

HVJ TRANSPORT LTD

TRANSPORT ASSESSMENT

PROPOSED DEMOLITION AND REPLACEMENT
OF WIC HOUSE

TRANSPORT WAY, OXFORD OX4 6LT

FOR

OXFORD BIOMEDICA

PROJECT NO. P1025

JANUARY 2021

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Working in conjunction with GTA Civils & Transport Ltd.





1 INTRODUCTION AND SCOPE

- 1.1 This Assessment is based upon instructions from Mike Gilbert of Mike Gilbert Planning on behalf of Oxford Biomedica and relates to the proposed demolition of WIC House at the Oxford Biomedica headquarters on Transport Way, Oxford and the construction of a replacement purpose built building.
- 1.2 Oxford Biomedica is a gene and cell therapy company specialising in the development of gene-based medicines and are working with AstraZeneca, VMIC (Vaccines Manufacturing and Innovation Centre) and the Oxford Vaccine consortium to expedite COVID vaccine manufacturing. Expansion of their specialist manufacturing capacity will enable them to meet the urgent demands of this programme.
- 1.3 This Assessment has also been informed by informal discussions with the highway officer, Will Madgewick of Oxfordshire County Council regarding the transport aspects of this development proposal.
- 1.4 The Assessment also includes reference to the transport specific requirements (TRA 01, TRA 02) for the project to attain BREEAM Excellent status. This is to be addressed as part of the planning application (Policy RE1 of Local Plan 2020) and will be required for all future major commercial developments in Oxford City.
- 1.5 The replacement building is designed to achieve a BREEAM Excellent rating. Achieving this rating requires an assessment of the sustainability performance of the project in a number of key areas including transport. BREEAM transport specific requirements (TRA01, TRA 02) are referenced within this document (Refer App A) and also in the accompanying site specific Travel Plan.
- 1.6 The purpose of this Assessment is to examine the traffic and transport impacts associated with the proposed redevelopment and the scope of work includes:
 - Site visit;
 - Review of site permitted development and proposed planning application;
 - Detailing of relevant national and local policies;
 - Review of local transport networks;
 - Review of relevant accident data;
 - Assessment of current accessibility by all transport modes (bus, cycle, walking, etc.) with a particular emphasis on the achievement of BREEAM Excellent status;
 - Analysis of trip generations of existing and proposed development using the TRICS Database;
 - Analysis of parking requirements;
 - Assessment of the sightline requirements;
 - Assessment of impacts of proposed development on local and strategic highway networks; and
 - Provision of a site specific Travel Plan.



1.7 This Assessment has been written with reference to the following planning frameworks and transport guidance documents:

- National Planning Policy Framework (NPPF) Feb. 2019;
- Oxfordshire County Council (OCC) Local Transport Plan 2011-2031;
- Oxford City Council Local Plan 2036 (OLP 2036);
- Oxford City Council Parking standards, Transport Assessments & Travel Plans SPD;
- Manual for Streets (MFS) 1 and 2- 2007;
- TRICS (Trip Rate Information Computer System) Database.



2 PLANNING POLICY GUIDANCE

National Planning Policy Framework (NPPF)

- 2.1 The National Planning Policy Framework, first published in 2012, revised in July 2018 and again in February 2019 sets out the Government's policies for England and how these are expected to be applied. The NPPF provides a framework within which locally-prepared plans for housing and other development can be produced. Section 2 of the document '*Achieving sustainable development*', sets out how the planning system will operate to achieve this. In particular, paragraph 10 states: '*So that sustainable development is pursued in a positive way, at the heart of the Framework is a presumption in favour of sustainable development.*'
- 2.2 The NPPF states in paragraph 7 that '*the purpose of the planning system is to contribute to the achievement of sustainable development.*' The three main objectives of sustainable development being; economic, social and environmental.
- 2.3 Within Section 9 – '*Promoting sustainable transport*', paragraph 103 recognises that the planning system should actively manage patterns of growth in support of the five objectives listed below so that:
- the potential impacts of development on transport networks can be addressed;
 - opportunities from existing or proposed transport infrastructure, and changing transport technology and usage, are realised – for example in relation to the scale, location or density of development that can be accommodated;
 - opportunities to promote walking, cycling and public transport use are identified and pursued;
 - the environmental impacts of traffic and transport infrastructure can be identified, assessed and taken into account – including appropriate opportunities for avoiding and mitigating any adverse effects, and for net environmental gains; and
 - patterns of movement, streets, parking and other transport considerations are integral to the design of schemes, and contribute to making high quality places.
- 2.4 At paragraph 108, the document provides guidance for how development proposals should be assessed and determined. It states: '*In assessing sites that may be allocated for development in plans, or specific applications for development, it should be ensured that:*
- *appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location;*
 - *safe and suitable access to the site can be achieved for all users; and*
 - *any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree.*'



- 2.5 Paragraph 109 gives clear guidance on how highways related issues are to be considered in determining development applications: *'Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe.'*
- 2.6 The means by which an assessment of transport issues may be presented is clarified in paragraph 111 which states: *'All developments that will generate significant amounts of movement should be required to provide a travel plan, and the application should be supported by a transport statement or transport assessment so that the likely impacts of the proposal can be assessed.'*

Oxfordshire County Council Local Transport Plan 4 (LTP4)

The objectives for LTP4 are as follows:

1. Reduce the need to travel and the distance people need to travel;
2. Make more efficient use of available transport capacity through innovative network management and offering a choice of different ways to travel;
3. Improve connectivity to support economic growth: between housing and jobs/ education/ services, and in networks of businesses and their supply chains;
4. Influence the location of development to maximise the use and value of existing and planned strategic transport investment;
5. Reduce overall journey times and increase journey time reliability on strategically important routes;
6. Develop a high quality, resilient integrated transport system that is attractive to customers and generates inward investment;
7. Reduce negative impacts of transport on human health and safety, and the environment, including reducing carbon emissions; and
8. Encourage and facilitate physically active travel to support health.



Oxford City Council Local Plan 2036

2.7 Section 7 (*Ensuring efficient movement into and around the city*) of the Local Plan sets out transport policy that is designed to promote sustainable travel through prioritising walking, cycling, and public transport. Section 7 of the Plan also includes the following specific transport policies:

Policy M2: Assessing and managing development.

Policy M3: Motor vehicle parking.

Policy M4: Provision of electric charging points.

Policy M5: Bicycle Parking.

2.8 Policy M1: Prioritising walking, cycling, and public transport states that: *“Planning permission will only be granted for development that minimises the need to travel and is laid out and designed in a way that prioritises access by walking, cycling and public transport.”*

Summary on Policy

2.9 The proposed development at Transport Way is consistent with relevant transport policies and also makes significant contributions to supporting the local economy. By reusing an existing site that is within easy reach of all facilities and services and a short walking distance of a frequent bus service, the proposal is aligned with Government sustainable development aspirations.



3 DESCRIPTION OF THE SITE

(BREEAM TRA1c)

- 3.1 The Oxford Biomedica site is located within a predominantly commercial area of Cowley in Oxford, approximately 5.5km southeast of Oxford City Centre (Refer Fig. 1). The 1.3ha site includes two large buildings, the Windrush Building which is the main headquarters and houses offices is on the eastern half of the site and WIC House which occupies the western side and is the subject of the application (Refer Fig. 2).

