Transport Statement, we would expect the proposed development to result in no material increase in peak hour traffic. The layout of the development is such that the local highway network would not be adversely affected.

Recommendations

8.3 In light of the information provided, JMP concludes that there are no traffic or transportation grounds on which to refuse the proposed development application.

Site Location Plan

| Job No | Report No | Issue no | Report Name | Page |
|---------|-----------|----------|-----------------------------------------------------------------------------------|------|
| M076017 | | 1 | Transport Statement - Proposed Bio Innovation Centre, Daulby Street, Liverpool | 15 |

Appendix B

MASA

Appendix C

Site Layout Plan

| Job No | Report No | Issue no | Report Name | Page |
|---------|-----------|----------|-----------------------------------------------------------------------------------|------|
| M076017 | | 1 | Transport Statement - Proposed Bio Innovation Centre, Daulby Street, Liverpool | 17 |

Appendix D

TRICS Output

| Page | Job No | Report No | Issue no | Report Name |
|------|---------|-----------|----------|-----------------------------------------------------------------------------------|
| 18 | M076017 | | 1 | Transport Statement - Proposed Bio Innovation Centre, Daulby Street, Liverpool |

Proposed Development Layout, Turning Movements and Visibility Splays

| Job No | Report No | Issue no | Report Name | Page |
|---------|-----------|----------|-----------------------------------------------------------------------------------|------|
| M076017 | | 1 | Transport Statement - Proposed Bio Innovation Centre, Daulby Street, Liverpool | A1 |