UCL

New Student Centre

Transport Statement

June 2015

[iceniprojects]

JUNE 2015

Transport Statement

Proposed New Student Centre, Gordon Street, London

ICENI PROJECTS LIMITED
ON BEHALF OF UNIVERSITY
COLLEGE LONDON (UCL)
ESTATES

Iceni Projects Limited on behalf of

University College London (UCL)

Estates

June 2015

Transport Statement
PROPOSED NEW STUDENT CENTRE, GORDON
STREET, LONDON

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APPENDICES

1. INTRODUCTION

1.1 Iceni Projects Ltd has been appointed by the University College London (UCL) to provide highways advice in regard to their development proposals at Gordon Street, London WC1 in the London Borough of Camden (LBC). A site location plan is included at Appendix A1.

1.2 UCL is seeking planning permission for a new student centre. The specific details of the planning application are for:

"the demolition of staircase structure and plant rooms, erection of a part 4, part 5 storey (plus two below ground floors) new build academic building (Use Class D1); the re-landscaping of the existing Japanese Garden to the rear; the provision of cycle parking; new vehicular and pedestrian access and associated works".

1.3 The New Student Centre will be located on a vacant site adjacent to the existing UCL Bloomsbury Theatre. The building will be Use Class D1 and will provide a mix of student-facing services with a wide range of social learning spaces. The building will accommodate existing students rather than additional students to the University.

1.4 The vacant site currently provides access for service vehicles associated with UCL's existing facilities to the rear of the application site.

1.5 Initial scoping discussions have been undertaken with Zoe Trower, Simi Shah and John Futcher at LBC in their role as the highway authority. The discussions sought to seek agreement on the contents of this Transport Statement (TS) and the relocation of the existing access and its resultant impact on the existing zebra crossing located Gordon Street. It was agreed that the relocation of the access would be acceptable assuming an alternative location for the zebra crossing was found. As such, a pedestrian movement survey was organised to understand the crossing movements and desire lines on Gordon Street. This informed the design decisions for both the access and zebra crossing relocations which have resulted in a design which has been agreed in principle subject to consultation. The relocation of the access and zebra crossing is discussed in further detail in Section 3 of this report and a copy of the scoping discussions is included at Appendix A2.

1.6 The methodology used in the preparation of this TS principally follows the Transport for London (TfL) 'Best Practice' guidance document dated April 2010. Consideration has also been given to the Department for Transport (DfT) 'Travel Plans, Transport Assessments and Statements in Decision-Taking' document dated March 2014.

1.7 The report is arranged as follows:

- Section 2 provides a description of the existing site conditions including site use, local highway network, existing levels of public transport provision, cycling and walking;
- Section 3 provides a description of the development proposals including servicing and refuse collection arrangements for the proposal;
- Section 4 provides an overview of the National and Local Transport Policies;
- Section 5 examines the travel habits of students and staff to and from the university.
- Section 6 provides a summary and draws conclusions.

1.8 The results of this assessment clearly demonstrates that the development will generate a negligible number of vehicle movements as the sustainable location combined with no car parking being provided would result in 99% sustainable movements of both staff and students.

2. THE SITE AND SURROUNDINGS

Site Location

2.1 The application property is located on the western side of Gordon Street within the Bloomsbury area of Camden, London.

2.2 The site is bounded to the north west by Bloomsbury Theatre, the north east by Gordon Street, the south east by residential properties and the south west by existing UCL buildings.

Site Description

2.3 The site is currently vacant, however, a dropped kerb access is provided from Gordon Street for service vehicles serving the various UCL buildings surrounding the site.

Existing Highway Network

2.4 Gordon Street is a two-way single carriageway road subject to a 30mph speed limit with a width ranging from approximately 8m to 10m. There are wide, well-lit footways between 3m and 4m wide on both sides of the road. A zebra crossing is located adjacent to the site (this is to be relocated and is discussed in greater detail in section 3) with an additional zebra crossing located to the north of the site. Signalised crossings are located at the junction with Euston Road. On-street parking is provided along much of Gordon Street to the north of the site, with resident permit holder only parking on the eastern side from Monday to Friday between 08:30 and 13:30 and pay at meter spaces on the western side from Monday to Friday between 08:30 and 18:30 and 08:30 to 13:30 on Saturdays.

2.5 Gordon Street links to Euston Road to the north and Gordon Square to the south.

2.6 Euston Road (A401) forms part of TfL's strategic road network and at its junction with Gordon Street is a dual carriageway functioning under a red route clearway traffic order. The road is well lit and has footways on either side with a minimum width of 2m. Euston Road also incorporates east and westbound bus lanes. The carriageway is subject to a 30mph speed limit and has traffic signals at various locations along its length.

2.7 Gordon Square is a single carriageway road subject to a 30mph speed limit with wide, well-lit footways on both sides. The majority on the road has on-street parking on both sides with similar restrictions to Gordon Street. Gordon Square is currently closed for general traffic and is being used for construction traffic only as we as pedestrian and cycle access. Gordon Square is due to reopen on 17th February 2016.

2.8 There are currently restrictions on parking and waiting for much of the local area. The site is located within the CA – E, Bloomsbury & Fitzrovia Controlled Parking Zone (CPZ) and as such the parking and waiting restrictions are as follows:

- No waiting Monday to Friday between 8:30am – 18:30pm & Saturday between 08:30 – 13:3pm

- No loading Monday to Friday 8:00am – 18:30pm

2.9 This site is conveniently located to allow existing staff, students, lecturers and future visitors various transport alternatives to the private car as it is in close proximity to both bus and rail corridors. London Euston Railway Station is a short walk to the north east and Euston Square underground station is to the north west. Additionally, the nearest bus stops are located at Euston Square station with several other stops located within 600m. There are wide, well lit footways between the site and bus stops, tube and train stations, providing safe and easy access for pedestrians.

Proposed and Committed Changes to the Highway Network

2.10 LBC are also looking at proposals to introduce two-way working on much of the highway network around the UCL Bloomsbury Campus including Gower Street. This is at an early stage and it is yet to be determined if this will come forward including what proportion of Gower Street will be made two-way. In addition to this LBC have recently approved the £42m 'West End Project'. This involves replacing the existing one-way system on Tottenham Court Road with two-way tree-lined streets, some protected cycle lanes and new public space. This is due to be completed by 2018 to coincide with the opening of Tottenham Court Road Cross Rail Station.

2.11 Should these proposals come forward they will benefit all pedestrians including staff/students utilising public transport to arrive/depart the site.

Walking

2.12 The pedestrian facilities in the vicinity of the site are good with wide well lit footways up to 4m in width which are of a level gradient and in a good state of repair.

2.13 There are two zebra crossings across Gordon Street, including one adjacent to the site and signal pedestrian crossings located at the junction with Euston Road which allow controlled and safe access on foot from the local stations and bus stops to the site entrance. Pedestrian guardrails, tactile paving and pedestrian refuges on the traffic islands are also provided at the junction crossing points.

Cycling

2.14 Whilst there is no cycle parking at the development site, there are currently a number of secure, covered cycle parking spaces located within the vicinity of the Bernard Katz Building. These spaces are accessed via the vehicular accesses on located on Gordon Street and Torrington Place.

2.15 The nearest dedicated on-carriageway cycle routes and advisory routes close to the site are identified on the Camden Cycling Campaign's website (http://maps.camdencyclists.org.uk/). Routes detailed on the site show that Route 6a of the London Cycle Network (LCN) runs past the site. This route runs from Highgate to Streatham across Central London. The route is signed advisory route with on-carriageway cycle priority measures at key highway junctions. Route 6a allows interconnection with wider LCN and National Cycle Network marked routes. A cycle route plan is shown at Appendix A3.

2.16 On 30th July 2010 the Santander Cycles Scheme, formally Barclays Cycles Scheme was launched to the public. The scheme, covering 100km² includes the City of London and parts of 11 London boroughs. There are a 173 cycle docks within a 400m walk of the site located at:

- Taviton Street – 30 docks
- Bedford Way – 23 docks
- Gower Place – 16 docks
- Endsleigh Gardens – 31 docks
- Malet Street – 49 docks
- Euston Road – 24 docks

2.17 Currently there are no proposals to provide Cycle Super Highways through LBC.

Public Transport

Public Transport Accessibility Levels (PTAL)

2.18 The levels of public transport services available to the site have been evaluated by TfL and it is considered to be located in an area of excellent accessibility, equivalent to a PTAL rating of 6b. The calculations are shown at Appendix A4.

Underground Services

2.19 London underground services are operated by TfL and there are a number of underground lines in close proximity to the site. The services include the Circle Line, Hammersmith & City, Metropolitan, Northern, Piccadilly, Central and Victoria. Underground trains operate frequently generally every 2 to 5 minutes throughout the day. Euston Square underground station is the closest station being some 360m from the site.

Rail Services

2.20 There are three main line rail stations close to the site, namely King's Cross, Euston and London St. Pancras International.

2.21 Kings Cross Station operates a range of intercity and suburban passenger rail services to destinations north of London, across Eastern England, Yorkshire, North East England and into Scotland. Adjacent to London King's Cross Station is London St. Pancras International, which accommodates Eurostar services, together with routes similar to King's Cross.

2.22 London Euston Station is ½ mile from Kings Cross St Pancras and is the southern terminus of the West Coast Main Line and is the main rail gateway from London to the West Midlands, the North West, North Wales and part of Scotland.

2.23 HS2 is a proposed high-speed rail link, which will connect London with Birmingham and destinations to the north. Current plans involve changes in the wider Euston area and construction of the new underground station (Euston) on the eastern side of Euston Road. This will also facilitate a partial pedestrianisation of Gordon Street from Endsleigh Gardens to Euston Road.

Bus Services

2.24 Bus services in London are operated by local bus operators on behalf of TfL. A range of bus stops serving various destinations across the city are located within 600m of the site. 21 services operate to a range of destinations, which includes over 215 buses per hour in the peak hours. These services are summarised in Table 2.1 overleaf with a routing plan shown at Appendix A5.

Table 2.1 Local Bus Frequency Table

Service	To/from	To/from	Average Peak Hour Frequency
8	Bow Church	Tottenham Court Road	10
10	Kings Cross	Hammersmith Bus Station	5
14	Putney Heath	Warren Street Station	12
18	Sudbury & Harrow Road Station	Euston Station	18
24	Grosvenor Road	Royal Free Hospital	10
27	Chiswick Business Park	Chalk Farm Morrisons	8
29	Lordship Lane	Trafalgar Square/Charing Cross Station	15
30	Portman Street/ Selfridges	St Mary Of Eton Church	8
55	Lea Bridge Road	Oxford Circus Station	9
59	Streatham Hill	King's Cross	10
68	West Norwood	Euston	9
73	London Victoria	Stoke Newington Common	18
88	Camden Gardens	Clapham Common Old Town	8
91	Crouch End	Trafalgar Square	9
98	Willesden Bus Garage	Russell Square Station	9
134	North Finchley	Tottenham Court Road Station	12
168	Hampstead Heath	Old Kent Road	9
205	Cleveland Terrace	Bow Bus Garage	8
253	Hackney	Euston	12
390	Canning Town Bus Station	London Chest Hospital	8
476	Northumberland Park	Euston	8
		Total number of services per peak hour	**215**

Summary

2.25 It has been shown that the site is located in a highly accessible location with good footway and cycle links and is close to frequent bus, underground and rail services, which supply good area coverage. TfL have confirmed that the site has a PTAL of 6b which equates to excellent accessibility.

2.26 In conclusion, the site provides opportunities to use modes other than the car and in particular will provide students, staff and visitors with the opportunity to use sustainable modes of travel including walking and cycling from the main campus. The site is located close to frequent bus and rail services, which provide linkages to local facilities. As such, the site is ideally located to take advantage of sustainable travel opportunities.

Pedestrian Environment Review System (PERS) Audit

2.27 A PERS audit was undertaken on Tuesday 15th October 2013 covering the routes to the national rail and underground stations north and south of the site. The scope of the audit was agreed with LBC.

2.28 Items that were reviewed in the assessment included links, crossings, public transport waiting areas (PTWA), and routes. There were no interchanges, PTWAs, Links or public spaces reviewed in the study area. A total of five routes and five crossings were reviewed.

2.29 The report, which is shown at Appendix A6, sets out the full results and analysis of the PERS Audit, however detailed below is a summary of the auditor's findings.

2.30 All features assessed were scored as green (positive overall) and therefore the results of the PERS audit indicates that the pedestrian environment around the site is generally of a good quality. This was reflected in green scores for the routes assessed.

2.31 There were some minor maintenance issues with minor cracks in the tactile paving in certain areas

2.32 All routes were generally litter free and clean except for gum residue and the occasional confectionary wrapper.

2.33 The crossings in the area are generally well maintained with no major issues highlighted by the audit. However all crossings would benefit from routine maintenance due to gum residue.

2.34 Gower Place would benefit from increased maintenance to remove trip hazards and repair the damaged tactile paving at the crossing. Additionally, a change in surface on the road at the crossing point would make the crossing safer for sensory impaired people and wheel chairs users.