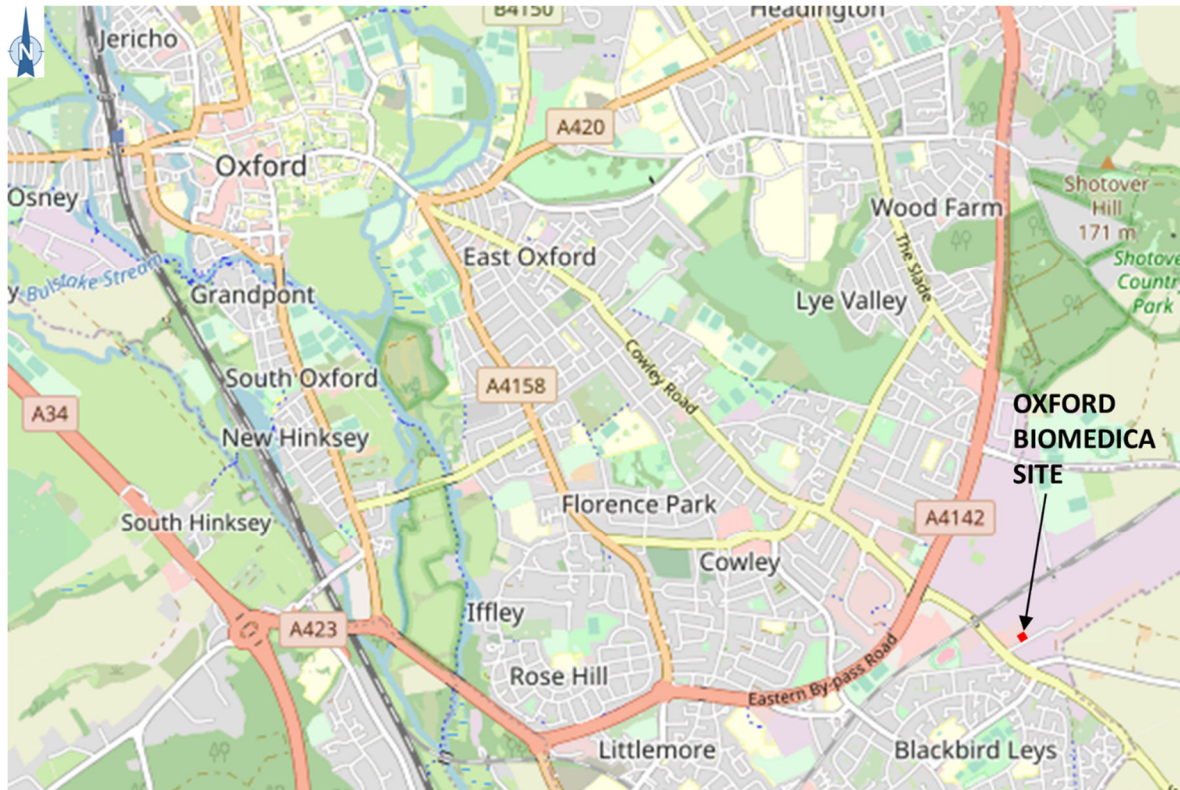


Figure 1: Location plan



Figure 2: Site plan

- 3.2 The site is conveniently located on the northern side of Transport Way, just 650m southeast of the A4142 Eastern Bypass Road which provides convenient connections to the A40 (M40) and the A34.
- 3.3 The site is served by two accesses onto Transport Way. The western access (Refer Photo 1) is 7.0m wide and connects to a 9.8m wide dropped kerb and is the main entrance and exit to the existing WIC House building. There are security gates set back 12.5m from the kerb and the access road follows a two-way system through the site that leads to a parking area for 58 cars (Refer Figure 4 in Section 5).
- 3.4 The eastern access is 5.95m wide and connects to the northern side of Transport Way with large turnout radii to a 15.5m wide drop kerb (Refer Photo 2). Steel gates are set back 13.3m from the kerb and this access serves the Windrush Building.

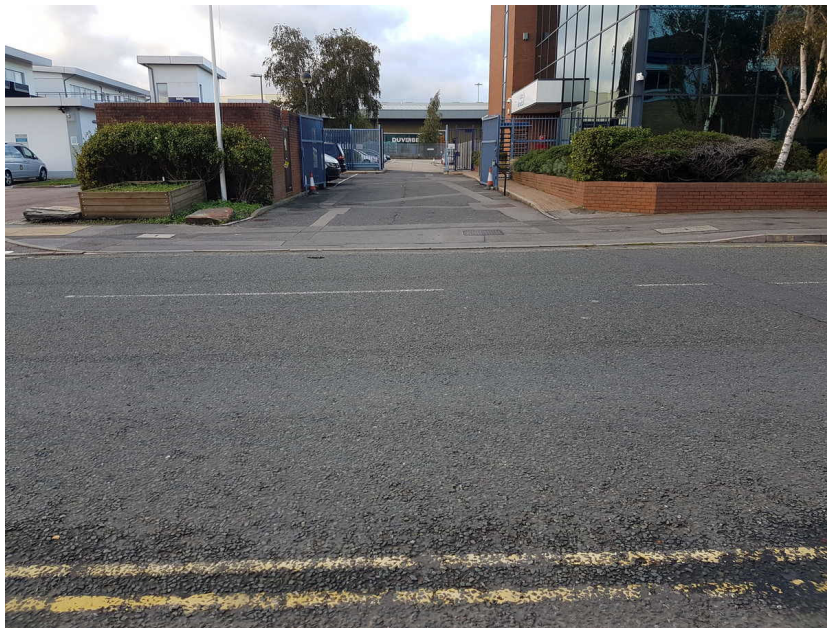


Photo 1: Western access and WIC House entrance/exit at Transport Way



Photo 2: Eastern access and Windrush Building entrance/exit to Transport Way

- 3.5 Transport Way is a 7.4m wide two-way single carriageway 30mph urban road with a system of street lighting. There is a 3.6m wide tarmac verge on the northern side fronting the site with the building line being a further 4.0m back. The 7.4m road width extends across the majority of the site frontage. However, the road widens to 9m from a point 25m east of the main western site entrance. The 9.0m width is maintained up to the nearby junction with Watlington Road (B480).



- 3.6 There is a 2.2m tarmac verge on the southern side of Transport Way along the 9.0m wide section of carriageway. Where the carriageway narrows to 7.4m, the southern verge correspondingly widens to 3.7m.
- 3.7 There are double yellow line markings on both sides of Transport Way. There are two gaps in the markings on the northern side of the road along the frontage to the Windrush Building measuring 18m each which provides for a total of 6 parked cars. There are two further breaks in the double yellow markings that provide a further 10 spaces between the Oxford Biomedica site and Gate 9 of the BMW Mini plant which is 120m east of the site on the northern side of Transport Way.
- 3.8 The Transport Way footways connect to the dedicated cycling and pedestrian links that exist on the nearby B480 at the Transport Way / Watlington Rd. junction.
- 3.9 National, regional and local planning policies promote the need for sustainable developments to have good accessibility to services and facilities. Ideally, developments should be located within walking or cycling distance of education, employment, health, retail and leisure facilities. From a commercial perspective, convenient links to transport connections and the target customer base is desirable. The nearest public transport links and population centres are:

Transport

- Oxford Rail Station – 6.5km
- Oxford City Centre and Central Bus Station – 6.0km
- Bus stops on B480, services to Oxford City – 120m

