Proposed Mixed Use Development
Highgate Centre & A&A Self-Storage

Transport Assessment

Fortnum Developments Ltd

Document Control Sheet

Transport Assessment

Mixed Used Development, Highgate Centre (19-37 Highgate Road) and A&A Self-Storage (19 Greenwood Place) Greenwood Place

Fortnum Developments Ltd

This document has been issued and amended as follows:

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1.0 Introduction

1.1 This Transport Assessment has been prepared by Motion on behalf of Fortnum Developments Ltd to accompany a full planning application for a residential led, mixed use development. The development proposals comprise 60 residential units, 8 of which will be assisted living units; 5,444sqm (GEA) storage space; 2,062 sqm (GEA) office space and 121sqm (GEA) Community use which is associated with the Greenwood Centre (Camden People First) located to the rear of the development on the western side of Greenwood Place.

1.2 The proposed development can be summarised as;

1.3 *Demolition of existing buildings and redevelopment of the site to provide two basement levels for Class B8 (self-storage) use and two buildings above ground; Building 1 over ground, first – fifth, part sixth, and part seventh for Class B8 (self-storage), Class B1 (office) and Class C3 (residential) uses; Building 2 over ground, first – fourth and part fifth floors for Class A3 (café) and Class C3 (residential) uses; creation of a pedestrian walkway running east-west between the two buildings linking Highgate Road with Greenwood Place; creation of a vehicular access from Greenwood Place and loading bay adjacent to Greenwood Place; provision of green/brown roofs and plan.*

1.4 The development site is located on Greenwood Place falling within the London Borough of Camden (LBC). The local highway network is focused around Highgate Road, which connects the site with Kentish Town in the south and Highgate in the north.

1.5 The site is currently occupied by 2,848sqm (GIA) of self-storage space and 795sqm (GIA) of office space. The Greenwood Centre is located to the west of the development site whilst Christ Apostolic Church is to the east.

1.6 Part of the development site, known as the Highgate Plot, has previously been granted consent for 42 dwellings, 8 of which are assisted living units, and 100sqm of flexible commercial space under the wider development proposals for the Greenwood Centre (app ref. 2013/5947/P). The A&A storage building was not part of that consent and therefore remained in situ.

1.7 Following discussions between Fortnum Developments Ltd and LBC, it is now proposed that only the Greenwood Centre element of the consented proposal is built out and Fortnum Developments Ltd propose to deliver a more comprehensive redevelopment for the remainder of the site.

1.8 As such, this planning application seeks to redevelop the A&A Storage site alongside the Highgate Plot whilst enhancing the public realm and creating a new, high quality, pedestrian connection to the Greenwood Centre. The development proposals also seek to address the current highways issues along Greenwood Place by relocating loading bays associated with the self-storage site to within the site boundary and rationalising on street parking and servicing arrangements.

1.9 The development proposals have progressed following continued discussions with LBC. The principle for access, servicing and cycle parking were agreed following a site meeting in July 2014 and a subsequent pre-application meeting with Camden highways officers in December 2015. The minutes from this meeting can be seen at **Appendix A**.

Report Structure

1.10 The structure of this report has been prepared in accordance with current best practice guidance and demonstrates that:

- The site accords with national, regional and local policies relevant to transport;
- The site is accessible by public transport, walking and cycling;
- Suitable and appropriate access to the site can be achieved from Greenwood Place and Highgate Road that accords with current best practice guidelines; and,

- The levels of traffic associated with the proposals will not lead to any demonstrable harm being caused to the existing operation and free flow of traffic on the adjoining highway network.

1.11 Following this introduction the Transport Assessment is split into seven sections as follows:

- Section 2 outlines the transport planning policies that are considered to be pertinent to this application.
- Section 3 considers the existing use of the site, reviews the accessibility of the site by all modes of transport and assesses local road safety records.
- Section 4 provides an overview of the proposed development together with the details related to the access, parking and servicing strategies that will be adopted.
- Section 5 assesses the trip generating potential of the proposals by all travel modes, and presents the likely traffic impact upon the local highway network.
- Section 6 outlines the likely measures to be included within the Residential and Office Travel Plan that will be operated at the proposed development.
- Section 7 summarises the key findings and conclusions of the report.

2.0 Transportation Policy Context

2.1 This section summarises relevant transport policy documents against which the development proposals would be considered at a national, regional and local level. The most relevant policy documents relating to this study are detailed below:

- National Planning Policy Framework (NPPF) (March 2012);
- Further Alterations to the London Plan (2015);
- Camden Core Strategy (Adopted November 2010);
- Camden Development Policies (Adopted November 2010);

National Planning Policy Framework (2012)

2.2 The National Planning Policy Framework (NPPF) was published on 27th March 2012, and replaces the previous national planning policies that were set out in the various Planning Policy Guidance Notes/ Statements. With regard to transport, the NPPF replaces policy contained within PPG13 (Transport).

2.3 The NPPF sets out a presumption in favour of sustainable development that recognises the importance of transport policies in facilitating sustainable development, and that planning decisions should have regard to local circumstances. In this regard, paragraph 32 of the NPPF states:

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

- The opportunities for sustainable transport modes have been taken up depending on the nature and location of the site, to reduce the need for major transport infrastructure;
- Safe and suitable access to the site can be achieved for all people; and,
- Improvements can be undertaken within the transport network that cost effectively limit the impacts of the development."

2.4 In promoting sustainable transport, the document identifies at paragraph 29 that:

"The transport system needs to be balanced in favour of sustainable transport modes, giving people a real choice about how they travel. However, the Government recognises that different policies and measures will be required in different communities and opportunities to maximise sustainable transport solutions will vary from urban to rural areas."

2.5 Moreover, paragraph 30 states that:

"In preparing Local Plans, local planning authorities should therefore support a pattern of development which, where reasonable to do so, facilitates the use of sustainable modes of transport."

2.6 Furthermore, paragraph 32 states that:

"Development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe."

Further Alterations to the London Plan (FALP) (March 2015)

2.7 The London Plan is the Mayors Planning Strategy for London. The purpose of the London Plan is to promote economic, social development and the environmental improvement of Greater London.

2.8 With regard to assessing the impact of development on transport capacity, Policy 6.3 states:

"Development proposals should ensure that impacts on transport capacity and the transport network, at both a corridor and local level, are fully assessed. Development should not adversely affect safety on the transport network."

2.9 With regards to cycling, Policy 6.9 states that:

"Developments should:

- *Provide secure , integrated and accessible parking facilities in line with minimum standards*
- *Provide on-site changing facilities and showers for cyclists*
- *Facilitate the Cycle Super Highway*
- *Facilitate the central London hire scheme."*

2.10 Table 6.3 of Further Alterations to the London Plan (FALP) (2014) provides minimum cycling parking standards which are summarised in Table 2.1 for the most relevant land use.

Land Use	Long-stay	Short-stay
C3 Dwellings (all)	1 space per 1 bed and studio dwellings 2 spaces per all other dwellings	1 space per 40 units
Offices	1 secure space per 90 sqm and after the first 5,000sqm	1 visitor space per 500 sqm (in the public realm)
Care Homes / Secure Accommodation	1 secure space per 5 staff and 1 space per 20 bedrooms	
Storage and Distribution	1 secure space per 500 sqm	1 space for visitors per 1000 sqm
Restaurants and Café	After 100 sqm: 1 secure space per 175 sqm	after 100 sqm 1 visitors space per 40 sqm

Table 2.1: FALP Minimum Cycle Parking Standards

2.11 In relation to car parking, Policy 6.13 advises that:

"The maximum standards set out in Table 6.2 in the Parking Addendum should be applied to planning applications.

- *Ensure that 1 in 5 spaces (both active and passive) provide an electrical charging point to encourage the uptake of electric vehicles;*
- *Provide parking for disabled people in line with FALP plans;*
- *Meet the minimum cycle parking standards set out in Table 6.3;*
- *Provide for the needs of businesses for delivery and servicing."*

Camden Core Strategy (Adopted November 2010)

2.12 The saved policies of the Camden Core Strategy, adopted in 2010, set out the local policies for the Borough. The saved policies in the plan that relate to this development are as follows:

- CS1 - Distribution of growth- This promotes the most efficient use of land and buildings in Camden. This includes encouraging a mix of uses in development and expecting the provision of a mix of uses in schemes in the most accessible parts of the borough.
- CS11 - Promoting sustainable and efficient travel- In order to support Camden's growth and to promote walking, cycling and public transport, the Council will improve public spaces and pedestrian links across the borough and continue to improve facilities for cyclists, including increasing the availability of cycle parking. As part of its approach to minimising congestion and addressing the environmental impacts of travel, the Council will minimise provision for private parking in new developments.

- CS14 - Promoting high quality places and conserving our heritage- seeking the highest standards of access in all buildings and places and requiring schemes to be designed to be inclusive and accessible.

Camden Development Policies (Adopted November 2010);

2.13 In addition to the Camden Core Strategy, there is also the Camden Development Policies that set out local development policies for the Borough. The saved policies relevant to this proposal are as follows:

- Policy DP1 - Mixed use development- The Council will require a mix of uses in development where appropriate in all parts of the borough, including a contribution towards the supply of housing.
- Policy DP6: Lifetime homes and wheelchair housing- All housing development should meet lifetime homes standards. 10% of homes developed should either meet wheelchair housing standards, or be easily adapted to meet them.
- Policy DP16 – The transport implications of development- The Council will seek to ensure that development is properly integrated with the transport network and is supported by adequate walking, cycling and public transport links.
- Policy DP17 - Walking, cycling and public transport- The Council will promote walking, cycling and public transport use. Development should make suitable provision for pedestrians, cyclists and public transport and, where appropriate, will also be required to provide for interchanging between different modes of transport.
- Policy DP18 - Parking standards and limiting the availability of car parking- The Council will seek to ensure that developments provide the minimum necessary car parking provision. The Council will expect development to be car free in the Central London Area, the town centres of Camden Town, Finchley Road / Swiss Cottage, Kentish Town, Kilburn High Road and West Hampstead, and other areas within Controlled Parking Zones that are easily accessible by public transport.
- Policy DP19 - Managing the impact of parking- The Council will seek to ensure that the creation of additional car parking spaces will not have negative impacts on parking, highways or the environment, and will encourage the removal of surplus car parking spaces.
- Policy DP29 - Improving access- The Council will seek to promote fair access and remove the barriers that prevent people from accessing facilities and opportunities.

2.14 Where the transport implications of proposals are significant, the Council will require a Transport Assessment to ensure that a proposal will not cause harm to the transport network or to highway safety, to show that the development will be properly integrated into the network, and indicate the extent to which there is additional capacity available to accommodate new travel patterns.

3.0 Baseline Conditions

Overview

3.1 So that the context of the site can be established, a detailed review of the study area has been undertaken. The following text provides a summary of the results of this review and makes reference to the location of the site and baseline traffic conditions. It also sets out an overview of the accessibility of the site by a variety of modes of transport.

Site Details

3.2 The development site is located on Greenwood Place and adjacent to Highgate Road, which connects the site with Kentish Town in the south and Highgate in the north. The site is currently occupied by 2,848sqm (GIA) of self-storage space and 795sqm (GIA) of office space. The greenwood Centre is located to the west of the development site whilst Christ Apostolic Church is to the east.

3.3 Greenwood Place currently contains approximately 13 car parking spaces and loading bays on street that are associated with the A&A Self Storage centre and existing office space.

3.4 The location of the development site in relation to the surrounding area can be seen at **Figure 3.1**.

Highway Network

3.5 Highgate Road is a two-way single carriageway subject to a speed restriction of 20 mph and provides connections to Kentish Town to the south and Highgate to the north. Greenwood Place is a narrow two-way carriageway connecting to Highgate Road at either end.

3.6 Fortress Road connects in the north with the A1 via Junction Road. The A1 provides connections north to the wider strategic network and the M1.