2.35 The positive scores for the features assessed are reflected in green scores for the routes audited.

2.36 In conclusion, the pedestrian environment around the site was found to be positive overall, fairly well maintained and generally of good quality. Wide footways, good lighting and CCTV across all routes make for a safe environment. However, two scores reflect that some areas could be improved notably Gower Place and Gordon Street south east where increased maintenance would be beneficial with enhanced street cleaning to address seasonal foliage. On Gower Place areas of tactile paving is in need of being replaced to avoid the potential of trip hazards.

Highway Safety Assessment

2.37 In order to assess the safety of the existing highway network surrounding the application site, Personal Injury Accident (PIA) data has been obtained from TfL for the five year period up to the 31st December 2013. The area covered by the data including the full details of the accident data, is provided at Appendix A6.

2.38 Over the five years surveyed a total of 39 PIAs occurred. Of these, 34 resulted in slight injuries, 5 resulted in serious injuries and there were no fatalities. The number of accidents occurring each year ranged from 5 to 12 accidents per year, however, only 6 accidents occurred in the last year. The accident breakdown by severity is shown in Table 2.2.

Table 2.2 Severity of Accidents

Severity	2009	2010	2011	2012	2013	Total	Average
Fatal	0	0	0	0	0	0	0
Serious	1	2	1	0	1	5	0.2
Slight	7	6	11	5	5	34	6.8
Total	8	8	12	5	6	39	7.8

2.39 The percentage of people killed or seriously injured (KSI) represents 13% of incidents recorded in the study area. Based on the data contained in the DfT report 'Reported Road Casualties in Great Britain 2012', 13.6% of all PIAs occurring in Camden in 2012 resulted in KSIs. As such, the number of these incidents in the study area is slightly lower than the average for the borough. It should be noted, however, that the low number of accidents overall also inflates the proportion of KSIs occurring and that with only 5 serious accidents and no fatalities over 5 years it is considered that there is no cause for concern over the number of KSIs occurring.

2.40 Considering the main road types in the study area, the DfT report shows that for built-up 30mph road the percentage of KSIs nationally in 2012 was 11.6%. The proportion of KSIs in the study area is therefore slightly higher than the national average for roads of this type.

Vulnerable Road Users

2.41 Table 2.3 shows the annual breakdown of accidents involving more vulnerable road users. Over the five year period, 10 involved pedestrians, 13 accidents resulted in cyclists being injured, only 1 involved a child and no older people were injured. All of the above accidents were reported as slight except for 4 which resulted in serious injuries. Of the serious accidents, 2 involved pedal cycles and 2 involved a pedestrian. Only 2 accidents involving vulnerable road users occurred in the last 2 years.

Table 2.3 Injuries to Vulnerable Road Users

User	2009	2010	2011	2012	2013	Total	Average
Pedestrians	3	3	2	2	1	10	2.0
Cyclists	2	3	3	3	2	13	2.6
Children	0	0	1	0	0	1	1.0
Older People	0	0	0	0	0	0	0.0
Total People	5	6	6	5	3	25	5.0
Total Incidents	4	6	7	3	4	24	4.8

2.42 Consideration of the causes of serious accidents and accident involving a child are described in more detail below:

- Of the 2 pedestrians seriously injured, both were injured as a result of running out into the road into the path of an oncoming vehicle. The cause was deemed as the pedestrian not looking properly whilst crossing.
- Of the 2 cyclists seriously injured, both were as a result of a car turning into the path of the cyclist that was travelling down the nearside lane as the cars changed lanes. This was considered an error of judgement on the part of the car driver who failed to look properly;
- The accident involving a child was the result of the child failing down the stairs of a bus whilst in the process of alighting.

2.43 The remaining accidents that were deemed slight were either as a result of the driver/cyclist not looking properly whilst exercising a manoeuvre or the pedestrian failing to look properly whilst crossing the carriageway or crossing outside of the confines of the pedestrian facility. In summary, driver/pedestrian error was the main cause of accidents.

2.44 Referring again to the DfT report, the following comparisons can be made between the 2012 national data and the data for the study area:

- Pedestrians – 12.9% nationally, 25.6% in the study area;
- Cyclists – 9.8% nationally, 33.3% in the study area;
- Children – 8.8% nationally, 2.6% in the study area;
- Older people – 11.9% nationally, 0% in the study area; and
- Total – 43.54% nationally, 61.5% in the study area.

2.45 The proportion of vulnerable road users involved in accidents in the study area over the five year period surveyed is higher overall than the national average for 2012, however the proportions are inflated by the low number of accidents overall. It should be noted that only 1 child and no older people were injured. There is no reason to suggest that the proposed development will lead to an increase in injuries to any of these groups.

Accidents at Junctions

2.46 Of the 39 accidents recorded, all but 1 occurred at the junction to the north – Gordon Street/Euston Road signalised junction. Whilst this would appear a concentrated area the majority of accidents were as a result of human error and not deficiencies with the junction and pedestrian facilities.

Conclusions

2.47 PIA data has been obtained from TfL for the five year period up to 31st December 2013. The proportion of accidents resulting in casualties being killed or seriously injured was lower than the 2012 average for Camden and slightly higher than the average for the road types within the study area.

2.48 The proportion of accidents involving vulnerable road users (61.5%) was also higher than the national average for 2012 (43.5%), but again this is due to the low number of incidents overall. Only 1 child and no older people were injured.

2.49 All accident apart from one were concentrated at the Gordon Street/Euston Road junction with 38 accidents over the 5 years period. The average number of accidents per year (7.8) is low and would be unlikely to be exacerbated by the proposed development.

2.50 Given the low number of accidents recorded it is considered that the proposed development will not give rise to any unacceptable road safety issues within the area studied.

3. PROPOSED DEVELOPMENT AND DELIVERIES

3.1 A full description of the redevelopment scheme is contained in the supporting documents accompanying the planning application. The following description is relevant in transport terms.

3.2 UCL is seeking planning permission for the demolition of staircase structure and plant rooms, erection of a part 4, part 5 storey (plus two below ground floors) new build academic building (Use Class D1); the re-landscaping of the existing Japanese Garden to the rear; the provision of cycle parking; new vehicular and pedestrian access and associated works.

3.3 There will be no additional students or staff as a result of this development and as such there will be no additional impact on the public transport networks.

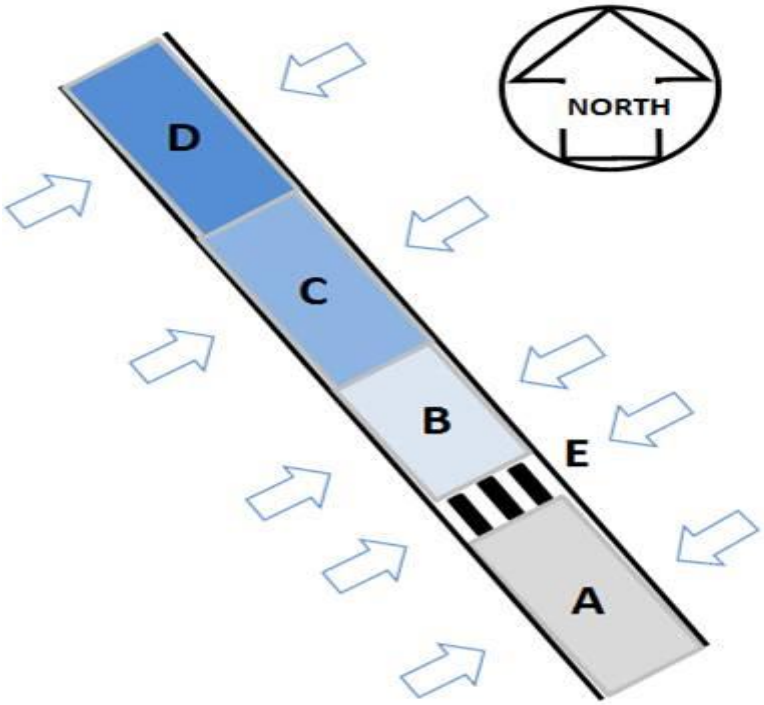
Vehicle Access

3.4 The vacant site currently provides access for pedestrians, service and emergency vehicles to the rear of the application site. This is to continue.

3.5 The existing access/egress is from Gordon Street and runs alongside the southern boundary of the Bloomsbury Theatre. The access then turns sharply to the left and travels south along the rear of the Bernard Katz Building. This provides both pedestrian access, via a segregated footway, and vehicular access. Vehicular access will be gated and managed by on-site security.

3.6 As part of the development, it is proposed to relocate this access approximately 15m towards the southern boundary of the site, with pedestrian access being provided directly into the new student centre. In order to accommodate the relocation of the access, the existing zebra crossing will need to be relocated slightly further north on Gordon Street, broadly in line with the existing site access.

3.7 To agree a suitable location for the zebra crossing, an on-site meeting was arranged with Zoe Trower of LBC highways on 13th September 2013. Whilst the potential to relocate the access was agreed, a pedestrian flow survey was requested to gain an understanding of pedestrian movements and desire lines to inform the optimal location for the relocated crossing. The survey, undertaken on 8th October 2013 and recorded the amount of pedestrians crossing Gordon Street within agreed zones north and south of the existing access. This 80m stretch of Gordon Street split into zones shown below.



- Zone A – Zebra crossing zig-zag markings (South)
- Zone B - Zebra crossing zig-zag markings (North)
- Zone C – 1st 20m section north of northern zig-zag markings
- Zone D – 2nd 20m section north of northern zig-zag markings
- Zone E – Zebra Crossing

3.8 Table 3.1 overleaf shows the peak hour results for the survey. It is clear that, within the vicinity of the site, a large amount of pedestrians (36%) do not use the zebra crossing to cross Gordon Street and of these pedestrians, 35% cross north of the zebra crossing. Of Zones A-D, Zone C was the busiest with 16% of all pedestrian movements and 44% of pedestrians who do not use the zebra crossing. As such, it was deemed that an optimal position for a relocated zebra crossing would be within Zone C. The full results of this survey are included at Appendix A8.

Table 3.1 Peak Hour Crossing Movements

Zone	Number Crossing West Bound	Number Crossing East Bound	Percentage Share (Including Zebra Crossing)	Percentage Share (Excluding Zebra Crossing)
D	16	1	14%	40%
C	63	57	16%	44%
B	180	207	5%	14%
E	206	144	64%	0%
A	910	658	1%	2%

3.9 At the request of LBC highways, further discussions was undertaken with Simi Shah and John Futcher in LBC's design team. Following these discussions it was agreed that two options would be provided for discussion which both showed the relocated zebra crossing.

3.10 Option 1 allowed for the existing access to be maintained whilst in use with the zebra located within the Zone C desire line. This option would also require the area of single yellow line that is sometimes used for loading for the theatre. It was agreed that this could be used and UCL would commit and manage all deliveries to the rear of the property.

3.11 Option 2 was located south of the proposed access within Zone A, however as the surveys show, the major footfall is to the north and as such, any zebra crossing in this location may be limited in its use.

3.12 Whilst option 1 was agreed to be the best solution, concerns were raised by the design team regarding the effect of the existing parking bays on pedestrian visibility. To address this concern, the build out on the eastern side of Gordon Street was increased which, whilst reducing the carriageway to 5.7m, allowed for pedestrian visibility to extend past the existing parking bays. Option 1 also allows for the existing zebra crossing to remain in use whilst the proposed crossing is being constructed. This ensures that pedestrians are always provided with controlled crossing within the vicinity of the university access.

3.13 The final design has been agreed in principle by the design team and will be subject to wider consultation and will take place parallel to the planning application process. This design and accompanying swept path analysis can be found at Appendix A9.

Pedestrian Access

3.14 The main pedestrian access to the new student centre will be located centrally on the eastern boundary. This access opens to the main entrance and stairs to the upper ground floor where the Japanese Garden is located. The Lower Refectory Route provides access to the new student centre, the Bloomsbury Theatre and provides access to the proposed cycle parking and main entrance areas. This entrance to the Lower Refectory Route is located in the south western corner of the lower ground floor and can be can be accessed via the proposed access road from Gordon Street. This makes it suitable for students with cycles or those travelling from the Bernard Katz Building.

Car Parking

3.15 UCL has a strict/managed policy with regard to car parking at all of their sites where spaces are available. However, no parking is to be provided at the development site.

Cycle Parking

3.16 Based on LBC Policy DP18, the following minimum standards apply:

- Staff – 1 space per 250m^2
- Student/Visitors – 1 space per 250m^2

3.17 Based on a GIA of 5838m², the minimum provision would be 47 spaces.

3.18 In order to encourage cycling to the site at total of 54 cycle parking spaces will be provided. These spaces will be provided within the proposed Refectory Route. The Refectory Route will be a high quality, well lit, uncover route beneath the proposed student centre. The Refectory Route can be accessed from within the student centre or from the proposed access road which runs from Gordon Street to the Bernard Katz Building.

3.19 Showers and lockers will be made available for staff and students. These facilities will be located on basement level 2.

