Panther House and 156-164 Grays Inn Road

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Panther House Developments Limited

Transport Statement

August 2019



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Panther House, Brain Yard Buildings & 156 & 160-164 Grays Inn Road

Transport Statement

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1 INTRODUCTION

1.1 TTP Consulting has been appointed to provide highways and transport advice in relation to the proposed redevelopment at Panther House, Brain Yard Building and 156 and 160-164 Grays Inn Road (the site), located within the London Borough of Camden (LBC). The site location is shown at **Figure 1.1.**

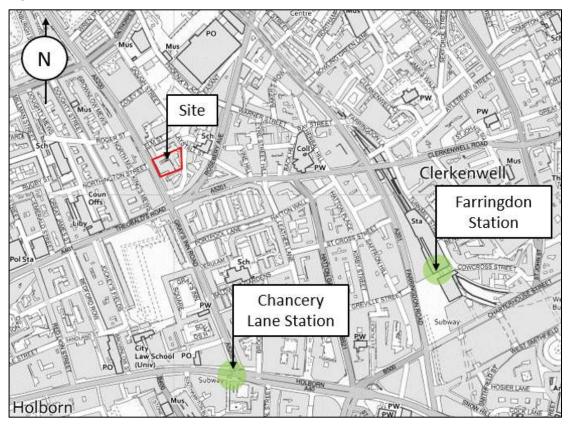


Figure 1.1 – Site Location Plan

- 1.2 The site is located in close proximity to numerous amenities and public transport infrastructure including Chancery Lane, Farringdon and Holborn Stations. It achieves a Public Transport Accessibility Level (PTAL) rating of 6b, representing an excellent level of accessibility, and is located with the Central Activity Zone (CAZ) suggesting the site has the potential to provide a sustainable development in respect of transport.
- 1.3 The redevelopment involves several adjacent but separate buildings which combine to provide 6,041sqm of B1 office space, 365sqm of A class retail / restaurant space and one residential unit. No. 156 and 160-164 Grays Inn Road take frontage from Grays Inn Road; a cobbled access between the two buildings provides a route to the Brain Yard building which is located behind them. Panther House fronts onto Mount Pleasant with the existing buildings facing onto



a courtyard. There is no pedestrian or vehicle connection across the site between Mount Pleasant and Grays Inn Road.

Planning History

- 1.4 Planning permission (Ref: 2015/6955/P) was granted in 2017 for the redevelopment of Panther House, Brain Yard Buildings and 156 and 160-164 Grays Inn Road. The previously approved development, which included extensive basement works and a new ground floor slab, sought to deliver 7,803sqm (GEA) of B1 office space with an additional 758sqm of flexible A1 / A3 / B1 use, 420sqm of A1/A3 use, 89sqm of A1 use and 13 residential units.
- 1.5 The approved development relied on all delivery and servicing activity to take place on-street on Grays Inn Road with the exception of office waste which would be collected from Mount Pleasant. Pedestrian access would be taken from both Grays Inn Road and Mount Pleasant, with no vehicles entering the site.

Development Proposal

- 1.6 This new application seeks a more modest redevelopment of the site than the approved scheme and has been designed with the requirements of a specific occupier in mind.
- 1.7 The revised proposals will offer 229sqm of retail floor space at ground floor, with 6,642sqm of office floor space and 7 residential units above. Delivery and servicing activity will continue to serve the site from the Grays Inn Road and Mount Pleasant frontages, in accordance with the approved development. In addition, the commercial uses will be able to receive deliveries from an off-street position using an area of the former courtyard served via Mount Pleasant. The development will not provide any car parking, in accordance with policy objectives and the previously approved scheme and hence the residential dwellings will be subject to a permit-free agreement. Cycle parking will be provided on-site in accordance with the Draft New London Plan standards.

Scope of Report

1.8 This report benefits from site visits and pre-application discussions with Camden highways officers, most recently an on-site meeting with highway officers on the 13th June 2019, during which the Council advised that they will be consulting the public on a scheme of cycle infrastructure improvements along Grays Inn Road in late summer 2019. As a consequence the application proposals have sought to retain an off-street loading area in order to reduce the reliance of deliveries on the Grays Inn Road frontage.



- 1.9 The report considers the effect of development and in particular the intended servicing strategy and the change in travel demand that is expected to arise. The remainder of the report is structured as follows:
 - Section 2 summaries the existing situation;
 - Section 3 reviews relevant transport policies;
 - Section 4 sets out the development proposals;
 - Section 5 considers the potential effects of the development; and
 - Section 6 provides a summary and conclusion.

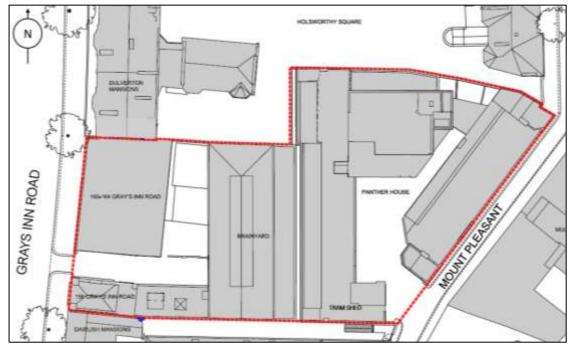


2 EXISTING CONDITION

Site and Surrounding Area

2.1 The application site is located between Elm Street, Mount Pleasant and Grays Inn Road and comprises a number of buildings, with Panther House (38 Mount Pleasant) to the east and buildings at 156 and 160-164 Grays Inn Road to the west. The existing building floor areas offer approximately 6,041sqm (GEA) of office floor space, with 365sqm of A1 retail / A3 restaurant use fronting Grays Inn Road and one residential unit. An existing site layout drawing is shown in **Figure 2.1**, whilst the existing ground floor layout plan is shown in **Appendix A**.





- 2.2 Brain Yard is situated between the site's commercial Grays Inn Road frontages, it occupies the centre of the site, with access from Grays Inn Road.
- 2.3 Panther House relies on Mount Pleasant for all access whilst Brain Yard and 156-164 Grays Inn Road rely on Grays Inn Road. Vehicle access to the Panther House courtyard is limited between the Tram Shed and the Panther House building, but requires vehicles to reverse into or out of the site from Mount Pleasant.
- 2.4 For clarity, the existing arrangements of the buildings on the application site do not provide a through route for vehicles between Grays Inn Road and Mount Pleasant, and there is a change in ground floor levels between the Tram Shed and Brain Yard.



Local Highway Network

- 2.5 Grays Inn Road (the A5200) is a two-way street, which passes the frontage of the site. It operates in a north-south orientation between Euston Road (the A501) and High Holborn (the A40). The street is subject to a 30mph speed limit. The footway along the front of the site is 3.8m in width, with a bus stop and associated cage located outside the site. Drawing 2015-2367-003-A included at **Appendix B** sets out the existing highway arrangement in front of the site on Grays Inn Road. There are bicycle stands located along the footway and there are greenman push button facilities at the Grays Inn Road / Clerkenwell Road junction, located south of the site.
- 2.6 Mount Pleasant is a one-way road which is subject to a 20mph speed restriction. It operates in a north to south orientation between Elm Street and Grays Inn Road. Double yellow line restrictions are present along both sides of the street for the length of the road in the vicinity of the site. The footway along Mount Pleasant is inconsistent in width, from its widest at 1.6m, it narrows to <1 metre towards Grays Inn Road.
- 2.7 Kerbside activity surveys were undertaken for the length of yellow line outside the site on Grays Inn Road in May and June 2015 to inform the 2015 planning application. In summary, a total of 30 deliveries relied on the yellow line over the day and no more than 3 delivery vehicles were present at any one time. An Automatic Traffic Count (ATC) was placed on the Mount Pleasant carriageway, which showed that no more than 15 vehicles were observed to use the Mount Pleasant carriageway in any 15 minute interval. It was agreed during pre-application discussions that the surveys did not require updating, given the reduced scale of development compared with the previously approved scheme.

On-Street Parking

2.8 The site is located within the London Borough of Camden's (LBC) Controlled Parking Zone (CPZ) area CA-D which is in operation Monday through Friday between 8.30am and 6.30pm and on Saturdays between 8.30am and 11.30am. Outside of these hours, parking is unrestricted in the vicinity of the site.

Accident Data

2.9 Accident data was obtained from Crashmap for the latest 5 year period (June 2014 – June 2019). The data shows that there have been no recorded injuries outside the site on Grays Inn Road, Mount Pleasant or at the Grays Inn Road / Mount Pleasant junction in the most recent 5 year period. Just south of the site, one 'slight' injury was recorded in June 2016 which was a result of a Transit-type van u-turning on-street and a cyclist continuing along Grays Inn Road.



Accessibility

2.10 The site is accessible by a variety of modes of transport with a large number of amenities within a reasonable walking distance of the site. The following paragraphs summarise the site's accessibility by non-car modes.

Cycling

- 2.11 It is generally accepted that cycling is a sustainable mode of travel for journeys up to 8km in length, although in London, longer journeys are commonplace.
- 2.12 **Figure 2.2** shows a 5km and 8km cycling catchment from the site. Much of Central London including Kensington, Pimlico, Shoreditch, Whitechapel and the Southbank are located within a 5km cycle of the site, whilst Hampstead, Notting Hill, Stockwell, Battersea and Brixton can be reached within an 8km cycle of the site.

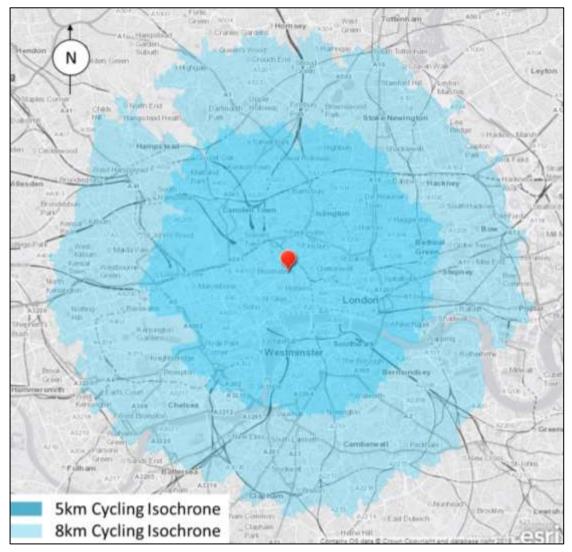


Figure 2.2 – Cycling Catchment Map



- 2.13 Cycle Superhighway 6 is located to the east of the site on Farringdon Road and connects Kings Cross to Elephant and Castle. There are proposals to introduce dedicated cycling facilities along Grays Inn Road which will be consulted upon later this year.
- 2.14 Within the vicinity of the site there are Sheffield stands, including on Mount Pleasant, Grays Inn Road, Northington Street, and Elm Street. Those in the immediate vicinity of the site are shown on the existing highway arrangement drawing at **Appendix B**.
- 2.15 TfL's Journey Planner tool allows for cycle route planning dependent on the difficulty of the route, being fast, moderate or easy. From the site the following destinations can be reached within various journey times:
 - King's Cross (4 minutes / 5 minutes / 6 minutes);
 - Euston (6 minutes / 9 minutes / 10 minutes);
 - London Bridge (11 minutes / 13 minutes / 17 minutes); and
 - Victoria (18 minutes / 22 minutes / 29 minutes).
- 2.16 Santander docking stations are a convenient and cost-effective alternative to owning a bike. The closest docking station to the site is located on Northington Street, to the west of the junction with Grays Inn Road, docking stations in the vicinity of the area are listed below:
 - Northington Street 19 cycles (90m walking distance);
 - Wren Street 33 cycles (350m walking distance);
 - Theobald's Road 26 cycles (350m walking distance); and
 - Hatton Wall 26 cycles (400m walking distance).

Walking

- 2.17 Like much of Inner London the site benefits from being within a short walking distance of public transport opportunities, local facilities and amenities as well as residential areas.
- 2.18 Roughly half of all walking journeys in London are part of longer public transport journeys, for example walking to or from the bus stop or tube / train station, whilst a third of car journeys are within a 25-minute (2km) walk, suggesting there are real opportunities for active modes to replace the car.
- 2.19 **Figure 2.3** provides details of a 1km and 2km catchment zone surrounding the site. The map shows that a number of retail and residential areas could be accessed on foot, as well as a number of bus stops and underground stations.



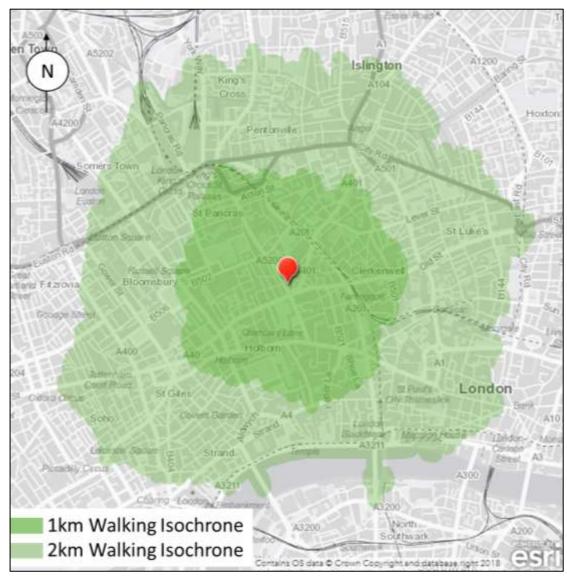


Figure 2.3 – Walking Isochrone Map

- 2.20 The walking environment in the vicinity of the site is such that footways are provided on both sides of Grays Inn Road, Clerkenwell Road and Theobalds Road.
- 2.21 The majority of crossings in the area are provided with dropped kerbs and tactile paving whilst crossings at the junctions with Grays Inn Road and Clerkenwell Road/ Theobalds Road are controlled, offering push-button/green-man facilities. There is also a zebra crossing, located approximately 35m to the north of the site facilitating access across Grays Inn Road.
- 2.22 **Table 2.1** sets out details of distances between the site and public transport opportunities. This illustrates that there are a number of public transport facilities within a convenient walking distance with an average walking speed assumed to be 80m per minute.