Sustainable Transport Accessibility and Access to Local Services

3.7 It is generally accepted that walking and cycling provide important alternatives to the private car, and therefore should be encouraged to form part of longer journeys via public transport. Indeed, it is noteworthy that the Institute of Highways and Transportation (IHT) has prepared several guidance documents that provide advice with respect to the provision of sustainable travel in conjunction with new developments. Within these documents it is suggested that:

- Most people will walk to a destination that is less than one mile (Planning for Walking, 2015);
- The bicycle is a potential mode of transport for all journeys under five miles (Planning for Cycling, 2015); and
- Walking distances to bus stops should not exceed 400 metres, whilst people are prepared to walk twice as far to rail stations (Planning for Walking, 2015).

3.8 Having regard to the above, the site is accessible by sustainable modes of travel including foot, cycle and public transport. Details on each of these sustainable modes of travel are set out below.

Walking and Cycling Accessibility

3.9 Convenient access to local facilities is provided via existing pedestrian infrastructure in the vicinity of the site. Highgate Road benefits from wide footways on either side. Greenwood Place benefits from a footpath on its western side which provides pedestrian links around the site. These footways also connect the site with the bus stops that are located on Highgate Road as well as providing a direct route to Kentish Town High Street. However, the current configuration of the site is a significant barrier to providing safe access to the Greenwood Centre, which is often accessed by more vulnerable people.

3.10 The TfL London Cycling Guide 7 and 14 highlights cycling routes in the vicinity of the proposed development. Highgate Road is a recommended route by cyclists, as it is a quieter road, which poses good opportunities for cycling as a method of travel.

Pedestrian Environment Review System (PERS) Audit

3.11 In order to review the quality of the pedestrian environment in the vicinity of the site, a PERS assessment has been undertaken using the Transport Research Laboratory (TRL) 'Streetaudit' software (version 1.1.10.211). The quality of the pedestrian infrastructure between the site and the nearest bus stops and underground stations were assessed on-site on the 13th March 2014 in accordance with the methodology provided with the software.

3.12 An assessment of each 'Link', 'Crossing' and 'Public Transport Waiting Area' was undertaken from the development site, south to Kentish Town Underground Station and the local shops.

3.13 A full copy of the results, including a map showing the study area and subsequent ratings, is included as **Appendix B** while a summary of the Red/Amber/Green (RAG) ratings for each element is provided below. Those elements that are considered to be of a good standard for pedestrians achieve a green rating, while elements that are considered average are allocated an amber rating. Elements which offer a poor pedestrian environment that require improvement are allocated a red rating.

	ID	Location	RAG Rating
Link	L1	South of Kentish Town Station	Amber
	L2	Kentish Town to Greenwood Place (West Side)	Amber
	L3	Kentish Town to Greenwood Place (East Side)	Green
	L4	South of Kentish Town Station	Amber
Crossing	C1	Crossing Leighton Road	Green
	C2	Crossing Regis Road	Green
	C3	Crossing Highgate Road	Green
	C4	Crossing Burghley Road	Green
	C5	Crossing Fortress Road	Green
Public Transport Waiting Area	PT1	Kentish Town Underground	Green
	PT2	Kentish Town Railway Station	Green
	PT3	Kentish Town Fire Station Bus Stop	Green
	PT4	Bus Stop opp Leverton Place	Green

Table 3.1 – Summary of PERS Audit Results

3.14 It is apparent that the majority of the elements scored either a 'Green' or an 'Amber' rating and are therefore of an average or good standard. There are no areas that were allocated a 'Red' score and therefore this area as a whole can be seen as an acceptable environment for pedestrians.

Public Transport Accessibility

Public Transport Accessibility Level (PTAL)

3.15 Public Transport Accessibility Levels (PTALs) provide a guide to the relative accessibility of an area. PTAL scores range from 1 to 6b, where 6b is the highest score and 1 is the lowest. Using the Transport for London (TfL) PTAL assessment methodology the site achieves a PTAL of 6a when measured from the centre of the application site. This rating suggests that the site has a very good level of accessibility to public transport services.

Bus

3.16 There are nine bus stops located within the recommended walking distances from the site, as established by the IHT. These bus stops are located along Highgate Road and Fortess Road and provide regular services to a number of locations across London. A summary of the buses that operate from the bus stops located within 400 metres of the site is provided below at Table 3.2.

Service Number	Destinations	Approximate Frequency	
		Mon–Sat	Sun
134	North Finchley- Tottenham Court Road	Every 10 mins	Every 10 mins
214	Highgate Village- Finsbury Square	Every 10 mins	Every 10 mins
C2	Parliament Hill Fields- Victoria Station	Every 10 mins	Every 10 mins
N20	Charing Cross- High Barnet Station	Night service	Night service

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

London Underground

3.17 Kentish Town station is a London Underground and National Rail station and is located approximately 300 metres to the south of the site. The Kentish Town station has four National Rail surface platforms operated by Thameslink and Southeastern, with northbound trains running to Luton and southbound to Sutton, Orpington and Sevenoaks, via London St. Pancras and Blackfriars. Kentish Town Underground has two platforms and falls within London travel card zone 2.

Journey to Work Statistics

3.18 On the basis of the above, it is considered that the application site is accessible by a range of sustainable modes of transport, which will enable people to travel to and from the site by foot, cycle and public transport. In order to assess the relative attractiveness of these modes amongst existing residents, the 2011 Census Data results associated with the Camden Super Output Area, Lower Layer, which incorporates the residential areas in the vicinity of the site, has been interrogated. Details of the data extracted from the 2011 Census is summarised in Table 3.3.

Method of Travel to Work	Location
Underground	34%
Train	9%
Bus	18%
Taxi	0%
Motorcycle	1%
Driving Car / Van	10%
Passenger Car/ Van	1%
Bicycle	13%
Foot	12%
Other	1%

Table 3.3 - Census Data – Method of Travel to Work

3.19 Table 3.3 indicates the predominant mode of transport for travelling to work amongst existing residents is the Underground. It is noteworthy that some 86% of people travel to work via sustainable modes of transport (i.e. public transport, walking and cycling) and as such it is considered that the sustainable transportation options above provide existing residents in this location with a real choice of sustainable travel modes.

Access to Key Local Services

3.20 The application site is located in close proximity to a range of key services and facilities. Kentish Town High Street, which includes a Police Station, supermarkets, a library, a medical centre and a Post Office is situated at an approximate 600 metre walk to the south west. Christ Apostolic Church is located to the immediate west of the site, Eleanor Primary School is located approximately 600 metres to the north east, Regis Road Recycling Centre is 650 metres to the south, St Andrew's Greek Orthodox Cathedral is 850 metres to the south west, Westminster Kingsway College is 900 metres to the south, and Kentish Town Sports Centre is 950 metres to the south.

3.21 In addition to the above, the Table 3.4 has been prepared to summarise the typical journey times to access local services. The location of these facilities can be seen at **Figure 3.2**.

	Walking / Cycle Distance from Site (metres)
Kentish Town Church of England Primary	550
Eleanor Palmer Primary School	600
Acland Burghley School	550
Rainbow Nursery	600
Kentish Town Sports Centre	950
Regis Road Recycling Centre	650
Saint Benet and All Saints' Church	600
New Life Church North London	550
Our Lady Help of Christians Church	500
Parliament Hill Surgery	300
The Dartmouth Park Practice (medical)	700
Kentish Town Library	400
Kentish Town Post Office	600
Sainsbury's	350
Co-operative	450
Iceland	450
Lidl	700
HSBC	450
Barclays	500
Lloyds	550
Santander	650
Kentish Town Train Station	200
Kentish Underground Station	350
Tufnell Park Station	650

Table 3.4: Table of walking distances

4.1 On the basis of the information presented above it is considered that the site is well located in proximity to a range of facilities that can be accessed by a range of transportation modes. It is therefore considered that the location of the proposed development has the potential to reduce reliance upon the private car in accordance with the guiding principles of the NPPF.

Car Club

4.2 Car Clubs can help to reduce car ownership by offering the convenience of a car, without the costs of repairs, servicing, insurance and parking. Research has shown that membership of a car clubs can particularly influence a household's decision not to own a second vehicle. The nearest car club vehicles are located at an approximate 230 metre walk on Falkland Road.

Summary of Baseline Conditions

4.3 On the basis of the above, it is considered that the location of the site in relation to public transport is such that it is likely to reduce the dependency on the private car and encourage longer journeys by more sustainable modes of transport. In this regard, it is considered that the location of the application site accords with the guiding principles of the NPPF.

5.0 Development Proposals

Overview

5.1 The site is currently occupied by 2,848sqm (GIA) of self-storage space and 795sqm (GIA) of office space. The development proposals include the provision of 60 new residential apartments comprising 8 assisted living units, 5,444sqm (GEA) storage space; 2,062sqm (GEA) office space and 121sqm (GEA) community use which is associated with the Greenwood Centre located to the rear of the development, on the western side of Greenwood Place.

5.2 The development proposals comprise 7 floors with a basement and lower ground floor for the self-storage space. The refuse store is to be located at ground level whilst cycle storage is provided predominantly at the 1st floor and within the residential units. The schedule of accommodation can be seen at **Appendix C**.

Amendments to Greenwood Place

5.3 The consented scheme for the Greenwood Centre comprised alterations to the highway layout that closed Greenwood Place to through traffic; whilst consented, these proposals have not yet been implemented and would be the subject of separate TRO's. This closure was proposed in order to provide a safe pedestrian route between Highgate Road and the Greenwood Centre. The consented highway layout proposals can be seen at **Appendix D.**

5.4 As part of the more comprehensive redevelopment, it is proposed that a new, high quality, pedestrian connection to the Greenwood Centre is delivered through the creation of an east-west link through the centre of the proposed redevelopment of the A&A site. The new link will provide a DDA compliant route through the site and will link the Greenwood Centre to the bus services operating along Highgate Road. Following the creation of this link, it has been agreed that the Greenwood Place should remain open to through traffic. The existing on street parking and unloading arrangement along Greenwood Place has also been rationalised to reflect the changing land uses in the area. The proposed highway layout can be seen at **Appendix E.**

5.5 However, in the short term, during the construction phase of the A&A site, it will be necessary to implement some temporary TRO's to ensure the safe passage of pedestrians to and from the Greenwood Centre. During this period Greenwood Place will not be a through route and, in principle, will function as per the consented layout. Temporary measures will be in place to ensure construction traffic access is managed appropriately.

Residential Parking and Delivery Strategy

5.6 Due to the high accessibility of the site by sustainable means, the residential aspect of the development will be car free. This aspect of the proposal remains consistent with the earlier consented scheme. The area falls within a controlled Parking Zone (zone CAM – East Kentish Town) and future residents will not be able to apply for parking permits. The parking restrictions are in operation between the hours of 08.30-1830 Monday to Friday and allow only permit holders to park in the local streets.

5.7 Cycle parking for the new dwellings will be provided in accordance with the adopted standards outlined in Section 2. The FALP guidelines indicate that the development should provide a minimum of 96 cycle parking spaces for residents. It is therefore intended that one or two secure cycle parking spaces will be provided within each flat in a designated cycle cupboard. The additional spaces will be provided at 1st floor level and will hold a total of 43 cycles. In addition to this, 26 secure cycle spaces will be provided at the 1st floor level associated with the office space.

Drop off and pick up

5.8 Drop off and pick up (such as taxis) will take place kerbside from Highgate Road with people waiting in the new pedestrian area. Additionally, drop off and pick up can take place from Greenwood Place, utilising the on street disabled bay, adjacent to the Greenwood Centre where required, where required. The new pedestrian connection will therefore afford disabled users with a safe and easy means of access to the accessible units.

Refuse Collection

5.9 It is estimated that refuse collection for the residential element of the scheme will take place twice weekly. A refuse store will be provided at ground floor level and residents will be required to transport their waste from their individual apartments directly to the waste storage area using the residential passenger lifts where they will segregate their waste into the appropriately labelled bins.