3.20 In summary all cycle parking will be secure and covered and will be provided in accordance with the design principles for cycle parking as discussed within Camden Planning Guidance/Cycle Facilities (CPG7).

Deliveries & Refuse

3.21 All servicing, including refuse, will be undertaken from Gordon Street via the new access to the site.

3.22 In order to understand the current delivery movements to and from the site, a video survey was undertaken at the existing access to obtain full classified turning movements. The number of movements to the site is limited with seven and five two-way trips respectively during the peak hours which were identified as 09:30-10:30 and 14:00-15:00. Over the total 12 hour survey period, only 88 two-way vehicular trips where recorded, with the highest two-way flow over a 60-minute period throughout the day being seven vehicles.

3.23 It is not anticipated that these movements will change as a result of the redevelopment. In summary the site would generate approximately one vehicle movement every nine minutes which would not be discernible from daily fluctuations. The full results of this survey are attached at Appendix A10.

3.24 Refuse collection is undertaken by a private company. UCL fleet vehicles collect from the application site daily and transfer the waste to the main refuse and recycling collection points at both Mallet Place and Gower Place. This is then collected daily and taken off site.

Summary

3.25 The number of deliveries and arrangements will not change and have been shown to be fit for purpose and the site, as existing and proposed, will continue to have only a limited number of deliveries per day. Servicing will continue to be undertaken off-street, again in line with existing practice.

Fire Access

3.26 The proposed access has been designed to accommodate the vehicle dimensions stated in the London Fire Brigade's 'Fire Safety Guidance Note GN 29 Rev 9' document. Swept path analysis showing a Pumping Appliance (7.9m length) and Hydraulic Platform (11.33m length) entering and exiting the site in forward gear is included at Appendix A11.

Construction

3.27 A Construction Management Plan (CMP) will be provided, via the Section 106, which will set out the approach that will be taken to implement the works and the mitigation that will be put in place to reduce the impact of the works on the environment, neighbours and the surrounding area.

3.28 A number of aspects residents and local stakeholders may have concerns about are briefly covered below with further details contained within the CMP.

- Access and unloading arrangements for vehicles
- Proposed local routes of vehicles to and from the site
- Size of vehicles delivering to the site
- Working Hours
- Staff facilities
- Zebra Crossing Relocation
- Management of traffic to reduce congestion

3.29 Taking each point in turn:

Access and Unloading Arrangements for Vehicles

3.30 UCL has also committed to efficient management of deliveries and partnered with logistics provider that would deal with the day to day logistics operations. In tandem UCL has been granted a temporary closure of Gordon Square for a construction logistics compound. This compound ensures the safe and efficient delivery and storage of construction materials required for all of UCL's projects on the Campus. Once materials arrive at the Gordon Square compound, they are distributed to the respective construction sites.

3.31 All sub-contractors and suppliers will be required to give 48 hours notice of deliveries. A Road Marshal will control the movement of materials. He/she will be responsible for the co-ordination and control of all aspects of material deliveries and movement. Any vehicle arriving without notice will be turned away.

3.32 A strict delivery procedure will be implemented to ensure that Gordon Street and the surrounding area is not overrun with site and delivery vehicles. The road marshal will ensure that traffic flow is maintained at all times.

3.33 A tower crane will be provided to facilitate easy and quick unloading of delivery vehicles and all materials will be stored within the boundary of the site or external areas and brought to the site on request.

Proposed Local Routes of Vehicles to and from the Site.

3.34 Before commencing work on site the construction management team will agree details of the proposed routes for vehicles arriving and leaving the site with London Borough of Camden.

3.35 Details of the agreed routes will be issued to all suppliers and subcontractors.

3.36 Should there be the need to hold vehicles whilst awaiting unloading, the contractor and logistic team will agree a suitable location with the Police and Highways department.

3.37 No parking will be permitted on site and all subcontractors will be informed at the pre order meeting that the surrounding area is for residents and visitors parking only. All subcontractors will be encouraged to use public transport.

Size of Vehicles

3.38 Numerous types of delivery vehicles will be used to bring materials to and from the site. These include;

- Skip lorries - Approx size 7.5m long and 2.4m wide and
- Standard 8 yard skips for waste - Approx size 7.15m long and 2.4m wide
- Ready mix concrete lorries - Approx size 8.25m long and 2.45m wide
- Flatbed delivery vehicles - Approx size 8.5m long and 2.45m wide

3.39 The projected vehicle movements are likely to peak at 15 – 20 per day during the main contract works.

Working Hours

3.40 The working hours are in accordance with the established rules for working in residential areas. The site working hours will be;

- 0800 to 1800 hours weekdays.
- 0800 to 1300 hours on Saturdays.

3.41 Deliveries, where possible will be limited to 9.30 am - 3pm to avoid busy traffic times.

3.42 At the start of the project, letters will be sent to neighbours informing them of what will be happening and giving them a contact name and telephone number of the contractor.

3.43 Neighbours will be kept informed, in advance, of any unusual, unavoidable activities, such as large loads, early deliveries, noisy work, late or weekend working, etc.

Staff Facilities

3.44 UCL is undertaking a 10 year Transformation Programme of its existing estate in order to facilitate the success and growth of the University and enable its world class teaching and research programmes. As such, considerable construction works will be required during the renovation and redevelopment in and around the Bloomsbury campus.

3.45 UCL have identified a number of construction projects that are currently on-site or likely to commence during the next 5 years. Whilst some are minor refurbishment some include new infrastructure construction providers. Each individual provider will require separate contractors to undertake the required demolition and construction works, and to ensure the construction program does not undermine the quality of the teaching or the student experience at the university. As such, the intention is to provide a centralised construction welfare facility by refurbishing the existing building on Chenies Mews. This application will shortly be submitted to LBC and the intention is that it will be in place for construction staff working on the new student centre.

3.46 The proposed facility will include a self-service canteen, showers, changing and cloakroom area, site offices and meeting rooms for contractor management staff.

Zebra Crossing Relocation

3.47 As part of the development proposals, it is required to relocate the existing Zebra Crossing on Gordon Street. The proposed location allows for the existing crossing to remain operational during the construction of the proposed crossing. This has been discussed in further detail at paragraphs 3.4 - 3.13.

Management of Traffic to Reduce Congestion.

3.48 Subcontractors will be encouraged to use public transport to travel to the site. The site manager will also inform potential subcontractors that parking is very restricted in the local area and that residents parking bays are not to be used. Parking will be monitored, especially on neighbouring roads, to ensure off-site parking is dealt with considerately.

4. TRANSPORTATION POLICY

National and Local Policy

4.1 Section 38(6) of the planning and compulsory purchase act 2004 requires planning applications to be determined in accordance with the statutory Development Plan, unless material considerations indicate otherwise.

4.2 Relevant policy guidance relating to this area comprises the following documents:

- National Planning Policy Framework;
- National Planning Policy Guidance;
- The London Plan; and
- London Borough of Camden Core Strategy and Development Policies (DPD)

National Planning Policy Framework (NPPF) – March 2012

4.3 The National Planning Policy Framework (NPPF), which was adopted in March 2012, sets out the Government's planning policies for England and how these are expected to be applied. It provides a framework within which local people and their accountable councils can produce their own distinctive local and neighbourhood plans, which reflect the needs and priorities of their communities. As a result of this policy being adopted, all Planning Policy Guidance and Planning Policy Statements have been revoked, including PPG13 (Transport), which was formerly used as a basis for national transport policy. As such, any detailed policy guidance previously provided within PPG13 will no longer act as the default policy where no policy has been set by the local authority. All detailed transport policies will now be found within the Local Development Framework documents adopted by each local authority.

4.4 While no longer policy, there are two key aspects within PPG13 which are still of relevance when determining a site's level of sustainable travel access. Paragraph 74 states with regard to walking that:

"Walking is the most important mode of travel at the local level and offers the greatest potential to replace short car trips, particularly under two kilometres. Walking also forms an often forgotten part of all longer journeys by public transport and car."

4.5 Paragraph 77 goes on to state that:

"Cycling also has potential to substitute for short car trips, particularly those under five kilometres, and to form part of a longer journey by public transport"

4.6 It is considered that the walking and cycling distances referred to in PPG13 remain valid and should not be overlooked when determining the walking and cycling accessibility of development sites.

4.7 With regard to transport policy, the NPPF states in Paragraph 32 that:

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

4.8 Whilst the development will not generate significant amounts of traffic movements this Transport Statement has been provided.

4.9 Paragraphs 34 to 36 go on to say that:

"Plans and decisions should ensure developments that generate significant movement are located where the need to travel will be minimised and the use of sustainable transport modes can be maximised. However this needs to take account of policies set out elsewhere in this Framework, particularly in rural areas.

- Plans should protect and exploit opportunities for the use of sustainable transport modes for the movement of goods or people. Therefore, developments should be located and designed where practical to
- accommodate the efficient delivery of goods and supplies;
- give priority to pedestrian and cycle movements, and have access to high quality public transport facilities;
- create safe and secure layouts which minimise conflicts between traffic and cyclists or pedestrians, avoiding street clutter and where appropriate establishing home zones;
- incorporate facilities for charging plug-in and other ultra-low emission vehicles; and
- consider the needs of people with disabilities by all modes of transport.
- A key tool to facilitate this will be a Travel Plan. All developments which generate significant amounts of movement should be required to provide a Travel Plan."

4.10 The site is located in an area with excellent public transport accessibility providing opportunities for students to use modes other than the car.

4.11 The proposed application site conforms with the ideals of NPPF being well located to the existing pedestrian network linking with the surrounding area, providing access to education, leisure, shopping, healthcare and public transport facilities. The proposed application site is also well located to encourage cycle accessibility with a supply of cycle parking proposed based on LBC standards and 173 Santander Cycle docks spread across 6 docking stations within a 400m walk of the site.

4.12 Furthermore, the proposed development will not generate any additional vehicle movements associated with delivery and service vehicles and, as such, any impact on the surrounding highway network will be negligible.

National Planning Policy Guidance (NPPG) – March 2014

4.13 Information contained as part of the National Planning Policy Guidance (NPPG), provides advice for travel plans, transport assessments and statements in decision-taking.

> "Travel Plans, Transport Assessments and Statements are all ways of assessing and mitigating the negative transport impacts of development in order to promote sustainable development. They are required for all developments which generate significant amounts of movements."

4.14 This report follows the advice within the guidance and accords with providing the information which should be included as part of a Transport Statement.

4.15 A site specific Travel Plan will be provided and secured by condition or planning obligation.

4.16 The site is located in an area with public transport accessibility providing opportunities for students to use modes other than the car.

4.17 The proposed development conforms with the NPPF policies being well located to the existing public transport facilities. The proposed development site is also well located to encourage cycle accessibility being adjacent to and linking with rural roads suitable for cycling.

London Plan

4.18 The London Plan, which was formally adopted on 22nd July 2011, replaces the London Plan (consolidated with alterations since 2004), which was published in February 2008. However, on the 10th March 2015, the Mayor adopted the Further Alterations to the London Plan (FALP). As such, the FALP (the Mayor's spatial development strategy) forms part of the development plan for Greater London.

4.19 The Greater London Authority (GLA) Act 1999 requires that the London Plan deals only with matters that are of strategic importance to Greater London.

4.20 The Mayor will use the following criteria in developing sub regional development frameworks and when considering LDFs and planning applications referred to him:

- Ensuring that development occurs in locations that are currently, or are planned to be accessible by public transport, walking and cycling.
- Ensuring that development occurs in locations that are accessible to town centres, employment, housing, shops and services.
- Ensuring that development takes account of the capacity of existing or planned infrastructure including public transport, utilities and community infrastructure, such as schools and hospitals.

4.21 Given its Central London location and high PTAL rating, the site benefits from access to a wide range of frequent public transport. There will be no additional students or staff as a result of this development and as such there will be no additional impact on the public transport networks. As such, the proposal adheres to the above criteria.

4.22 The Mayor will work with TfL, the Strategic Rail Authority, the Government, Boroughs and other partners to ensure the integration of transport and development by:

- Encouraging patterns and forms of development that reduce the need to travel especially by car.

Camden Core Strategy and Development Policies

4.23 The Core Strategy aims to both address the existing deficiencies in transport in the Borough and to ensure that planned growth is supported by adequate transport infrastructure that promotes sustainable transport choices. The Development Policies DPD sets out a number of policies that are relevant to the proposals which are detailed below.

DP 17 – Walking, Cycling and Public Transport

4.24 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. Criteria relevant to the proposal are detailed below.

- (b) other features associated with pedestrian and cycling access to the development, where needed, for example seating for pedestrians, signage, high quality cycle parking, workplace showers and lockers;

4.25 The site is in a location with good walking facilities and is situated within easy walking distance of the main UCL campus where high quality safe and covered cycle parking is provided.

4.26 It goes on to state that the Council will resist development that would be dependent on travel by private motor vehicles. This site is located within a PTAL rating of 6b, i.e. excellent accessibility where the favoured travel mode is by sustainable methods. To clarify, no car parking will not be provided for students or staff.