Table 2.1 – Approximat	e 2.1 – Approximate Distances to Local Public Transport Opportunities		
Stop / Station	Location	Distance	Approximate Walking Time*
Stop 'CD' (southbound)	Grays Inn Road	10m	1 minute
Stop 'CQ' (northbound)	Grays Inn Road	130m	2 minutes
Stop 'CB' (southbound)	Grays Inn Road	130m	2 minutes
Stop 'CT' (southbound)	Grays Inn Road	140m	2 minutes
Stop 'CS' (northbound)	Grays Inn Road	160m	2 minutes
Stop 'CU' (eastbound)	Clerkenwell Road	160m	2 minutes
Stop 'CW' (westbound)	Clerkenwell Road	160m	2 minutes
Chancery Lane Station	Grays Inn Road	480m	6 minutes
Farringdon Station	Cowcross Street	800m	10 minutes
Holborn Station	A40 High Holborn	800m	10 minutes
Russell Square Station	Bernard Street	960m	12 minutes
*Based on 80m per minut	e		

2.23 Local facilities and amenities including a primary school, banks, a post office, convenience stores and cafes are located a short walking distance from the site, a summary of which is shown in **Table 2.2.**

Table 2.2 – Approxima	able 2.2 – Approximate Distances to Local Facilities				
Amenity	Location	Distance	Approximate Walking Time*		
Primary School	Laystall Street	55m	1 minute		
The Co-operative	Grays Inn Road	90m	1 minute		
Sainsbury's Local	Clerkenwell Road	260m	3 minutes		
Post Office	Rosebery Avenue	400m	5 minutes		
NatWest	High Holborn	480m	6 minutes		
Tesco Express	Farringdon Road	650m	8 minutes		
Barclays	Hatton Garden	800m	10 minutes		
*Based on 80m per minu	te				

Public Transport Accessibility

2.24 The site is highly accessible by public transport with several bus stops servicing the local road network, including Grays Inn Road, Theobald's Road and Rosebery Avenue. Additionally, three underground stations and Farringdon Rail station are located within a convenient walking distance of the site.

<u>By Bus</u>

2.25 The closest bus stop, 'CD' is located directly outside the site, with 'CB' located just south of the site. The stops provide access to routes 17, 45 and 46, which connect the site to London Bridge, Clapham Park and St Bartholomew's Hospital. Within a two minute walking distance there are a further 9 bus routes which can be accessed, including: 8, 19, 25, 38, 55, 63, 243, 341 and 521.



2.26 **Figure 2.4** sets out the site's proximity to local bus stops whilst **Table 2.3** provides a summary of the local bus routes. The relevant TfL bus spider maps are included at **Appendix C**.

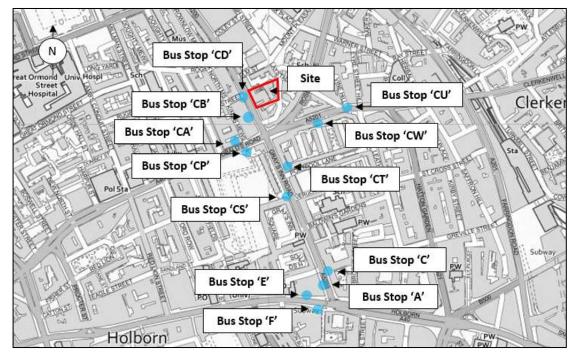


Figure 2.4 – Map to Show Local Bus Stops

Table 2.3 -	- Sum	mary of Local Bus Services			
Bus Stop		Route	Freq	uency (eve minutes)	r y `x′
	No.	Destination	Mon-Fri	Saturday	Sunday
`CD' &	17	Archway Station and London Bridge	6 - 10	8 - 11	15
CD &	45	Clapham Park and Kings Cross	8 - 12	8 - 12	15
CD	46	Lancaster Gate and St Bartholomew's	9 - 12	9 - 10	15
`CT' & `CS'	341	County Hall and Northumberland Park	10 - 12	9 - 12	10 - 13
`CU' &	55	Leyton and Oxford Circus	4 - 8	7 - 10	8 - 11
`CW′	243	Waterloo and Wood Green	5 - 8	7 - 11	8 - 12
`CA' & `CP'	19	Battersea Bridge and Finsbury Park	6 - 10	7 - 11	8 - 12
CAACP	38	Clapton and Victoria	4 - 8	2 - 6	6 - 8
	8	Bow Church and High Holborn	4 - 8	6 - 10	9 - 11
`E' & `F'	25	Ilford and Holborn Circus	5 - 9	6 - 10	9 - 12
	521	Waterloo and London Bridge	2 - 11	-	-
`A' & `C'	63	Honour Oak and Kings Cross	6 - 10	6 - 10	9 - 13



By Underground / Rail

- 2.27 The closest underground station to the site is Chancery Lane Station which is situated 500m to the south of the site. It is within a 6 minute walk / 2 minute cycle or 5 minute bus journey from the site. The station is served by the Central Line, which provides regular services to a number of stations between Epping and Ealing. Services operate every 2-4 minutes in each direction.
- 2.28 Farringdon Station is located 800m to the east of the site (11 minute walk / 4 minute cycle / 8 minutes by bus). It provides Hammersmith and City, Circle and Metropolitan Line services, which offer frequent connections through central London including interchange opportunities at Liverpool Street, Kings Cross and Baker Street. Each service operates approximately every 5 10 minutes in each direction.
- 2.29 Farringdon Station is also served by regular Thameslink services. Destinations from Farringdon include Luton, Gatwick Airport, Bromley, Sevenoaks, St Albans, Brighton and Cambridge. The station benefits from step-free access to platforms with staff help available. Once operating, the Elizabeth Line will stop at Farringdon Station connecting Reading and Heathrow to the west through Central London to Shenfield.
- 2.30 Holborn Station is located within a 900m to the southwest of the site, offering Central and Piccadilly Line services. The station is within an 11 minute walk, 5 minute cycle or 7 minute bus journey from the site. The Piccadilly Line provides services towards Heathrow to the west and Cockfosters to the north. Services operate every 2-5 minutes in each direction.
- 2.31 The site is within close proximity to numerous other stations located within a 20 minute walk of the site including:
 - Russell Square (12 minute walk / 4 minute cycle / 11 minute bus);
 - City Thameslink (14 minute walk / 5 minute cycle / 9 minute bus);
 - Barbican (17 minute walk / 6 minute cycle / 9 minute bus);
 - Angel (19 minute walk / 7 minute cycle / 12 minute bus);
 - St Paul's (19 minute walk / 8 minute cycle / 14 minute bus); and
 - King's Cross (20 minute walk / 8 minute cycle / 12 minute bus).

Public Transport Accessibility Level (PTAL)

2.32 Public Transport Accessibility Levels (PTALs) are a theoretical measure of the accessibility of a given point to the public transport network, taking into account walk access time and service availability. The method is essentially a way of measuring the density of the public transport network at a particular point. The scale has a range of 0 (worst) to 6b (best), with 6b demonstrating high level of accessibility. The site has a PTAL level of 6b, demonstrating that it

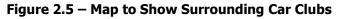


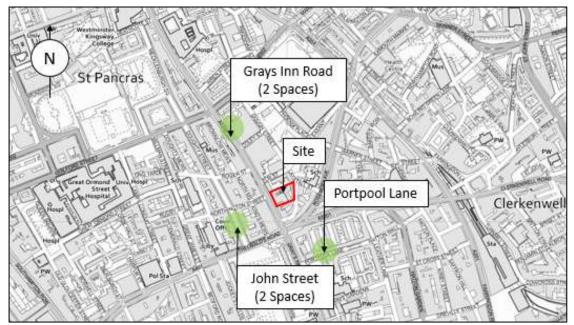
has an 'excellent' level of accessibility to public transport. The PTAL report is included at **Appendix D.**

Car Clubs

2.33 There are five car club bays located within a 240m (3 minutes) walk of the site, both Grays Inn Road and John Street provide two spaces. The closest to the site are on Grays Inn Road which are provided by Zipcar and Enterprise. **Table 2.4** below provides details of the local car club parking bays, they are shown in **Figure 2.5**.

Table 2.4 – Local Car Club Operators				
Operator	Location	Distance from Site		
Zipcar / Enterprise	Grays Inn Road	210m		
Zipcar	Portpool Lane	240m		
Zipcar	John Street	240m		





Method of Travel to Work

- 2.34 The 2011 Census has been examined to establish the method of journey to work for the workplace population and residential population. The data for the super output area middle layer (Camden 027) in which the site is located is summarised in **Table 2.5**.
- 2.35 For the workplace population 80% of those working in the local area travel by public transport, whilst 12% travel by active modes, 6% by car and 2% by motorcycle. The method of travel to work for those living in the local area varies with 41% of journeys made by public transport, 51% by active transport, 6% by car, 1% by taxi and 1% by motorcycle.



Table 2.5 – 2011 Method of Travel to Work [Camden 027]				
Mode	Percentage (%)			
Mode	(Workplace Population)	(Resident Population)		
Underground / Overground	32%	18%		
Rail	37%	5%		
Bus	11%	18%		
Taxi	0%	1%		
Motorcycle	2%	1%		
Car Driver	6%	6%		
Bicycle	6%	7%		
Walking	6%	44%		
Total	100%	100%		



3 POLICY

National Policy

National Planning Policy Framework

- 3.1 The revised National Planning Policy Framework (NPPF) was published on the 19th February 2019 setting out the Government's planning policies for England and how these are expected to be applied.
- 3.2 When considering the transport effects of a development, NPPF states that:

"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."

3.3 Paragraph 109 advises that:

"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."

Regional Policy

London Plan

- 3.4 The London Plan is a Spatial Development Strategy which sets out the framework for the development of London over a period of 20-25 years and was published in March 2016.
- 3.5 Paragraph 1.53 sets outs the Mayor's objectives and vision, with point 6 stating the following with regards to transport.

"Ensuring London is a city where it is easy, safe and convenient for everyone to access jobs, opportunities and facilities with an efficient and effective transport system which actively encourages more walking and cycling, makes better use of the Thames and supports delivery of all the objectives of this Plan."

3.6 Chapter 6 (Transport) states that:

"The Mayor recognises that transport plays a fundamental role in addressing the whole range of his spatial planning, environmental, economic and social policy priorities. It is critical to the efficient functioning and quality of life of London and its inhabitants. It also has major effects – positive and negative – on places, especially around interchanges and in town centres and on the environment, both within the city itself and more widely. Conversely, poor or reduced accessibility can be a major constraint on the success and quality of places, and their



neighbourhoods and communities. He is particularly committed to improving the environment by encouraging more sustainable means of transport, through a cycling revolution, improving conditions for walking, and enhancement of public transport."

3.7 Policy 6.13 Parking states that at a strategic level:

"The Mayor wishes to see an appropriate balance being struck between promoting new development and preventing excessive car parking provision that can undermine cycling, walking and public transport use."

3.8 Table 6.3 of the London Plan summarises the minimum cycle standards for different land uses.The relevant minimum cycle parking standards are set out in Table 3.1.

Table 3.1 – Cycle F	able 3.1 – Cycle Parking Current London Plan Minimum Standards (GEA)			
Use Class	Long-stay	Short-stay		
A1 – A5 (Retail)	1 space per 175 sqm*	1 space per 40sqm		
B1a (Office)	1 space per 90 sqm	First 5,000sqm: 1 space per 500sqm Thereafter: 1 space per 5,000sqm		
C3 (Residential)	1 space per 1 bed unit 2 spaces per 2+ bed unit	1 space per 40 units		
*Non-food retail standard	is 1 space per 250sqm			

Draft New London Plan

3.9 The Draft New London Plan was published for consultation between December 2017 and March 2018, with minor amendments made by the Mayor issued in August 2018 and post session changes arising from the Examination in Public included in July 2019. The current 2016 plan is still the adopted Development Plan; however, the draft London Plan is a consideration in planning decisions. The document strives to promote a healthier and more active London with improving air quality and reducing car parking provision at the forefront of the plan.

3.10 Policy T1 seeks a strategic approach to transport and states at paragraph 10.1.1. that:

"The integration of land use and transport, and the provision of a robust and resilient public transport network, are essential in realising and maximising growth and ensuring that different parts of the city are connected in a sustainable and efficient way. In order to help facilitate this, an integrated strategic approach to transport is needed, with an ambitious aim to reduce Londoners' dependency on cars in favour of increased walking, cycling and public transport use. Without this shift away from car use, which the policies in the Plan and the Mayor's Transport Strategy seek to deliver, London cannot continue to grow sustainably."

3.11 Furthermore, Policy T2 sets out the Healthy Streets Approach which states that development Plans should:



- "Promote and demonstrate the application of the Mayor's Healthy Streets Approach to: improve health and reduce health inequalities; reduce car dominance, ownership and use, road danger, severance, vehicle emissions and noise; increase walking, cycling and public transport use; improve street safety, comfort, convenience and amenity; and support these outcomes through sensitively designed freight facilities;
- Identify opportunities to improve the balance of space given to people to dwell, walk, cycle, and travel on public transport and in essential vehicles, so space is used more efficiently and streets are greener and more pleasant; and,
- In Opportunity Areas and other growth areas, new and improved walking, cycling and public transport networks should be planned at an early stage, with delivery phased appropriately to support mode shift towards active travel and public transport. Designs for new or enhanced streets must demonstrate how they deliver against the ten Healthy Streets Indicators."
- 3.12 Policy T5, 'cycling', suggests that barriers to cycling can be removed and that a healthy environment in which people choose to cycle can be created through appropriate levels of cycle parking which are fit for purpose, secure and well-located. The cycle parking standards as set out in Table 10.2 of the Draft New London Plan are summarised in **Table 3.2**.

Table 3.2 – 0	Cycle Parking Draft New London Pla	an Minimum Standards (GEA)
Use Class	Long-stay	Short-stay
A1 – A5 (Retail)	1 space per 175sqm*	1 space per 20sqm
B1a (Office)	1 space per 90sqm	First 5,000sqm: 1 space per 500sqm Thereafter: 1 space per 5,000sqm
C3 (Residential)	1 space per 1 bed unit (1 person) 1.5 spaces per 1 bed unit (2 person) 2 spaces per 2+ bed unit	1 space per 40 units
*Non-food retail	standard is 1 space per 250sqm	

Transport for London's Transport Assessment Guidance

3.13 TfL's Transport Assessment guidance sets out thresholds for transport reports based on the size or scale of development. For a B1 Business use (office) it states that a Transport Statement should be provided when the floor area is between 1,500 sqm – 2,500 sqm. Below this threshold a statement is not considered necessary, whilst planning applications for 2,500+ sqm of office space should be provided with a Transport Assessment and a Travel Plan.