5.10 On nominated collection days, the appointed LBC waste collection contractor will enter Greenwood Place via the northern end, park their Refuse Collection Vehicle (RCV) on Greenwood Place adjacent to the shared surface area and will access the store through the external access doors which will be fitted with digital locks; the code to which will be supplied to LBC prior to the development being occupied. The access route between the bin store, across the shared surface area and to the vehicle is step free. Refuse collection generally takes place in the early morning and conflict between users of the shared surface space is therefore unlikely. The refuse vehicle will then perform a turning manoeuvre and exit the way it came. The Tracking drawing is shown in **Appendix F.**

Deliveries and servicing

5.11 It is estimated that the residential development will generate approximately 5-6 service or delivery movements per day. This equates to between 35-42 deliveries movements per week. Typically, these movements are comprised of supermarket home deliveries, Amazon and courier deliveries. Servicing can be undertaken from Highgate Road outside the hours of 0700-1000 and 1600-1900 Monday to Friday and all day Saturday, adjacent to the new pedestrian walkway and goods would be trolleyed to the residential entrances. Dependant on vehicle size, loading and unloading is permitted for between 20-40 minutes on Highgate Road which is sufficient for most types of deliveries.

5.12 It is proposed that on street servicing arrangements along Greenwood Place are reconfigured and new service bays will be located at the northern end of Greenwood Place adjacent to The Highgate Business Centre and Linton House. These bays can accommodate up to 3 service vehicles at any one time. In addition, a managed off street loading bay will be located adjacent to the A&A storage unit. The Tracking drawing is shown in **Appendix G.**

5.13 Whilst all on street bays can be utilised by all users (not just those of the redevelopment of the A&A Storage site) it is considered that sufficient on street servicing locations are provided for all users.

5.14 In respect of Linton House, it is worth noting that the consented strategy is that the majority of servicing, refuse collection and superstore deliveries for the proposed residential units will be undertaken off street within the car park area located within the curtilage of that site. It is only occasional larger delivery vehicles made by rigid vehicles that will need to service from Greenwood Place.

Office Parking & Delivery Strategy

Drop off and pick up

5.1 As with the proposals for the residential development, drop off and pick up (such as taxis) will take place kerbside from Highgate Road with people waiting in the new pedestrian area. If taxis are expected to wait for employees of the office space, this would take place Kerbside in Greenwood Place.

Refuse collection

5.2 Office refuse collection will be taken to the bin store by office or site management staff. The waste will be collected in the same way as per the residential waste.

Deliveries and servicing

5.3 Deliveries and servicing movements for the office space will be dependent on the number and type of occupier and this is not defined at this stage. Typically, such movements are comprised of motorcycle courier deliveries or small box and transit vans. It is likely such deliveries will be made from the service bays along Greenwood Place. In addition, outside of the peak hours of 0700-1000 and 1600-1900 Monday to Friday and all day Saturday, deliveries not exceeding a wait time of 20 minutes can take place from Highgate Road.

6.0 Trip Generation and Distribution

Overview

This section of the report considers the trip attraction of the redevelopment proposals and the modal split.

Trip Attraction – Vehicle Trips

6.1 The TRICS database has been interrogated in order to quantify the levels of traffic flows that are likely to be associated with the office and residential aspects of the development for the morning and evening peak periods. The self-storage aspect of the development typically attracts vehicle movements outside of the usual morning and evening peaks and as such has been assessed separately.

Development Proposals

6.2 The development proposals comprise the redevelopment of the self-storage centre to provide 60 residential units, 8 of which will be assisted living; 5,444sqm (GEA) storage space; 2,062sqm (GEA) office space. Whilst there is 121sqm of flexible commercial space provided at ground floor, it is likely that this will be occupied as a café staffed by patrons of the Greenwood Centre and would therefore generate a negligible increase in person trips from the wider network. As such the impact of this space has not been considered.

6.3 The associated additional trips for each use has been summarised below.

Office Use

6.4 The building currently provides 795sqm (GIA) of office floorspace. As part of the development proposals an increase in office floorspace of 1,008sqm (GIA) is proposed. The trip rates derived by TRICS should be applied to the GEA of a development use; as such these figures have been factored up based on the proposed schedule to equate 1,115sqm of office use.

6.5 For the purposes of this assessment the following search parameters have been used on the basis that they most closely reflect the proposed uses:

- Land Use – Employment / Office
- Regions – Greater London
- Floor Area – 400 – 4000sqm
- Date Range – 01/01/07 to 29/11/13
- Selected Days – Weekdays.
- Selected Locations – Edge of Town Centre, Town Centre.

6.6 Copies of these TRICS output reports are provided at **Appendix H**, while a summary of the total person trip rates during the peak hours are provided in Table 5.1.

	Total Person Trip Rates Employment Office (per 100sqm)		Total People Movements (1,015sqm)	
Time Period	Arrivals	Departures	Arrivals	Departures
Weekday Morning (08:30-09:30)	2.875	0.216	29	2
Weekday Evening (17:00-18:00)	0.506	2.918	5	29

Table 5.1 – Person Trip Rates for Office Employment Use

6.7 Table 5.1 indicates that the increase in office use is likely to attract in the order of 31 person trips in the weekday morning peak and 34 movements in the evening peak.

Residential

6.8 The development site currently provides no residential accommodation, 60 residential apartments are proposed as part of the redevelopment of the site.

6.9 For the purposes of this assessment the following search parameters have been used on the basis that they most closely reflect the proposed uses:

- Land Use – Private Flats
- Regions – Greater London
- Unit Number – up to 530 units
- Date Range – 01/01/07 to 23/04/15
- Selected Days – Weekdays.
- Selected Locations – Edge of Town Centre, Town Centre, Suburban Area, Neighbourhood Centre

6.10 Copies of these TRICS output reports are provided at **Appendix I**, while a summary of the total person trip rates during the peak hours are provided in Table 5.2.

	Total Person Trip Rates Private Flats (per unit)		Total People Movements (60 Units)	
Time Period	Arrivals	Departures	Arrivals	Departures
Weekday Morning (08:30-09:30)	0.105	0.461	6	28
Weekday Evening (17:00-18:00)	0.310	0.168	19	10

Table 5.2 – Person Trip Rates of Private Flats

6.11 Table 5.2 indicates that the residential use is likely to attract in the order of 34 person trips in the weekday morning peak and 29 movements in the evening peak.

Multi Modal Trip Generation

6.12 In order to establish the multi modal trip that the office and residential aspects of the proposed development are likely to generate, the total person two way trip generations outlined in Tables 5.1 and 5.2 above have been factored using the mode split data for the 2011 Camden Super Output Area, Lower Layer presented in Section 3.

6.13 It is anticipated that the office and residential elements of the site will generate 65 total person two way trips during the morning peak period and 63 total person two way trips during the evening peak period. The resulting modal split is summarised below in Table 5.3.

Method of Travel to Work	Percentage	Two way trips Office and Residential	
		AM	PM
Underground	34%	22	21
Train	9%	6	6
Bus	18%	12	11
Taxi	0%	0	0
Motorcycle	1%	1	1
Driving Car / Van	10%	7	7
Passenger Car/ Van	1%	1	1
Bicycle	13%	9	8
Foot	12%	8	8
Other	1%	1	1
Total	**100%**	**65**	**63**

Table 5.2 – Modal Split based on people working in the Camden Super Output Area

6.14 The above analysis has demonstrated that the office and residential elements are likely to generate 22 two way underground trips during the morning peak hour and 21 two way underground trips during the evening peak hour. This increase in underground trips is deemed negligible and is not anticipated to have a detrimental effect on the operation of the underground network.

6.15 In addition to this, the development is anticipated to generate an additional 12 trips by bus in the morning peak and evening peaks. This would equate to an additional bus trip every 5 minutes across the peak hours and is not considered to be detrimental to the operation of the local bus network.

A&A Self Storage

6.16 The building currently provides 2,848qm (GIA) of office floorspace. As part of the development proposals an increase in office floorspace of 1,464sqm (GIA) is proposed. The trip rates derived by TRICS should be applied to the GEA of a development use; as such these figures have been factored up based on the proposed schedule to equate 1,848qm of storage use.

6.17 Trip rates for the self-storage facility have been extracted from the 2008 approved Transport Statement prepared by Motion in relation to the consented development within Lewisham (Application ref DC/08/70032/X). The trip rates were extracted from customer data from six current Access Self Storage sites. The consented self-storage unit has a ground floor area of 9,700 square metres. Based upon an average trip rate of 0.917 trips per 100 square metres, the self-storage unit would attract an additional 16 arrival and departure movements per day equating to in the order of 8 customer visits.

6.18 As outlined in the 2008 Transport Statement, to provide a robust assessment of the operation of the unloading facilities, it is assumed that customers will seek to avoid peak hour travel. Therefore, on the basis that all trips occur between 0900 and 1700 hours it is projected that the number of customer visits per hour would be 1, resulting in 2 arrival and departure movements.

Net Traffic Attraction

6.19 Based upon the above analysis it is evident that the proposed development will result in an increase in trips on the local highway, bus and underground network. It is anticipated that there will be an increase in 22 and 21 underground trips in the morning and evening peaks respectively. Additionally, it is anticipated that there will be an increase of 12 bus trips in the morning and evening peaks. The self-storage unit is anticipated to generate approximately 2 vehicular trips an hour during the typical peaks.

6.20 It is therefore considered that the development proposals will not have a negative impact on the operation of the local highway and public transport networks.

7.0 Promoting Smarter Choices via Travel Plans

7.1 The NPPF published in March 2012 indicates that developments generating significant traffic movements should provide a Travel Plan. Further to this, guidance contained within the Department for Transport's 2009 publication entitled '*Good Practice Guidelines: Delivering Travel Plans through the Planning Process*' outlines the thresholds above which Travel Plans would normally be expected. With reference to local policy, the London Plan requires residential planning applications between 50 and 80 units to be accompanied by a Travel Plan Statement.

7.2 To accord with national and local planning policy, a Residential Travel Plan Statement shall be produced prior to initial occupation of the development.

7.3 The Travel Plan Statement is intended to be used to encourage sustainable travel patterns. The main objective of the Travel Plan is to provide a reduction in private car mileage in favour of the more sustainable modes of travel, thus reflecting current Government policy in respect of transport. The Plan will provide details of a range of initiatives to encourage the use of sustainable travel modes and hence reduce reliance on the private motor vehicle. The Travel Plan will be prepared in line with prevailing policy and best practice.

7.4 The Travel Plan will implement 'hard' and 'soft' measures to encourage and facilitate the use of sustainable travel modes to and from the site. 'Hard' measures may include;

- Installation of cycle parking around residential areas and outside local facilities in the area;
- Advertisement of local cycle routes and recreational grounds through notice boards and signs including the health benefits of walking or cycling; and,

7.5 Soft measures may include;

- Advertisement to residents of the 'simply buy, show and go' ticketing facilities for local bus services;
- Details of websites which make walking journeys easier to plan such as www.walkit.com will be provided to residents;
- Details of journey planning tools such as those available on the council website will be provided to enable users to plan journeys using sustainable means; and,
- Promotion of national awareness events such as 'Walk to School Week' to local school children in the residential area.

8.0 Summary and Conclusions

8.1 This Transport Assessment has been prepared by Motion on behalf of Fortnum Developments Ltd to accompany a full planning application for residential led mixed use development. The development proposals comprise 60 residential dwellings, 8 of which will be assisted living; 5,4445sqm (GEA) storage space; 2,062sqm (GEA) office space and 121sqm (GEA) community use which is associated with the Greenwood Centre located to the rear of the development.

8.2 The development site is located on Greenwood Place and is located within the London Borough of Camden (LBC). The local highway network is focused around Highgate Road, which connects the site with Kentish Town in the South and Highgate in the north.

8.3 The site is currently occupied by 2,848sqm (GIA) of self-storage space and 795sqm (GIA) of office space. Camden People First is located to the west of the development site whilst Christ Apostolic Church is to the east.