Other amenities/services (BREEAM TRA1d)

- Gardens and open space exist between WIC House and Windrush Building
- Lidl supermarket 40m
- Pizza Stazione takeaway – 400m
- Post office – 600m
- Macy's Takeaway – 600m
- Comies Caribbean Grill – 600m
- Oxford Retail Park including Tesco supermarket – 850m
- Burger King takeaway – 800m
- Templars Shopping Park – 1.9km



- 3.10 In terms of the operation and safety of the road network, records are kept of personal injury accidents. A guide to the local accident patterns can be viewed at www.crashmap.co.uk. This web site uses data approved by the National Statistics Authority and reported on by the Department for Transport each year. Data for this area indicates that there has only been one incident over the past five years which occurred on 04/10/2016 and involved 2 vehicles and one casualty.
- 3.11 The incident involved a car and a bicycle and was classified as slight. The incident was located 30m west of the site's western access on Transport Way and between the Lidl Supermarket access and the Transport Way / B480 junction and involved the car crossing into the path of the cyclist. Incident report is provided in Appendix C.
- 3.12 The circumstances of this one incident do not relate to the subject site and it is considered that the proposed development presents no highway safety issues that could exacerbate the existing situation.



4 MODAL CHOICES AND ACCESSIBILITY

(BREEAM TRA1c)

Policy M1: Prioritising walking, cycling, and public transport

- 4.1 The OLP 2036 sets out some key objectives relating to accessibility. In particular, the Policy M1 states that *Planning permission will only be granted for development that minimises the need to travel and is laid out and designed in a way that prioritises access by walking, cycling and public transport.*
- 4.2 In relation to walking, the policy requires that developments take opportunities to achieve improvements and shall:
- ensure that the urban environment is permeable and safe to walk through and adequately lit, with good and direct connections both within and across the wider network;
 - make improvements to the pedestrian environment including the provision of high quality crossings points where needed, seating, signage and landscaping; and
 - support high quality public realm improvement works (refer to Policy DH1) and ensure that footways are sufficiently wide to accommodate the level of use.
- 4.3 To promote cycling in the city and ensure an accessible environment for cyclists, the Policy states that Council will seek to ensure that development:
- provides for connected, high quality, convenient and safe (segregated where possible) cycle routes within developments and the wider networks that are permeable and can accommodate the anticipated growth in cycling;
 - provides for accessible, conveniently located, secure cycle parking facilities in both private and publicly-accessible locations; and
 - makes provision for high quality on-site facilities that promote cycle usage, including changing rooms, showers, dryers and lockers.
- 4.4 The Policy also expects that proposals will facilitate and deliver links to the various cycle routes on the OCC Proposals map to serve needs arising from development and where opportunities arise to secure improvements. Planning permission will not be granted for development that would jeopardise future delivery of these links.
- 4.5 In relation to public transport, the Policy requires that in order to safeguard and promote the provision of public transport in Oxford, developments that will add to demand on public transport should contribute towards improvements to bus network infrastructure including pedestrian and cycle routes to bus stops, shelters, passenger seating, waiting areas, signage, timetable information and infrastructure relating to zero emissions.



Buses

- 4.6 The closest existing bus stops to the site are located on the B480 Watlington Road public transport corridor just 120m walk from the site. The No. 11 and 11X services between Oxford City and Watlington can be accessed from this stop as detailed in Table 4.1 below. The number 11 service is a stopping service between Watlington and Oxford City Centre. By contrast, the 11X bus runs directly between the BMW factory gates and Oxford city centre and vice versa. The site is afforded a premium standard service from these routes.
- 4.7 The 11X service which is accessible from this stop provides a much higher level of service in and out of Oxford. This service does not run to the southeast beyond the BMW Factory Gate Stop. The 11X buses run every 20 minutes between 0700 and 2116 Monday to Friday.
- 4.8 There is an additional stop located on Cuddesdon Way, approximately 320m south of the site which provides access to the Greater Leys No. 12 loop service which also terminates in Oxford.

Route No	Mon-Fri	Sat	Sun
11	0620 – 1920 every 60 min.	0844-1908 every 60 min.	0856, 1057, 1317, 1627, 1835
11X	0700 – 0905 every 20 min. 0905 – 1721 every 8 min 1721 – 2116 every 15 min.	0800 – 0900 every 20 min. 0900 – 1721 every 8 to 10 min 1721 – 2116 every 15 min.	1000 – 1801 every 10 min. 1801 – 2116 every 15 min
12	0629 – 2008 every 30 min. then every 60min. until 0015	0709 – 1908 every 30 min. then every 60min. until 0015	Hourly between 0917 and 2315

Table 4.1 Bus schedules

- 4.9 As demonstrated above, the site benefits from exceptionally frequent bus services to Oxford from stops that are just a short walk from the site.

Trains

- 4.10 The nearest railway station to the site is Oxford which is located 6.5km from the site. Whilst it is a fair distance from the development it is a short walk from the city centre which can be reached directly from the site by using the 11, 11X or 12 buses as noted above. By bicycle, the station can be reached in 20 minutes.
- 4.11 Oxford station provides fast services to London, Reading, Birmingham and the southwest network as well as a number of stopping services to surrounding towns and villages.



Walking and cycling

4.12 Transport Way provides a good quality footway which is at least 2m wide that connects to the existing footways on Watlington Road where a dedicated cycle path is provided (Refer Photos 3 & 4).



Photo 3: Pedestrian and cycle path looking south towards Transport Way



Photo 4: Pedestrian and cycle path looking north towards Oxford

4.13 The footways on Watlington Road are well maintained on both sides of the road and are 2m wide. They also provide connections to the nearest bus stops to the site with the cycle paths providing links to other local cycle paths as shown on Figure 3. Given the proximity of facilities in the local area cycling can be considered an attractive option to travel to and from the site.