Local Policy

Camden Local Plan

- 3.14 Camden's Local Plan is the key strategic document in Camden's development plan. It sets out the vision for shaping the future of the Borough and contains policies for guiding planning decisions and was adopted in July 2017.
- 3.1 Transport related policies are set out in T1 through T4 a summary of the relevant policies is below.

Policy T1: Prioritising Walking, Cycling and Public Transport

"In order to promote walking in the borough and improve the pedestrian environment, we will seek to ensure that developments:

a. improve the pedestrian environment by supporting high quality public realm improvement works;

b. make improvements to the pedestrian environment including the provision of high quality safe road crossings where needed, seating, signage and landscaping;

c. are easy and safe to walk through ('permeable');

d. are adequately lit;

e. provide high quality footpaths and pavements that are wide enough for the number of people expected to use them. Features should also be included to assist vulnerable road users where appropriate; and

f. contribute towards bridges and water crossings where appropriate.

In order to promote cycling in the borough and ensure a safe and accessible environment for cyclists, the Council will seek to ensure that development:

g. provides for and makes contributions towards connected, high quality, convenient and safe cycle routes, in line or exceeding London Cycle Design Standards, including the implementation of the Central London Grid, Quietways Network, Cycle Super Highways;

h. provides for accessible, secure cycle parking facilities exceeding minimum standards outlined within the London Plan (Table 6.3) and design requirements outlined within our supplementary planning document Camden Planning Guidance on transport. Higher levels of provision may also be required in areas well served by cycle route infrastructure, taking into account the size and location of the development;

i. makes provision for high quality facilities that promote cycle usage including changing rooms, showers, dryers and lockers;

j. is easy and safe to cycle through ('permeable'); and

k. contribute towards bridges and water crossings suitable for cycle use where appropriate."



Policy T2: Parking and Car-free Development

"The Council will limit the availability of parking and require all new developments in the borough to be car-free. We will:

a. not issue on-street or on-site parking permits in connection with new developments and use legal agreements to ensure that future occupants are aware that they are not entitled to onstreet parking permits;

b. limit on-site parking to:

- *i. spaces designated for disabled people where necessary; and/or*
- ii. essential operational or servicing needs.
- c. support the redevelopment of existing car parks for alternative uses; and

d. resist the development of boundary treatments and gardens to provide vehicle crossovers and on-site parking."

Policy T4 Sustainable Movement of Goods and Materials

"The Council will promote the sustainable movement of goods and materials and seek to minimise the movement of goods and materials by road. We will:

a. encourage the movement of goods and materials by canal, rail and bicycle where possible;

b. protect existing facilities for waterborne and rail freight traffic and;

c. promote the provision and use of freight consolidation facilities. Developments of over 2,500 sqm likely to generate significant movement of goods or materials by road (both during construction and operation) will be expected to:

d. minimise the impact of freight movement via road by prioritising use of the Transport for London Road Network or other major roads;

e. accommodate goods vehicles on site; and

f. provide Construction Management Plans, Delivery and Servicing Management Plans and Transport Assessments where appropriate."

Camden Planning Guidance CPG - Transport

- 3.2 Camden's Transport CPG was adopted in March 2019 to support the policies set out in the Camden Local Plan 2017.
- 3.3 Regarding transport guidance states that assessments/ notes:

"A Transport Assessment, Statement or Note is required for all applications that involve a change in the way that a site is accessed from the highway. These documents must clearly



demonstrate what measures will be required in order to mitigate the transport impact of the development."

Policy Summary

- 3.4 Transport policy at all levels advocates locating new developments in areas that are accessible by public transport, walking and cycling or which can be made accessible by these modes and that the level of parking provided at sites in such locations should be reduced.
- 3.5 It is evident that the site is in a sustainable location, being accessible by a choice of travel modes, and a car-free development is also considered suitable in transport policy terms.



4 DEVELOPMENT PROPOSAL

Proposal Overview

4.1 The planning application involves the following:

'Redevelopment of the site to include retention, refurbishment and part 2, part 3 storey roof extensions of Panther House; retention and refurbishment of the Tramshed at Brain Yard; demolition of 156 and 160-164 Gray's Inn Road and replacement with a 7 storey building to deliver 6,642sq.m (GIA) of employment (B1) uses across Panther House, the Tramshed and two levels of Gray's Inn Road, 229sq.m of A1/A3 uses at the ground floor level of Gray's Inn Road and 7 residential units (C3) equating to 949sq.m of GIA at the upper floors of the Gray's Inn Road building.'

4.2 **Table 4.1** provides a summary of the existing, consented and proposed floor areas. It is worth noting that the consented scheme offered a proportion of flexible A class / B class use, which is reflected in the table. The Architect's layout plans are included at **Appendix E**.

Table 4.1 – Net Change in	Floor Areas			
Land Use	Existing	Consented (2017)	Proposed	Net Change (Existing Vs Proposed)
Retail Space	365sqm	509sqm / 1,267sqm	229sqm	-136sqm
Office Space	6,041sqm	7,803sqm /8,312sqm	6,642sqm	+601sqm
Total Commercial Space	6,406sqm	9,070sqm	6,871sqm	+465sqm
Residential Units	1	13	7*	6
*The 7 residential units will c	omprise 1 v 1 he	de 1 v 2 hode	3 v 3 bods and ') v 4 hods

*The 7 residential units will comprise 1 x 1 beds, 1 x 2 beds, 3 x 3 beds and 2 x 4 beds

- 4.3 In summary, the development proposals are as follows:
 - Demolition of the existing buildings on Grays Inn Road with the provision of a new building fronting onto Grays Inn Road and the retention, refurbishment and alterations to the other buildings;
 - The development will provide staff cycle parking spaces in accordance with the Draft New London Plan;
 - There will be no on-site vehicle parking provided, in accordance with planning policy;
 - The introduction of a raised carriageway on Mount Pleasant, subject to approval by LBC;
 - Servicing for vehicles will be undertaken both on-street and on-site, with a loading area retained capable of accommodating up to 7.5t vehicles;
 - Waste storage has been calculated based on Camden's Waste Guidance document; and



• Pedestrian access to the building will be provided along Grays Inn Road and Mount Pleasant, with the main entrance to the office, residential and retail units taken from Grays Inn Road.

Consented Scheme Comparison

4.4

In comparison to the 2017 approved scheme, this development will result in:

- The retention of both Brain Yard, the Tram Shed and the Panther House building;
- The buildings on Grays Inn Road will be demolished and replaced by a new building;
- The redevelopment and rearrangement of the courtyard will retain the ability for a vehicle to enter the site for servicing purposes;
- There will be no new basement construction; and
- The massing of the proposal is reduced with a 465 sqm increase in floor area compared with a 2664 sqm increase in floor area for the approved scheme.



5 EFFECT OF DEVELOPMENT

Trip Generation

- 5.1 The trip generation by each mode of transport to and from the proposed development has been estimated for a typical weekday morning and evening peak period, as well as an entire day for the office use. Given that there will be a nominal reduction in A-class floorspace and 6 additional residential units only, it is not considered relevant to undertake a trip generation assessment for these use classes. It is also relevant that the travel demands of a larger development proposal have recently been considered acceptable and approved.
- 5.2 To establish a comprehensive multi-modal trip generation scenario for the additional 601sqm of office space the TRICS database has been interrogated. The trip rates are based upon available data, taking into account the characteristics of the site such as location and number of parking spaces. The output reports are included at **Appendix F**.

Time Period	Trip Rates	Trip Rates per 100 sqm		on Trips*
Time Period	In	Out	In	Out
7am – 8am	1.284	0.033	4	1
8am – 9am	2.856	0.072	18	2
9am – 10am	0.970	0.066	17	3
Morning Period (7am – 10am)	5.110	0.046	40	5
4pm – 5pm	0.151	1.467	1	6
5pm – 6pm	0.144	2.391	1	17
6pm – 7pm	0.039	0.662	1	12
Evening Period (4pm – 7pm)	0.334	4.887	3	35
Total (7am – 7pm)	8.150	8.210	73	71

5.3 A summary of the trip rates and resultant total person trips for the uplift of 601sqm is shown in **Table 5.1**.

- 5.4 To establish the mode of transport expected to be used by staff and visitors to the development, journey to work data from the 2011 Census, for those working in the local area as summarised in **Table 2.5** has been applied to the total person trips. The Census mode relates to the longest part of the journey to work.
- 5.5 The modal split has been modified to reflect the car-free nature of the scheme, i.e. there will be no parking provided. The site is within a controlled parking zone where controls are in place Monday to Friday between 8.30am and 6.30pm and on Saturday mornings, which makes it difficult for those commuting to work by car to park on-street during the day. The car driver

٦



mode split has therefore been reduced from 6% to 0%. The remaining 6% has been reallocated to underground and rail modes. **Table 5.2** shows the predicted mode split percentages.

Table 5.2 – Predicted Mode Split Percentages (Journey to Work)		
Mode	Modified Modal Split	
Underground / Overground	35%	
Rail	40%	
Bus	11%	
Taxi	0%	
Motorcycle	2%	
Bicycle	6%	
Walking	6%	
Total	100%	

5.6

The modified modal split has been applied to the total person trips. **Table 5.3** shows the estimated multi-modal trip generation summary for the additional office space during the morning peak (8am – 9am) and the evening peak (5pm – 6pm). For example, the development is expected to generate 46 persons arriving at the site by all modes during the morning peak hour and 43 persons departing by all modes during the evening peak.

Mode	Modified Mode Split	AM Peak		PM Peak	
		In	Out	In	Out
M/C	2%	0	0	0	0
Bicycle	6%	1	0	0	1
Walk	6%	1	0	0	1
Underground	35%	6	1	0	6
Rail	40%	7	1	1	7
Bus	11%	2	0	0	2
Taxi	0%	0	0	0	0
Total Person	100%	18	2	1	17

5.7

The proposed development is expected to result in an additional 17 trips by public transport in the busiest one-hour period. The site achieves a PTAL of 6b and benefits from being located near to numerous and frequent bus, rail and underground services from a variety of locations. Hence, it is not considered necessary to carry out a more detailed assessment of public transport trips.

Highway Works

5.8 The existing pedestrian experience on Mount Pleasant is poor, with limited visibility of vehicles using the carriageway and narrow footways.



5.9 It is proposed that a scheme of works is agreed with the London Borough of Camden to resurface the carriageway and footway along Mount Pleasant from the site's frontage toward Laystall Street, incorporating traffic calming features where appropriate. An indicative arrangement is shown at **Appendix G** with a swept path drawing showing the refuse collection point for the office store. This is in accordance with the approved scheme at the site.

Access

Pedestrian and Cycle Access

- 5.10 Pedestrian access to the site will be taken predominantly from Grays Inn Road, with secondary entry taken from Mount Pleasant.
- 5.11 The office will be provided with an entrance from Grays Inn Road, which will lead to the reception area and to the remainder of the building. Access for cyclists working at or visiting the office space will be provided from Mount Pleasant at basement level. A platform lift will facilitate step-free access to/from the cycle store.
- 5.12 There are three retail units proposed, all of which will front onto Grays Inn Road, two of which will be served with independent accesses, whilst access to the smaller unit will be taken from within the office entrance to the site. Access to the retail cycle store will be taken from the main office entrance.
- 5.13 The residential core will be located at the northern extent of the building that fronts onto Grays Inn Road.

Vehicular Access

5.14 The current courtyard access via Mount Pleasant will remain to support the delivery and servicing strategy for the site. This will allow vehicles up to a 7.5t box van to enter and load from within the site boundary. As with the previously approved scheme, there is no vehicular access along Grays Inn Road. Swept path analysis indicating a vehicle entering and leaving the development is shown at **Appendix H.**

Parking

Car Parking

5.15 No on-site car parking facilities are proposed for the development, in line with the site's high level of access to public transport facilities and in accordance with policy objectives. Residents of the development will not be able to obtain a parking permit to park on the streets surrounding the site. This strategy is in accordance with the previously approved scheme at the site.



Cycle Parking

- 5.16 The proposed development includes on-site cycle parking in accordance with Draft New London Plan Standards which will benefit employees at the site and encourage travel by more sustainable modes.
- 5.17 For the office use, cycle parking will be located at basement level and accessed via Mount Pleasant. A platform lift will provide step-free access to the cycle parking. There will be 110 spaces will be available in the form of two-tier cycle parking and 6 in the form of Sheffield stands. The use of the secure area to provide some visitor cycle parking will cater for those guests to the building that may cycle to attend a meeting and therefore have a requirement to store their cycle for a longer visit, e.g. an hour or more. It is considered most likely that a shortstay cyclist visitor, such as a courier, would use the cycle parking provided within the public realm. The provision of cycle parking spaces, showers, changing facilities and lockers will encourage employees to travel to work by sustainable modes and helps promote the aims of the Travel Plan.
- 5.18 Cycle parking for the retail units will be provided at ground floor level for 8 bicycles. The cycle parking will be accessed from the main entrance.
- 5.19 Residential cycle parking will be accessed from the residential core at the northern end of the building. There will be a total of 16 cycle spaces available for residents.

Delivery and Servicing Activity

Deliveries

Delivery Strategy

5.20 Following pre-application discussions, it is understood that the Council is seeking to promote the introduction of dedicated cycle facilities along both sides of Grays Inn Road with a public consultation planned for late summer. Such a scheme would retain time-limited on-street loading controls from the Grays Inn Road frontage and / or make loading opportunities on local side roads. Therefore, it is appropriate for the development proposals to accommodate vehicles on-site where possible in order to reduce the reliance on street servicing via Grays Inn Road.

Office

5.21 The approach for delivery and servicing activity to the office use will therefore be split between vehicles stopping on-street on the surrounding highway network and vehicles part of the former courtyard from Mount Pleasant. The on-site area allows vehicles up to a 7.5t box van to reverse into the site and re-enter Mount Pleasant in forward gear. It is envisaged that the delivery and



servicing strategy at the development would be managed through a Servicing Management Plan which will seek to reduce the reliance on the highway network, i.e. encouraging suppliers to use smaller vehicles and to book a time slot for the on-site loading area.

5.22 There will be regular post, stationery and office supply deliveries. In terms of types of vehicles, often couriers will travel by bike, motorbike or car, and larger deliveries would take place in Luton box van or similar. A review of the TRICS database indicates that offices typically generate 0.25 deliveries per 100sqm of floorspace per day. The uplift of 601sqm of office floor space is likely to generate in the order of 1-2 deliveries when compared to the existing development, should it be fully occupied, whilst a reduction in deliveries is likely when compared to the larger, approved scheme.