8.4 On the basis of the evidence provided in this report it has been established that the site benefits from access to a good network of pedestrian and cycle links, which connect the site to the existing sustainable transport networks that serve the local area and a range of local facilities. On this basis, it is considered that the proposed development is ideally located to provide people with a real choice of modes of transport in accordance with the guiding principles of the NPPF. Moreover, the applicant intends to deliver a new pedestrian connection to the Greenwood Centre through the creation of an east-west link through the centre of the proposed development. The pedestrian route also delivers an area of high quality public realm which provides significant benefit in ensuring a safe and suitable access to and from the Greenwood Centre.

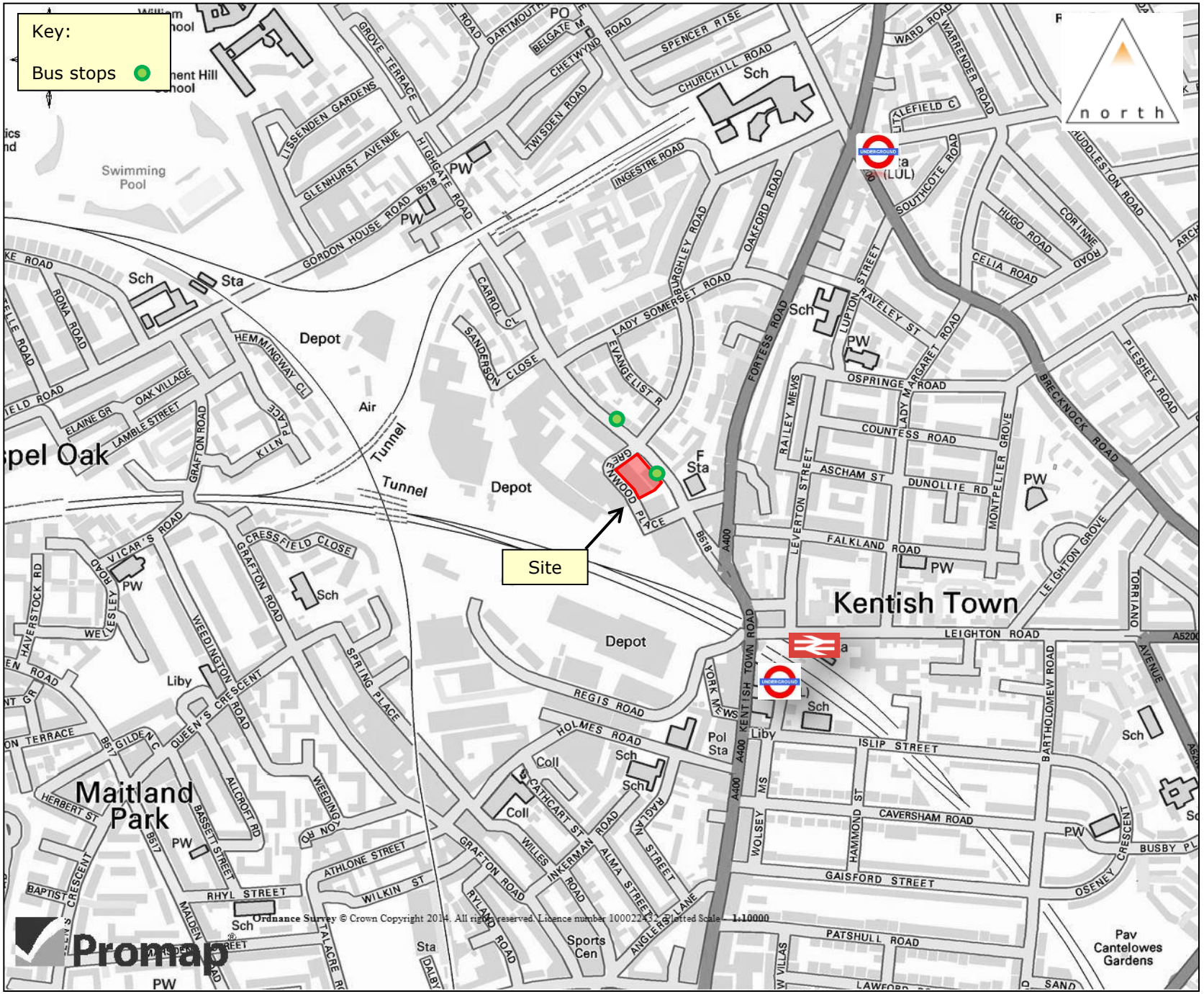
8.5 It has been demonstrated that the proposals are unlikely to have a material impact upon the local transport networks. Indeed, the results of our various analyses indicate that the proposals would not lead to any demonstrable harm to the operation of the local highway network during the peak travel periods.

8.6 In summary, the report demonstrates the following:

- The location of the site accords with the relevant national and local transport planning policies;
- The site benefits from access to a sustainable transport network that provides alternatives to the private car;
- Appropriate provision can be made for access, parking and servicing in accordance with relevant guidance and standards;
- A high quality pedestrian connection is delivered through the site;
- The pedestrian route through the site will connect the Greenwood Centre to Highgate Road and local bus services.
- The increases in vehicular activity will not have a material impact on the operation of the local highway network; and,
- By operating a Residential Travel Plan Statement at the proposed development, the use of more sustainable modes of transport will be actively encouraged.

8.7 On the basis of the above, it is concluded that the proposals accord with national and local transport related policies and can be accommodated without detriment to the operating capacity of the local transport networks. As such, it is considered that there is no reason why the proposals should be resisted on traffic or transportation grounds.

Figures

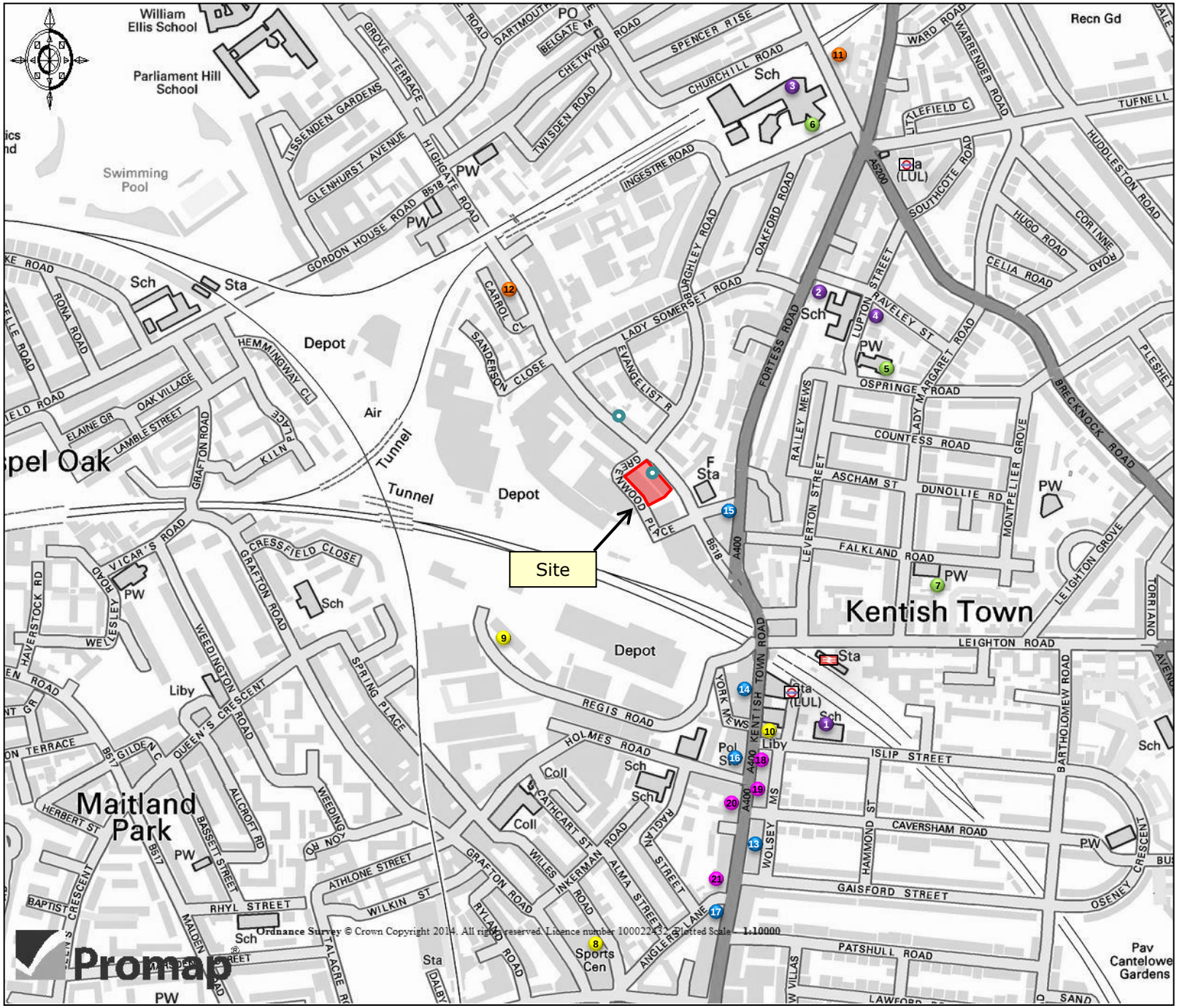


Not to Scale

Greenwood Place, Camden

Figure 3.1 – Site Location Plan

motion



Legend

1. Kentish Town Church of England Primary
2. Eleanor Palmer Primary School
3. Acland Burghley School
4. Rainbow Nursery
5. Saint Benet and All Saints' Church
6. New Life Church North London
7. Our Lady Help of Christians Church
8. Kentish Town Sports Centre
9. Regis Road Recycling Centre
10. Kentish Town Library
11. The Dartmouth Park Practice (medical)
12. Parliament Hill Surgery
13. Kentish Town Post Office
14. Sainsbury's
15. Co-operative
16. Iceland
17. Lidl
18. HSBC
19. Barclays
20. Lloyds
21. Santander
- Local Bus Stops
- Rail Station
- Underground Station

Figure 3.2
Local Amenities Plan

motion

Appendix A

Meeting Minutes – LBC Pre-Application

Meeting Minutes

Date: 8th December 2015

Venue: Camden Council Offices

Subject: Highgate Road

Attendees:

John Duffy (JDu)	Jon Dingle (JD)
Damian Tungatt (DT)	Kathleen Hallquist (KH)
Lianne Brook (LB)	Zenab Haji-Ismail (ZHI)

1.0	**Site Overview**	**Action**
1.1	JDu stated that the Greenwood Centre had a projected opening date of approximately Q2 2016 however accepted that the scheme was running behind schedule. The development on the A&A storage site would follow thereafter. JDu confirmed that following the site visit with DT in July 2014, as agreed, it would be appropriate for Greenwood place to remain open as part of the comprehensive development proposals as opposed to pedestrianizing the central area as proposed as part of the now consented Camden application. JDu stated that there will however have to be an interim highway solution to ensure pedestrian safety prior to the A&A proposals being built out. This is likely to reflect the consented proposals to minimise conflict between users of the Greenwood centre and construction traffic etc. This was agreed as a reasonable approach. JDu stated that the site must integrate with the operation of the minibus services which serve the centre as this is an important part of its function. DT confirmed that the highway proposals we are promoting generally reflect the parking and minibus arrangements proposed by Campbell Reith.	

2.0 Car Parking

2.1 DT stated that the development site with regards to the residential and office use will be car free, whilst the A&A storage area will have 8 loading bays for vehicles which are located within the development and 2 spaces for larger vehicle to the immediate north of the building. JDu supports the principle of this.

2.2 JDu stated that there might be a need for double yellow lines along Greenwood Place adjacent to the residential units to deter any residents parking and obstructing the carriageway. This can be considered further at a later date.

3.0 Cycle Parking

3.1 DT started that cycle parking will provided in accordance with the London Plan. One cycle space will be provided within each flat within a specifically designed storage cupboard. Additional storage for flats requiring more than one bike space will be stored at 1st floor level and will accessible via lifts. JDu confirmed this approach is acceptable.