DP 18 – Parking Standards and Limiting the Availability of Car Parking

4.27 The Council will seek to ensure that developments provide the minimum necessary car parking provision and states that development should comply with the Council's parking standards, as set out in Appendix 3 of the Development Policies.

4.28 No car parking will be provided in line with UCL policy. The site benefits from excellent public transport accessibility meaning that it is a suitable location for a car free development.

4.29 Cycle parking will be provided in excess of the minimum standards.

Summary

4.30 In terms of sustainability, it is clear that the site benefits from having excellent accessibility to existing bus, underground and railway services that provide access to Central London and the surrounding towns providing students and visitors with a realistic alternative to the private car.

4.31 The site benefits from good walking facilities and is located within easy walking distance of the other UCL facilities and services.

4.32 As such, the site location is considered to accord to the relevant National and Local Government Policy Guidelines in terms of being in a suitable location and accessible by modes other than the private car.

5. ENVIRONMENTAL RESEARCH SURVEY

5.1 The National Union of Students undertook an Environmental Research Survey at UCL in June 2012 to gain an understanding of the attitudes and behaviours of staff and students in relation to environmental issues. The survey included questions on travel to and from the university and the findings of this section are summarised below. A full summary of the results is included at Appendix A12.

Student Travel

5.2 Table 5.1 overleaf shows the travel habits of students attending UCL at the time of the survey. It is clear that a very small number of students travel to UCL by car with car drivers accounting for less than 1% of all trips spread across the various campuses. These trips are mainly to UCL satellite medical campuses and not to the main Bloomsbury campus. No parking will be available at the proposal site so to give an indication of the likely number of students travelling by each mode the car driver and car passenger proportions have been reassigned to all other modes.

5.3 Again it needs to be borne in mind that there will be no additional students or staff as a result of this development and as such there will be no additional impact on the public transport networks.

5.4 The survey shows that students already choose to travel to the university by sustainable modes of transport as 42% will walk, 33% will travel on the underground or train, 12% will take the bus and 11% will cycle.

Table 5.1 Student Travel Habits

Mode of Travel	Respondents	Percentage	Gordon Street Trips	Adjusted Trips	
A car or van as a driver	7	0.7%	8	0	0.0%
A car or van as a passenger	10	1.0%	11	0	0.0%
A motorbike, moped or scooter	4	0.4%	5	5	0.4%
A bicycle you own, borrow or hire (not from Barclays Cycle Hire Scheme)	95	9.2%	105	108	9.4%
A bicycle hired from the Barclays Cycle Scheme	16	1.6%	18	18	1.6%
Microscooter/board/blade	1	0.1%	1	1	0.1%
Walk	427	41.5%	475	483	42.2%
Bus	123	11.9%	136	138	12.1%
Underground	245	23.8%	272	277	24.2%
DLR	8	0.8%	9	9	0.8%
Riverboat	2	0.2%	2	2	0.2%
Tram	3	0.3%	3	3	0.3%
Overland trains	89	8.6%	98	101	8.8%

Note: Gordon Street trips based on 1144 students

Staff Travel

5.5 As with the students, Table 5.2 overleaf shows that the majority of staff travel by sustainable modes as only 3.1% drive to work. To reiterate, no parking will be available at the proposed facility and the mode share has been adjusted taking account of this. For staff, underground or train travel is the most popular mode accounting for 44% of trips. In addition to this, 33% will walk to work, 12% will travel by bus and 10% will cycle.

5.6 Given that the site has a PTAL of 6b and benefits from being close to a large number of bus (21 services), underground (7 lines) and overground (3 stations) services it is considered that the staff and students travelling to the site will not have a detrimental impact on the capacity of existing services as staff and students will not all be travelling at the same time and will arrive from different locations meaning they will be spread across all of the services available.

Table 5.2 Table 5.2 – Staff Travel Habits

Mode of Travel	Respondents	Percentage	Gordon Street Trips	Adjusted	
A car or van as a driver	42	3.1%	1	0	0.0%
A car or van as a passenger	31	2.3%	1	0	0.0%
A motorbike, moped or scooter	8	0.6%	0	0	0.6%
A bicycle you own, borrow or hire (not from Barclays Cycle Hire Scheme)	121	8.8%	4	4	9.3%
A bicycle hired from the Barclays Cycle Scheme	11	0.8%	0	0	0.8%
Microscooter/board/blade	0	0.0%	0	0	0.0%
Walk	422	30.8%	13	13	32.5%
Bus	161	11.8%	5	5	12.4%
Underground	314	22.9%	9	10	24.2%
DLR	6	0.4%	0	0	0.5%
Riverboat	2	0.1%	0	0	0.2%
Tram	0	0.0%	0	0	0.0%
Overland trains	252	18.4%	8	8	19.4%

Note: Gordon Street trips based on 41 staff

Summary

5.7 The survey data clearly shows that staff and students already choose to travel by sustainable modes of transport, with only 0.7% of students and 3.1% of staff driving to the site. Although the results are not specifically related to the buildings adjacent to the application site it is fair to assume that the travel habits shown are broadly similar across all campuses and UCL buildings.

5.8 The survey undertaken by UCL and the presence of an existing University Travel Plan shows that UCL have a commitment to understanding the environmental impact of staff and students in terms of travel choice and that given the restrictions on both students and staff parking, there is little benefit in altering the monitoring programme currently in place.

6. SUMMARY AND CONCLUSIONS

6.1 UCL is seeking planning permission for the demolition of staircase structure and plant rooms, erection of a part 4, part 5 storey (plus two below ground floors) new build academic building (Use Class D1); the re-landscaping of the existing Japanese Garden to the rear; the provision of cycle parking; new vehicular and pedestrian access and associated works.

6.2 The building will be Use Class D1 and will provide a mix of student-facing services with a wide range of social learning spaces. The building will accommodate existing students rather than additional students to the University.

6.3 In order to facilitate the new development the access will be relocated to the south of the site. The relocation of the access will also require the existing pedestrian crossing to be relocated slightly further north on Gordon Street, broadly in line with the existing site access. This design has been agreed in principle subject to consultation following discussions with LBC highways and design teams.

6.4 Servicing will take place via the new access in Gordon Street, which is in keeping with current practice where servicing is undertaken via the existing site access. Additionally, there will be no increase in vehicle movements as a result of this development. Deliveries to the site will be low in number and part of an existing journey undertaken between the UCL's buildings.

6.5 The site is in a highly sustainable location (PTAL 6b) with excellent public transport accessibility.

6.6 The site benefits from excellent pedestrian and cycle facilities in the locality providing opportunities for linked trips and multi-modal journeys.

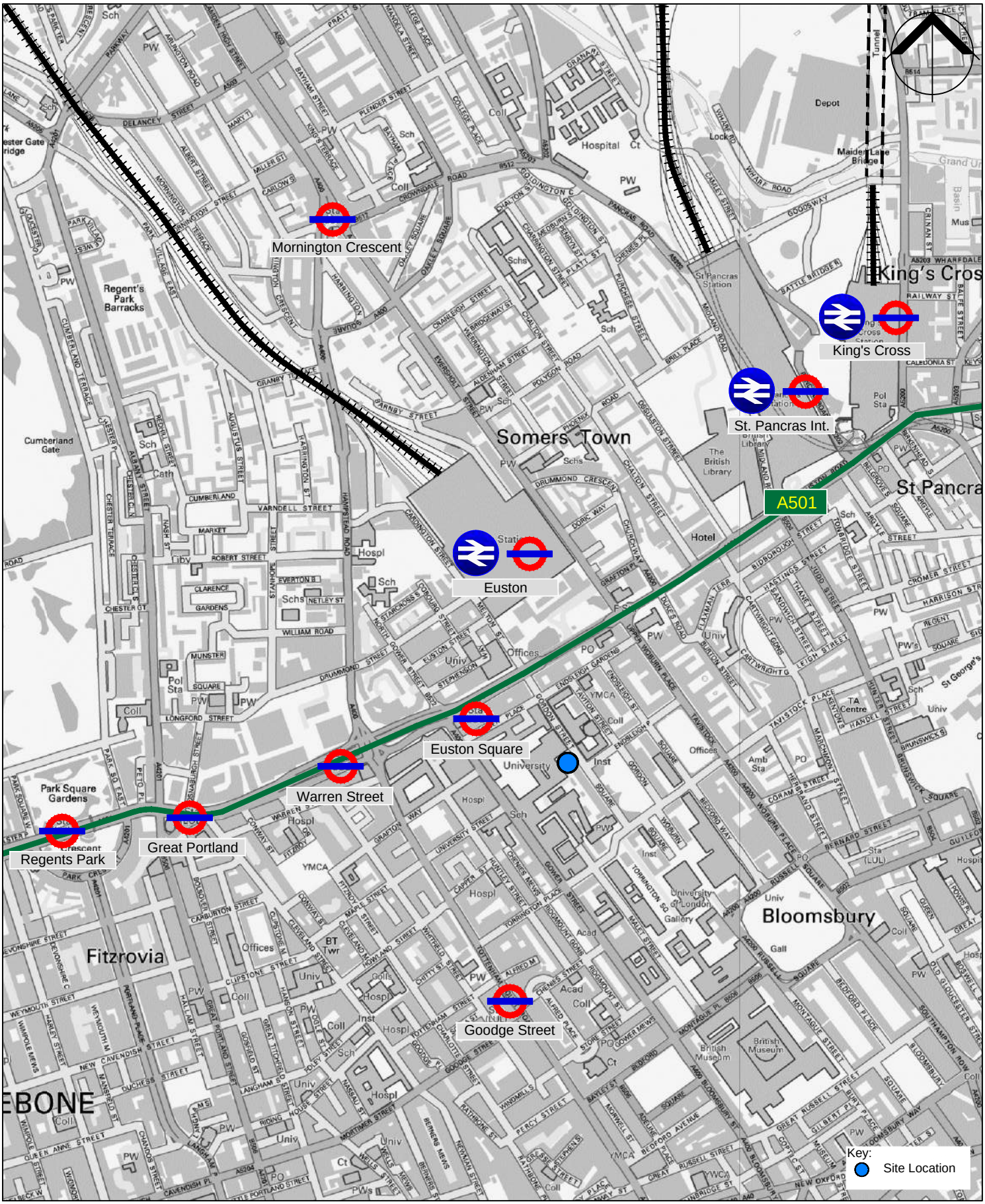
6.7 The majority of staff, students or visitors will travel to the site either by public transport, cycle or walking. There will be no additional students or staff as a result of this development and as such there will be no additional impact on the public transport networks.

6.8 No car parking will be provided in accordance with UCL policy.

6.9 A minimum of 46 spaces are required based on LBC policy DP18 standards. In order to encourage cycling to and from the site, a total of 58 spaces will be provided. Access to showers and lockers will also be made available to staff and students to further encourage cycling. All spaces will be secure and cover in line with LBC policy.

6.10 Given the commitment by the UCL to understanding the environmental impact at their sites and the fact that there is a University Travel Plan already in place (which is updated on a regular basis), along with the fact that no parking will be associated with the development, it is considered that there is no highway related reason why the development should not be granted planning consent.

A1. SITE LOCATION PLAN



Client	University College London (UCL) Estates	Project No. 13-T037	Drawing No. 08	
Project	UCL New Student Centre	Scale @ A4 NTS	Date 03/05/15	
Title	Site Location Plan	Drawn By AG	Checked By RB 03/05/15	Approved By FP 03/05/15

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A2. SCOPING

Mitchell Gregory

From: Fred Peters
Sent: 20 May 2015 09:25
To: Shah, Simi
Cc: Fletcher, Justine; Saville, Thomas; David Young; Simons, Tom (UK - London); Oliva, Leonie (UK - London); Mitchell Gregory; James Eades; Futcher, John; Maung, Richard (UK - London); Trower, Zoe; Sexton, Gavin; Mitchell Gregory; Ryan Broom
Subject: RE: Gordon Street Zebra Crossing Options
Attachments: 13-T037_06B.pdf; 13-T037_06B.zip

Hi Simi

Please find attached the final scheme as agreed in principle. I have attached the .dwg for your purposes and a PDF for the wider team's consideration. Tracking plans will form part of the Transport Statement.

I am preparing our report so thank you for conformation in regard to the statement for inclusion i.e. 'agreed in principle subject to consultation'.

Did you receive a response in regard to the funding? Gavin? If payment is required from UCL can you please let us know so we can get this to you asap.

Thank you kindly for your continued help on this.

Fred

Fred Peters
Iceni Projects Limited
D.D. 020 34354221
Mob. 07800902379

From: Shah, Simi [mailto:Simi.Shah@camden.gov.uk]
Sent: 18 May 2015 09:52
To: Fred Peters
Cc: Fletcher, Justine; Saville, Thomas; David Young; Simons, Tom (UK - London); Oliva, Leonie (UK - London); Mitchell Gregory; James Eades; Futcher, John; Maung, Richard (UK - London); Trower, Zoe; Sexton, Gavin
Subject: RE: Gordon Street Zebra Crossing Options

Fred,

I am happy with the design, but have just one comment on the detail, I would continue the radius out of the new entrance to meet the buildout so it's one continuous curve - you may need to widen the entrance slightly on curvature where it meets the road to ensure clear sweptpaths.