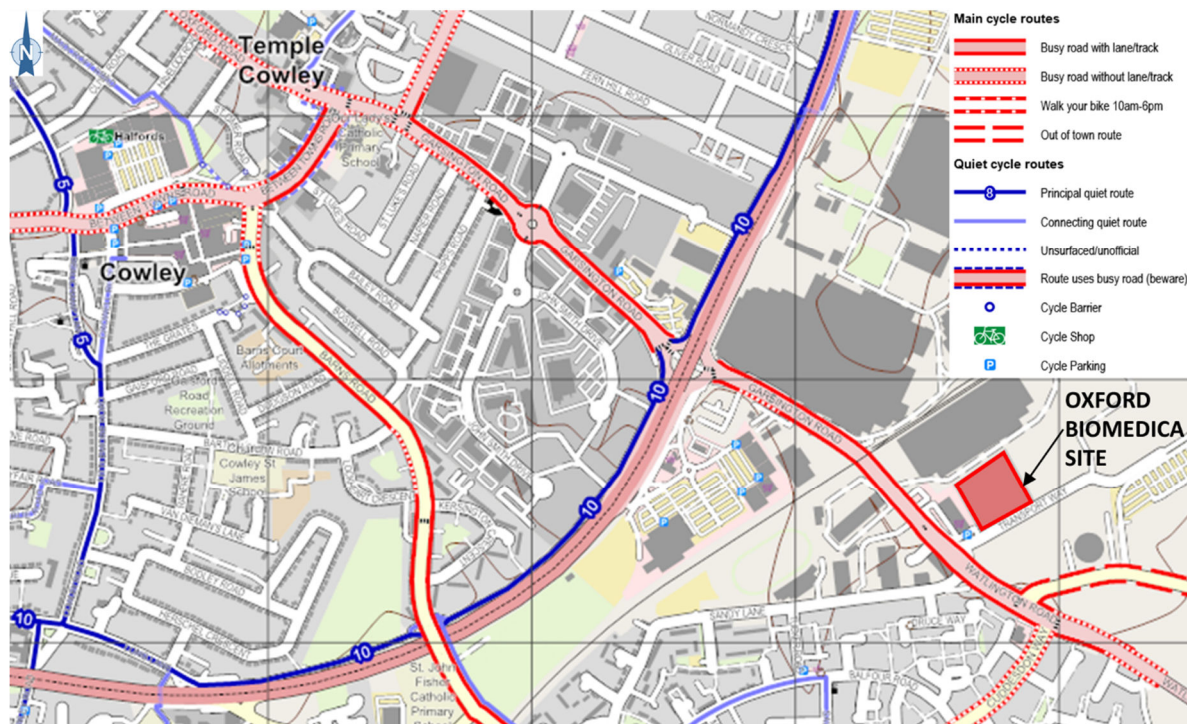


Figure 3: Local cycle routes

- 4.14 Level thresholds are provided to building entrances with pathways and routes to accessible parking spaces not exceeding gradients as specified in current building regulations (Refer architects drawings). Similarly, pathways connecting the existing footways in Transport Way to the internal paths and building access are to be max gradient 1:20 with textured paving at the junctions with the highway edge.
- 4.15 Overall, the site on Transport Way has good accessibility to many local amenities within suitable walking and cycling distance. The site is also readily accessible via public transport services and continued development of the site aligns with the aims and objectives of Policy M1.



5 PROPOSED DEVELOPMENT

- 5.1 The proposal is to demolish the existing WIC House and construct a new replacement facility that better meets the current and future needs of Oxford Biomedica. The new building will carry the same Classification B1 use as the existing WIC House and will be located in the same position.
- 5.2 The new building will provide specifically designed office and laboratory space together with plant rooms and the necessary employee welfare and amenity spaces. Spaces for car parking and manoeuvring will be provided on the northern and western sides of the building.
- 5.3 The existing access onto Transport Way will be retained for entrance only access to the site. The parking and access drive layout will facilitate a one-way traffic flow from WIC House around the rear of the Windrush Building to exit only gates back onto Transport Way as shown on Figure 4.
- 5.4 The existing and proposed floor plans are provided in Appendix B and the relevant floor areas of each configuration is defined in Table 5.1 below.

Accommodation	Existing WIC House (m ²)	Replacement WIC house (m ²)
Office / laboratories		
Ground floor	1945	2300
First floor	519	2329
Second floor	519	753
Total office / laboratory common areas	2983	5383
Plant areas	164	900
TOTAL GFA	3147	6283

Table 5.1 Existing and proposed floor plan areas (Class B1 use)

Car Parking

- 5.5 It is noted that the OLP 2036 states that:

Major redevelopment of non-residential sites is expected across Oxford during the plan period. Many of these sites already have substantial amounts of parking, including provision for disabled parking. Additional parking will not be allowed in the event of redevelopment and the reduction of parking is encouraged.

Any new developments for B1 use in the city centre and district centres do not require any parking provision except operational need, because the centres have good access to public transport and cycling and walking routes.



- 5.6 In line with the existing scheme the site will have a total of 56 spaces for staff (including 2 disabled spaces) within the internal area of the site. A minimum of 4 spaces will be allocated for the staff car sharing scheme and positioned towards the entrance gate and building entrance. Additionally, the scheme also provides 4 spaces for visitors which includes 2 disabled spaces.
- 5.7 As noted in Section 4, the site has excellent public transport links with a frequent bus service and the local pedestrian and cycle networks are readily accessible. As required by the OLP 2036, there has been no increase in the level of on-site parking provision.
- 5.8 The reconfiguring of the site has resulted in a one-way system which simplifies vehicle movements at each of the existing accesses onto Transport Way and also reduces the likelihood of vehicle conflicts within any of the confined areas of the site (Refer Fig. 4).
- 5.9 Policy M4 (Provision of Electric charge points) of the OLP 2036 requires a minimum of 25% of parking spaces to be provided with charging points on non-residential developments. For this scheme there will be one (1) charge point provided in the visitor parking area and 14 charge points provided in the staff parking areas.

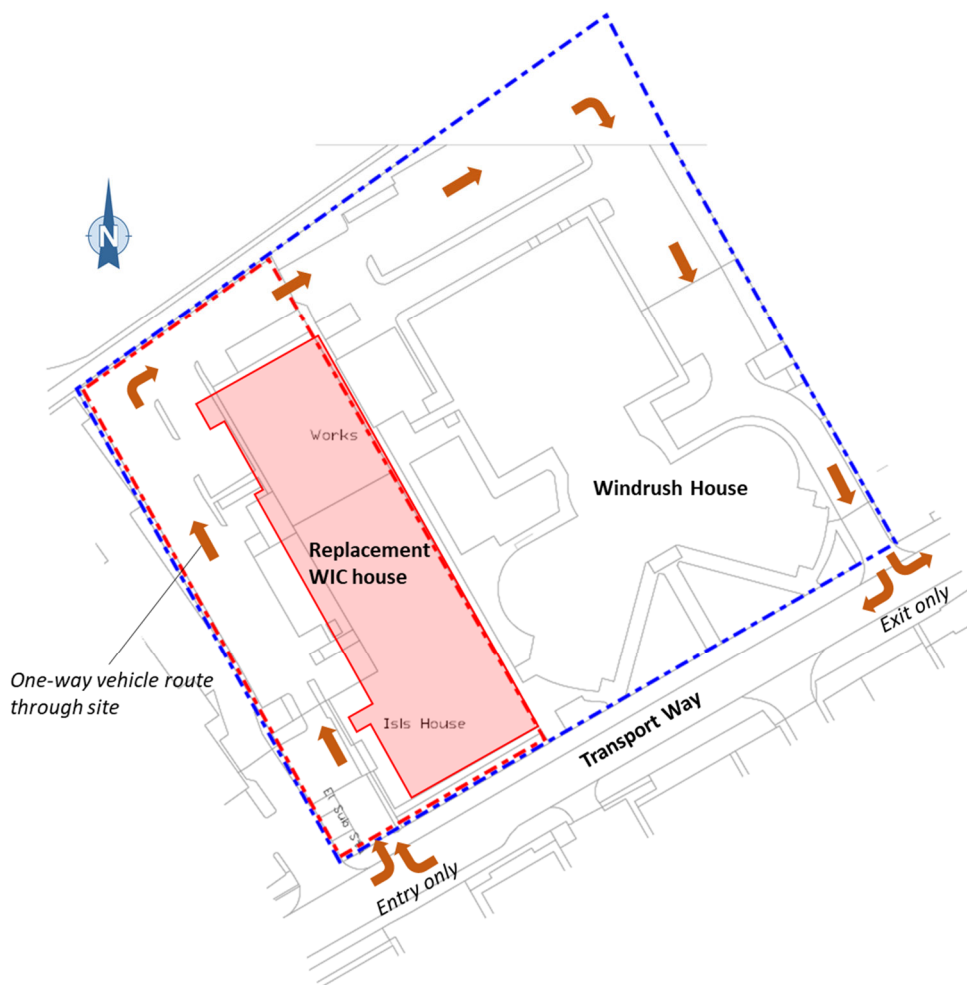


Figure 4: One-way vehicle route through site



Cycle parking

- 5.10 Policy M5 of the OLP 2036 requires provision of cycle parking at the rate of 1 space per 90m² of GFA or 1 space per 5 staff or other people. For the proposed 5383m² of office and laboratory work spaces the scheme provides 56 covered spaces that are securely located within the entry and exit gates of the site. Three (3) bicycle charge points are also provided.
- 5.11 Policy B5 also requires the provision of shower and comfort facilities for use by commuting cyclists. For B1 use development, showers are required at a rate of 1 shower per 500m² up to 1000m² then 1 shower per 4000m² thereafter. The required number of showers is 4 for the proposed scheme of 5383m². A minimum of 6 showers is provided together with changing and locker facilities.