4.0 Servicing

4.1 The residential buildings and office will be serviced from Greenwood Place. JDu preferred if vehicles utilising the loading bays could enter and exit using a forward gear however due to physical constraints it is accepted that vehicles may have to reverse to exit the bays. At a later date it could be explored whether the hard standing area adjacent to Camden owned property could be utilised as highway for vehicles turning. This would not form part of the application as the land is outside of our control but would represent a good opportunity if it could be secured. JDu to consider further with colleagues.

4.2 JDu requested details of the surface treatment for the loading bay. DT stated that the detail is being worked up but that the end of the bay will kerbed or delineated in some way.

5.0 Interface with Greenwood Centre / Public Realm

5.1 JDu stated that there could be the potential for conflict with any visually impaired persons visiting the Greenwood Centre with the shared surface scheme. JDu agreed that the vulnerability of users' needs to be discussed further. If a scheme was agreed with the Greenwood Centre in respect of shared surfacing / tactile wayfinding, JDu would be happy with the principle. ZHI confirmed that from a planning perspective the shared surface would be the preferred approach.

DT / KH confirmed that the pedestrian footway to the immediate north of the building is principally for users of the building and safe movement around the service area. Whilst it could he used by others the central route through the scheme would be the promoted route. JDu agreed with this approach.

KH confirmed that following discussions with the design officer at LBC the refuse storage area that was previously located in proximity to the service bays has been relocated to be adjacent to the assisted living area. JDu was satisfied with this principle.

6.0 Documents to be Submitted

6.1 JDu requested that a Transport Statement and Construction Management Plan is submitted with the planning application. JDu noted that the scheme was too small for a Travel Plan.

Appendix B

PERS Audit

streetaudit 1.1.10.211
Route

ID	Place Nam	RAG	RAG Index

Link

ID	Place Nam	RAG	RAG Index
L1	South of K	Amber	2
L2	Kentish To	Amber	2
L3	Kentish To	Green	3
L4	South of K	Amber	2

Crossing

ID	Place Nam	RAG	RAG Index
C1	Crossing Le	Green	3
C2	Crossing R	Green	3
C3	Crossing Hi	Green	3
C4	Crossing B	Green	3
C5	Crossing Fc	Green	3

PT Waiting Area

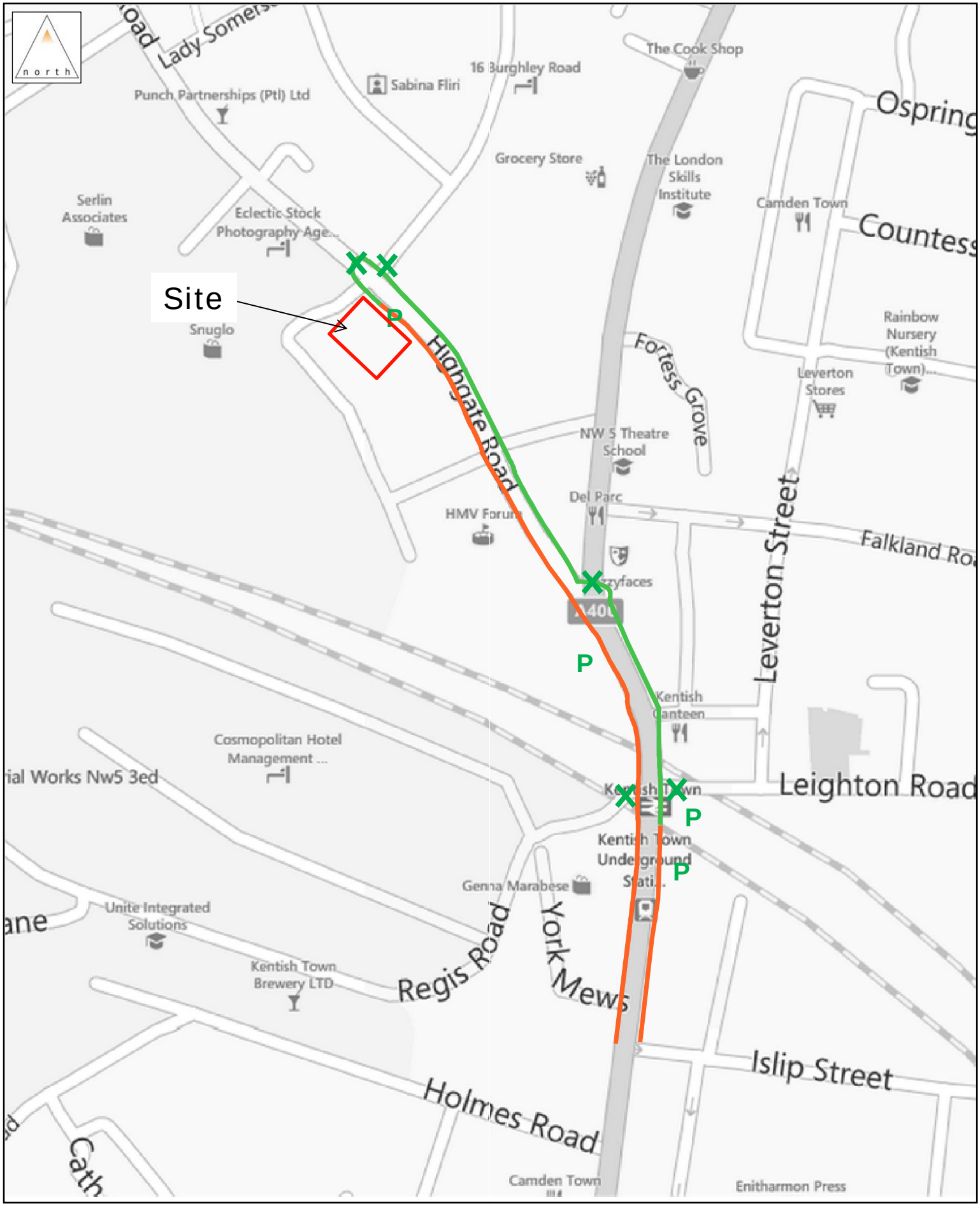
ID	Place Nam	RAG	RAG Index
PT1	Kentish To	Green	3
PT2	Kentish To	Green	3
PT3	Kentish To	Green	3
PT4	Bus Stop o	Green	3

Public Space

ID	Place Nam	RAG	RAG Index

Interchange

ID	Place Nam	RAG	RAG Index



motion

Link	Crossing	Public Transport Waiting Area
Good	Good	P Good
Average	Average	P Average
Poor	Poor	P Poor

Greenwood Place, Kentish Town

PERS Assessment Summary – Existing Conditions

streetaudit 1.1.10.211 Export File
Weighting Scheme: Default

Route

Link

ID	Name	Description	Surveyor	Time	Date	Facility Typ	Overall Total Score
L1	South of Kentish Town		LB	14:00:00	13-Mar-14	Neutral	19

Parameter	Unweighte	Weighted S	Design Con	Maintenance Comments
Effective W	-2	-10		
Dropped Ke	N/A	N/A		
Gradient	3	4		
Obstructior	-2	-6	Bus Stops and Market Stalls	
Permeabilit	1	6		
Legibility	0	1		
Lighting	3	12		
Tactile Info	0	3		
Colour Con	1	6		
Personal Se	2	15		
Surface Qu	-1	-3		
User Confli	-1	-5		
Quality of t	-2	-2		
Maintenan	-2	-2	Gum / Litter	

ID	Name	Description	Surveyor	Time	Date	Facility Typ	Overall Total Score
L2	Kentish Town to Greer		LB	14:00:00	13-Mar-14	Neutral	28

Parameter	Unweighte	Weighted S	Design Con	Maintenance Comments
Effective W	-1	-5		
Dropped Ke	1	6		
Gradient	1	2		
Obstructior	-2	-6		
Permeabilit	-1	-3		
Legibility	0	1		
Lighting	0	3		
Tactile Info	2	9		
Colour Con	2	9		
Personal Se	1	10		
Surface Qu	-1	-3		
User Confli	0	5		
Quality of t	-1	-1		
Maintenan	0	1		

ID	Name	Description	Surveyor	Time	Date	Facility Typ	Overall Total Score
L3	Kentish Town to Greenwood Place			14:00:00	13-Mar-14	Neutral	55

Parameter	Unweighte	Weighted S	Design Con	Maintenance	Comments
Effective W	-2	-10			
Dropped Ke	2	9			
Gradient	2	3			
Obstructior	-1	-3			
Permeabilit	-2	-6			
Legibility	1	2			
Lighting	2	9			
Tactile Info	2	9			
Colour Con	0	3			
Personal Se	2	15			
Surface Qu	2	9			
User Confli	1	10			
Quality of t	1	2			
Maintenan	2	3			

ID	Name	Description	Surveyor	Time	Date	Facility Typ	Overall Total Score
L4	South of Kentish Town Station			14:00:00	13-Mar-14	Neutral	19

Parameter	Unweighte	Weighted S	Design Con	Maintenance	Comments
Effective W	-2	-10			
Dropped Ke	N/A	N/A			
Gradient	3	4			
Obstructior	-2	-6			
Permeabilit	1	6			
Legibility	0	1			
Lighting	3	12			
Tactile Info	0	3			
Colour Con	1	6			
Personal Se	2	15			
Surface Qu	-1	-3			
User Confli	-1	-5			
Quality of t	-2	-2			
Maintenan	-2	-2			

Crossing

ID	Name	Description	Surveyor	Time	Date	Facility Typ	Overall Total Score
C1	Crossing	Leighton Roa	LB	14:00:00	13-Mar-15	Neutral	108

Parameter	Unweighte	Weighted S	Design Con	Maintenance	Comments
Crossing Pr	3	20			
Deviation f	3	12			
Performanc	3	20			
Capacity	1	2			
Delay	3	12			
Legibility	3	4			

Legibility (S	3	12
Dropped Ke	3	12
Gradient	3	4
Obstructior	1	2
Surface Qu	1	6
Maintenan	1	2

ID	Name	Description	Surveyor	Time	Date	Facility Typ	Overall Total Score
C2	Crossing	Regis Road	LB	14:00:00	13-Mar-14	Neutral	92

Parameter	Unweighte	Weighted S	Design Con	Maintenance	Comments
Crossing Pr	2	15			
Deviation f	3	12			
Performanc	2	15			
Capacity	2	3			
Delay	2	9			
Legibility	3	4			
Legibility (S	0	3			
Dropped Ke	3	12			
Gradient	3	4			
Obstructior	2	3			
Surface Qu	2	9			
Maintenan	2	3			

ID	Name	Description	Surveyor	Time	Date	Facility Typ	Overall Total Score
C3	Crossing	Highgate Roa	LB	14:00:00	13-Mar-14	Neutral	95

Parameter	Unweighte	Weighted S	Design Con	Maintenance	Comments
Crossing Pr	3	20			
Deviation f	2	9			
Performanc	3	20			
Capacity	2	3			
Delay	3	12			
Legibility	3	4			
Legibility (S	2	9			
Dropped Ke	2	9			
Gradient	3	4			
Obstructior	2	3			
Surface Qu	0	3			
Maintenan	-1	-1			

ID	Name	Description	Surveyor	Time	Date	Facility Typ	Overall Total Score
C4	Crossing	Burghley Roa	LB	14:00:00	13-Mar-14	Neutral	97

Parameter	Unweighte	Weighted S	Design Con	Maintenance	Comments
Crossing Pr	2	15			
Deviation f	3	12			
Performanc	2	15			
Capacity	3	4			
Delay	3	12			

Legibility	2	3	
Legibility (S	1	6	
Dropped Ke	3	12	
Gradient	3	4	
Obstructior	2	3	
Surface Qu	2	9	
Maintenan	1	2	Rubbish

ID	Name	Descriptior	Surveyor	Time	Date	Facility Typ	Overall Total Score
C5	Crossing	Fortress Road	LB	14:00:00	13-Mar-14	Neutral	78