The next process would be for my team to draft the relevant dwg and letter and consult on this – the changes need to be advertised for three weeks following which a report would need to be produced to seek approval to proceed. The timescale for all this will be approx. 2 months.

Camden can start the consultation now/in advance of the application, but I am happy for you to state in your application that the crossing has been agreed in principle with Camden but subject to consultation.

For my team to consult on this, I need funding to undertake this work and a CAD drawing please. Gavin, does the funding aspect sit with you?

Regards

Simi

Simi Shah
Design Team Manager

Telephone: 020 7974 2066

From: Fred Peters [mailto:fpeters@iceniprojects.com]
Sent: 11 May 2015 16:32
To: Shah, Simi; Futcher, John
Cc: Fletcher, Justine; Saville, Thomas; David Young; Simons, Tom (UK - London); Oliva, Leonie (UK - London); Mitchell Gregory; James Eades; Maung, Richard (UK - London); Trower, Zoe; Sexton, Gavin
Subject: RE: Gordon Street Zebra Crossing Options

Simi

Please find attached road design which should now be agreed in principle as this picks up on your last comments and as you say is agreed by CCC. I have also attached the swept path for both the 8m & 12m fire tender's.

Clearly we want to make a start on the consultation process as soon as we can and would appreciate if you can advise on the procedure and timescales from start to finish.

Please do let me know if you need anything further and thank you kindly for your time.

Fred

Fred Peters MCIHT
Director, Transportation

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for the RTPI Planning Consultancy of the Year Award 2015.

From: Shah, Simi [mailto:Simi.Shah@camden.gov.uk]
Sent: 28 April 2015 11:18
To: Fred Peters
Subject: RE: Gordon Street Zebra Crossing Options

Hi Fred,

I have now heard back from CCC and they are fine with it as well so please proceed with the update to the design.

Regards

Simi

Simi Shah
Design Team Manager

Telephone: 020 7974 2066

From: Fred Peters [mailto:fpeters@iceniprojects.com]
Sent: 28 April 2015 09:16
To: Shah, Simi
Subject: RE: Gordon Street Zebra Crossing Options

Hi Simi

I know you said Monday so I thought I would give you a gentle reminder before I update the drawing for your final sign off.

My thanks

Fred Peters MCIHT
Director, Transportation

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Iceni Projects has been shortlisted for the RTPI Planning Consultancy of the Year Award 2015.

From: Shah, Simi [mailto:Simi.Shah@camden.gov.uk]
Sent: 24 April 2015 13:22
To: Fred Peters
Subject: RE: Gordon Street Zebra Crossing Options

Fred,

In principle it looks fine, although the road under 6m is slightly on the narrow side. One comment, I would continue the buildout and join up with the new site entrance.
As its on the cycle grid, I have to seek views from Camden Cyling Campaign which I will do now and let you know my final thoughts hopefully today, if not by Monday.

Regards

Simi

Simi Shah
Design Team Manager

Telephone: 020 7974 2066

From: Fred Peters [mailto:fpeters@iceniprojects.com]
Sent: 23 April 2015 13:20
To: Shah, Simi; Futcher, John
Cc: Fletcher, Justine; Saville, Thomas; David Young; Simons, Tom (UK - London); Oliva, Leonie (UK - London); Mitchell Gregory; James Eades; Maung, Richard (UK - London); Trower, Zoe; Sexton, Gavin
Subject: RE: Gordon Street Zebra Crossing Options

Hi Simi

Any update would be appreciated.

My thanks

Fred

Fred Peters MCIHT
Director, Transportation

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Iceni Projects has been shortlisted for the RTPI Planning Consultancy of the Year Award 2015.

From: Fred Peters
Sent: 21 April 2015 17:42
To: 'Shah, Simi'; Futcher, John
Cc: Fletcher, Justine; Saville, Thomas; David Young; Simons, Tom (UK - London); Oliva, Leonie (UK - London); Mitchell Gregory; James Eades; Maung, Richard (UK - London); Trower, Zoe; Sexton, Gavin
Subject: RE: Gordon Street Zebra Crossing Options

Hi Simi

Thank you for the chat earlier.

As discussed I would rather not interfere with the parking bays to the north but understand your concerns in regards to pedestrian sightlines. Clearly there is an option to remove one or two bays from each side but the simplest solution is to build out the footway on the site side. As such, please find attached drawing 13 – T097_06 which hopefully deals with all points.

Firstly you will see that we have brought out the footway on the site side via a build out. This allows us to 1) keep the zig-zags to two and 2) deals with the visibility issue. The result is that a pedestrian sight line would now be in line with the existing parking bays. You will note that the residual width of the carriageway outside of the build outs is 6.1m to the north and 5.7m to the south respectively which is more than enough to pass two vehicles.

I trust that this is a satisfactory solution for the access and zebra crossing to be relocated.

I know we have discussed this but for clarification to the wider team, UCL will manage deliveries to the theatre to the rear and the larger type vehicles you mentioned would be ad-hoc (yearly) an example being filming by the BCC at the university.

Any questions please ask and I look forward to your conformation that the design is acceptable as soon as possible so we can start the consultation process.

Thanks again Simi for your time.

Fred

Fred Peters MCIHT
Director, Transportation

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Iceni Projects has been shortlisted for the RTPI Planning Consultancy of the Year Award 2015.

From: Shah, Simi [mailto:Simi.Shah@camden.gov.uk]
Sent: 20 April 2015 09:48
To: Fred Peters; Futcher, John
Cc: Fletcher, Justine; Saville, Thomas; David Young; Simons, Tom (UK - London); Oliva, Leonie (UK - London); Mitchell Gregory; James Eades; Maung, Richard (UK - London); Trower, Zoe; Sexton, Gavin
Subject: RE: Gordon Street Zebra Crossing Options

Hi Fred,
Sorry just found this in my draft!!
I am aware that the regulations do allow for reducing the zig zags to 2 on exit; however this is to accommodate changes in highway layout and not to avoid taking out parking bays. The underlining issue is to ensure adequate sightlines especially here as pedestrian flow is very high; you may achieve this on the buildout side but I am not sure you can on the opposite side.

My suggestion of combining the two sections of single yellow line still stands as even if you don't need loading for the theatre, you will still need to retain the one in the middle for the university building; therefore why not combine them in one area. I understood that the theatre has very large lorries being used for props delivery, etc and they would need the space on the road to park; is this not the case? Can they get in the back?

Regards

Simi

Simi Shah
Design Team Manager

Telephone: 020 7974 2066

From: Fred Peters [mailto:fpeters@iceniprojects.com]
Sent: 25 March 2015 12:01
To: Shah, Simi; Futcher, John
Cc: Fletcher, Justine; Saville, Thomas; David Young; Simons, Tom (UK - London); Oliva, Leonie (UK - London); Mitchell Gregory; James Eades; Maung, Richard (UK - London); Trower, Zoe; Sexton, Gavin
Subject: RE: Gordon Street Zebra Crossing Options

Hi Simi

Thank you for your response.

We wasn't looking to reduce the parking on the north side if at all possible and have purposely shown shortened zigzags. We have taken guidance from 'The Zebra, Pelican and Puffin Pedestrian Crossings Regulations and general directions 1997' which states at Point 10.4.a 'the number of marks in any zig-zag line in that area may be reduced to not less than 2'. This guidance is replicated in the 'Department for Transport Traffic Signs Manual Chapter 5'. Additionally the proposed build out aids the sightlines.

In regards to the loading at the theatre we discussed at the meeting that there is an opportunity for deliveries to be undertaken at the rear of the property. UCL will manage this.

I would appreciate your thoughts as soon as you can as so we can agree a layout to be consulted on.

Thank you for your time and hopefully speak to you shortly.

Fred

Fred Peters MCIHT
Director, Transportation

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Available for both iPhone and Android.

From: Shah, Simi [mailto:Simi.Shah@camden.gov.uk]
Sent: 24 March 2015 10:01
To: Fred Peters; Futcher, John
Cc: Fletcher, Justine; Saville, Thomas; David Young; Simons, Tom (UK - London); Oliva, Leonie (UK - London); Mitchell Gregory; James Eades; Maung, Richard (UK - London); Trower, Zoe; Sexton, Gavin
Subject: RE: Gordon Street Zebra Crossing Options

Hi Fred, apologies for my late response.

In principle Option 1 seems to best solution as it is closer to where the students are crossing currently. However to provide sufficient sightlines, you need to extend the zig zags on the north side and indicate what loss in parking this would result in. In addition, the theatre would require loading space; my suggestion would be to remove the stretch of single yellow line outside no 17 and put all the parking bays adjacent to each other leaving a stretch of single yellow line after the zig zags.

This clearly will result in the loss of resident parking bays; if you haven't already done so , I would recommend occupancy survey for both p&d and resident bays.

Kind regards

Simi

Simi Shah
Design Team Manager
Transport Strategy Service
Culture and Environment
London Borough of Camden

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From: Fred Peters [mailto:fpeters@iceniprojects.com]
Sent: 27 February 2015 14:50
To: Futcher, John; Shah, Simi
Cc: Fletcher, Justine; Saville, Thomas; David Young; Simons, Tom (UK - London); Oliva, Leonie (UK - London); Mitchell Gregory; James Eades; Maung, Richard (UK - London); Trower, Zoe; Sexton, Gavin
Subject: Gordon Street Zebra Crossing Options

John/Simi I trust you are both well.

Please see attached two options for your comment/consideration.

Option 1, this is our preference for two reasons 1) the existing access can be maintained whilst in use and 2) the surveys show that any crossing in the location is on the desire line for the proposed entrance. We have also shown an extension north of the build out opposite as existing. Option 1 would also require the area of single yellow line that is sometimes used for loading for the theatre. UCL would manage deliveries to the rear of the property.

Option 2, is south of the proposed access but the surveys show the major footfall is north of this location so it may be limited in its use.

You will see that we have raised the crossings in each option but not to the extent we discussed. This is because any crossing needs to be centrally located within the raised area as set out in regulation 4 of the Highways (Road Humps) Regulations 1999. This would not be possible in option 1 without impacting on the existing parking to the north. The same for option 2, with the added complication as to where you cease the raised area given the solo motorcycle parking on Gordon Street and existing parking on Endsleigh Place. I would like your comments on this before I provide the final preferred version.

Any questions please ask and I look forward to your comments as soon as possible so we can start the consultation process.

Fred

Fred Peters MCIHT
Director, Transportation

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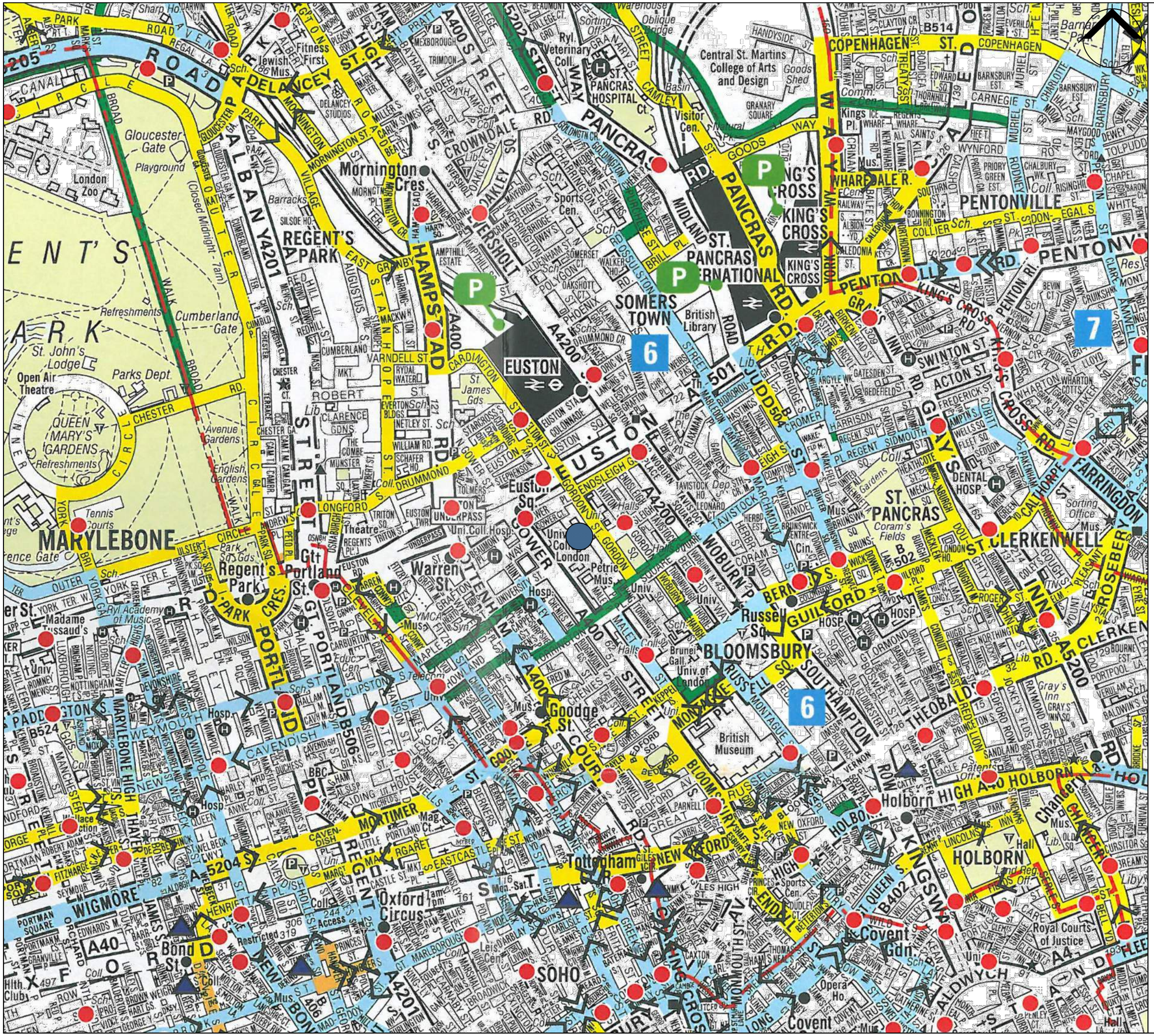
[iceniprojects]