6 DEVELOPMENT TRAFFIC IMPACT

- 6.1 An assessment has been completed which demonstrates that the traffic associated with the proposed development will not have a material impact on the local highway network. **(Complies BREEAM TRA1b)**
- 6.2 The TRICS database was analysed and sites with similar characteristics were applied to the application site. The database has been interrogated under the Use Class B1 and the results are presented in the Tables below. The full TRICS data output is presented in Appendix D.
- 6.3 Levels of car parking remain unchanged between the existing and proposed schemes. For this reason, the same number of total peak hour trips are allocated for the proposed site. All other trips relate to the increased gross floor area (refer Note 2 also).

Trip Periods	Forecast trip generation Use Class B1 – 2983m ² GFA					
	Trip rate per 100m ²			Total trips		
	Arr	Dep	Total	Arr	Dep	Total
AM Peak: 08.00-09.00	1.379	0.122	1.501	41.136	3.639	44.775
PM Peak: 17.00-18.00	0.069	1.277	1.346	2.058	38.093	40.151
Total Peak hour trips²	1.448	1.399	2.847	43.194	41.732	84.926
Total daily flows: 07.00-19.00	3.613	3.625	7.238	107.776	108.134	215.910
Trips for³ deliveries	2.165	2.226	4.391	64.582	66.402	130.984

Table 6.1: Trip Generation for existing site (2983m²).

Trip Periods	Forecast trip generation Use Class B1 – 5383m ² GFA					
	Trip rate per 100m ²			Total trips		
	Arr	Dep	Total	Arr	Dep	Total
Total Peak hour trips²	1.448	1.399	2.847	43.194	41.732	84.926
Trips for Deliveries⁴	3.700	3.804	7.504	116.542	119.826	236.368
Total daily Flows⁵: 07.00-19.00	5.148	5.203	10.351	159.736	161.558	321.294
Increase in trips	1.742	1.791	3.533	51.960	53.424	105.384

Table 6.2: Trip Generation for proposed site (5383m²).

Notes:

1. Plant areas not included.
2. Peak hour trips represent trips predominantly associated with filling and emptying the staff car park
3. Trips for deliveries represent all other daily trips to the site other than peak hour movements.
4. This figure has been increased proportionally (+80%) with the increase in GFA (5383-2983m²).
5. Revised daily flows includes the unchanged peak hour flows + increased trips for deliveries.



- 6.4 The trip rate peak times for this type of use and activity are between 0700 and 0800, in the mornings and between 1800 and 1900 in the evenings. Trips in these periods are most likely to be associated with staff arriving and departing. The notes associated with Tables 6.1 and 6.2 provide further explanation of how the trips outside of peak hours are assigned to deliveries and other service vehicles that may visit the site.
- 6.5 Under the reconfigured site conditions the parking allocation of 60 spaces remains essentially the same as required under the OLP 2036 which states that '*additional parking will not be allowed in the event of redevelopment and the reduction of parking is encouraged.*' Other than peak hour trips, all other trips associated with deliveries and service vehicles have been proportionately increased based on the increased GFA as shown in table 6.2 and referenced in the accompanying notes. The total additional daily trips to the site is 105.
- 6.6 The 105 trips representing a potential increase in deliveries are spread across a 10 hour period that excludes the morning and evening peaks. This represents an average of 10.5 movements per hour or 1 movement every 5.7 minutes.
- 6.7 Based on the analysis it is therefore considered that the additional levels of use which are distributed across times other than peak, are acceptable in terms of highway safety and capacity impacts on a commercial road such as Transport Way.



7 SIGHTLINES

- 7.1 The design of sightlines at junctions and access points is discussed in detail in the document Manual for Streets (MfS) which was published in 2007. This guide is also meant to complement local street design guidance produced by local authorities.
- 7.2 Traditionally sightlines were constructed with an emphasis on ensuring motorists had wide splays and generous sightlines so that they can react to hazards ahead of them in plenty of time, based on the speed of traffic using them. It is now accepted this encourages higher speeds because motorists feel comfortable with the speed that they are driving at, especially in approaching residential areas.
- 7.3 Reducing visibility and using alignments which encourage motorists to drive more slowly should not only maintain or improve on current safety levels but will also help create places which are good for social activity and where movement by means other than the car is encouraged. Therefore, some stopping distances have been revised and are shown within Table 7.1 of the MfS.
- 7.4 An 'X' dimension of 2.4m (Refer Fig. 7.1) which is normally used in most built up situations, as this represents a reasonable maximum distance between the front of the car and the driver's eye, is considered suitable at this location. According to MfS, using an 'X' distance in excess of 2.4m is not generally required.

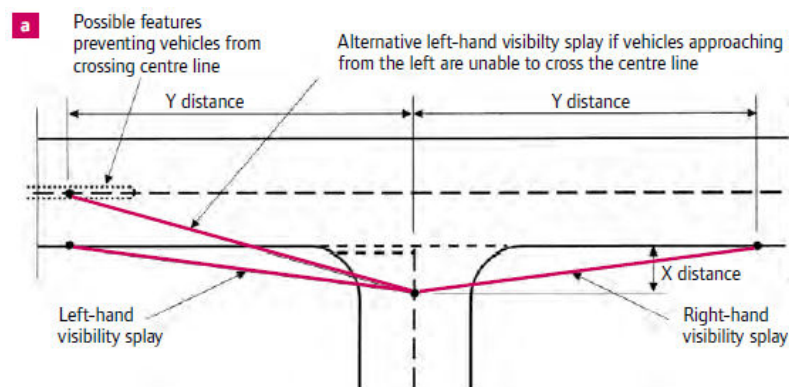


Fig.7.1: Junction visibility requirements

- 7.5 Longer 'X' distances enable drivers to look for gaps as they approach the junction. This increases junction capacity for the minor arm, and so may be justified in some circumstances, but it also increases the possibility that drivers on the minor approach will fail to take account of other road users, particularly pedestrians and cyclists. TRL Report No 184-20 found that accident risk increased with greater minor road sight distance. It is therefore suitable and appropriate for the 'X' distance in this instance to be 2.4m.



- 7.6 The minimum sight distance required for a 30mph road is 43m (Y) at 2.4m (X). Sightlines at the existing accesses onto Transport Way were assessed and the minimum (Y) distance is comfortably exceeded at both access points as shown in Photos 5 to 8.