<u>Retail</u>

- 5.23 There will be a total of three A-class units at the site, which will operate as part of the development i.e. a restaurant / café or as a retail unit such as a bookshop / florist. The A-class use would support those working within the building and the local population and hence the delivery vehicles are likely to already be on the network, serving nearby properties.
- 5.24 Given the convenience factor for delivery drivers, it is likely that they would stop to deliver in an available on-street opportunity along either Grays Inn Road or on a local side road, i.e. Elm Street or Northington Street. The retail floor space will retain a similar quantum to that already provided on-site and hence it is not considered that there will be a noticeable change in the number of vehicles nor to the arrangement that currently occurs.

Residential

5.25 The proposal seeks to provide 7 residential units at the site, resulting in an uplift of 6 new homes. Residential units typically generate 0.100 deliveries per unit per day, hence the uplift in units could generate 1 delivery per day.

Summary

5.26 Following on from discussions with LBC officers, it was not considered necessary to undertake further kerbside activity survey work, given that information was submitted as a part of the 2015 planning application and that LBC are undertaking independent kerbside activity surveys to inform the plans to introduce dedicated cycle lane infrastructure on Grays Inn Road.

Waste Storage and Collections

5.27 The waste storage at the site has been provided in accordance with Camden's waste guidance.



- 5.28 Residential waste will be located adjacent to the entrance to the residential core. There will be two 1,100L bins (one for general waste and one for recyclables) and two smaller bins (240L) to accommodate food waste and recyclables. The residential waste will be collected from the front of the building, with vehicles stopping on-street on Grays Inn Road, in line with the previously approved scheme and neighbouring properties.
- 5.29 Refuse collections for the office will take place via Mount Pleasant with the bin store located within a short distance of the carriageway. As set out, it is envisaged that the carriageway on Mount Pleasant will be raised to provide a step-free route from the site boundary to the back of the refuse vehicle. Office waste storage will be collected by a private contract and hence it is appropriate to reduce the number of bins within the store and increase the frequency of collection, as this will reduce the period of time that vehicles will wait on Mount Pleasant to collect waste. Hence, this will reduce the period of time that the flow of vehicles is temporarily stopped. This strategy is in line with the approved scheme at the site.
- 5.30 The retail waste store will be located at the southern end of the site. There will be a total of 3 x 1,280 Eurobins and one smaller 500L bin provided. This level of provision is considered suitable for the retail element of the scheme. Waste vehicles will wait on-street on Grays Inn Road, in line with the existing properties on the site, the approved scheme and neighbouring properties.

Mitigation Measures

Travel Plan

- 5.31 Employees and visitors at the proposed development will be encouraged to travel to the site by sustainable modes through the implementation of a Travel Plan. A draft Travel Plan has been prepared and included as a separate document as part of the planning application.
- 5.32 The primary objective of the Travel Plan will be to set out a long-term strategy to facilitate and encourage sustainable modes of travel to the site. It will also seek to promote a shift from travel by public transport to active modes such as walking and cycling as these offer health benefits.
- 5.33 The initiatives and measures that form part of the Travel Plan will be a mixture of 'hard' and 'soft' measures. The 'hard' measures include the provision of facilities such as safe and secure cycle parking, showers, lockers and changing facilities and zero car parking, except for disabled users. The 'soft' measures include initiatives such as providing information on public transport services and walking and cycling routes.
- 5.34 The Travel Plan would be finalised, and agreed prior to the occupation of the proposed development.



Servicing Management Plan

- 5.35 A draft Servicing Management Plan (SMP) has also been prepared. This is included as a separate document as part of the planning application and will be secured by way of condition. The purpose of the SMP will be to mitigate the potential impacts of servicing activity associated with the development. The key aims and objectives of the SMP are:
 - To minimise disruption to the local roads;
 - To manage deliveries effectively to avoid peaking of deliveries and departures that may have detrimental impact on the local highway network; and,
 - To manage the number/volume of service vehicle movements during the morning and evening peak periods; and,
 - To reduce the dwell time of the vehicle, by increasing the efficiency of the delivery.

Construction Management Plan

5.36 A draft Construction Management Plan (CMP) has been prepared by South Downs Safety. The Council's pro-forma document has been completed as part of the planning application and will be secured by way of condition. The plan seeks to reduce the impact of the construction works associated with the development on local residents, businesses and the highway.



6 SUMMARY AND CONCLUSION

Summary

- 6.1 TTP Consulting has been appointed by Panther House Developments Limited (the Applicant) to provide traffic and transport advice in relation to the proposed redevelopment at Panther House, Brain Yard Buildings and 156 and 160-164 Grays Inn Road (the site), located within the London Borough of Camden (LBC).
- 6.2 In summary:
 - The existing buildings combine to provide 365sqm of retail space and 6,041sqm of office space (a total of 6,406sqm of floorspace) and one residential unit. The proposals seek to provide a building of comprising 229sqm of retail space, 6,642sqm of office floorspace and 7 residential units. This represents a nominal reduction in retail space and an increase of 601sqm of office space and 6 residential units;
 - When compared to the 2017 approved scheme, the quantum of retail and office floorspace has reduced;
 - The site is located within a highly accessible London location, achieving a PTAL rating of 6b. As such the vast majority of trips associated with the proposals will be expected to be made by sustainable modes of travel;
 - There will be no car parking provided on-site in line with policy objectives. Residents at the development will not be permitted to obtain a parking permit to park on-street;
 - Cycle parking will be provided at basement level in accordance with the Draft New London Plan standards;
 - Servicing activity including deliveries and refuse collections will be undertaken on-street from Grays Inn Road and on local side roads. In addition, an on-site servicing opportunity will be retained and accessed from Mount Pleasant. Delivery and servicing activity will be managed by a Servicing Management Plan;
 - The proposed level of vehicle activity indicates that the servicing arrangement can be accommodated without detriment to the operation of the local road network;
 - Refuse storage will be provided at ground floor level for collection;



- The level of trips generated by the proposed development is not significant, with employees benefitting from several stations and bus routes in close proximity and is not expected to have a material impact on the local highway or public transport network; and,
- The site's existing public transport facilities and access to walking and cycling routes combined with the lack of on-site car parking will maximise the sustainability of the site in accordance with local, regional and national policy and will promote a sustainable form of development.

Conclusion

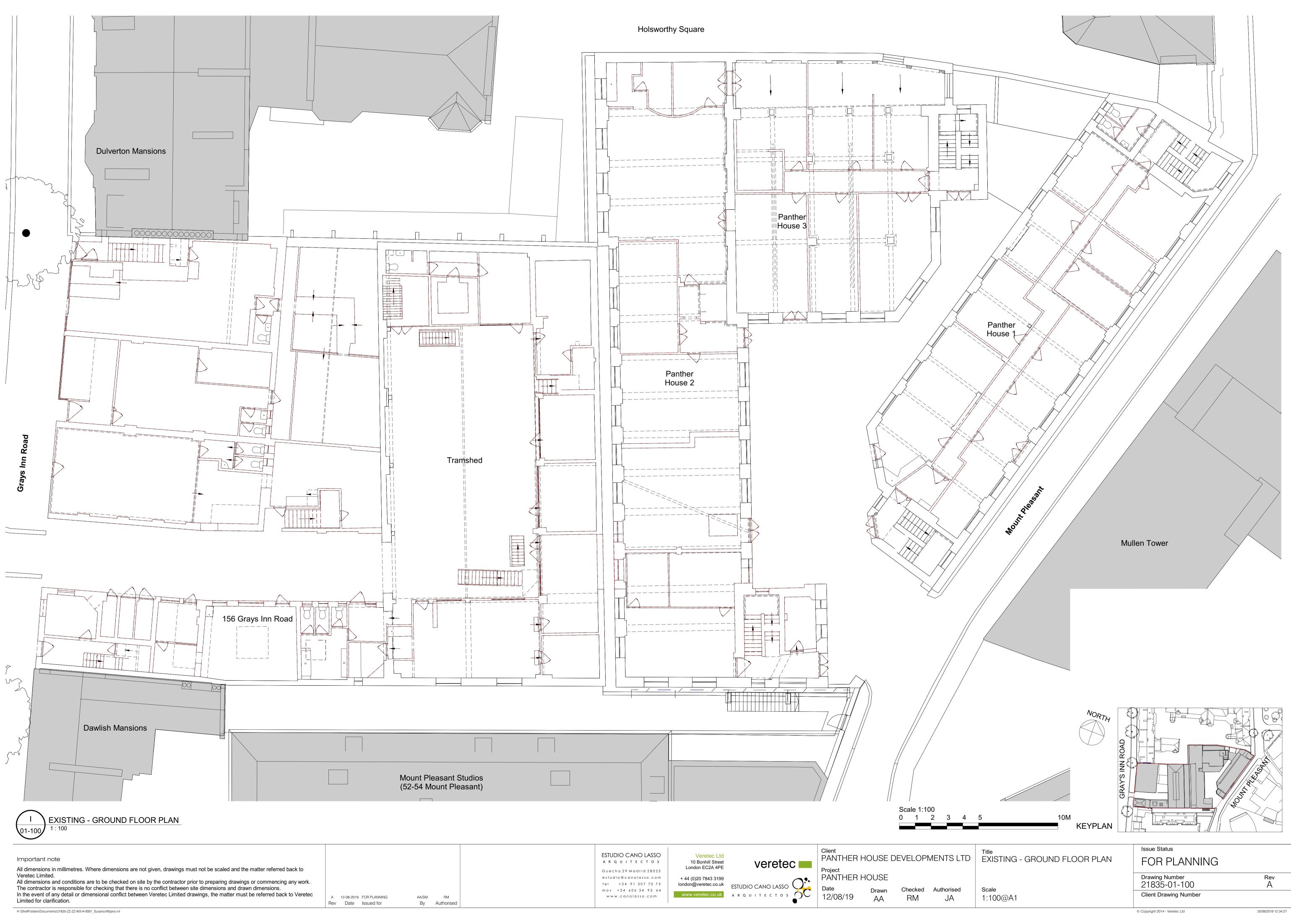
6.3

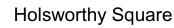
The proposed scheme is consistent with relevant transport planning policy guidance and will not give rise to any material transport related impacts. The proposals generate a lower demand for travel than the scheme considered suitable for approval in 2017. It therefore meets the test of the NPPF and paragraph 109, which states that:

"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."

Appendix A

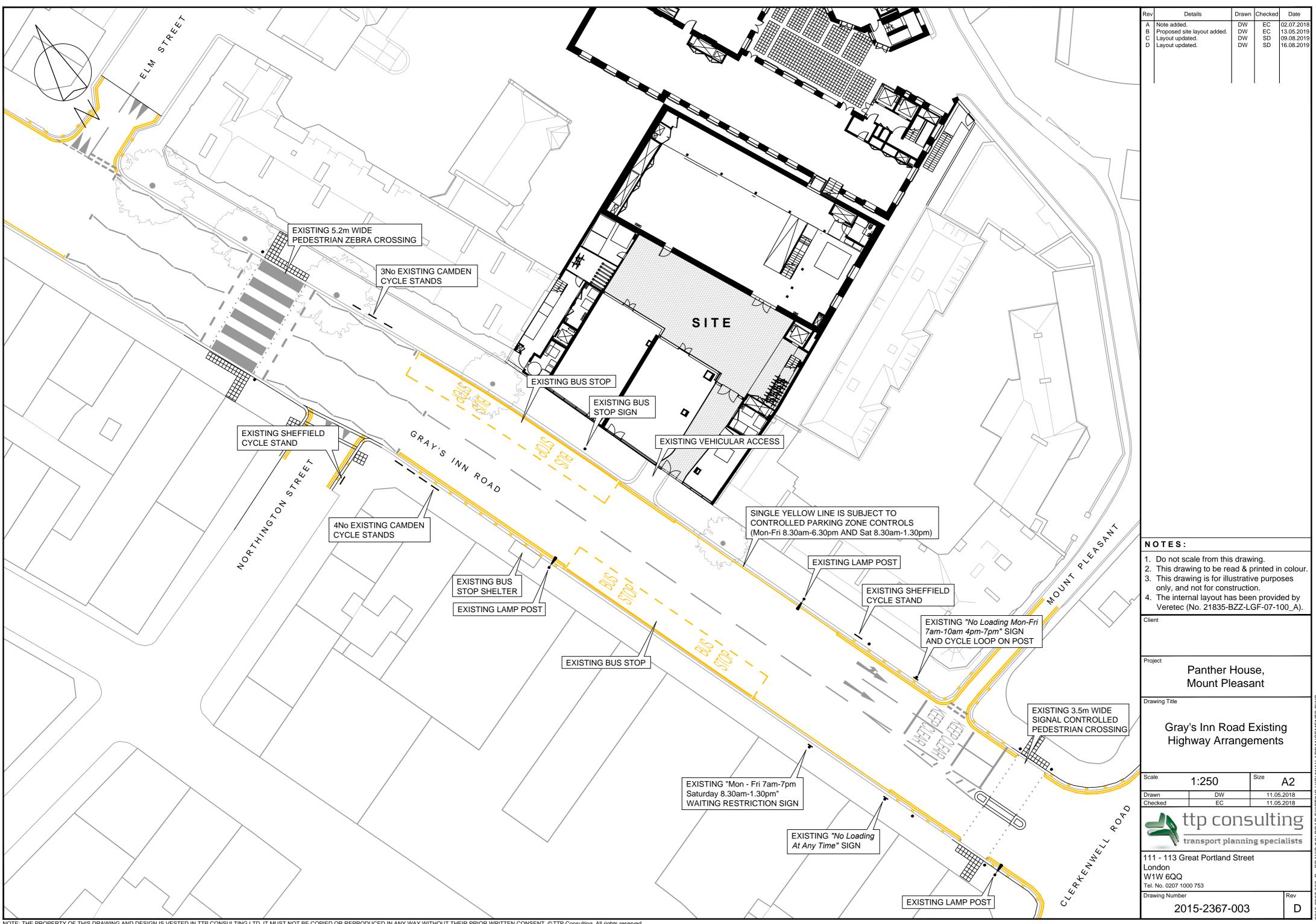
(Existing Layout Plans)