Flitcroft House
114-116 Charing Cross Road
London WC2H 0JR

From: Fred Peters
Sent: 24 February 2015 18:05
To: James Eades; 'Maung, Richard (UK - London)'
Cc: Fletcher, Justine; Saville, Thomas; David Young; Simons, Tom (UK - London); Oliva, Leonie (UK - London); Mitchell Gregory
Subject: FW: Gordon Street

A3. CYCLE ROUTE PLAN



Notes;
This map is taken from TfL's Local Cycling Guide 4 published in April 2012. For up-to-date cycle route information visit www.tfl.gov.uk

Key;

- Cycle Superhighways (CS7)
- Routes signed or marked for use. use by cyclists on a mixture of quiet or busier roads.
- Quieter roads that have been recommended by other cyclists, may connect to other route sections.
- Off-road routes: either alongside roads, through parks, or along towpaths.Some routes may not be available or suitable for use at night.
- Pedestrian only route which connects cycling sections - you must dismount as cycling is not permitted at any time.
- Cycle hire docking stations
- 9 London Cycle Network routes
- 1 Nation Cycle Network routes
- Site Location

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Client
University College London (UCL) Estates

Project
UCL New Student Centre

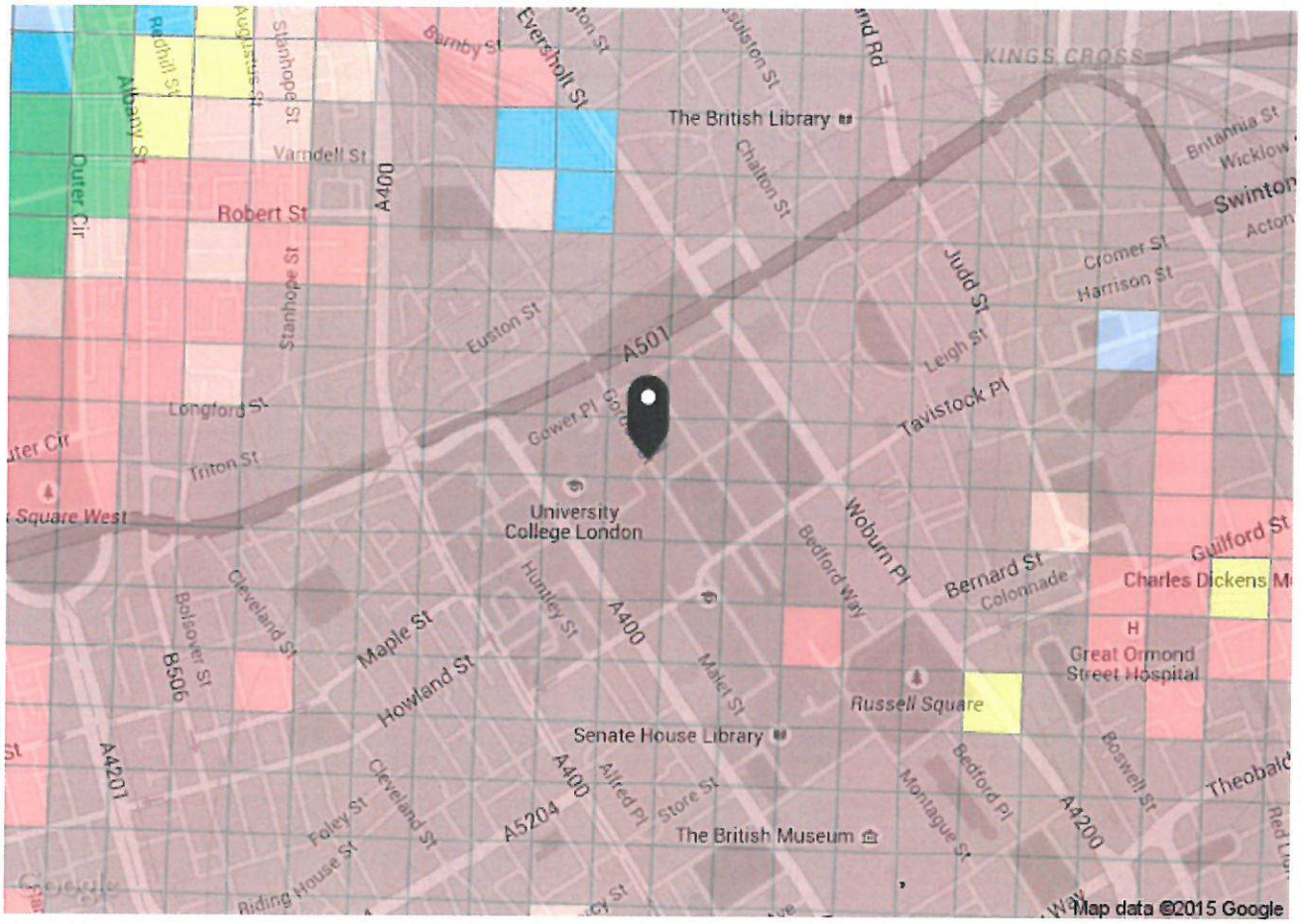
Title
Cycle Route Plan

Drawn By	Checked By	Approved By
AG	RB 03/05/15	FP 03/05/15

Scale @ A3	Date	
NTS	03/05/15	
Project No. 13-T037	Drawing No. 09	Rev. -

A4. PTAL CALCULATIONS

TRANSPORT FOR LONDON



PTAL output for 2011 (Base year)

6b

Easting: 529669, Northing: 182319

Grid Cell: 89895

Report generated: 13/05/2015

Map key - PTAL

0 (Worst)	1a
1b	2
3	4
5	6a
6b (Best)	

Map layers

PTAL (cell size: 100m)

Calculation Parameters

Day of Week	M-F
Time Period	AM Peak
Walk Speed	4.8 kph
Bus Node Max. Walk Access Time (mins)	8
Bus Reliability Factor	2.0
LU Station Max. Walk Access Time (mins)	12
LU Reliability Factor	0.75
National Rail Station Max. Walk Access Time (mins)	12
National Rail Reliability Factor	0.75

Calculation data

Mode	Stop	Route	Distance (metres)	Frequency(vph)	Walk Time (mins)	SWT (mins)	TAT (mins)	EDF	Weight	AI
Bus	WARREN STREET STATION	27	529.97	8	6.62	5.75	12.37	2.42	0.5	1.21
Bus	WARREN STREET STATION	88	529.97	8	6.62	5.75	12.37	2.42	0.5	1.21
Bus	GOWER ST UNIVERSITY COLL	24	446.47	10	5.58	5	10.58	2.84	0.5	1.42
Bus	GOWER ST UNIVERSITY COLL	134	446.47	12	5.58	4.5	10.08	2.98	0.5	1.49
Bus	GOWER ST UNIVERSITY COLL	29	446.47	15	5.58	4	9.58	3.13	0.5	1.57
Bus	HYG & TROP MEDICINE SCHL	8	622.84	10	7.79	5	12.79	2.35	0.5	1.17
Bus	HYG & TROP MEDICINE SCHL	55	622.84	9	7.79	5.33	13.12	2.29	0.5	1.14
Bus	HYG & TROP MEDICINE SCHL	98	622.84	9	7.79	5.33	13.12	2.29	0.5	1.14
Bus	HYG & TROP MEDICINE SCHL	25	622.84	8	7.79	5.75	13.54	2.22	0.5	1.11
Bus	EUSTON SQUARE STATION	18	267.73	18	3.35	3.67	7.01	4.28	1	4.28
Bus	EUSTON SQUARE STATION	10	267.73	4.5	3.35	8.67	12.01	2.5	0.5	1.25
Bus	EUSTON SQUARE STATION	390	267.73	8	3.35	5.75	9.1	3.3	0.5	1.65
Bus	EUSTON SQUARE STATION	30	267.73	7.5	3.35	6	9.35	3.21	0.5	1.6
Bus	EUSTON SQUARE STATION	73	267.73	18	3.35	3.67	7.01	4.28	0.5	2.14
Bus	EUSTON SQUARE STATION	205	267.73	8	3.35	5.75	9.1	3.3	0.5	1.65
Bus	WARREN STREET STATION UCL STAND	14	422.32	12	5.28	4.5	9.78	3.07	0.5	1.53
Bus	EUSTON BUS STATION	253	350.05	12	4.38	4.5	8.88	3.38	0.5	1.69
Bus	EUSTON BUS STATION	476	350.05	7.5	4.38	6	10.38	2.89	0.5	1.45
Bus	UPPER WOBURN PLACE	59	330.96	10	4.14	5	9.14	3.28	0.5	1.64
Bus	UPPER WOBURN PLACE	68	330.96	9	4.14	5.33	9.47	3.17	0.5	1.58
Bus	UPPER WOBURN PLACE	91	330.96	9	4.14	5.33	9.47	3.17	0.5	1.58
Bus	UPPER WOBURN PLACE	168	330.96	9	4.14	5.33	9.47	3.17	0.5	1.58
Rail	St Pancras	'STPANC-CTRLINT'	922.13	0.67	11.53	46.78	58.3	0.51	0.5	0.26
Rail	St Pancras	'STPANC-CTRLINT'	922.13	1	11.53	32	43.53	0.69	0.5	0.34
Rail	St Pancras	'STPANC-CTRLINT'	922.13	0.33	11.53	92.91	104.44	0.29	0.5	0.14
Rail	St Pancras	'CTRLINT-STPANC'	922.13	1.33	11.53	24.56	36.08	0.83	0.5	0.42
Rail	St Pancras	'CTRLINT-STPANC'	922.13	0.33	11.53	92.91	104.44	0.29	0.5	0.14
Rail	St Pancras	'NTNG-STPX 1B09'	922.13	0.33	11.53	92.91	104.44	0.29	0.5	0.14
Rail	St Pancras	'NTNG-STPX 1B12'	922.13	0.67	11.53	46.78	58.3	0.51	0.5	0.26
Rail	St Pancras	'NTNG-STPX 1B16'	922.13	0.33	11.53	92.91	104.44	0.29	0.5	0.14
Rail	St Pancras	'NTNG-STPX 1B18'	922.13	0.33	11.53	92.91	104.44	0.29	0.5	0.14
Rail	St Pancras	'DRBY-STPX 1C06'	922.13	0.33	11.53	92.91	104.44	0.29	0.5	0.14
Rail	St Pancras	'SHEFFLD-STPX 1C11'	922.13	0.33	11.53	92.91	104.44	0.29	0.5	0.14
Rail	St Pancras	'SHEFFLD-STPX 1C93'	922.13	0.33	11.53	92.91	104.44	0.29	0.5	0.14
Rail	St Pancras	'LEEDS-STPX 1C15'	922.13	0.33	11.53	92.91	104.44	0.29	0.5	0.14
Rail	St Pancras	'SHEFFLD-STPX 1C17'	922.13	0.67	11.53	46.78	58.3	0.51	0.5	0.26
Rail	St Pancras	'DRBY-STPX 1C92'	922.13	0.33	11.53	92.91	104.44	0.29	0.5	0.14
Rail	St Pancras	'STPX-NTNG 1D07'	922.13	0.33	11.53	92.91	104.44	0.29	0.5	0.14
Rail	St Pancras	'STPX-NTNG 1D09'	922.13	1	11.53	32	43.53	0.69	0.5	0.34
Rail	St Pancras	'STPX-NTNG 1D12'	922.13	0.67	11.53	46.78	58.3	0.51	0.5	0.26
Rail	St Pancras	'STPX-SHEFFLD 1F08'	922.13	2	11.53	17	28.53	1.05	0.5	0.53
Rail	St Pancras	'STPX-CORBY 1M11'	922.13	0.67	11.53	46.78	58.3	0.51	0.5	0.26
Rail	St Pancras	'MLTNSDG-STPX 1P10'	922.13	0.33	11.53	92.91	104.44	0.29	0.5	0.14
Rail	St Pancras	'BEDFDM-SVNOAKS 1E62'	922.13	0.33	11.53	92.91	104.44	0.29	0.5	0.14
Rail	St Pancras	'BEDFDM-BROMLYS 1E83'	922.13	0.33	11.53	92.91	104.44	0.29	0.5	0.14
Rail	St Pancras	'BEDFDM-ORPNGTN 1L60'	922.13	0.33	11.53	92.91	104.44	0.29	0.5	0.14
Rail	St Pancras	'BEDFDM-SUTTON 1O13'	922.13	0.33	11.53	92.91	104.44	0.29	0.5	0.14
Rail	St Pancras	'BEDFDM-KENTHOS 1S85'	922.13	0.33	11.53	92.91	104.44	0.29	0.5	0.14
Rail	St Pancras	'BEDFDM-BRGHTN 1T11'	922.13	0.33	11.53	92.91	104.44	0.29	0.5	0.14
Rail	St Pancras	'BEDFDM-BRGHTN 1T15'	922.13	0.67	11.53	46.78	58.3	0.51	0.5	0.26
Rail	St Pancras	'BRGHTN-BEDFDM 1T83'	922.13	0.33	11.53	92.91	104.44	0.29	0.5	0.14
Rail	St Pancras	'BEDFDM-SUTTON 1V23'	922.13	0.33	11.53	92.91	104.44	0.29	0.5	0.14
Rail	St Pancras	'BEDFDM-SUTTON 1V82'	922.13	0.33	11.53	92.91	104.44	0.29	0.5	0.14
Rail	St Pancras	'BRGHTN-BEDFDM 1W06'	922.13	0.33	11.53	92.91	104.44	0.29	0.5	0.14
Rail	St Pancras	'BRGHTN-BEDFDM 1W81'	922.13	0.33	11.53	92.91	104.44	0.29	0.5	0.14
Rail	St Pancras	'BEDFDM-BRGHTN 1W84'	922.13	0.33	11.53	92.91	104.44	0.29	0.5	0.14
Rail	St Pancras	'BEDFDM-BRGHTN 1W86'	922.13	0.33	11.53	92.91	104.44	0.29	0.5	0.14
Rail	St Pancras	'STALBCY-SVNOAKS 2E11'	922.13	1	11.53	32	43.53	0.69	0.5	0.34