Parameter	Unweighte	Weighted S	Design Con	Maintenance	Comments
Crossing Pr	3	20			
Deviation f	0	3			
Performanc	3	20			
Capacity	3	4			
Delay	-1	-3			
Legibility	1	2			
Legibility (S	-1	-3			
Dropped Ke	3	12			
Gradient	3	4			
Obstructior	3	4			
Surface Qu	3	12			
Maintenan	2	3			

PT Waiting Area

ID	Name	Descriptior	Surveyor	Time	Date	Facility Typ	Overall Total Score
PT1	Kentish Town	Undergr	LB	14:00:00	13-Mar-14	Neutral	119

Parameter	Unweighte	Weighted S	Design Con	Maintenance	Comments
Informatior	3	12			
Infrastructu	3	12			
Boarding P	3	20			
Informatior	3	12			
Safety Perc	3	20			
Security M	3	20			
Lighting	3	12			
Quality of t	-3	-3			
Maintenan	1	2			
Waiting Are	3	12			

ID	Name	Descriptior	Surveyor	Time	Date	Facility Typ	Overall Total Score
PT2	Kentish Town	Railway	LB	14:00:00	13-Mar-14	Neutral	101

Parameter	Unweighte	Weighted S	Design Con	Maintenance	Comments
Informatior	0	3			
Infrastructu	2	9			

Boarding P	1	10
Informatio	3	12
Safety Perc	3	20
Security M	3	20
Lighting	3	12
Quality of t	2	3
Maintenan	2	3
Waiting Are	2	9

ID	Name	Descriptior	Surveyor	Time	Date	Facility Typ	Overall Total Score
PT3	Kentish Town Fire Stat		LB	14:00:00	13-Mar-14	Neutral	63

Parameter	Unweighte	Weighted S	Design Con	Maintenance	Comments
Informatio	2	9			
Infrastructu	1	6			
Boarding P	3	20			
Informatio	2	9			
Safety Perc	0	5			
Security M	-1	-5			
Lighting	2	9			
Quality of t	-1	-1			
Maintenan	-1	-1			
Waiting Are	3	12			

ID	Name	Descriptior	Surveyor	Time	Date	Facility Typ	Overall Total Score
PT4	Bus Stop opp Leverton		LB	14:00:00	13-Mar-14	Neutral	79

Parameter	Unweighte	Weighted S	Design Con	Maintenance	Comments
Informatio	2	9			
Infrastructu	0	3			
Boarding P	1	10			
Informatio	3	12			
Safety Perc	2	15			
Security M	2	15			
Lighting	2	9			
Quality of t	-2	-2			
Maintenan	-1	-1			
Waiting Are	2	9			

Public Space

Interchange

Appendix C

Schedule of Accomodation

Summary of Areas - Highgate Road

Level	Residential Areas - Market						Residential Areas - ALU						AA Self Storage						Office						Community Use					
	GEA		GIA		NSA		GEA		GIA		NSA		GEA		GIA		NIA		GEA		GIA		NIA		GEA		GIA		NIA	
	m²	ft²	m²	ft²	m²	ft²	m²	ft²	m²	ft²	m²	ft²	m²	ft²	m²	ft²	m²	ft²	m²	ft²	m²	ft²	m²	ft²	m²	ft²	m²	ft²	m²	ft²
Basement -2			41	441									2407	25899	2121	22822	2030	21843												
Basement -1			230	2475									2407	25899	1932	20788	1768	19024												
Ground	388	4175	344	3701			539	5800	486	5229	443	4767	630	6779	259	2787	254	2733	56	603	52	560	0	0	121	1302	103	1108	100	1076
First	659	7091	593	6381	296	3185	283	3045	209	2249	155	1668							140	1506	114	1227	0	0						
Second	640	6886	563	6058	455	4896													929	9996	815	8769	660	7102						
Third	640	6886	563	6058	455	4896													937	10082	822	8845	664	7145						
Fourth	1494	16075	1314	14139	1081	11632																								
Fifth	1396	15021	1329	14300	999	10749																								
Sixth	1072	11535	931	10018	750	8070																								
Seventh	602	6478	536	5767	401	4315																								
Total	6891	74147	6444	69337	4437	47742	822	8845	695	7478	598	6434	5444	58577	4312	46397	4052	43600	2062	22187	1803	19400	1324	14246	121	1302	103	1108	100	1076
(Camden Agreement)	6901	74255	6140	66066	4723	50819	772	8307	682	7338	589	6338	5423	58351	4944	53195	4365	46964	748	8048	652	7010	518	5574	121	1302	99	1066	96	1033
									102%						87%						277%						104%			

	:		
	:		
Net areas	:	10511	m
Gross internal area	:	13357	m
	:		

Areas are approximate only and subject to change through survey, planning, design and development of the proposal

SQUIRE & PARTNERS

Schedule of residential areas (Including Both Building 1 and Building 2)

Level	Gross internal area		Net saleable area		Accommodation			
	m²	ft²	m²	ft²	1bed	2 bed	3 bed	4 bed
Basement -2	41	441						
Basement -1	181	1948						
Ground	830	8931	443	4767	6			
First	802	8630	451	4853	2	2	1	
Second	563	6058	455	4896	2	2	1	
Third	563	6058	455	4896	2	2	1	
Fourth	1314	14139	1081	11632	4	8	1	
Fifth	1329	14300	999	10749	4	6	2	
Sixth	931	10018	750	8070	2	7	0	
Seventh	536	5767	401	4315	2	2	1	
Total	7090	76288	5035	54177	24	29	7	

Development summary

Site area	:	acres	Average area per 1 bed unit	:	66 m²	711 ft²
Development ratio	:	hr/acre	Average area per 2 bed unit	:	94 m²	1016 ft²
Net saleable area	:	5035 m	Average area per 3 bed unit	:	93 m²	996 ft²
Gross internal area	:	7090 m	Average area per 4 bed unit	:	m²	0 ft²
Net to gross ratio	:	71 %	Total no. of units	:	60	

Areas are approximate only and subject to change through survey, planning, design and development of the proposal

Schedule of residential areas - Highgate Road - Building 1

Level	Gross external area		Gross internal area		Accommodation schedule (Nett saleable area)			
	m²	ft²	m²	ft²	Unit	Beds	m²	ft²
Ground	416	4476	365	3927	-	-	-	-
					1.G.1	1	73	785
					1.G.2	1	71	764
First	527	5671	431	4638				
					1.1.1	1	80	861
					1.1.2	1	75	807
Second	19	204	19	204	-	-	-	-
Third	19	204	19	204	-	-	-	-
Fourth	873	9393	770	8285				
					1.4.1	2	89	958
					1.4.2	2	81	872
					1.4.3	2	87	936
					1.4.4	2	90	968
					1.4.5	1	52	560
					1.4.6	2	92	990
					1.4.7	1	54	581
					1.4.8	2	81	872
Fifth	873	9393	770	8285				
					1.5.1	2	89	958
					1.5.2	2	81	872
					1.5.3	2	87	936
					1.5.4	2	90	968
					1.5.5	1	52	560
					1.5.6	2	92	990
					1.5.7	1	54	581
					1.5.8	2	81	872
Sixth	873	9393	770	8285				
					1.6.1	2	89	958
					1.6.2	2	81	872
					1.6.3	2	87	936
					1.6.4	2	90	968
					1.6.5	1	52	560
					1.6.6	2	92	990
					1.6.7	1	54	581
					1.6.8	2	81	872
Seventh	600	6478	531	5767				
					1.7.1	1	63	678
					1.7.2	2	83	893
					1.7.3	2	89	958
					1.7.4	3	103	1108
					1.7.5	1	63	678
Total	**4202**	**45214**	**3680**	**39597**	**36** Units	**91** Hab. Rooms	**2578**	**28084**

Development summary: Residential Building 1

	:		Average area per 1 bed unit	62 m²	702 ft²
	:		Average area per 2 bed unit	87 m²	932 ft²
Net saleable area	:	2578 m	Average area per 3 bed unit	103 m²	678 ft²
Gross internal area	:	3680 m	Average area per 4 bed unit	0 m²	0 ft²
Net to gross ratio	:	70%	Total no. of units	**33**	
	:		1 bed units	**12**	
	:		2 bed units	**20**	
			3 bed units	**1**	

Areas are approximate only and subject to change through survey, planning, design and development of the proposal

Schedule of residential areas - Highgate Road - Building 2

Level	Gross external area		Gross internal area		Accommodation schedule (Nett saleable area)			
	m²	ft²	m²	ft²	Unit	Beds	m²	ft²
Ground	511	5498	465	5003	-	-	-	-
					2.G.1	1	73	785
					2.G.2	1	73	785
					2.G.3	1	75	807
					2.G.4	1	78	839
First	415	4465	371	3992				
					2.1.1	3	99	1065
					2.1.2	2	98	1054
					2.1.3	2	99	1065
Second	621	6682	544	5853				
					2.2.1	3	129	1388
					2.2.2	1	63	678
					2.2.3	1	63	678
					2.2.4	2	98	1054
					2.2.5	2	102	1098
Third	621	6682	544	5853				
					2.3.1	3	129	1388
					2.3.2	1	63	678
					2.3.3	1	63	678
					2.3.4	2	98	1054
					2.3.5	2	102	1098
Fourth	621	6682	544	5853				
					2.4.1	3	129	1388
					2.4.2	1	63	678
					2.4.3	1	63	678
					2.4.4	2	98	1054
					2.4.5	2	102	1098
Fifth	523	5627	456	4907				
					2.5.1	3	129	1388
					2.5.2	1	63	678
					2.5.3	1	63	678
					2.5.4	3	118	1270
Sixth	199	2141	161	1732				
					2.6.1	2	124	1334
Total	**3511**	**37778**	**3085**	**33195**	**27**	**75** Hab Rooms	**2457**	**26437**

Development summary: Residential Building 2

Site area	:	acres	Average area per 1 bed unit	67 m²	720 ft²
Development ratio	:	hr/acre	Average area per 2 bed unit	102 m²	1101 ft²
Net saleable area	:	2457 m	Average area per 3 bed unit	122 m²	1315 ft²
Gross internal area	:	346 m	Average area per 4 bed unit	0 m²	0 ft²
Net to gross ratio	:	80%	Total no. of units	**27**	
	:		1 bed units	**12**	
	:		2 bed units	**9**	
			3 bed units	**6**	

Areas are approximate only and subject to change through survey, planning, design and development of the proposal

Schedule of commercial/community areas

Floor	Nett internal area (NIA)		Gross internal area (GIA)	
	m ^{2}	sq ft	m ^{2}	sq ft
Community Use				
Ground	100	1076	103	1108
Sub total	100	1076	103	1108

Floor	Nett internal area (NIA)		Gross internal area (GIA)	
	m ^{2}	sq ft	m ^{2}	sq ft
AA Self Storage				
Basement Level 2	2030	21843	2121	22822
Basement Level 1	1768	19024	1932	20788
Ground	254	2733	259	2787
Sub total	4052	43600	4312	46397

Floor	Nett internal area (NIA)		Gross internal area (GIA)	
	m ^{2}	sq ft	m ^{2}	sq ft
Office (B1)				
Basement Level 1	0	0	0	0
Ground	0	0	52	560
First	0	0	114	1227
Second	660	7102	815	8769
Third	664	7145	822	8845
Sub Total	1324	14246	1803	19400

Development summary: Commercial, Community and AA Self Storage

Net internal area (NIA)	m ^{2}	5476
Gross internal area (GIA)	m ^{2}	6218

Areas are aproximate only and subject to change through planning, design and development of the proposal.

Schedule of areas

Floor	Net internal area (NIA)		Gross external area (GEA)	
	m ^{2}	sq ft	m ^{2}	sq ft
Office (B1)				
Ground	0	0	56	603
First	0	0	140	1506
Second	664	7145	929	9996
Third	668	7188	937	10082
Total	**1332**	**14332**	**2062**	**22187**

Parking

Required @ 1/40m^2 GEA	spaces
Provided @ 1/47m^2 GEA	spaces

Areas are aproximate only and subject to change through planning, design and development of the proposal.