Photo 5: Sightline at WIC House access looking west



Photo 6: Sightline at WIC House access looking east



Photo 7: Sightline at Windrush House access looking east



Photo 8: Sightline at Windrush House access looking west



8 CONCLUSION

- 8.1 This Transport Assessment has been completed to support the proposed demolition and replacement construction of WIC House on the Oxford Biomedica site at Transport Way, Cowley, Oxford. A site specific Travel Plan has also been prepared to accompany this submission.
- 8.2 Analysis of the traffic impact of the development demonstrates that there will be no discernible negative effect on the local highway network when compared to existing traffic levels.
- 8.3 The scheme will be in accordance with the aims and objectives of local and national policy with regard to accessibility by walking, cycling and public transport. It will offer staff and visitors to the site sustainable choices in their mode of travel and meets the required standards to achieve BREEAM Excellent rating.
- 8.4 The proposed scheme has access to sustainable transport options and offers safe and efficient access arrangements for all traffic (cars, delivery vehicles, cyclists and pedestrians).
- 8.5 The proposed development limits the parking provision for cars as required by the most recent policies within the Oxford City Council Local Plan 2036.
- 8.6 The two existing accesses in respect of both the sightlines and the trip generation satisfy all standards with sightline requirements including the government's Manual for Streets.
- 8.7 A Travel Plan has been created in order to mitigate any potential traffic impact and encourage the adoption of more environmentally friendly and sustainable journeys to and from the site.
- 8.8 There are therefore no transportation reasons which should prevent the development of this site. The Highway Authority, therefore ought to be able to provide a positive recommendation for approval of this planning application.



APPENDIX A

BREEAM TRA2 summary



BREEAM TRA 2 Assessment summary

(TA – Transport Assessment), (TP – Travel Plan)

Assessment Option	Measure	Initiative / Evidence	Points
1	The existing AI calculated in Tra 01 achieves the following: ≥ 4 for prison or MOD sites, rural location sensitive buildings, and other building group 3 ≥ 8 for all other building types	AI=4.42 based on the Tra 1 calculator and bus timetable and walking distance information provided within the TA and TP	1
2	Demonstrate an increase over the existing Accessibility Index through negotiation with local bus, train or tram companies to increase the frequency of the local service provision for the development; OR	All	2
	Demonstrate an increase over the existing Accessibility Index through provision of a diverted bus route, a new or enhanced bus stop, or other similar solutions. OR	Travel Plan coordinator is to meet with Oxford City Council and Oxfordshire County Council to seek improvements to walking and cycle links. Refer TP	3
	Provide a dedicated service, such as a bus route or service	Travel Plan Coordinator to investigate feasibility for a site work bus. This could be done in conjunction with other Biomedica sites and other employers in the area. Refer TP	3
3	Provide a public transport information system in a publicly accessible area, to allow building users access to up-to-date information on the available public transport and transport infrastructure. This may include signposting to public transport, cycling, walking infrastructure or local amenities.	Notice board in publicly accessible foyer area. Travel information also provided on corporate website. Process to provide links to all site visitors. Refer TP	1
4	Provide electric recharging stations of a minimum of 3kW for at least 10% of the total car parking capacity for the development.	14 EV charge points (25%) provided. Refer S5.9 in TA; and Section 5 of TP	1
5	<ul style="list-style-type: none"> Set up a car sharing group or facility to facilitate and encourage building users to car share. Raise awareness of the sharing scheme with marketing and communication materials. Provide priority spaces for car sharers for at least 5% of the total car parking capacity for the development. Locate priority parking spaces nearest the development entrance used by the sharing scheme participants. 	<ul style="list-style-type: none"> Car sharing group required – refer S5.6 in TA, and TP Internal marketing of scheme is responsibility Travel Plan Coordinator – refer Action Plan in TP 4 car share spaces (7.1%) provided near entrance. Refer S 5.6 in TA and Section 5 in TP 	1
6	<ul style="list-style-type: none"> During preparation of the brief, the design team consults with the local authority (LA) on the state of the local cycling network and public accessible pedestrian routes, to focus on whichever the LA deems most 	Discussions ongoing with the LA. Grant of planning to include a condition relating to agreed option.	2



	<p>relevant to the project, and how to improve it.</p> <ul style="list-style-type: none"> Agree and implement one proposition chosen with the local authority. The proposition supported by the development is additional to existing local plans and has a significant impact on the local cycling network or on pedestrian routes open to the public. 	Travel Plan coordinator is to meet with Oxford City Council and Oxfordshire County Council to seek improvements to walking and cycle links. Refer TP	
7	Install compliant cycle storage spaces to meet the minimum levels set out below	Min req=0 56 covered secure spaces within the entry and exit gates of the site. 3 bicycle charge points are also provided. Refer TA in S5.10. Refer Section 5 in TP	1
8	<p>Option 7 has been achieved. Provide at least two <i>compliant cyclists' facilities</i> (see below) for the building users:</p> <ul style="list-style-type: none"> Showers Changing facilities Lockers Drying spaces. 	6 showers are provided together with compliant changing and locker facilities. Refer architect's plan.	1
9	At least three existing <i>accessible amenities</i> (see below) are present	<ul style="list-style-type: none"> Gardens and open space exist between WIC House and Windrush Building Lidl supermarket 40m Pizza Stazione takeaway – 400m <p>Refer S3.9 in TA, Fig 4 in TP</p>	1
10	Ensure a minimum of one new <i>accessible amenity</i> is provided. OR	N/A	2
	Ensure more than one new <i>accessible amenity</i> , is provided.		3
11	<p>Implement one site-specific improvement measure, not covered by the options already listed in this issue, in line with the recommendations of the travel plan.</p> <p>Submit this for review by BRE.</p>	All	1 – 3

Accessible Amenities

Criteria	BG1
Proximity (metres)	500
Appropriate food outlet	✓
Access to cash	✓
Access to an outdoor open space (public or private, suitably sized and accessible to building users)	✓
Access to a recreation or leisure facility for fitness or sports	✓
Publicly available postal facility	✓
Community facility	✓
Over the counter services associated with a pharmacy	✓
Public sector GP surgery or general medical centre	
Childcare facility or school	✓



APPENDIX B

Existing and proposed site plans

NOTES
1. This drawing is to be used in conjunction with all other drawings and specifications on file before commencing. Do not scale from this drawing.
2. All dimensions are given in meters unless otherwise stated.
3. All dimensions are given in meters unless otherwise stated.
4. All dimensions are given in meters unless otherwise stated.
5. All dimensions are given in meters unless otherwise stated.
6. All dimensions are given in meters unless otherwise stated.
7. All dimensions are given in meters unless otherwise stated.
8. All dimensions are given in meters unless otherwise stated.
9. All dimensions are given in meters unless otherwise stated.
10. All dimensions are given in meters unless otherwise stated.



Rev	Description	By	Date
1	Issue for Tender		
2	Issue for Construction		
3	Issue for Completion		

TENDER	
This is a preliminary drawing of the site plan, for information only. It is not to be used for construction purposes without the approval of the project manager.	