Mode	Stop	Route	Distance (metres)	Frequency(vph)	Walk Time (mins)	SWT (mins)	TAT (mins)	EDF	Weight	AI
Rail	St Pancras	'BEDFDM-SVNOAKS 2E19'	922.13	0.33	11.53	92.91	104.44	0.29	0.5	0.14
Rail	St Pancras	'LUTON-SVNOAKS 2E21'	922.13	0.33	11.53	92.91	104.44	0.29	0.5	0.14
Rail	St Pancras	'STALBCY-SVNOAKS 2E95'	922.13	0.33	11.53	92.91	104.44	0.29	0.5	0.14
Rail	St Pancras	'SUTTON-LUTON 2O00'	922.13	0.33	11.53	92.91	104.44	0.29	0.5	0.14
Rail	St Pancras	'SUTTON-BEDFDM 2O04'	922.13	0.33	11.53	92.91	104.44	0.29	0.5	0.14
Rail	St Pancras	'SUTTON-STALBCY 2O06'	922.13	0.33	11.53	92.91	104.44	0.29	0.5	0.14
Rail	St Pancras	'SUTTON-LUTON 2O10'	922.13	1	11.53	32	43.53	0.69	0.5	0.34
Rail	St Pancras	'LUTON-SUTTON 2O17'	922.13	0.67	11.53	46.78	58.3	0.51	0.5	0.26
Rail	St Pancras	'STALBCY-SUTTON 2O21'	922.13	0.33	11.53	92.91	104.44	0.29	0.5	0.14
Rail	St Pancras	'STALBCY-SUTTON 2O29'	922.13	0.67	11.53	46.78	58.3	0.51	0.5	0.26
Rail	St Pancras	'LUTON-BCKNHMJ 2S91'	922.13	0.33	11.53	92.91	104.44	0.29	0.5	0.14
Rail	St Pancras	'STALBCY-BROMLYS 2S93'	922.13	0.33	11.53	92.91	104.44	0.29	0.5	0.14
Rail	St Pancras	'BRGHTN-BEDFDM 2T02'	922.13	0.33	11.53	92.91	104.44	0.29	0.5	0.14
Rail	St Pancras	'BRGHTN-BEDFDM 2T04'	922.13	0.33	11.53	92.91	104.44	0.29	0.5	0.14
Rail	St Pancras	'BEDFDM-BRGHTN 2T15'	922.13	1	11.53	32	43.53	0.69	0.5	0.34
Rail	St Pancras	'BEDFDM-BRGHTN 2T25'	922.13	0.33	11.53	92.91	104.44	0.29	0.5	0.14
Rail	St Pancras	'BRGHTN-LUTON 2T99'	922.13	0.33	11.53	92.91	104.44	0.29	0.5	0.14
Rail	St Pancras	'SUTTON-STALBCY 2V02'	922.13	0.33	11.53	92.91	104.44	0.29	0.5	0.14
Rail	St Pancras	'SUTTON-STALBCY 2V08'	922.13	0.67	11.53	46.78	58.3	0.51	0.5	0.26
Rail	St Pancras	'BEDFDM-SUTTON 2V15'	922.13	0.33	11.53	92.91	104.44	0.29	0.5	0.14
Rail	St Pancras	'SUTTON-BEDFDM 2V16'	922.13	0.33	11.53	92.91	104.44	0.29	0.5	0.14
Rail	St Pancras	'LUTON-SUTTON 2V19'	922.13	0.33	11.53	92.91	104.44	0.29	0.5	0.14
Rail	St Pancras	'SUTTON-KNTSHTN 2V20'	922.13	0.33	11.53	92.91	104.44	0.29	0.5	0.14
Rail	St Pancras	'STALBCY-SUTTON 2V27'	922.13	0.33	11.53	92.91	104.44	0.29	0.5	0.14
Rail	St Pancras	'LUTON-SUTTON 2V31'	922.13	0.33	11.53	92.91	104.44	0.29	0.5	0.14
Rail	St Pancras	'BRGHTN-BEDFDM 2W08'	922.13	0.33	11.53	92.91	104.44	0.29	0.5	0.14
Rail	St Pancras	'BRGHTN-BEDFDM 2W12'	922.13	0.33	11.53	92.91	104.44	0.29	0.5	0.14
Rail	St Pancras	'BRGHTN-BEDFDM 2W16'	922.13	0.33	11.53	92.91	104.44	0.29	0.5	0.14
Rail	St Pancras	'ASHFKY-BEDFDM 1E61'	922.13	0.33	11.53	92.91	104.44	0.29	0.5	0.14
Rail	St Pancras	'ASHFKY-BEDFDM 1E63'	922.13	0.33	11.53	92.91	104.44	0.29	0.5	0.14
Rail	St Pancras	'RCHT-BEDFDM 1E67'	922.13	0.33	11.53	92.91	104.44	0.29	0.5	0.14
Rail	St Pancras	'SVNOAKS-BEDFDM 1E69'	922.13	0.33	11.53	92.91	104.44	0.29	0.5	0.14
Rail	St Pancras	'BROMLYS-BEDFDM 1E82'	922.13	0.33	11.53	92.91	104.44	0.29	0.5	0.14
Rail	St Pancras	'BCKNHMJ-BEDFDM 1G65'	922.13	0.33	11.53	92.91	104.44	0.29	0.5	0.14
Rail	St Pancras	'KENTHOS-BEDFDM 1G71'	922.13	0.33	11.53	92.91	104.44	0.29	0.5	0.14
Rail	St Pancras	'ORPNGTN-STALBCY 2D93'	922.13	0.33	11.53	92.91	104.44	0.29	0.5	0.14
Rail	St Pancras	'ORPNGTN-LUTON 2D95'	922.13	0.33	11.53	92.91	104.44	0.29	0.5	0.14
Rail	St Pancras	'SVNOAKS-STALBCY 2E59'	922.13	0.67	11.53	46.78	58.3	0.51	0.5	0.26
Rail	St Pancras	'SVNOAKS-LUTON 2E61'	922.13	0.33	11.53	92.91	104.44	0.29	0.5	0.14
Rail	St Pancras	'SVNOAKS-WHMPSTM 2E63'	922.13	0.33	11.53	92.91	104.44	0.29	0.5	0.14
Rail	St Pancras	'SVNOAKS-KNTSHTN 2E65'	922.13	0.33	11.53	92.91	104.44	0.29	0.5	0.14
Rail	St Pancras	'SVNOAKS-KNTSHTN 2E67'	922.13	0.33	11.53	92.91	104.44	0.29	0.5	0.14
Rail	St Pancras	'BROMLYS-LUTON 2E93'	922.13	0.33	11.53	92.91	104.44	0.29	0.5	0.14
Rail	St Pancras	'ORPNGTN-LUTON 2L59'	922.13	0.33	11.53	92.91	104.44	0.29	0.5	0.14
Rail	St Pancras	'ORPNGTN-KNTSHTN 2L65'	922.13	0.33	11.53	92.91	104.44	0.29	0.5	0.14
Rail	St Pancras	'BEDFDM-ELPHNAC 1J87'	922.13	0.33	11.53	92.91	104.44	0.29	0.5	0.14
Rail	St Pancras	'BEDFDM-ELPHNAC 1J88'	922.13	0.33	11.53	92.91	104.44	0.29	0.5	0.14
Rail	St Pancras	'STPANCI-FAVRSHM 1F08'	922.13	2	11.53	17	28.53	1.06	0.5	0.53
Rail	St Pancras	'BRSR-STPANCI 1F13'	922.13	0.67	11.53	46.78	58.3	0.51	0.5	0.26
Rail	St Pancras	'FAVRSHM-STPANCI 1F17'	922.13	1	11.53	32	43.53	0.69	0.5	0.34
Rail	St Pancras	'EBSFLTI-STPANCI 1F85'	922.13	1.33	11.53	24.56	36.08	0.83	0.5	0.42
Rail	St Pancras	'STPANCI-MARGATE 1J08'	922.13	0.33	11.53	92.91	104.44	0.29	0.5	0.14
Rail	St Pancras	'STPANCI-DOVERP 1J10'	922.13	1	11.53	32	43.53	0.69	0.5	0.34
Rail	St Pancras	'RAMSGTE-STPANCI 1J11'	922.13	0.67	11.53	46.78	58.3	0.51	0.5	0.26
Rail	St Pancras	'STPANCI-MARGATE 1J12'	922.13	0.67	11.53	46.78	58.3	0.51	0.5	0.26
Rail	St Pancras	'MARGATE-STPANCI 1J13'	922.13	0.33	11.53	92.91	104.44	0.29	0.5	0.14
Rail	St Pancras	'MARGATE-STPANCI 1J17'	922.13	0.33	11.53	92.91	104.44	0.29	0.5	0.14
Rail	St Pancras	'DOVERP-STPANCI 1J19'	922.13	0.33	11.53	92.91	104.44	0.29	0.5	0.14