Appendix B

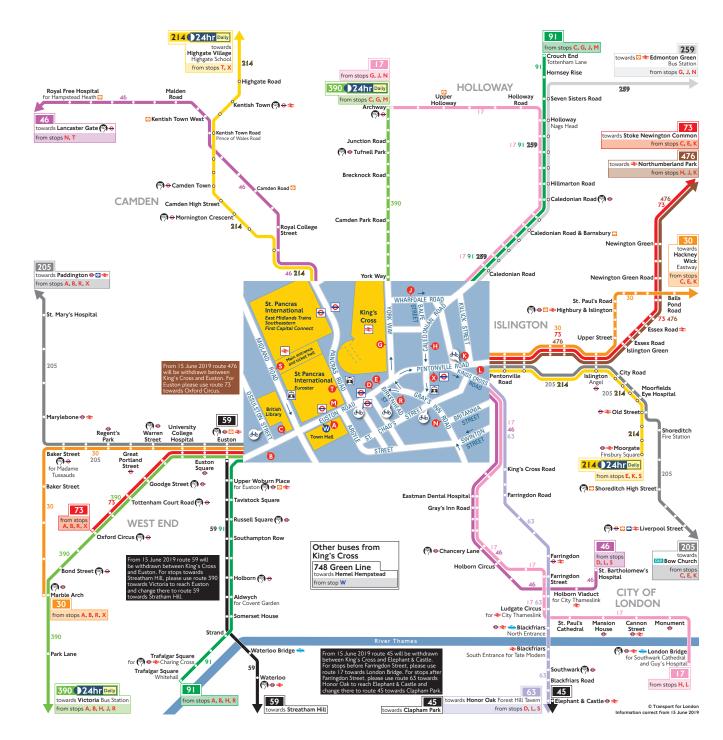
(Existing Highway Arrangement)



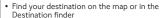
Appendix C

(Bus Route Map)

Buses from King's Cross



How to use this map



- See the coloured lines on the map and numbers in the Destination finder for the bus
- routes that go to your destinationCheck the Destination finder and map (at the
- end of each coloured line) for the bus stops to catch your bus from

θ

1 2 3

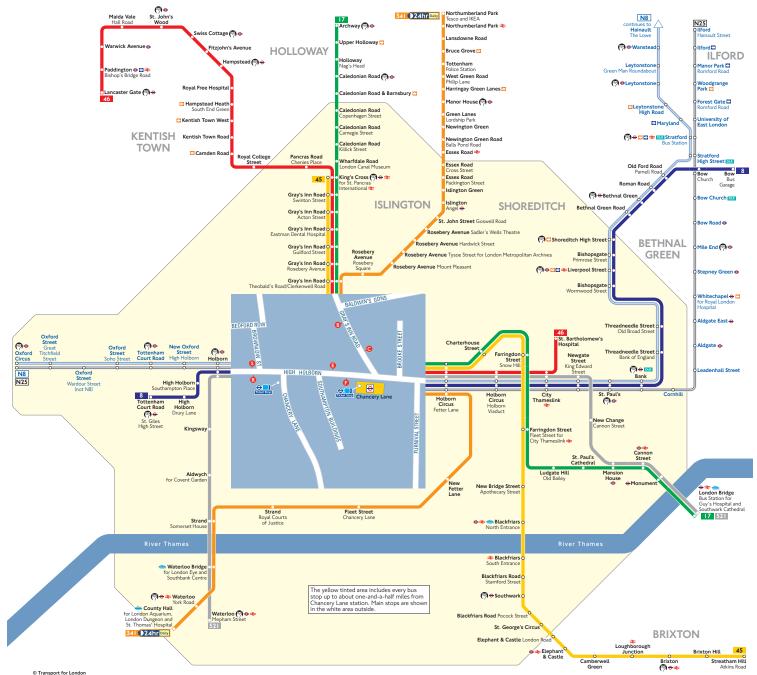
- Use the central map to find the nearest bus
 stop for your route
- Look for the bus stop letters at the top of the
- stop (see example for stop **A** to the right)

Key θ Connections with London Underground Ð Connections with London Overground Ð Connections with TfL Rail Connections with National Rail 2 DLR Connections with DLR Connections with river boats -Śłó Cycle hire docking station Taxi rank Tube/London Overground station with 24-hour (?) ⊖ [] service Friday and Saturday nights

Ways to pay



Buses from Chancery Lane Station



Route finder

Bus route	Towards	Bus stops
8	Bow	88
	Tottenham Court Road	B B
17	Archway	B
	London Bridge	G
45	Kings Cross	B
	Streatham Hill	0
46	Lancaster Gate	B
	St. Bartholomew's Hospital	0
341 ()24hr 🔤	County Hall	0
	Northumberland Park	B
521	London Bridge	88
	Waterloo 🔳	60

Night buses

Bus route	Towards	Bus stops
N8	Hainault	00
	Oxford Circus	B B
N25	llford	00
	Oxford Circus	68

Key

-	
8	Day buses in black
N8	Night buses in blue
0	Connections with London Underground
O	Connections with London Overground
Ð	Connections with TfL Rail
*	Connections with National Rail
DLR	Connections with DLR
	Connections with river boats
® ⊖ ⊡	Tube/London Overground station with
(%) 🗢 🖸	24-hour service Friday and Saturday nights
	Mondays to Fridays only

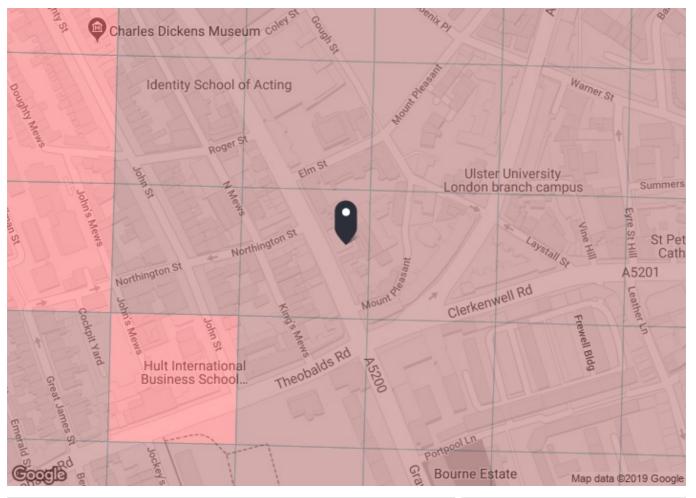
Ways to pay



Appendix D

(PTAL Output)





PTAL output for Base Year 6b	
160 Grays Inn Rd, Holborn, London WC1X 8ED, UK Easting: 530979, Northing: 182051	
Grid Cell: 88392	
Report generated: 18/06/2019	
Calculation Parameters	
Dayof Week	M-F
Time Period	AM Peak
Walk Speed	4.8 kph
Bus Node Max. Walk Access Time (mins)	8
Bus ReliabilityFactor	2.0
LU Station Max. Walk Access Time (mins)	12
LU ReliabilityFactor	0.75
National Rail Station Max. Walk Access Time (mins)	12
National Rail ReliabilityFactor	0.75



Calculation data

Calcu	lation data									
Mode	Stop	Route	Distance (metres)	Frequency(vph)	Walk Time (mins)	SWT (mins)	TAT (mins)	EDF	Weight	A
Bus	HOLBORN HALL	341	158.54	6	1.98	7	8.98	3.34	0.5	1.67
Bus	GRAYS INN RD CL'WELL RD	46	30.93	6	0.39	7	7.39	4.06	0.5	2.03
Bus	GRAYS INN RD CL'WELL RD	17	30.93	7.5	0.39	6	6.39	4.7	1	4.7
Bus	GRAYS INN RD CL'WELL RD	45	30.93	7	0.39	6.29	6.67	4.5	0.5	2.25
Bus	HOLBORN HALL	243	163.82	11	2.05	4.73	6.78	4.43	0.5	2.21
Bus	HOLBORN HALL	38	163.82	10	2.05	5	7.05	4.26	0.5	2.13
Bus	HOLBORN HALL	19	163.82	8	2.05	5.75	7.8	3.85	0.5	1.92
Bus	HOLBORN HALL	55	163.82	10	2.05	5	7.05	4.26	0.5	2.13
Bus	CHANCERY LANE STATION	8	553.39	10	6.92	5	11.92	2.52	0.5	1.26
Bus	CHANCERY LANE STATION	521	553.39	27	6.92	3.11	10.03	2.99	0.5	1.5
Bus	CHANCERY LANE STATION	242	553.39	6.5	6.92	6.62	13.53	2.22	0.5	1.11
Bus	CHANCERY LANE STATION	25	553.39	8	6.92	5.75	12.67	2.37	0.5	1.18
Bus	MOUNT PLEASANT	63	443.13	12	5.54	4.5	10.04	2.99	0.5	1.49
Rail	Farringdon Turnmill	'BEDFDM-SVNOAKS 1E62'	731.56	0.33	9.14	91.66	100.8	0.3	0.5	0.15
Rail	Farringdon Turnmill	'BEDFDM-BROMLYS 1E83'	731.56	0.33	9.14	91.66	100.8	0.3	0.5	0.15
Rail	Farringdon Turnmill	'BEDFDM-ORPNGTN 1L60'	731.56	0.33	9.14	91.66	100.8	0.3	0.5	0.15
Rail	Farringdon Turnmill	'BEDFDM-SUTTON 1013'	731.56	0.33	9.14	91.66	100.8	0.3	0.5	0.15
Rail	Farringdon Turnmill	BEDFDM-SOTTON 1013	731.56	0.33	9.14 9.14	91.66	100.8	0.3	0.5	0.15
	Farringdon Turnmill	BEDFDM-BRGHTN 1T11	731.56	0.33	9.14 9.14	91.66	100.8	0.3	0.5	0.15
Rail	Ū.	BEDFDM-BRGHTN 1T11		0.33	9.14 9.14	45.53	100.8 54.67		0.5	
Rail	Farringdon Turnmill		731.56							0.27
Rail	Farringdon Turnmill	'BRGHTN-BEDFDM 1T83'	731.56	0.33	9.14	91.66	100.8	0.3	0.5	0.15
Rail	Farringdon Turnmill	'BEDFDM-SUTTON 1V23'	731.56	0.33	9.14	91.66	100.8	0.3	0.5	0.15
Rail	Farringdon Turnmill	'BEDFDM-SUTTON 1V82'	731.56	0.33	9.14	91.66	100.8	0.3	0.5	0.15
Rail	Farringdon Turnmill	'BRGHTN-BEDFDM 1W06'	731.56	0.33	9.14	91.66	100.8	0.3	0.5	0.15
Rail	Farringdon Turnmill	'BRGHTN-BEDFDM 1W81'	731.56	0.33	9.14	91.66	100.8	0.3	0.5	0.15
Rail	Farringdon Turnmill	'BEDFDM-BRGHTN 1W84'	731.56	0.33	9.14	91.66	100.8	0.3	0.5	0.15
Rail	Farringdon Turnmill	'BEDFDM-BRGHTN 1W86'	731.56	0.33	9.14	91.66	100.8	0.3	0.5	0.15
Rail	Farringdon Turnmill	'STALBCY-SVNOAKS 2E11'	731.56	1	9.14	30.75	39.89	0.75	1	0.75
Rail	Farringdon Turnmill	'BEDFDM-SVNOAKS 2E19'	731.56	0.33	9.14	91.66	100.8	0.3	0.5	0.15
Rail	Farringdon Turnmill	'LUTON-SVNOAKS 2E21'	731.56	0.33	9.14	91.66	100.8	0.3	0.5	0.15
Rail	Farringdon Turnmill	'STALBCY-SVNOAKS 2E95'	731.56	0.33	9.14	91.66	100.8	0.3	0.5	0.15
Rail	Farringdon Turnmill	'SUTTON-LUTON 2000'	731.56	0.33	9.14	91.66	100.8	0.3	0.5	0.15
Rail	Farringdon Turnmill	'SUTTON-BEDFDM 2004'	731.56	0.33	9.14	91.66	100.8	0.3	0.5	0.15
Rail	Farringdon Turnmill	'SUTTON-STALBCY 2006'	731.56	0.33	9.14	91.66	100.8	0.3	0.5	0.15
Rail	Farringdon Turnmill	'SUTTON-LUTON 2010'	731.56	1	9.14	30.75	39.89	0.75	0.5	0.38
Rail	Farringdon Turnmill	'LUTON-SUTTON 2017'	731.56	0.67	9.14	45.53	54.67	0.55	0.5	0.27
Rail	Farringdon Turnmill	'STALBCY-SUTTON 2021'	731.56	0.33	9.14	91.66	100.8	0.3	0.5	0.15
Rail	Farringdon Turnmill	'STALBCY-SUTTON 2029'	731.56	0.67	9.14	45.53	54.67	0.55	0.5	0.27
Rail	Farringdon Turnmill	'LUTON-BCKNHMJ 2S91 '	731.56	0.33	9.14	91.66	100.8	0.3	0.5	0.15
Rail	Farringdon Turnmill	'STALBCY-BROMLYS 2S93'	731.56	0.33	9.14	91.66	100.8	0.3	0.5	0.15
Rail	Farringdon Turnmill	'BRGHTN-BEDFDM 2T02'	731.56	0.33	9.14	91.66	100.8	0.3	0.5	0.15
Rail	Farringdon Turnmill	'BRGHTN-BEDFDM 2T04'	731.56	0.33	9.14	91.66	100.8	0.3	0.5	0.15
Rail	Farringdon Turnmill	'BEDFDM-BRGHTN 2T15'	731.56	1	9.14	30.75	39.89	0.75	0.5	0.38
Rail	Farringdon Turnmill	'BEDFDM-BRGHTN 2T25'	731.56	0.33	9.14	91.66	100.8	0.3	0.5	0.15
Rail	Farringdon Turnmill	'BRGHTN-LUTON 2T99'	731.56	0.33	9.14	91.66	100.8	0.3	0.5	0.15
Rail	Farringdon Turnmill	'SUTTON-STALBCY 2V02'	731.56	0.33	9.14	91.66	100.8	0.3	0.5	0.15
Rail	Farringdon Turnmill	'SUTTON-STALBCY 2V08'	731.56	0.67	9.14	45.53	54.67	0.55	0.5	0.27
Rail	Farringdon Turnmill	'BEDFDM-SUTTON 2V15'	731.56	0.33	9.14	91.66	100.8	0.3	0.5	0.15
Rail	Farringdon Turnmill	'SUTTON-BEDFDM 2V16'	731.56	0.33	9.14	91.66	100.8	0.3	0.5	0.15
Rail	Farringdon Turnmill	'LUTON-SUTTON 2V19'	731.56	0.33	9.14	91.66	100.8	0.3	0.5	0.15
Rail	Farringdon Turnmill	'SUTTON-KNTSHTN 2V20'	731.56	0.33	9.14	91.66	100.8	0.3	0.5	0.15
Rail	Farringdon Turnmill	'STALBCY-SUTTON 2V27'	731.56	0.33	9.14 9.14	91.66	100.8	0.3	0.5	0.10
Rail	Farringdon Turnmill	'LUTON-SUTTON 2V31'	731.56	0.33	9.14 9.14	91.66	100.8	0.3	0.5	0.10
Rail	Farringdon Turnmill	'BRGHTN-BEDFDM 2W08'	731.56	0.33	9.14	91.66	100.8	0.3	0.5	0.15
Rail	Farringdon Turnmill	'BRGHTN-BEDFDM 2W12'	731.56	0.33	9.14	91.66	100.8	0.3	0.5	0.15
Rail	Farringdon Turnmill	'BRGHTN-BEDFDM 2W16'	731.56	0.33	9.14	91.66	100.8	0.3	0.5	0.15
Rail	Farringdon Turnmill	'ASHFKY-BEDFDM 1E61 '	731.56	0.33	9.14	91.66	100.8	0.3	0.5	0.15
Rail	Farringdon Turnmill	'ASHFKY-BEDFDM 1E63'	731.56	0.33	9.14	91.66	100.8	0.3	0.5	0.15