Appendix D

Consented Highway Layout

BUS STOP

DISABLED

DISABLED

DISABLED

DISABLED

SOLO M/CS ONLY

Revised Gates subject to detail design and TBC by agreement with owners

APPLICATION SITE BOUNDARY

SECTION 278 WORKS BOUNDARY

notes

1. DO NOT SCALE THIS DRAWING ON PRINT OR ELECTRONICALLY. WORK FROM FIGURED DIMENSIONS ONLY
2. No deviation from the details shown on this drawing is allowed without Campbell Reith Hill's prior permission in writing.
3. Read this drawing with all Architects, Service Engineers and Campbell Reith Hill's relevant details and drawings.
4. All work is to be in accordance with the relevant specifications issued by Campbell Reith Hill, British Standard Codes of Practice, Statutory requirements and the Contract Documents.
5. DRAWING STATUS
   - S :– SCHEME ——— Outline/Scheme drawings for proposals, budgets etc.
   - D :– DESIGN DEVELOPMENT ——— Evolving final design drawings for approvals, tenders, billing etc.
   - C :– CONSTRUCTION ——— Fully developed drawings issued under instruction for construction.

ONLY STATUS C DRAWINGS TO BE USED FOR CONSTRUCTION.

Status/Rev	Description	Date	By
D1	ISSUED FOR INFORMATION	15/08/13	MJ

CampbellReith consulting engineers

LONDON 020 7340 1700 • MANCHESTER 0161 819 3060
REDHILL 01737 784 500 • BIRMINGHAM 01675 467 484
BRISTOL 0117 916 1066 • DUBAI 00 971 4345 7088
www.campbellreith.com

Job Title: GREENWOOD PLACE

Client: LB CAMDEN

FIGURE 18: APPLICATION SITE BOUNDARY AND S278 WORKS BOUNDARY

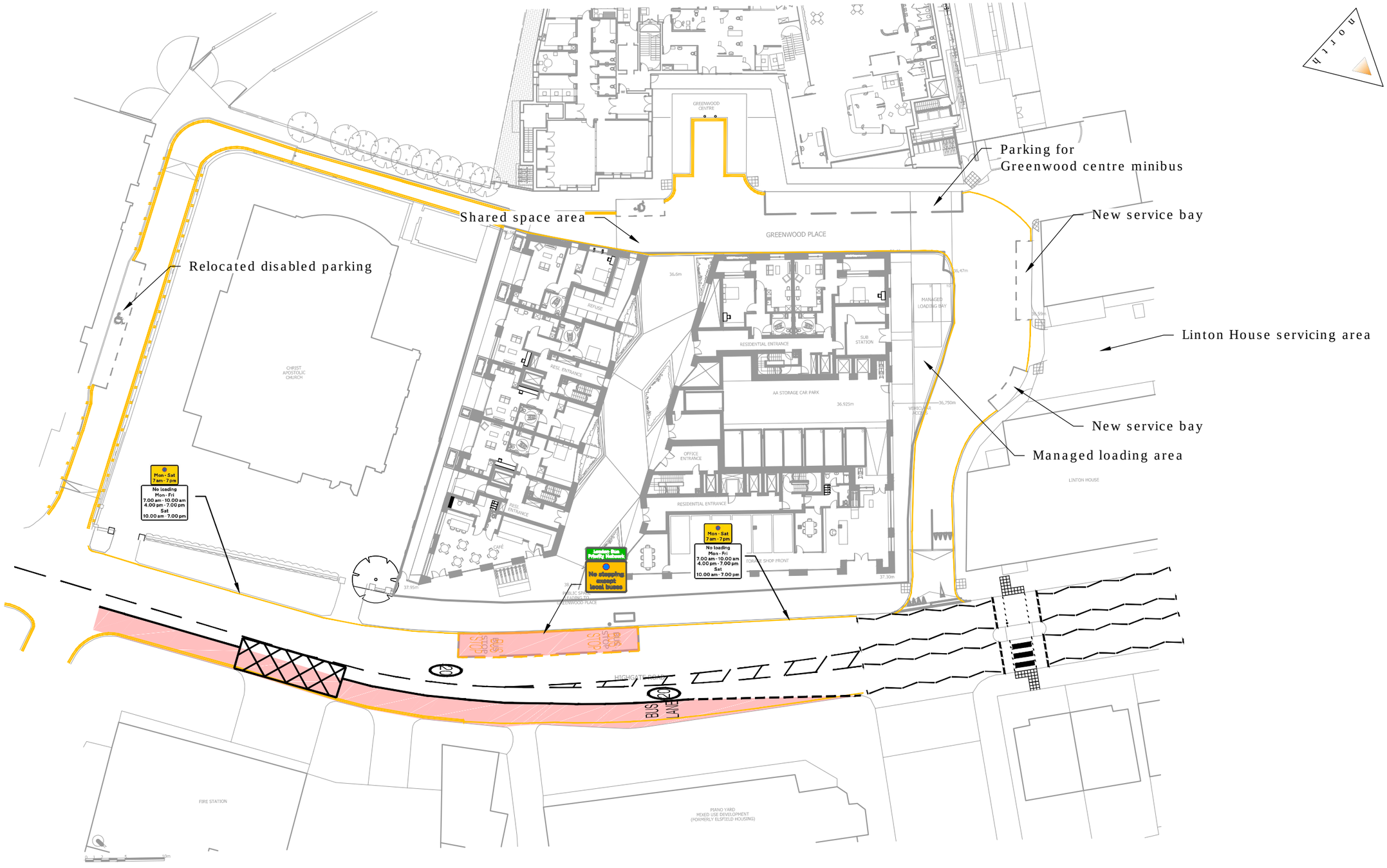
drawn	date	scale	CI checked	CAD filename
MJ	15.08.13	1:125@A0		11167-T005

Job No.	Drg No.	Status/Revision
11167	T005	D1

A0

Appendix E

Proposed Highway Layout



motion

84 North Street
Guildford
Surrey
GU1 4AU

T: 01483 531 300

Golden Cross House
8 Duncannon Street
London
WC2N 4JF

T: 020 7031 8141

www.motion.co.uk

Project:
Greenwood Place

Title:
Proposed Site Plan

Scale: 1:500 (@ A3)

Notes:

Drawing:
140204-05

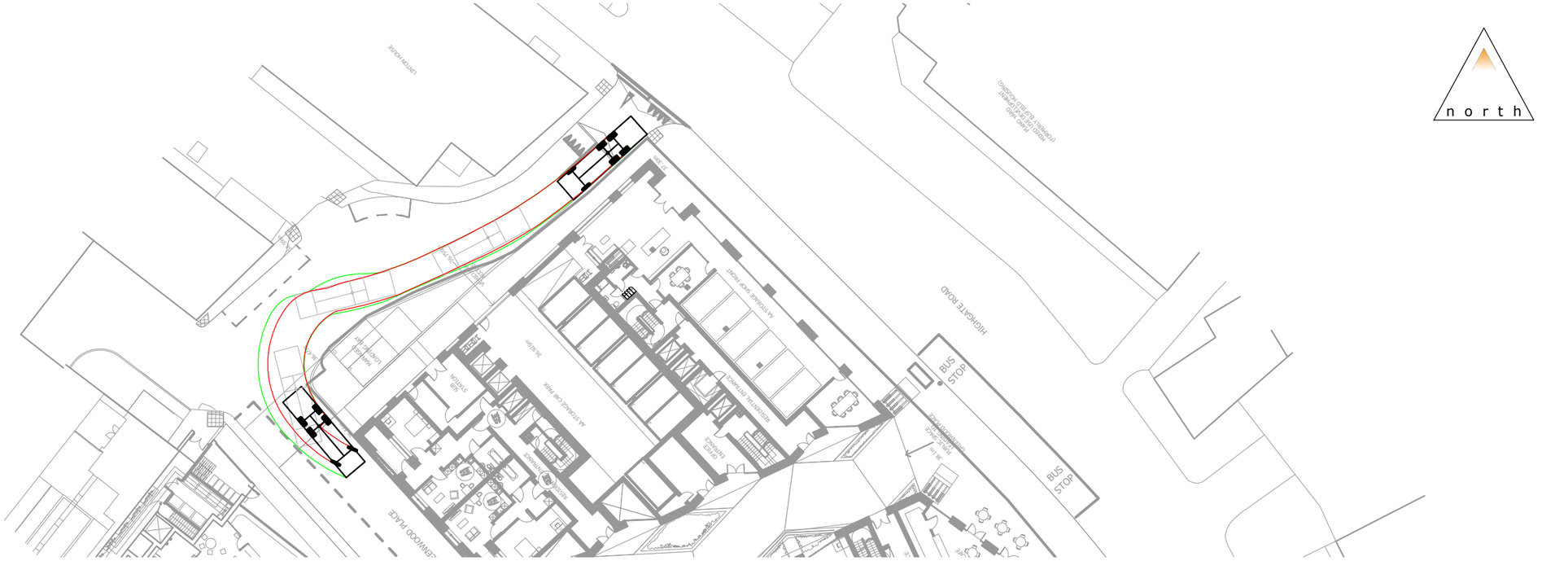
Revision:
D

L:\Projects\squcam 140204\Drawings\140204-05d.dwg

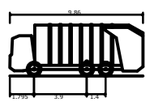
Appendix F

Swept Path Analysis – Refuse Vehicle

Entry



Exit



Large Refuse Vehicle (3 axle)	
Overall Length	9.860m
Overall Width	2.450m
Overall Body Height	3.814m
Min Body Ground Clearance	0.366m
Track Width	2.450m
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	9.500m

motion

84 North Street
Guildford
Surrey
GU1 4AU

T: 01483 531 300

Golden Cross House
8 Duncannon Street
London
WC2N 4JF

T: 020 7031 8141

www.motion.co.uk

Project:
Greenwood Place

Title:
Swept Path Analysis
Refuse Vehicle

Scale: 1:500 (@ A3)

Notes:

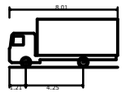
Drawing:
140204-TK12

Revision:
B

L:\Projects\squcam 140204\Drawings\140204-TK12b.dwg

Appendix G

Swept Path Analysis – Managed Delivery Area



7.5t Box Van	
Overall Length	8.010m
Overall Width	2.100m
Overall Body Height	3.556m
Min Body Ground Clearance	0.351m
Track Width	2.064m
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	7.400m

motion

84 North Street
Guildford
Surrey
GU1 4AU

T: 01483 531 300

Golden Cross House
8 Duncannon Street
London
WC2N 4JF

T: 020 7031 8141

www.motion.co.uk

Project:
Greenwood Place

Title:
Swept Path Analysis
7.5t Box Van

Scale: 1:250 (@ A3)

Notes:

Drawing: 14024-TK14

Revision: B

L:\Projects\squcam 140204\Drawings\140204-TK14b.dwg

Appendix H

TRICS Output Reports – Office Use

Calculation Reference: AUDIT-734001-151216-1242

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT
Category : A - OFFICE
MULTI-MODAL TOTAL PEOPLE

Selected regions and areas:

01	GREATER LONDON		
	CI	CITY OF LONDON	2 days
	SK	SOUTHWARK	1 days
	WH	WANDSWORTH	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Filtering Stage 2 selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter:	Gross floor area
Actual Range:	1215 to 2371 (units: sqm)
Range Selected by User:	408 to 4000 (units: sqm)

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/07 to 29/11/13

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday	1 days
Wednesday	1 days
Thursday	1 days
Friday	1 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	4 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaking using machines.