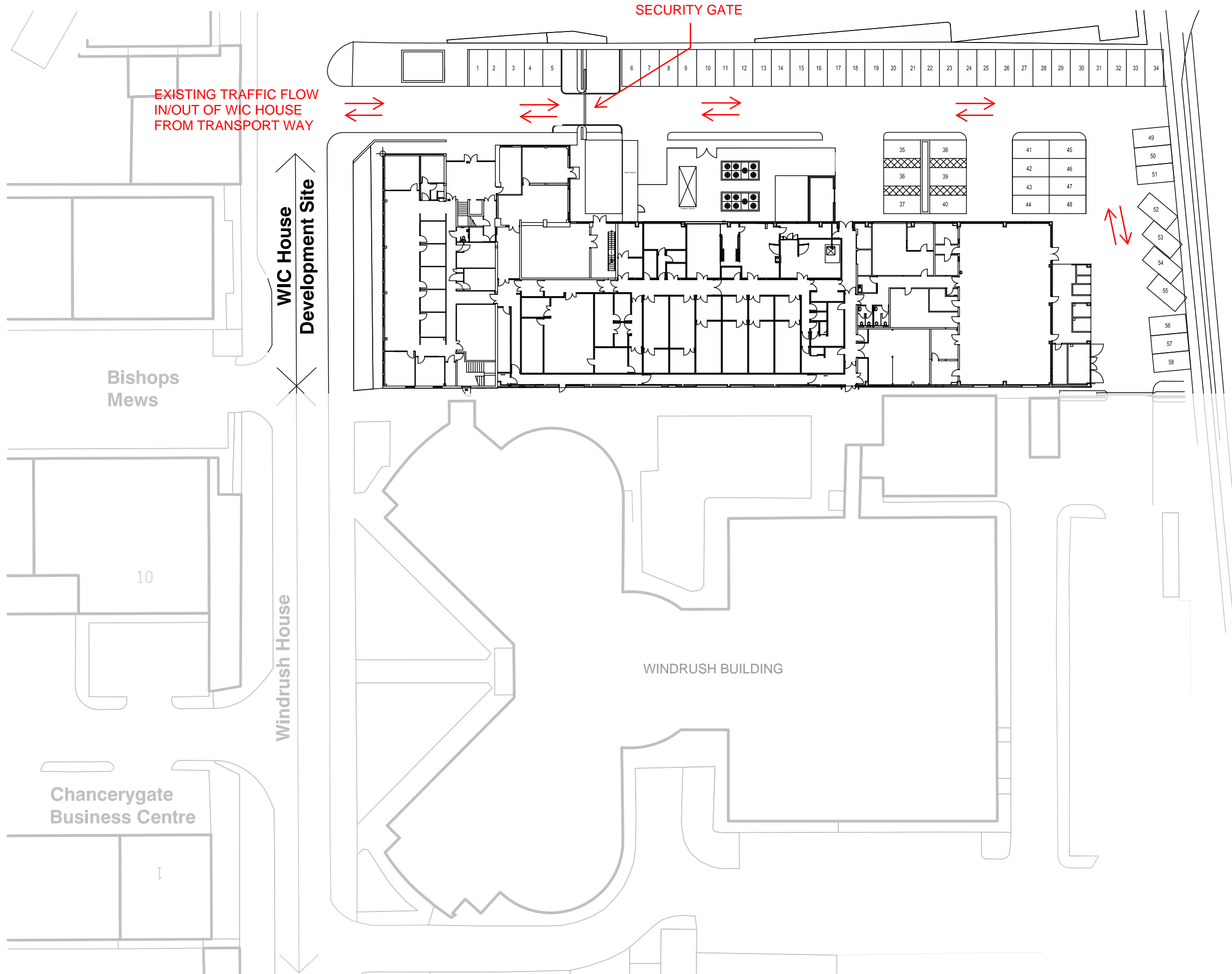
T-SQUARED	
WIC HOUSE DEVELOPMENT	

Proposed Site Plan	
09/01/20	@ A1
PS	MCA

7682-FDG-DR-A-081.00	
7682-FDG-DR-A-081.00	

FDG	
fulham design group	

Proposed Site Plan
1 : 200



T-SQUARED

T-SQUARED P4 Ltd
Dunston Innovation Centre
Dunston Road
Chesterfield
Derbyshire S41 8NG
T 01246 267 567
F 0141 557 5901
www.tsquared.co.uk

Client:



Project: [1024856]

WIC HOUSE- PREFEASIBILITY

Status:

PRELIMINARY CONCEPT

Drawing Title:

EXISTING SITE PLAN

Drawn By:

DC

Date:

31.01.2020

Checked By:

RB

Date:

31.01.2020

Scale:

1:500

Sheet Size:

A3

Drawing No:

PROJECT ORIGIN SERIES LEVEL TYPE ROLE NUMBER REV:
WIC - FDG - 02 - XX - DR - A - 0001 -



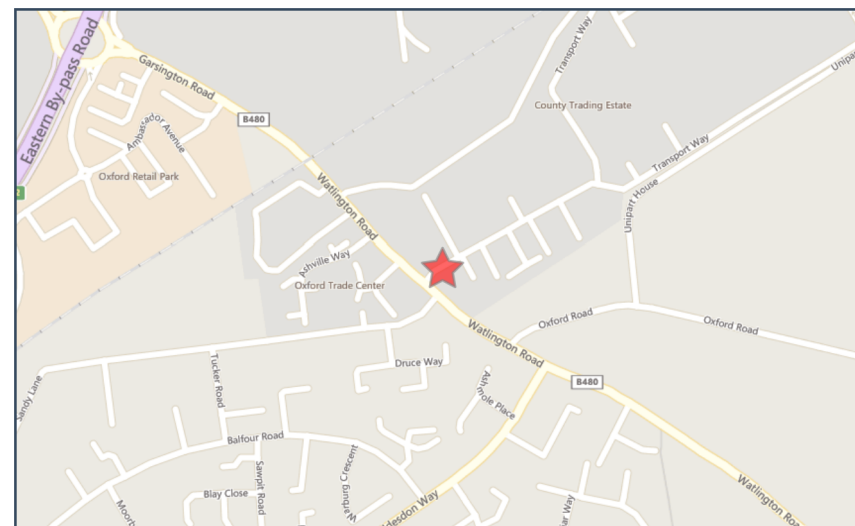
APPENDIX C

Crashmap report



Crash Date:	Tuesday, October 04, 2016	Time of Crash:	2:24:00 PM	Crash Reference:	2016430282338
--------------------	---------------------------	-----------------------	------------	-------------------------	----------------------

Road Number:	B480	Number of Casualties:	1
		Number of Vehicles:	2
		OS Grid Reference:	455616 203471



For more information about the data please visit: www.crashmap.co.uk/home/Faq
To subscribe to unlimited reports using CrashMap Pro visit www.crashmap.co.uk/Home/Premium_Services



No

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Manoeuvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Pedal cycle	-1	Male	21 - 25	Vehicle proceeding normally along the carriageway, not on a bend	Nearside	Other	None	None
2	Car (excluding private hire)	-1	Female	56 - 65	Vehicle is in the act of turning right	Front	Other	None	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Slight	Driver or rider	Male	21 - 25	Unknown or other	Unknown or other

For more information about the data please visit: www.crashmap.co.uk/home/Faq

To subscribe to unlimited reports using CrashMap Pro visit www.crashmap.co.uk/Home/Premium_Services