Mode	Stop	Route	Distance (metres)	Frequency(vph)	Walk Time (mins)	SWT (mins)	TAT (mins)	EDF	Weight	A
Rail	Stop Farringdon Turnmill	ROUTE 'RCHT-BEDFDM 1E67'	731.56	0.33	9.14	91.66	100.8	0.3	0.5	AI 0.15
Rail	Farringdon Turnmill	'SVNOAKS-BEDFDM 1E69'	731.56	0.33	9.14	91.66	100.8	0.3	0.5	0.15
Rail	Farringdon Turnmill	'BROMLYS-BEDFDM 1E82'	731.56	0.33	9.14	91.66	100.8	0.3	0.5	0.15
Rail	Farringdon Turnmill	BCKNHMJ-BEDFDM 1G65'	731.56	0.33	9.14	91.66	100.8	0.3	0.5	0.15
Rail	Farringdon Turnmill	'KENTHOS-BEDFDM 1G71'	731.56	0.33	9.14	91.66	100.8	0.3	0.5	0.15
Rail	Farringdon Turnmill	'ORPNGTN-STALBCY 2D93'	731.56	0.33	9.14	91.66	100.8	0.3	0.5	0.15
Rail	Farringdon Turnmill	'ORPNGTN-LUTON 2D95'	731.56	0.33	9.14	91.66	100.8	0.3	0.5	0.15
Rail	Farringdon Turnmill	'SVNOAKS-STALBCY 2E59'	731.56	0.67	9.14	45.53	54.67	0.55	0.5	0.10
Rail	Farringdon Turnmill	'SVNOAKS-LUTON 2E61 '	731.56	0.33	9.14	91.66	100.8	0.3	0.5	0.15
Rail	Farringdon Turnmill	SVNOAKS-WHMPSTM 2E63	731.56	0.33	9.14	91.66	100.8	0.3	0.5	0.15
Rail	Farringdon Turnmill	SVNOAKS-KNTSHTN 2E65	731.56	0.33	9.14	91.66	100.8	0.3	0.5	0.15
Rail	Farringdon Turnmill	'SVNOAKS-KNTSHTN 2E67'	731.56	0.33	9.14	91.66	100.8	0.3	0.5	0.15
Rail	Farringdon Turnmill	'BROMLYS-LUTON 2E93'	731.56	0.33	9.14	91.66	100.8	0.3	0.5	0.15
Rail	Farringdon Turnmill	'ORPNGTN-LUTON 2L59'	731.56	0.33	9.14	91.66	100.8	0.3	0.5	0.15
Rail	Farringdon Turnmill	ORPNGTN-KNTSHTN 2L65	731.56	0.33	9.14	91.66	100.8	0.3	0.5	0.15
Rail	Farringdon Turnmill	'BEDFDM-ELPHNAC 1J87'	731.56	0.33	9.14	91.66	100.8	0.3	0.5	0.15
Rail	Farringdon Turnmill	'BEDFDM-ELPHNAC 1J88'	731.56	0.33	9.14	91.66	100.8	0.3	0.5	0.15
LUL	Farringdon Turnmill	'Hammersmith-Edgware'	731.56	6	9.14	5.75	14.89	2.01	0.5	1.01
LUL	Farringdon Turnmill	'Barking-Hammersmith'	731.56	6.34	9.14	5.48	14.63		0.5	1.03
LUL	Farringdon Turnmill	'Hammersmith-Plaistow	731.56	1	9.14	30.75	39.89		0.5	0.38
LUL	Farringdon Turnmill	'Aldgate-AmerFast '	731.56	1	9.14	30.75	39.89		0.5	0.38
LUL	Farringdon Turnmill	'Ches-AldgateFast'	731.56	2	9.14	15.75	24.89	1.21	0.5	0.6
LUL	Farringdon Turnmill	'Uxbridge-AldSlow'	731.56	5.33	9.14	6.38	15.52		0.5	0.97
LUL	Farringdon Turnmill	'Watford-AldSfast '	731.56	3.67	9.14	8.92	18.07		0.5	0.83
LUL	Farringdon Turnmill	'Aldg-WatfordSlow'	731.56	3.67	9.14	8.92	18.07		0.5	0.83
LUL	Farringdon Turnmill	'Ald-HarrowHill '	731.56	1.33	9.14	23.31	32.45		0.5	0.46
LUL	ChanceryLane	'Epping-Ealing '	515.19	3	6.44	10.75	17.19		0.5	0.87
LUL	ChanceryLane	'WRuislip-Epping '	515.19	3	6.44	10.75	17.19		0.5	0.87
LUL	Chancery Lane	'RuislipGar-Epping '	515.19	1	6.44	30.75	37.19	0.81	0.5	0.4
LUL	Chancery Lane	'WhiteCity-Epping '	515.19	0.33	6.44	91.66	98.1	0.31	0.5	0.15
LUL	Chancery Lane	'Epping-NActon '	515.19	1	6.44	30.75	37.19	0.81	0.5	0.4
LUL	Chancery Lane	'Debden-WRuislip'	515.19	0.33	6.44	91.66	98.1	0.31	0.5	0.15
LUL	Chancery Lane	'WhiteCity-Debden'	515.19	0.33	6.44	91.66	98.1	0.31	0.5	0.15
LUL	Chancery Lane	'Debden-Northolt '	515.19	1	6.44	30.75	37.19	0.81	0.5	0.4
LUL	Chancery Lane	'RuislipGdns-Debden'	515.19	0.33	6.44	91.66	98.1	0.31	0.5	0.15
LUL	Chancery Lane	'Loughton-WRuislip'	515.19	1	6.44	30.75	37.19	0.81	0.5	0.4
LUL	Chancery Lane	'NActon-Loughton'	515.19	0.67	6.44	45.53	51.97	0.58	0.5	0.29
LUL	Chancery Lane	'WhiteCity-Loughton '	515.19	0.33	6.44	91.66	98.1	0.31		0.15
LUL	Chancery Lane	'Loughton-Northolt '	515.19	0.33	6.44	91.66	98.1	0.31	0.5	0.15
LUL	Chancery Lane	'Ealing-Loughton'	515.19	1	6.44	30.75	37.19	0.81		0.4
LUL	Chancery Lane	'Ealing-NewburyPark'	515.19	0.67	6.44	45.53	51.97	0.58		0.29
LUL	Chancery Lane	WRuislip-NewburyPark	515.19	0.33	6.44	91.66	98.1	0.31		0.15
LUL	Chancery Lane	'NActon-NewburyPark'	515.19	0.33	6.44	91.66	98.1	0.31	0.5	0.15
LUL	Chancery Lane	'Hainault-Ealing '	515.19	5.33	6.44	6.38	12.82	2.34		2.34
LUL	Chancery Lane	'Hainault-Nacton'	515.19	1.33	6.44	23.31	29.75	1.01	0.5	0.5
LUL	Chancery Lane	'Hainault-WRuislip'	515.19	3.33	6.44	9.76	16.2	1.85		0.93
LUL	Chancery Lane	'RuislipGdns-NP-Hain'	515.19	0.67	6.44	45.53	51.97	0.58		0.29
LUL	Chancery Lane	'WhiteCity-Hainault'	515.19	1.67	6.44	18.71	25.15	1.19		0.6
LUL	Chancery Lane	'Hainault-NP-Northolt'	515.19	1	6.44	30.75	37.19	0.81		0.4
LUL	Chancery Lane	'GrangeHill-WD-Eal '	515.19	1	6.44	30.75	37.19	0.81		0.4
LUL	Chancery Lane	'GrangeHill-Wdfd-Whit'	515.19	0.67	6.44	45.53	51.97	0.58		0.29
LUL	Chancery Lane	'GrangeHill-Wdfd-WRsp'	515.19	0.67	6.44	45.53	51.97	0.58		0.29
LUL	Russel Square	'Cockfosters-LHRT4LT'	941.14	4.67	11.76	7.17	18.94	1.58		0.79
LUL	Russel Square	'Oakwood-RayLane'	941.14	0.33	11.76	91.66	103.42	0.29		0.15
LUL	Russel Square	'LHRT5-Cockfosters '	941.14	6	11.76	5.75	17.51	1.71		0.86
LUL	Holborn	'Northolt-Epping '	917.78	0.67	11.47	45.53	57	0.53		0.26
LUL	Holborn	'RuislipGdns-Loughton'	917.78	0.67	11.47	45.53	57	0.53		0.26
LUL	Holborn	'RayLane-Cockfosters'	917.78	3.67	11.47	8.92	20.4	1.47		0.74

Mode	Stop	Route	Distance (metres)	Frequency(vph)	Walk Time (mins)	SWT (mins)	TAT (mins)	EDF	Weight	A
LUL	Holborn	'LHRT4LT-ArnosGrove'	917.78	4.67	11.47	7.17	18.65	1.61	0.5	0.8
LUL	Holborn	'ArnosGrove-RayLane'	917.78	0.33	11.47	91.66	103.13	0.29	0.5	0.15
LUL	Holborn	'ArnosGrove-Nthfields'	917.78	3	11.47	10.75	22.22	1.35	0.5	0.67
LUL	Holborn	'Nthfields-Cockfoster'	917.78	1	11.47	30.75	42.22	0.71	0.5	0.36
LUL	Holborn	'Uxbridge-Cockfosters'	917.78	3.67	11.47	8.92	20.4	1.47	0.5	0.74
LUL	Holborn	'Ruislip-Cockfosters'	917.78	2.33	11.47	13.63	25.1	1.2	0.5	0.6
LUL	Holborn	'ArnosGrove-Uxbridge'	917.78	1	11.47	30.75	42.22	0.71	0.5	0.36
LUL	Holborn	'Oakwood-Uxbridge'	917.78	0.33	11.47	91.66	103.13	0.29	0.5	0.15
LUL	Holborn	'Oakwood-Ruislip'	917.78	0.33	11.47	91.66	103.13	0.29	0.5	0.15
									Total Grid Cell Al:	61.63

Appendix E

(Architect's Layout Plans)



All dimensions in millimetres. Where dimensions are not given, drawings must not be scaled and the matter referred back to Veretec Limited.

All dimensions and conditions are to be checked on site by the contractor prior to preparing drawings or commencing any work. The contractor is responsible for checking that there is no conflict between site dimensions and drawn dimensions. In the event of any detail or dimensional conflict between Veretec Limited drawings, the matter must be referred back to Veretec Limited for clarification.

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A 12-08-2019 FOR PLANNING Rev Date Issued for