Selected Locations:

Town Centre	3
Edge of Town Centre	1

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Commercial Zone	2
Built-Up Zone	2

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Filtering Stage 3 selection:

Use Class:

B1	4 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 1 mile:

10,001 to 15,000	1 days
25,001 to 50,000	1 days
50,001 to 100,000	2 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

250,001 to 500,000	1 days
500,001 or More	3 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.5 or Less	3 days
0.6 to 1.0	1 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

No	4 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

LIST OF SITES relevant to selection parameters

1	CI-02-A-01	OFFICES		CITY OF LONDON
	50 CANNON STREET			
	CITY OF LONDON			
	BANK			
	Town Centre			
	Built-Up Zone			
	Total Gross floor area:		1386 sqm	
	Survey date: WEDNESDAY		21/10/09	Survey Type: MANUAL
2	CI-02-A-03	OFFICES		CITY OF LONDON
	MONUMENT STREET			
	MONUMENT			
	CITY OF LONDON			
	Town Centre			
	Commercial Zone			
	Total Gross floor area:		1951 sqm	
	Survey date: FRIDAY		29/11/13	Survey Type: MANUAL
3	SK-02-A-02	OFFICES		SOUTHWARK
	ST OLAV'S COURT			
	ROTHERHITHE			
	Edge of Town Centre			
	Commercial Zone			
	Total Gross floor area:		2371 sqm	
	Survey date: MONDAY		20/10/08	Survey Type: MANUAL
4	WH-02-A-02	OFFICES		WANDSWORTH
	BATTERSEA PARK ROAD			
	BATTERSEA			
	Town Centre			
	Built-Up Zone			
	Total Gross floor area:		1215 sqm	
	Survey date: THURSDAY		10/05/12	Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	4	1731	0.520	4	1731	0.014	4	1731	0.534
07:30 - 08:00	4	1731	0.794	4	1731	0.029	4	1731	0.823
08:00 - 08:30	4	1731	1.228	4	1731	0.144	4	1731	1.372
08:30 - 09:00	4	1731	1.546	4	1731	0.144	4	1731	1.690
09:00 - 09:30	4	1731	1.329	4	1731	0.072	4	1731	1.401
09:30 - 10:00	4	1731	0.997	4	1731	0.376	4	1731	1.373
10:00 - 10:30	4	1731	0.578	4	1731	0.433	4	1731	1.011
10:30 - 11:00	4	1731	0.506	4	1731	0.506	4	1731	1.012
11:00 - 11:30	4	1731	0.289	4	1731	0.217	4	1731	0.506
11:30 - 12:00	4	1731	0.404	4	1731	0.636	4	1731	1.040
12:00 - 12:30	4	1731	0.997	4	1731	1.213	4	1731	2.210
12:30 - 13:00	4	1731	0.838	4	1731	1.141	4	1731	1.979
13:00 - 13:30	4	1731	0.982	4	1731	1.054	4	1731	2.036
13:30 - 14:00	4	1731	0.737	4	1731	0.462	4	1731	1.199
14:00 - 14:30	4	1731	1.054	4	1731	0.636	4	1731	1.690
14:30 - 15:00	4	1731	0.534	4	1731	0.578	4	1731	1.112
15:00 - 15:30	4	1731	0.477	4	1731	0.534	4	1731	1.011
15:30 - 16:00	4	1731	0.419	4	1731	0.809	4	1731	1.228
16:00 - 16:30	4	1731	0.318	4	1731	1.069	4	1731	1.387
16:30 - 17:00	4	1731	0.303	4	1731	0.650	4	1731	0.953
17:00 - 17:30	4	1731	0.260	4	1731	1.546	4	1731	1.806
17:30 - 18:00	4	1731	0.246	4	1731	1.372	4	1731	1.618
18:00 - 18:30	4	1731	0.274	4	1731	0.896	4	1731	1.170
18:30 - 19:00	4	1731	0.101	4	1731	0.607	4	1731	0.708
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			15.731			15.138			30.869

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	1215 - 2371 (units: sqm)
Survey date date range:	01/01/07 - 29/11/13
Number of weekdays (Monday-Friday):	4
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

Appendix I

TRICS Output Reports – Office Use

Calculation Reference: AUDIT-734001-150817-0824

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : C - FLATS PRIVATELY OWNED
MULTI-MODAL TOTAL PEOPLE

Selected regions and areas:

01	GREATER LONDON		
	CN	CAMDEN	1 days
	HG	HARINGEY	3 days
	HK	HACKNEY	1 days
	HM	HAMMERSMITH AND FULHAM	1 days
	HO	HOUNSLOW	1 days
	HV	HAVERING	1 days
	IS	ISLINGTON	2 days
	KI	KINGSTON	1 days
	KN	KENSINGTON AND CHELSEA	3 days
	NH	NEWHAM	1 days
	RD	RICHMOND	1 days
	SK	SOUTHWARK	2 days
	TH	TOWER HAMLETS	2 days
	WH	WANDSWORTH	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Filtering Stage 2 selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: Number of dwellings
Actual Range: 9 to 530 (units:)
Range Selected by User: 9 to 530 (units:)

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/07 to 23/04/15

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday	3 days
Tuesday	4 days
Wednesday	7 days
Thursday	4 days
Friday	3 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	21 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaking using machines.

Selected Locations:

Town Centre	3
Edge of Town Centre	7
Suburban Area (PPS6 Out of Centre)	10
Neighbourhood Centre (PPS6 Local Centre)	1

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Filtering Stage 3 selection:

Use Class:

C1	1 days
C3	20 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 1 mile:

5,001 to 10,000	1 days
10,001 to 15,000	3 days
25,001 to 50,000	3 days
50,001 to 100,000	10 days
101,000 or More	4 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

125,001 to 250,000	2 days
250,001 to 500,000	1 days
500,001 or More	18 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.5 or Less	7 days
0.6 to 1.0	12 days
1.1 to 1.5	2 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

Yes	3 days
No	18 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

LIST OF SITES relevant to selection parameters

1 CN-03-C-01 BLOCK OF FLATS CAMDEN
OVAL ROAD

REGENTS PARK
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 12
Survey date: FRIDAY 07/11/08 Survey Type: MANUAL

2 HG-03-C-01 BLOCK OF FLATS HARINGEY
CHADWELL LANE
NEW RIVER VILLAGE
HORNSEY
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 25
Survey date: TUESDAY 27/10/09 Survey Type: MANUAL

3 HG-03-C-02 BLOCK OF FLATS HARINGEY
HIGH ROAD
WOODSIDE PARK
WOOD GREEN
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 30
Survey date: WEDNESDAY 01/10/14 Survey Type: MANUAL

4 HG-03-C-03 BLOCK OF FLATS HARINGEY
GREEN LANES
MANOR HOUSE
FINSBURY PARK
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 10
Survey date: WEDNESDAY 24/09/14 Survey Type: MANUAL

5 HK-03-C-02 BLOCK OF FLATS HACKNEY
HOXTON

SHOREDITCH
Town Centre
Built-Up Zone
Total Number of dwellings: 9
Survey date: TUESDAY 11/11/08 Survey Type: MANUAL

6 HM-03-C-01 BLOCK OF FLATS HAMMERSMITH AND FULHAM
VANSTON PLACE

FULHAM
Town Centre
High Street
Total Number of dwellings: 42
Survey date: WEDNESDAY 16/07/14 Survey Type: MANUAL

7 HO-03-C-02 BLOCK OF FLATS HOUNSLOW
HIGH STREET

BRENTFORD
Town Centre
Built-Up Zone
Total Number of dwellings: 86
Survey date: WEDNESDAY 03/09/14 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

8 HV-03-C-01 BLOCKS OF FLATS HAVERING
WATERLOO ROAD

ROMFORD
Suburban Area (PPS6 Out of Centre)
Built-Up Zone
Total Number of dwellings: 530
Survey date: WEDNESDAY 25/06/14 Survey Type: MANUAL

9 IS-03-C-01 FLATS ISLINGTON
RAMSEY WALK

ISLINGTON
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 31
Survey date: TUESDAY 04/11/08 Survey Type: MANUAL

10 IS-03-C-03 BLOCK OF FLATS ISLINGTON
FLORENCE STREET

ISLINGTON
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 9
Survey date: THURSDAY 21/11/13 Survey Type: MANUAL

11 KI-03-C-02 BLOCK OF FLATS KINGSTON
SOPWITH WAY

KINGSTON UPON THAMES
Edge of Town Centre
No Sub Category
Total Number of dwellings: 132
Survey date: MONDAY 14/06/10 Survey Type: MANUAL

12 KN-03-C-01 BLOCKS OF FLATS KENSINGTON AND CHELSEA
UXBRIDGE STREET

NOTTING HILL
Edge of Town Centre
Residential Zone
Total Number of dwellings: 16
Survey date: THURSDAY 15/10/09 Survey Type: MANUAL

13 KN-03-C-02 BLOCK OF FLATS KENSINGTON AND CHELSEA
BECKFORD CLOSE

SOUTH KENSINGTON
Edge of Town Centre
Residential Zone
Total Number of dwellings: 294
Survey date: TUESDAY 15/06/10 Survey Type: MANUAL

14 KN-03-C-03 BLOCK OF FLATS KENSINGTON AND CHELSEA
ALLEN STREET

KENSINGTON
Edge of Town Centre
Residential Zone
Total Number of dwellings: 72
Survey date: FRIDAY 11/05/12 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

15 NH-03-C-01 BLOCK OF FLATS NEWHAM
ARTHINGWORTH STREET

STRATFORD
Neighbourhood Centre (PPS6 Local Centre)
Residential Zone
Total Number of dwellings: 12
Survey date: THURSDAY 14/11/13 Survey Type: MANUAL

16 RD-03-C-02 BLOCK OF FLATS RICHMOND
B306 QUEENS RIDE

BARNES
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 28
Survey date: MONDAY 29/01/07 Survey Type: MANUAL

17 SK-03-C-01 BLOCK OF FLATS SOUTHWARK
PARK STREET

SOUTHWARK
Edge of Town Centre
Built-Up Zone
Total Number of dwellings: 53
Survey date: FRIDAY 19/09/14 Survey Type: MANUAL

18 SK-03-C-02 BLOCK OF FLATS SOUTHWARK
LAMB WALK

BERMONDSEY
Edge of Town Centre
Built-Up Zone
Total Number of dwellings: 29
Survey date: THURSDAY 23/04/15 Survey Type: MANUAL

19 TH-03-C-02 FLATS TOWER HAMLETS
BURNHAM STREET

BETHNAL GREEN
Suburban Area (PPS6 Out of Centre)
Built-Up Zone
Total Number of dwellings: 24
Survey date: MONDAY 10/11/08 Survey Type: MANUAL

20 TH-03-C-03 FLATS TOWER HAMLETS
PALMERS ROAD

BETHNAL GREEN
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 69
Survey date: WEDNESDAY 12/11/08 Survey Type: MANUAL

21 WH-03-C-01 BLOCKS OF FLATS WANDSWORTH
AMIES STREET

CLAPHAM JUNCTION
Edge of Town Centre
Residential Zone
Total Number of dwellings: 30
Survey date: WEDNESDAY 09/05/12 Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	21	73	0.069	21	73	0.273	21	73	0.342
08:00 - 09:00	21	73	0.105	21	73	0.461	21	73	0.566
09:00 - 10:00	21	73	0.106	21	73	0.198	21	73	0.304
10:00 - 11:00	21	73	0.087	21	73	0.153	21	73	0.240
11:00 - 12:00	21	73	0.111	21	73	0.117	21	73	0.228
12:00 - 13:00	21	73	0.134	21	73	0.130	21	73	0.264
13:00 - 14:00	21	73	0.136	21	73	0.139	21	73	0.275
14:00 - 15:00	21	73	0.128	21	73	0.137	21	73	0.265
15:00 - 16:00	21	73	0.231	21	73	0.111	21	73	0.342
16:00 - 17:00	21	73	0.226	21	73	0.143	21	73	0.369
17:00 - 18:00	21	73	0.310	21	73	0.168	21	73	0.478
18:00 - 19:00	21	73	0.288	21	73	0.131	21	73	0.419
19:00 - 20:00	2	162	0.294	2	162	0.108	2	162	0.402
20:00 - 21:00	2	162	0.180	2	162	0.105	2	162	0.285
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.405			2.374			4.779

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	9 - 530 (units:)
Survey date date range:	01/01/07 - 23/04/15
Number of weekdays (Monday-Friday):	21
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.