APPENDIX D

TRICS Data

Filtering Summary

Land Use	02/A	EMPLOYMENT/OFFICE
Selected Trip Rate Calculation Parameter Range	178-10000 sqm GFA	
Actual Trip Rate Calculation Parameter Range	1230-39230 sqm GFA	
Date Range	Minimum: 01/01/11	Maximum: 14/03/19
Parking Spaces Range	All Surveys Included	
Days of the week selected	Monday	3
	Tuesday	5
	Wednesday	1
	Thursday	2
Main Location Types selected	Edge of Town	11
Population <1 Mile ranges selected	1,001 to 5,000	3
	5,001 to 10,000	5
	10,001 to 15,000	2
	25,001 to 50,000	1
Population <5 Mile ranges selected	25,001 to 50,000	1
	75,001 to 100,000	2
	100,001 to 125,000	2
	125,001 to 250,000	4
	250,001 to 500,000	1
	500,001 or More	1
Car Ownership <5 Mile ranges selected	0.6 to 1.0	4
	1.1 to 1.5	5
	1.6 to 2.0	2
PTAL Rating	No PTAL Present	11

Calculation Reference: AUDIT-349901-191211-1248

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT
 Category : A - OFFICE

VEHICLESSelected regions and areas:

02	SOUTH EAST	
	HC HAMPSHIRE	1 days
	KC KENT	2 days
	SC SURREY	1 days
03	SOUTH WEST	
	WL WILTSHIRE	1 days
04	EAST ANGLIA	
	CA CAMBRIDGESHIRE	2 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	WY WEST YORKSHIRE	1 days
08	NORTH WEST	
	MS MERSEYSIDE	1 days
09	NORTH	
	DH DURHAM	2 days

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

Secondary Filtering 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: 1230 to 39230 (units: sqm)
 Range Selected by User: 178 to 10000 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/11 to 14/03/19

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	5 days
Wednesday	1 days
Thursday	2 days

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

Selected survey types:

Manual count	11 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 undertaken using machines.

Selected Locations:

Edge of Town 11

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:

Industrial Zone	2
Commercial Zone	5
Development Zone	1
Built-Up Zone	1
No Sub Category	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.

Secondary Filtering selection:Use Class:

B1	11 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:

1,001 to 5,000	3 days
5,001 to 10,000	5 days
10,001 to 15,000	2 days
25,001 to 50,000	1 days

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

Population within 5 miles:

25,001 to 50,000	1 days
75,001 to 100,000	2 days
100,001 to 125,000	2 days
125,001 to 250,000	4 days
250,001 to 500,000	1 days
500,001 or More	1 days

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

Car ownership within 5 miles:

0.6 to 1.0	4 days
1.1 to 1.5	5 days
1.6 to 2.0	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	4 days
No	7 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.

PTAL Rating:

No PTAL Present	11 days
-----------------	---------

This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

1	CA-02-A-04	OFFICE	CAMBRIDGESHIRE
	BRETTON WAY		
	PETERBOROUGH		
	Edge of Town		
	Commercial Zone		
	Total Gross floor area:	6483 sqm	
	Survey date: THURSDAY	20/10/11	Survey Type: MANUAL
2	CA-02-A-06	OFFICES	CAMBRIDGESHIRE
	LYNCH WOOD		
	PETERBOROUGH		
	Edge of Town		
	Commercial Zone		
	Total Gross floor area:	4040 sqm	
	Survey date: WEDNESDAY	19/10/16	Survey Type: MANUAL
3	DH-02-A-02	CONSTRUCTION COMPANY	DURHAM
	DURHAM ROAD		
	NEAR DURHAM		
	BOWBURN		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	2000 sqm	
	Survey date: TUESDAY	27/11/12	Survey Type: MANUAL
4	DH-02-A-03	ENGINEERING COMPANY	DURHAM
	ALDERMAN BEST WAY		
	DARLINGTON		
	Edge of Town		
	No Sub Category		
	Total Gross floor area:	3530 sqm	
	Survey date: THURSDAY	18/10/18	Survey Type: MANUAL
5	HC-02-A-11	DIY CO. HQ	HAMPSHIRE
	CHESTNUT AVENUE		
	CHANDLER'S FORD		
	Edge of Town		
	Commercial Zone		
	Total Gross floor area:	26100 sqm	
	Survey date: MONDAY	17/10/11	Survey Type: MANUAL
6	KC-02-A-07	KCC HIGHWAYS REG.	KENT
	KAVELIN WAY		
	ASHFORD		
	HENWOOD IND. ESTATE		
	Edge of Town		
	Commercial Zone		
	Total Gross floor area:	2525 sqm	
	Survey date: MONDAY	05/12/11	Survey Type: MANUAL
7	KC-02-A-08	KCC HIGHWAYS REG. OFFICE	KENT
	ST MICHAEL'S CLOSE		
	AYLESFORD		
	CLAY WOOD		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	3168 sqm	
	Survey date: MONDAY	28/11/11	Survey Type: MANUAL
8	MS-02-A-02	SCIENCE PARK OFFICES	MERSEYSIDE
	MOUNT PLEASANT		
	LIVERPOOL		
	Edge of Town		
	Built-Up Zone		
	Total Gross floor area:	11250 sqm	
	Survey date: TUESDAY	13/11/18	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

9	SC-02-A-16	BANK OF AMERICA	SURREY
	STANHOPE ROAD		
	CAMBERLEY		
	Edge of Town		
	Commercial Zone		
	Total Gross floor area:	39230 sqm	
	Survey date: TUESDAY	10/05/11	Survey Type: MANUAL
10	WL-02-A-01	PET INSURANCE COMPANY	WILTSHIRE
	THE CRESCENT		
	AMESBURY		
	SUNRISE WAY		
	Edge of Town		
	Development Zone		
	Total Gross floor area:	2500 sqm	
	Survey date: TUESDAY	18/09/18	Survey Type: MANUAL
11	WY-02-A-05	OFFICES	WEST YORKSHIRE
	PIONEER WAY		
	CASTLEFORD		
	WHITWOOD		
	Edge of Town		
	No Sub Category		
	Total Gross floor area:	1230 sqm	
	Survey date: TUESDAY	23/05/17	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

VEHICLES**Calculation factor: 100 sqm****BOLD print indicates peak (busiest) period**

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	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	11	9278	0.527	11	9278	0.068	11	9278	0.595
08:00 - 09:00	11	9278	1.379	11	9278	0.122	11	9278	1.501
09:00 - 10:00	11	9278	0.536	11	9278	0.107	11	9278	0.643
10:00 - 11:00	11	9278	0.185	11	9278	0.080	11	9278	0.265
11:00 - 12:00	11	9278	0.126	11	9278	0.092	11	9278	0.218
12:00 - 13:00	11	9278	0.165	11	9278	0.235	11	9278	0.400
13:00 - 14:00	11	9278	0.230	11	9278	0.189	11	9278	0.419
14:00 - 15:00	11	9278	0.158	11	9278	0.168	11	9278	0.326
15:00 - 16:00	11	9278	0.097	11	9278	0.232	11	9278	0.329
16:00 - 17:00	11	9278	0.093	11	9278	0.635	11	9278	0.728
17:00 - 18:00	11	9278	0.069	11	9278	1.277	11	9278	1.346
18:00 - 19:00	10	10083	0.048	10	10083	0.420	10	10083	0.468
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.613			3.625			7.238

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.

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Parameter summary

Trip rate parameter range selected:	1230 - 39230 (units: sqm)
Survey date date range:	01/01/11 - 14/03/19
Number of weekdays (Monday-Friday):	11
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	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 shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.