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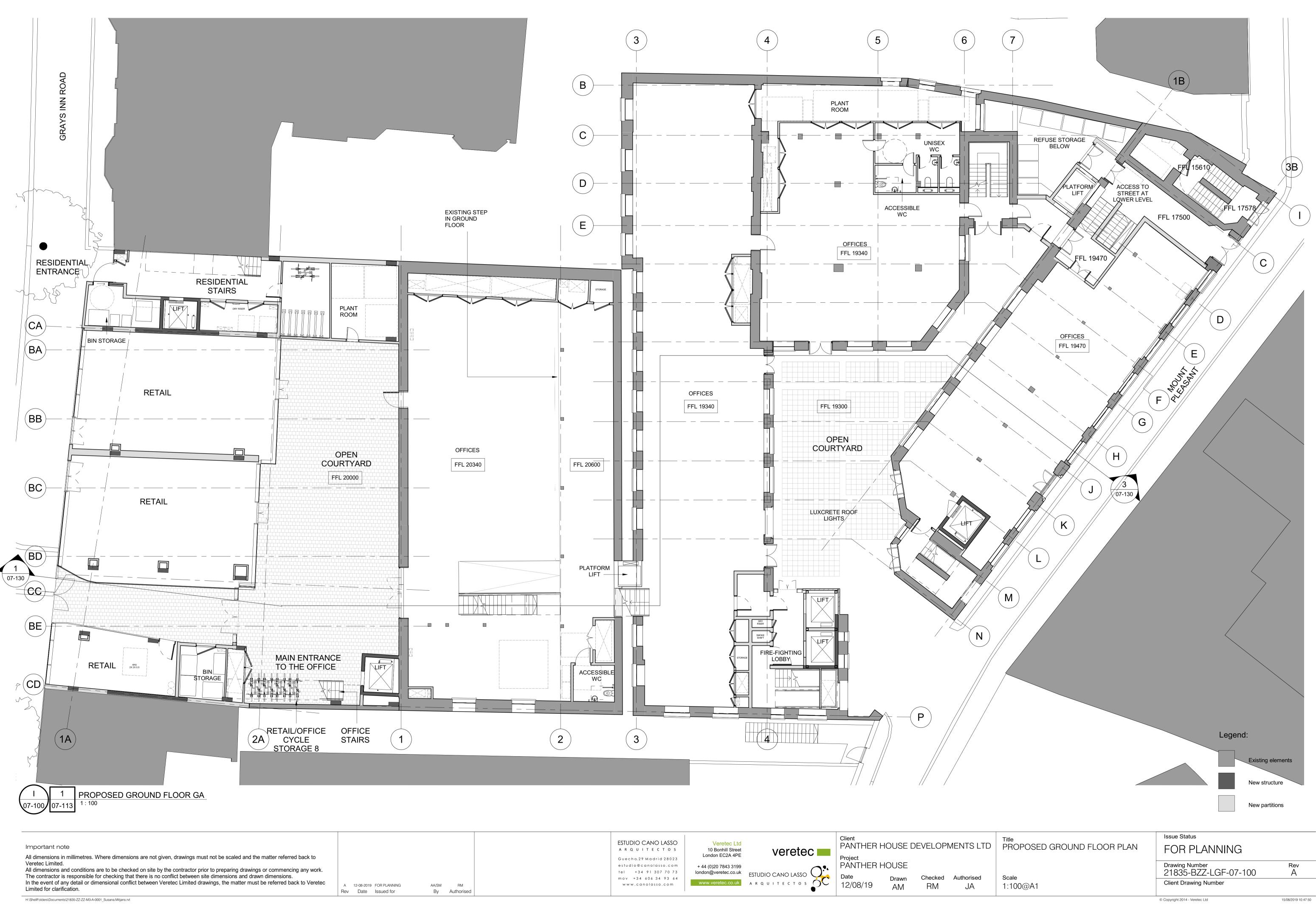
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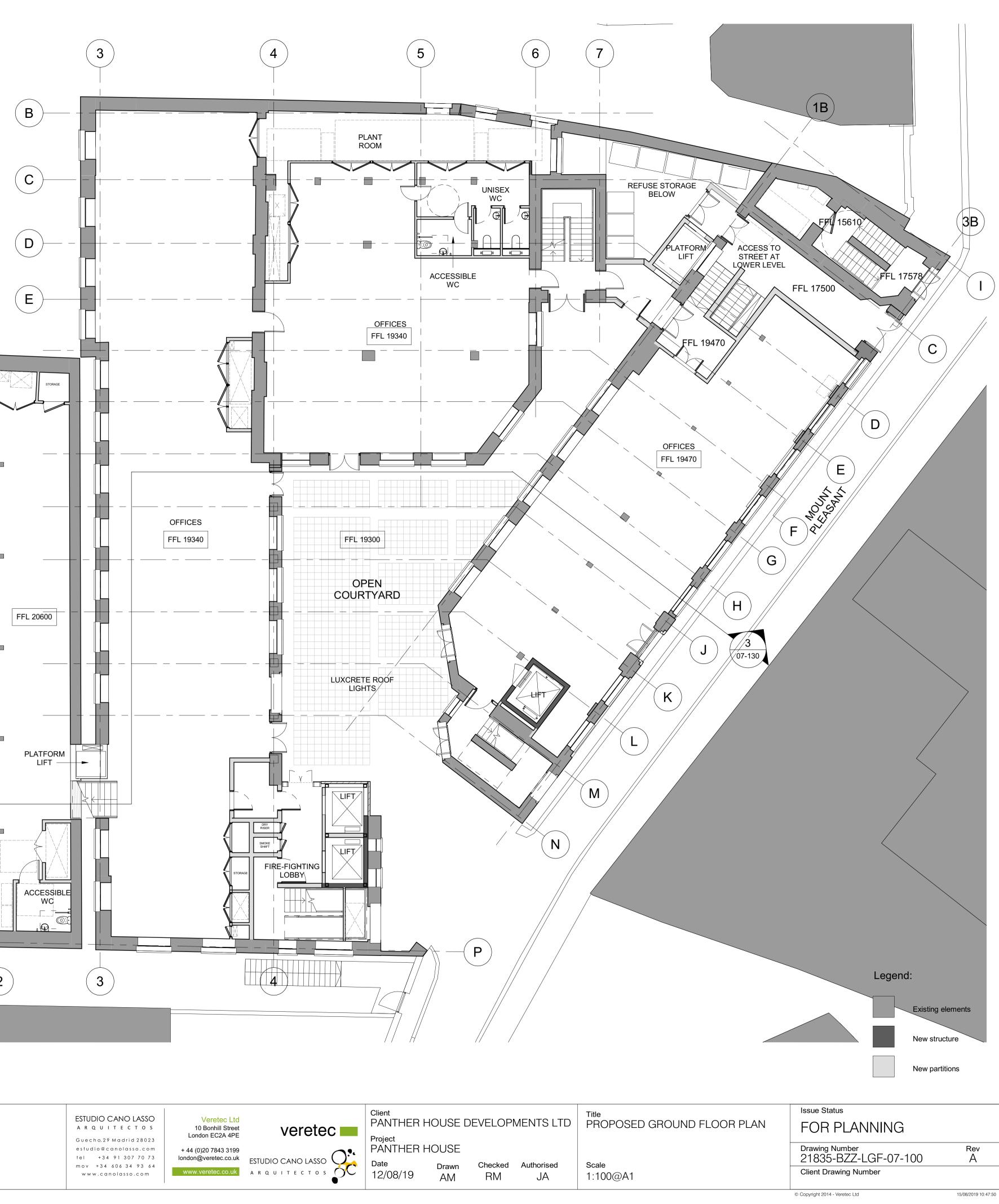
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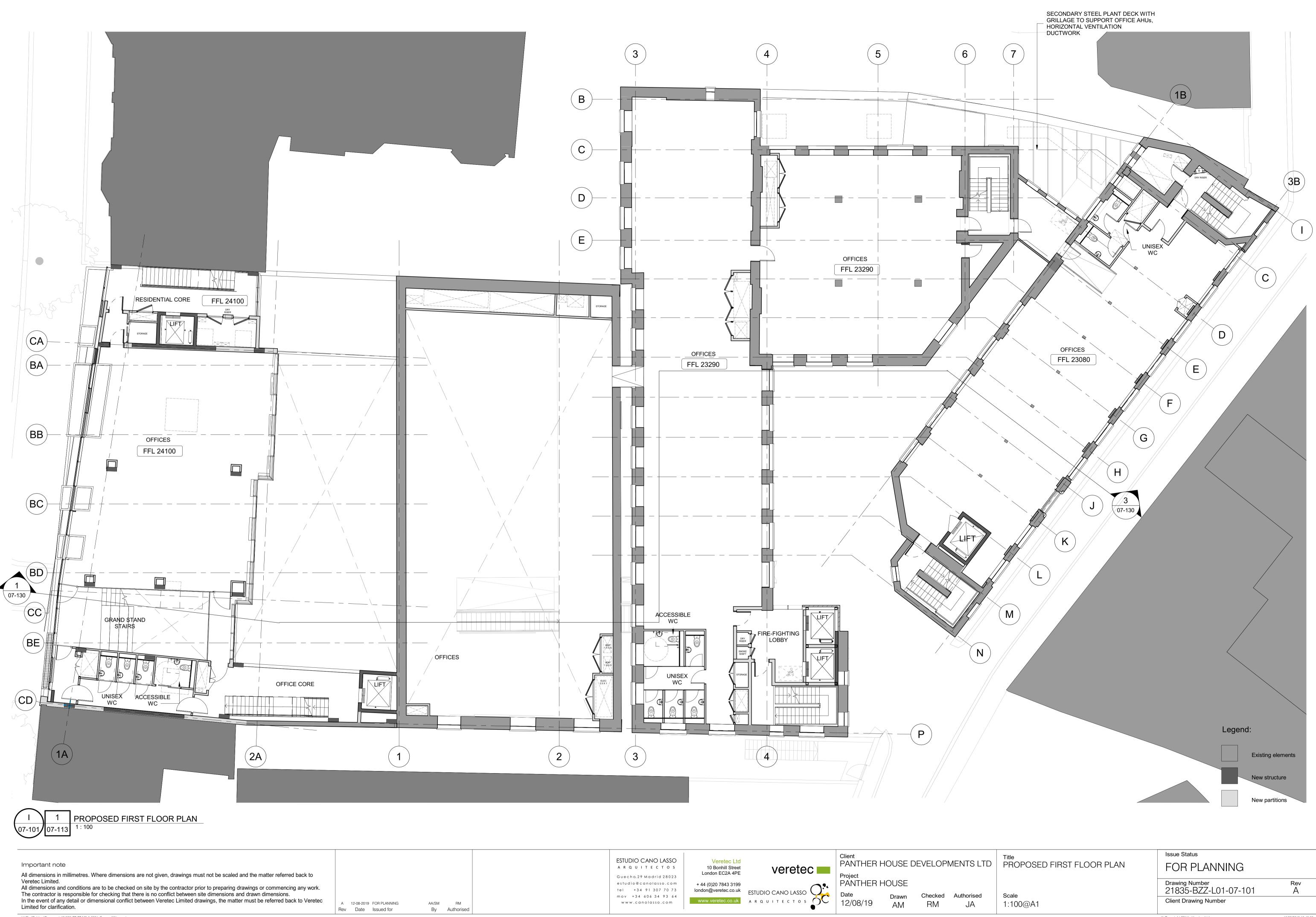
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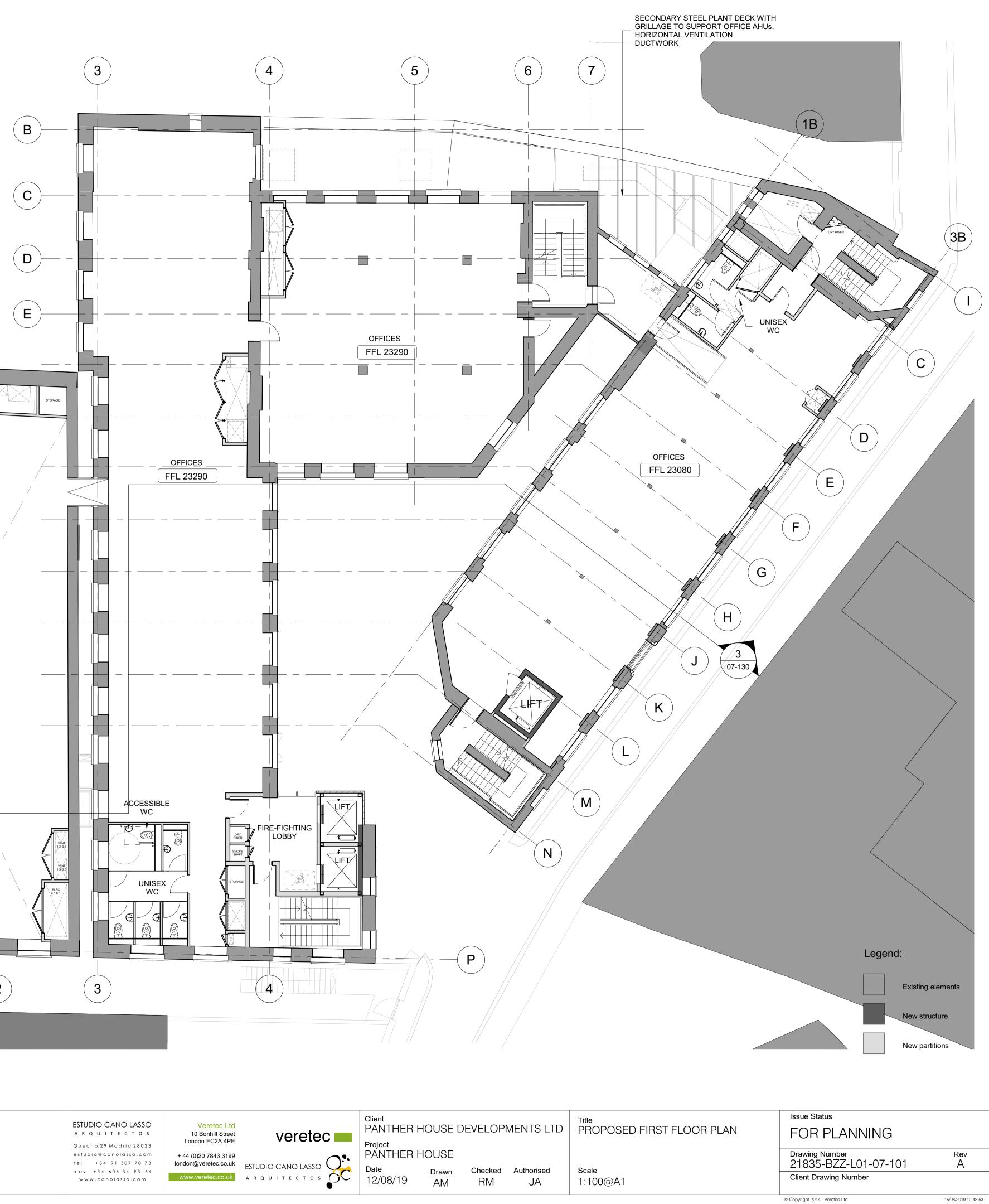
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Appendix F

(TRICS Output Files)

TTP Consulting 111-113 Great Portland Street London

Licence No: 752101 Calculation Reference: AUDIT-752101-190801-0829

Page 1

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

<u>Sele</u>	octed regions and areas:
01	GREATER LONDON

GREA	ATER LONDON	
CN	CAMDEN	1 days
HM	HAMMERSMITH AND FULHAM	1 days
LB	LAMBETH	1 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.

Include all surveys

Parameter:	Gross floor area
Actual Range:	2036 to 26639 (units: sqm)
Range Selected by User:	408 to 120000 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision: Selection by:

Date Range: 01/01/14 to 06/03/19

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.

<u>Selected survey days:</u>	
Monday	2 days
Wednesday	1 days

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

Selected survey types:	
Manual count	3 days
Directional ATC Count	0 days

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

<u>Selected Locations:</u>	
Town Centre	2
Edge of Town Centre	1

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

<u>Selected Location Sub Categories:</u> Built-Up Zone

3

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

3 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®.

TRICS 7.6.2 250719 B19	14 Database right of TRICS Cor	nsortium Limited, 2019. All rights reserved	Thursday 01/08/19
			Page 2
TTP Consulting 111-113	Great Portland Street London		Licence No: 752101
Secondary Filter	ng selection (Cont.):		
Population within	mile		
50,001 to 100,000		l days	
100,001 or More		2 days	
100,001 01 10010	2	2 days	
This data displays	the number of selected surveys w	ithin stated 1-mile radii of population.	
Population within .	miles:		
500,001 or More		3 days	
This data displays	the number of selected surveys w	ithin stated 5-mile radii of population.	
Car ownership with	nin 5 miles:		
0.5 or Less		l days	
0.6 to 1.0	2	2 days	
, , ,	the number of selected surveys w 5-miles of selected survey sites.	ithin stated ranges of average cars owned po	er residential dwelling,
Travel Plan			

Travel Plan:	
Yes	1 days
No	2 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.