Mode	Stop	Route	Distance (metres)	Frequency(vph)	Walk Time (mins)	SWT (mins)	TAT (mins)	EDF	Weight	AI
Rail	St Pancras	'MARGATE-STPANCI 1J21'	922.13	0.33	11.53	92.91	104.44	0.29	0.5	0.14
Rail	St Pancras	'MSTONEW-STPANCI 1T91'	922.13	1	11.53	32	43.53	0.69	0.5	0.34
LUL	Euston Square	'Hammersmith-Edgware'	330.05	6	4.13	7	11.13	2.7	0.5	1.35
LUL	Euston Square	'Barking-Hammersmith'	330.05	6.34	4.13	6.73	10.86	2.76	0.5	1.38
LUL	Euston Square	'Hammersmith-Plaistow'	330.05	1	4.13	32	36.13	0.83	0.5	0.42
LUL	Euston Square	'Aldgate-AmerFast'	330.05	1	4.13	32	36.13	0.83	0.5	0.42
LUL	Euston Square	'Ches-AldgateFast'	330.05	2	4.13	17	21.13	1.42	0.5	0.71
LUL	Euston Square	'Uxbridge-AldSlow'	330.05	5.33	4.13	7.63	11.75	2.55	0.5	1.28
LUL	Euston Square	'Watford-AldSfast'	330.05	3.67	4.13	10.17	14.3	2.1	0.5	1.05
LUL	Euston Square	'Aldg-WatfordSlow'	330.05	3.67	4.13	10.17	14.3	2.1	0.5	1.05
LUL	Euston Square	'Ald-HarrowHill'	330.05	1.33	4.13	24.56	28.68	1.05	0.5	0.52
Rail	Euston	'EUSTON-CHST 1D81'	396.99	0.67	4.96	46.78	51.74	0.58	0.5	0.29
Rail	Euston	'EUSTON-BANGOR 1D82'	396.99	0.67	4.96	46.78	51.74	0.58	0.5	0.29
Rail	Euston	'EUSTON-LVRPLSH 1F11'	396.99	1	4.96	32	36.96	0.81	0.5	0.41
Rail	Euston	'EUSTON-BHAMNWS 1G04'	396.99	1	4.96	32	36.96	0.81	0.5	0.41
Rail	Euston	'EUSTON-WVRMPTN 1G05'	396.99	1	4.96	32	36.96	0.81	0.5	0.41
Rail	Euston	'EUSTON-BHAMNWS 1G06'	396.99	0.67	4.96	46.78	51.74	0.58	0.5	0.29
Rail	Euston	'EUSTON-MNCRPIC 1H09'	396.99	1	4.96	32	36.96	0.81	0.5	0.41
Rail	Euston	'EUSTON-MNCRPIC 1H11'	396.99	0.67	4.96	46.78	51.74	0.58	0.5	0.29
Rail	Euston	'EUSTON-MNCRPIC 1H62'	396.99	0.33	4.96	92.91	97.87	0.31	0.5	0.15
Rail	Euston	'EUSTON-MNCRPIC 1H63'	396.99	0.67	4.96	46.78	51.74	0.58	0.5	0.29
Rail	Euston	'WVRMPTN-EUSTON 1R00'	396.99	0.33	4.96	92.91	97.87	0.31	0.5	0.15
Rail	Euston	'WVRMPTN-EUSTON 1R01'	396.99	0.67	4.96	46.78	51.74	0.58	0.5	0.29
Rail	Euston	'MNCRPIC-EUSTON 1R02'	396.99	0.33	4.96	92.91	97.87	0.31	0.5	0.15
Rail	Euston	'RUGBY-EUSTON 1R03'	396.99	0.33	4.96	92.91	97.87	0.31	0.5	0.15
Rail	Euston	'LVRPLSH-EUSTON 1R05'	396.99	0.33	4.96	92.91	97.87	0.31	0.5	0.15
Rail	Euston	'WVRMPTN-EUSTON 1R06'	396.99	0.33	4.96	92.91	97.87	0.31	0.5	0.15
Rail	Euston	'PRST-EUSTON 1R07'	396.99	0.33	4.96	92.91	97.87	0.31	0.5	0.15
Rail	Euston	'MNCRPIC-EUSTON 1R08'	396.99	0.33	4.96	92.91	97.87	0.31	0.5	0.15
Rail	Euston	'WVRMPTN-EUSTON 1R09'	396.99	0.33	4.96	92.91	97.87	0.31	0.5	0.15
Rail	Euston	'MNCRPIC-EUSTON 1R10'	396.99	0.67	4.96	46.78	51.74	0.58	0.5	0.29
Rail	Euston	'LVRPLSH-EUSTON 1R11'	396.99	0.67	4.96	46.78	51.74	0.58	0.5	0.29
Rail	Euston	'WVRMPTN-EUSTON 1R12'	396.99	0.67	4.96	46.78	51.74	0.58	0.5	0.29
Rail	Euston	'HLYH-EUSTON 1R13'	396.99	0.33	4.96	92.91	97.87	0.31	0.5	0.15
Rail	Euston	'BHAMINT-EUSTON 1R16'	396.99	0.33	4.96	92.91	97.87	0.31	0.5	0.15
Rail	Euston	'MNCRPIC-EUSTON 1R17'	396.99	0.33	4.96	92.91	97.87	0.31	0.5	0.15
Rail	Euston	'MNCRPIC-EUSTON 1R18'	396.99	0.33	4.96	92.91	97.87	0.31	0.5	0.15
Rail	Euston	'LVRPLSH-EUSTON 1R19'	396.99	0.33	4.96	92.91	97.87	0.31	0.5	0.15
Rail	Euston	'GLGC-EUSTON 1R20'	396.99	0.33	4.96	92.91	97.87	0.31	0.5	0.15
Rail	Euston	'BHAMNWS-EUSTON 1R21'	396.99	0.33	4.96	92.91	97.87	0.31	0.5	0.15
Rail	Euston	'MNCRPIC-EUSTON 1R22'	396.99	0.33	4.96	92.91	97.87	0.31	0.5	0.15
Rail	Euston	'MNCRPIC-EUSTON 1R23'	396.99	0.33	4.96	92.91	97.87	0.31	0.5	0.15
Rail	Euston	'HLYH-EUSTON 1R24'	396.99	0.33	4.96	92.91	97.87	0.31	0.5	0.15
Rail	Euston	'MNCRPIC-EUSTON 1R25'	396.99	0.33	4.96	92.91	97.87	0.31	0.5	0.15
Rail	Euston	'BHAMNWS-EUSTON 1R26'	396.99	0.33	4.96	92.91	97.87	0.31	0.5	0.15
Rail	Euston	'EUSTON-GLGC 1S42'	396.99	1	4.96	32	36.96	0.81	0.5	0.41
Rail	Euston	'EUSTON-EDINBUR 1S54'	396.99	0.33	4.96	92.91	97.87	0.31	0.5	0.15
Rail	Euston	'EUSTON-NMPTN 1N03'	396.99	1	4.96	32	36.96	0.81	0.5	0.41
Rail	Euston	'EUSTON-BHAMNWS 2Y05'	396.99	1	4.96	32	36.96	0.81	0.5	0.41
Rail	Euston	'NMPTN-EUSTON 1N20'	396.99	0.33	4.96	92.91	97.87	0.31	0.5	0.15
Rail	Euston	'CREWE-EUSTON 1U20'	396.99	0.33	4.96	92.91	97.87	0.31	0.5	0.15
Rail	Euston	'EUSTON-CREWE 1U25'	396.99	1	4.96	32	36.96	0.81	0.5	0.41
Rail	Euston	'NMPTN-EUSTON 1W78'	396.99	0.33	4.96	92.91	97.87	0.31	0.5	0.15
Rail	Euston	'RUGBY-EUSTON 1W80'	396.99	0.33	4.96	92.91	97.87	0.31	0.5	0.15
Rail	Euston	'BHAMNWS-EUSTON 1W82'	396.99	0.33	4.96	92.91	97.87	0.31	0.5	0.15
Rail	Euston	'NMPTN-EUSTON 1W84'	396.99	0.67	4.96	46.78	51.74	0.58	0.5	0.29
Rail	Euston	'BHAMNWS-EUSTON 1W86'	396.99	0.33	4.96	92.91	97.87	0.31	0.5	0.15
Rail	Euston	'BLTCHLY-EUSTON 2B04'	396.99	0.33	4.96	92.91	97.87	0.31	0.5	0.15

Mode	Stop	Route	Distance (metres)	Frequency(vph)	Walk Time (mins)	SWT (mins)	TAT (mins)	EDF	Weight	AI
Rail	Euston	'WATFDJ-EUSTON 2J06'	396.99	0.67	4.96	46.78	51.74	0.58	0.5	0.29
Rail	Euston	'EUSTON-MKNSCEN 2K13'	396.99	0.67	4.96	46.78	51.74	0.58	0.5	0.29
Rail	Euston	'EUSTON-MKNSCEN 2K21'	396.99	0.33	4.96	92.91	97.87	0.31	0.5	0.15
Rail	Euston	'EUSTON-TRING 2T11'	396.99	0.67	4.96	46.78	51.74	0.58	0.5	0.29
Rail	Euston	'EUSTON-TRING 2T19'	396.99	1.33	4.96	24.56	29.52	1.02	0.5	0.51
Rail	Euston	'MKNSCEN-EUSTON 2W01'	396.99	0.67	4.96	46.78	51.74	0.58	0.5	0.29
Rail	Euston	'TRING-EUSTON 2W02'	396.99	1	4.96	32	36.96	0.81	0.5	0.41
Rail	Euston	'TRING-EUSTON 2W04'	396.99	0.33	4.96	92.91	97.87	0.31	0.5	0.15
Rail	Euston	'BLTCHLY-EUSTON 2W24'	396.99	0.33	4.96	92.91	97.87	0.31	0.5	0.15
Rail	Euston	'TRING-EUSTON 2W26'	396.99	0.33	4.96	92.91	97.87	0.31	0.5	0.15
Rail	Euston	'MKNSCEN-EUSTON 2W55'	396.99	0.33	4.96	92.91	97.87	0.31	0.5	0.15
Rail	Euston	'BLTCHLY-EUSTON 2W57'	396.99	0.33	4.96	92.91	97.87	0.31	0.5	0.15
Rail	Euston	'RUGBY-EUSTON 2W59'	396.99	0.33	4.96	92.91	97.87	0.31	0.5	0.15
Rail	Euston	'MKNSCEN-EUSTON 2W61'	396.99	0.33	4.96	92.91	97.87	0.31	0.5	0.15
Rail	Euston	'TRING-EUSTON 2W63'	396.99	0.33	4.96	92.91	97.87	0.31	0.5	0.15
Rail	Euston	'MKNSCEN-EUSTON 2W93'	396.99	0.33	4.96	92.91	97.87	0.31	0.5	0.15
Rail	Euston	'WATFJDC-EUSTON 2C06'	396.99	2.67	4.96	13.24	18.2	1.65	0.5	0.82
Rail	Euston	'EUSTON-WATFJDC 2D86'	396.99	3	4.96	12	16.96	1.77	1	1.77
LUL	Euston	'Edgware-Morden'	396.99	9	4.96	5.33	10.3	2.91	0.5	1.46
LUL	Euston	'Morden-HighBarnet'	396.99	14.67	4.96	4.04	9.01	3.33	0.5	1.67
LUL	Euston	'Morden-MillHillE'	396.99	4	4.96	9.5	14.46	2.07	0.5	1.04
LUL	Euston	'Morden-Edgware'	396.99	4.67	4.96	8.42	13.39	2.24	0.5	1.12
LUL	Euston	'HighBarnet-Morden'	396.99	0.33	4.96	92.91	97.87	0.31	0.5	0.15
LUL	Euston	'Kennington-Edgware'	396.99	14.67	4.96	4.04	9.01	3.33	0.5	1.67
LUL	Euston	'HighBarnet-Kenningt'	396.99	5.33	4.96	7.63	12.59	2.38	0.5	1.19
LUL	Euston	'MillHill-Morden'	396.99	1.67	4.96	19.96	24.93	1.2	0.5	0.6
LUL	Euston	'MillHillE-Kenningt'	396.99	1.67	4.96	19.96	24.93	1.2	0.5	0.6
LUL	Euston	'Brixton-WalthamstowC'	396.99	15.67	4.96	3.91	8.88	3.38	1	3.38
LUL	Euston	'SevenSisters-Brixton'	396.99	11.67	4.96	4.57	9.53	3.15	0.5	1.57
LUL	Russel Square	'Cockfosters-LHRT4LT'	942.59	4.67	11.78	8.42	20.21	1.48	0.5	0.74
LUL	Russel Square	'RayLane-Cockfosters'	942.59	3.67	11.78	10.17	21.96	1.37	0.5	0.68
LUL	Russel Square	'LHRT4LT-ArnosGrove'	942.59	4.67	11.78	8.42	20.21	1.48	0.5	0.74
LUL	Russel Square	'ArnosGrove-RayLane'	942.59	0.33	11.78	92.91	104.69	0.29	0.5	0.14
LUL	Russel Square	'ArnosGrove-Nthfields'	942.59	3	11.78	12	23.78	1.26	0.5	0.63
LUL	Russel Square	'Oakwood-RayLane'	942.59	0.33	11.78	92.91	104.69	0.29	0.5	0.14
LUL	Russel Square	'Nthfields-Cockfoster'	942.59	1	11.78	32	43.78	0.69	0.5	0.34
LUL	Russel Square	'LHRT5-Cockfosters'	942.59	6	11.78	7	18.78	1.6	0.5	0.8
LUL	Russel Square	'Uxbridge-Cockfosters'	942.59	3.67	11.78	10.17	21.96	1.37	0.5	0.68
LUL	Russel Square	'Ruislip-Cockfosters'	942.59	2.33	11.78	14.88	26.66	1.13	0.5	0.56
LUL	Russel Square	'ArnosGrove-Uxbridge'	942.59	1	11.78	32	43.78	0.69	0.5	0.34
LUL	Russel Square	'Oakwood-Uxbridge'	942.59	0.33	11.78	92.91	104.69	0.29	0.5	0.14
LUL	Russel Square	'Oakwood-Ruislip'	942.59	0.33	11.78	92.91	104.69	0.29	0.5	0.14
									Total Grid Cell AI:	**98.43**

A5. BUS ROUTE PLAN

Notes;
This map is taken from TfL's Central London Bus Map. For up-to-date bus route information visit www.tfl.gov.uk

Key;

◯ Site Location

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Client

University College London (UCL) Estates

Project

UCL New Student Centre

Title

Bus Route Map

Drawn By	Checked By	Approved By
AG	RB 03/05/2015	FP 03/05/2015

Scale @ A3	Date
NTS	03/05/2015

Project No.	Drawing No.	Rev.
13-T037	10	-