<u>PTAL Rating:</u> 6b (High) Excellent

3 days

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

TRICS	7.6.2	250719 B19.14	Database right of	TRICS Consortio	um Limited, :	2019. All rights reserved	Thursday 01/08/19 Page 3
TTP Con	sultin	g 111-113 Grea	t Portland Street	London			Licence No: 752101
	LIST	OF SITES relevant	to selection paran	neters			
					-		
	1	CN-02-A-03 FITZROY STREET FITZROVIA	Planning &	ENGINEERING	Ē	CAMDEN	
	2	Town Centre Built-Up Zone Total Gross floor a <i>Survey da</i> HM-02-A-01 QUEEN CAROLINE HAMMERSMITH	<i>te: WEDNESDAY</i> REGUS OFFIC		sqm 2/17	<i>Survey Type: MA</i> HAMMERSMITH AN	
	3	Town Centre Built-Up Zone Total Gross floor a	te: MONDAY	2036 <i>13/1</i> FICES & STUD	1/17	<i>Survey Type: MA</i> LAMBETH	NUAL
		Edge of Town Cer Built-Up Zone Total Gross floor a <i>Survey da</i>		10200 <i>19/1</i>	sqm 1/18	Survey Type: MA	NUAL

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.

MANUALLY DESELECTED SITES

	Site Ref	Reason for Deselection
H	D-02-A-09	parking

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

		ARRIVALS		[DEPARTURES	;		TOTALS	
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	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	3	12958	0.710	3	12958	0.116	3	12958	0.826
08:00 - 09:00	3	12958	3.038	3	12958	0.316	3	12958	3.354
09:00 - 10:00	3	12958	2.878	3	12958	0.430	3	12958	3.308
10:00 - 11:00	3	12958	1.122	3	12958	0.697	3	12958	1.819
11:00 - 12:00	3	12958	0.705	3	12958	0.586	3	12958	1.291
12:00 - 13:00	3	12958	0.898	3	12958	1.116	3	12958	2.014
13:00 - 14:00	3	12958	1.119	3	12958	1.235	3	12958	2.354
14:00 - 15:00	3	12958	0.741	3	12958	0.715	3	12958	1.456
15:00 - 16:00	3	12958	0.329	3	12958	0.769	3	12958	1.098
16:00 - 17:00	3	12958	0.247	3	12958	0.993	3	12958	1.240
17:00 - 18:00	3	12958	0.216	3	12958	2.812	3	12958	3.028
18:00 - 19:00	3	12958	0.085	3	12958	1.973	3	12958	2.058
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			12.088			11.758			23.846

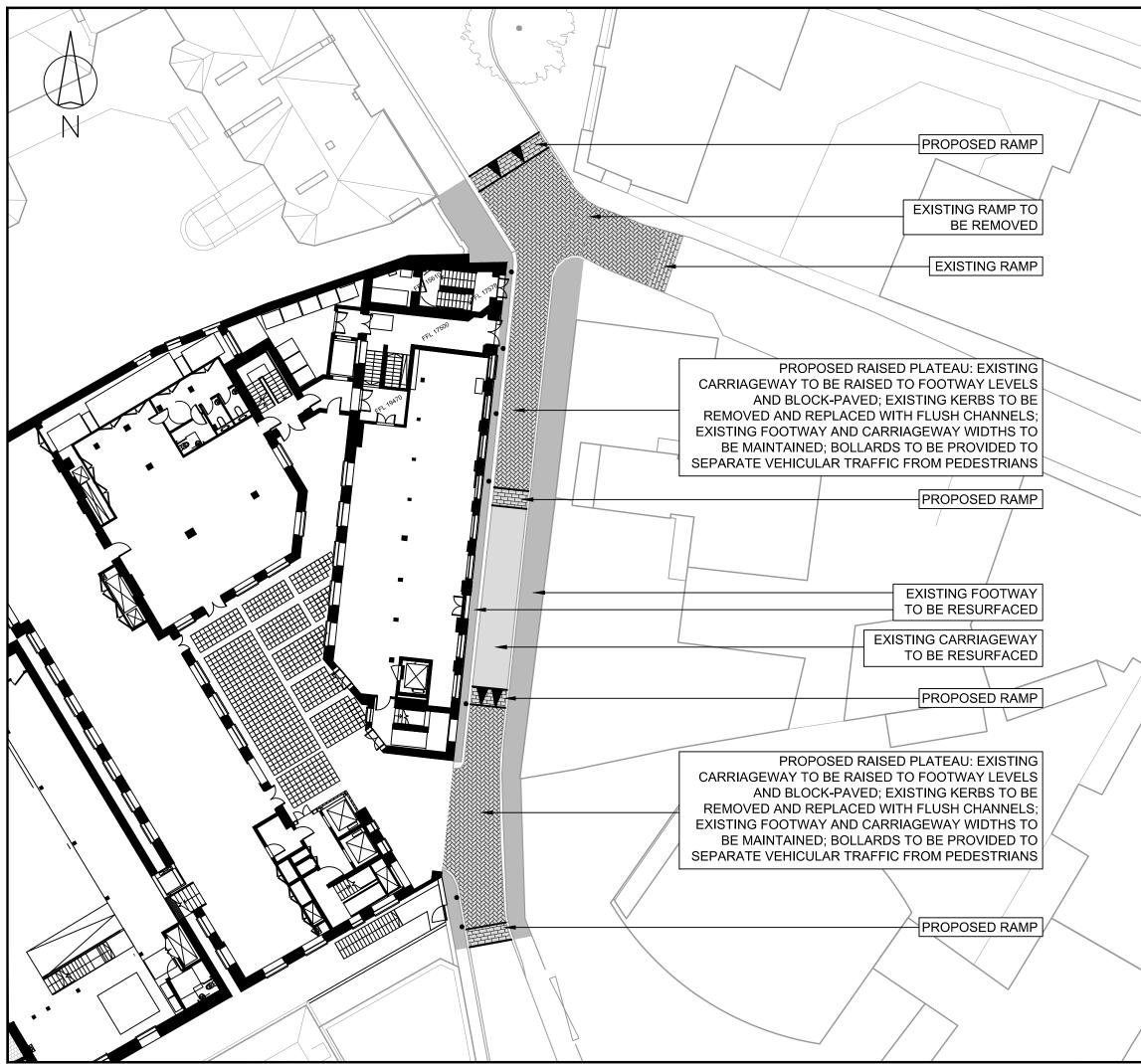
This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are 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.

Licence No: 752101

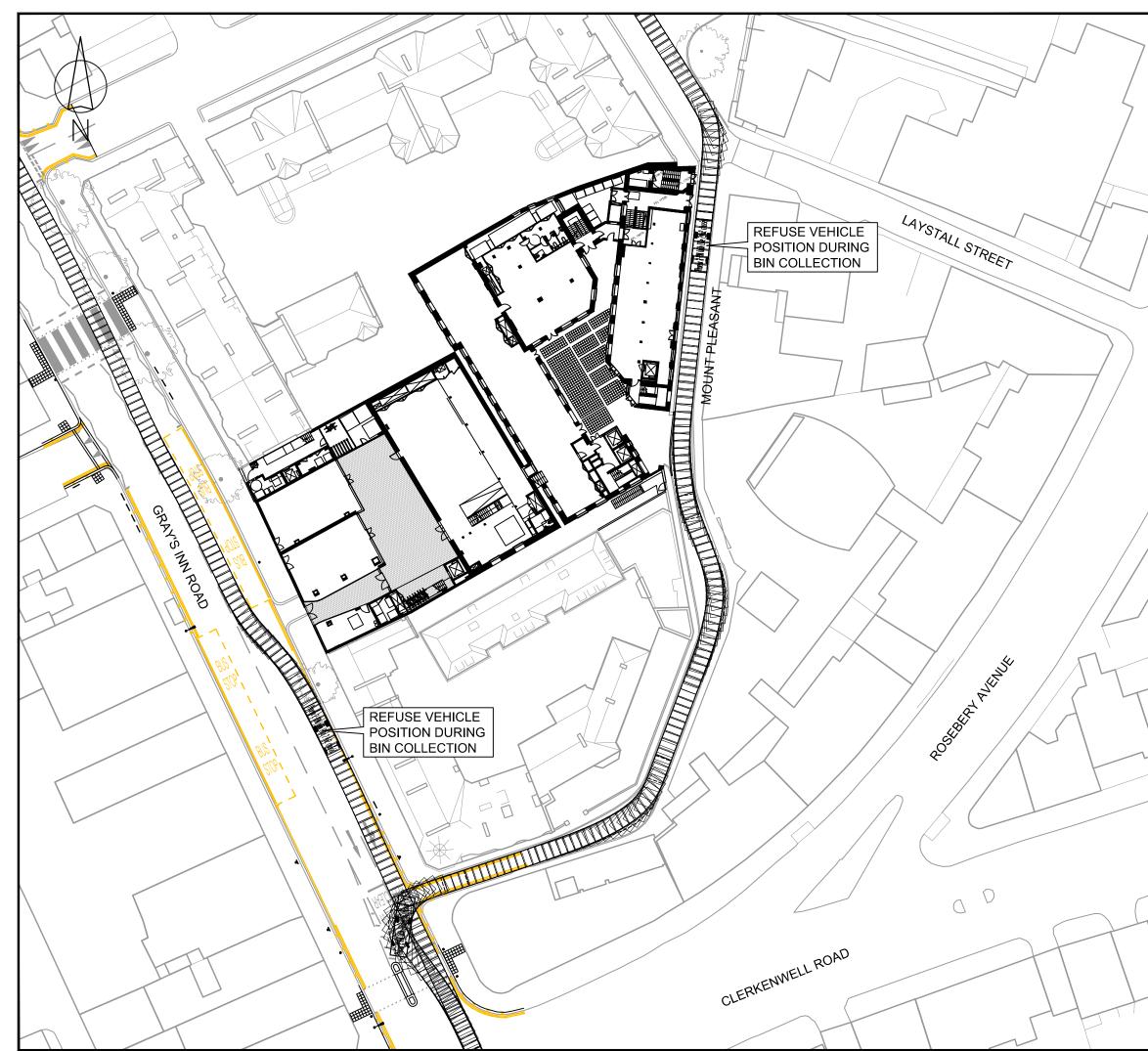
Appendix G

(Indicative Highway Works Drawing)



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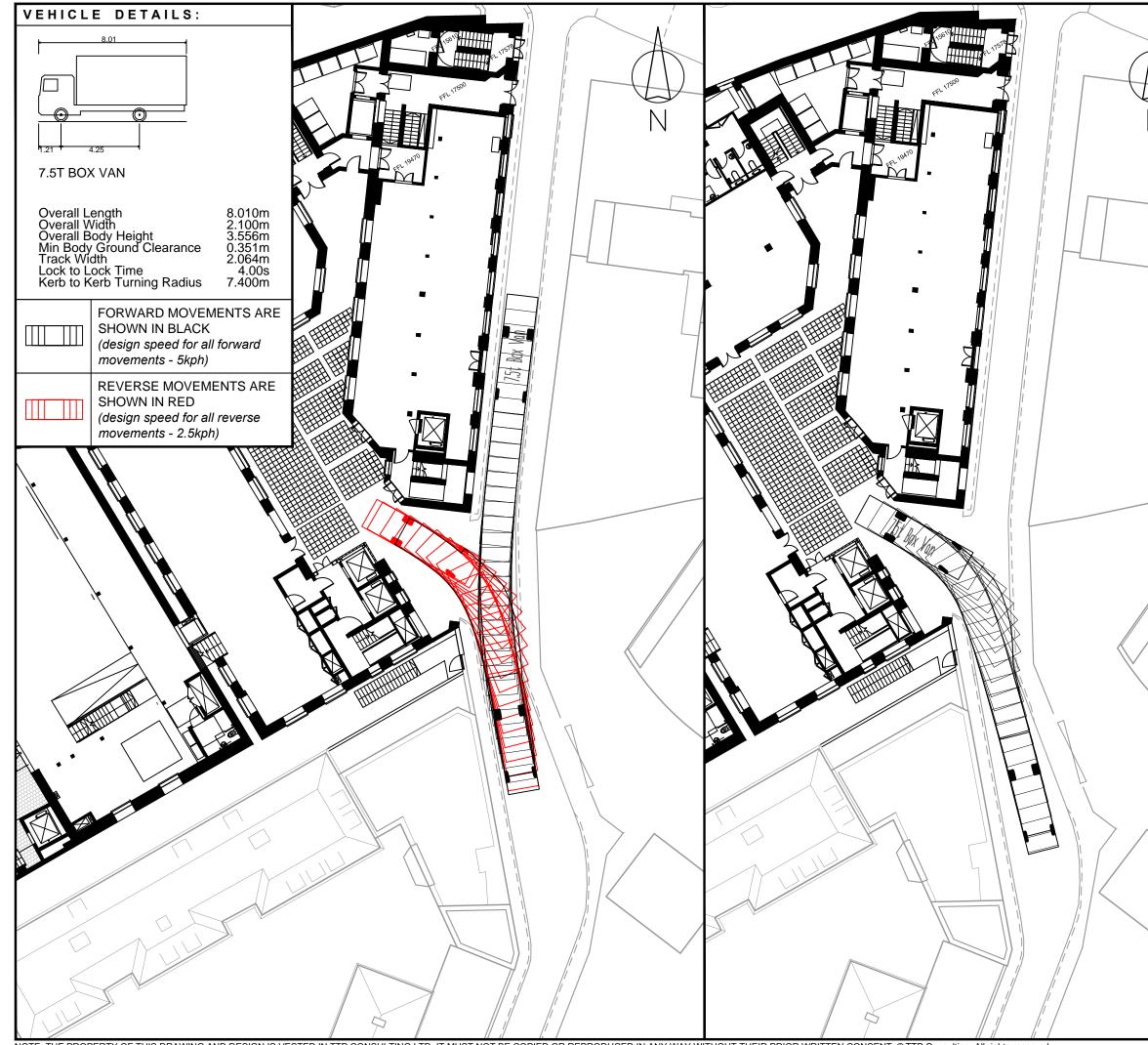


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	Rev	Details	Drawn	Checked	Date					
/	A	Site layout updated. Gray's Inn Road swept paths added.	DW	EC	02.07.2018					
/	В	Proposed site layout added.	DW	EC	13.05.2019					
	C D	Layout updated. Layout updated.	DW DW	SD SD	09.08.2019 16.08.2019					
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Appendix H

(Swept Path Analysis)



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