335 Kentish Town Road & 20 York Mews

Preliminary Construction Management Plan

July 2019

Waterman Infrastructure & Environment Limited
Pickfords Wharf, Clink Street, London, SE1 9DG
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Client Name:	Mr Anish Shah
Document Reference:	WIE16128.100.R.1.2.2.CMP
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Quality Assurance – Approval Status

This document has been prepared and checked in accordance with
Waterman Group's IMS (BS EN ISO 9001: 2015, BS EN ISO 14001: 2015 and BS OHSAS 18001:2007)

Issue	Date	Prepared by	Checked by	Approved by
1.2.2	19/07/2019	K. Zsobrak	C. Ricci	M. Powers
		Graduate	Engineer	Technical Director

Comments

Comments

Disclaimer

This report has been prepared by Waterman Infrastructure & Environment Limited, with all reasonable skill, care and diligence within the terms of the Contract with the client, incorporation of our General Terms and Condition of Business and taking account of the resources devoted to us by agreement with the client.

We disclaim any responsibility to the client and others in respect of any matters outside the scope of the above.

This report is confidential to the client and we accept no responsibility of whatsoever nature to third parties to whom this report, or any part thereof, is made known. Any such party relies on the report at its own risk.

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1. Introduction

General

1.1. Waterman Infrastructure & Environment Ltd ('Waterman') has been commissioned by Mr Anish Shah ('the Applicant'), to prepare a Construction Management Plan ('CMP') for a site located at 335 Kentish Town Road & 20 York Mews, Kentish Town, London, NW5 2TJ ('the Site') in the London Borough of Camden ('LBC').

1.2. The agreed contents of the CMP must be complied with unless otherwise agreed with the Council.

1.3. The Site Manager shall work with the Council to review this CMP if problems arise in relation to the construction of the Development.

1.4. Any future revised plan must be approved by the Council and complied with thereafter.

Document Structure

1.5. This document has been prepared with reference to the standard LB Camden pro-forma template[1], and is structured as follows:

- Section 2: Contact Details;
- Section 3: Site Overview;
- Section 4: Community Liaison;
- Section 5: Traffic Impact;
- Section 6: Environmental Impact;
- Section 7: Agreement.

[1] '*Construction Management Plan pro forma v2.3*' via https://www.camden.gov.uk/construction-management-plans

2. Contact Details

Site Address

2.1. The Site is located at:

335 Kentish Town Road & 20 York Mews, Kentish Town, London, NW5 2TJ

Planning Reference

2.2. The planning reference number to which the CMP applies is:

[to be updated following planning consent]

Contact Details – CMP Submission

2.3. The CMP has been prepared by, with input from the Applicant:

Waterman Infrastructure & Environment Ltd

Pickfords Wharf, Clink Street, London, SE1 9DG

info@watermangroup.com / 020 7928 7888

Contact Details – Site Manager

2.4. The Site Manager contact details are:

Mr Anish Shah

18 Temple Mead Close, Stanmore, HA7 3RG

anishshah54321@gmail.com / 07980 297 887

Contact Details – Community Liaison

2.5. The Community Liaison contact details are:

Mr Anish Shah

18 Temple Mead Close, Stanmore, HA7 3RG

anishshah54321@gmail.com / 07980 297 887

Contact Details – Legal Representative

2.6. The legal representative contact details are:

Mr Anish Shah

18 Temple Mead Close, Stanmore, HA7 3RG

anishshah54321@gmail.com / 07980 297 887

3. Site Summary

Site Location

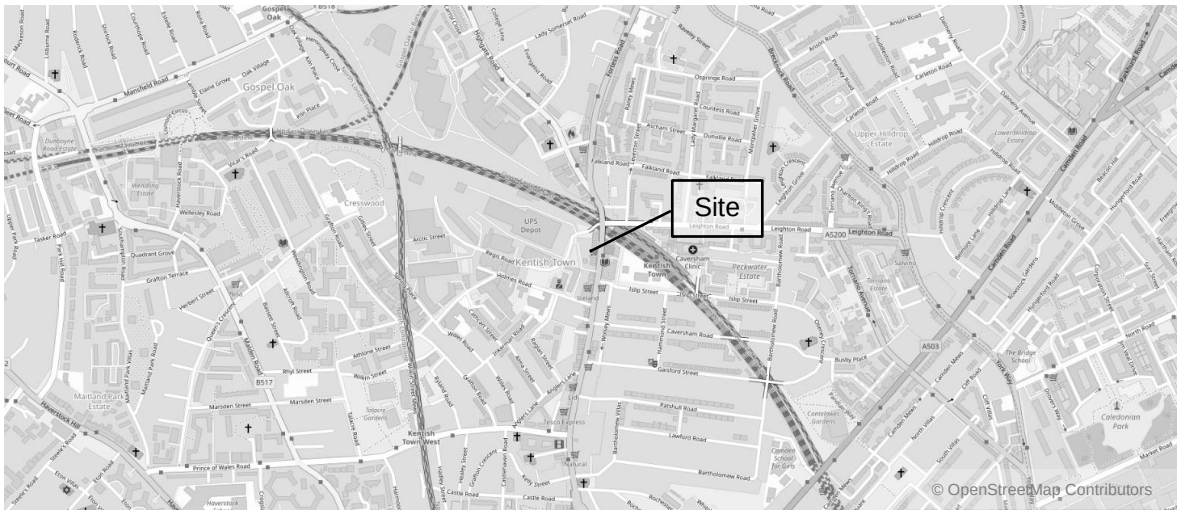
3.1. The Site is situated in an area of high public transport accessibility with a PTAL rating of 6a ('Excellent'). The entrance to Kentish Town Thameslink and Northern Line underground stations are located some 20 metres to the north of the Site, and Kentish Town West London Overground station is 0.7km (8 minutes' walk) to the south west of the development.

3.2. The Site currently comprises an existing four storey building that currently has retail space on the ground floor with residential accommodation above.

3.3. The building occupies a mid-terrace position on the western side of Kentish Town Road, to the north of York Mews. The Site is located within a predominantly retail area, with most ground floor commercial premises having residential properties above.

3.4. The Site location is shown in Figure 1, below.

Figure 1: Site Location



Description of Works

3.5. The Proposed Development will comprise the retention of the ground floor as existing, and the conversion of the upper stories to provide 5no. flats (4no. one-bed and 1no. two-bed), with minor extension works.

3.6. Minimal demolition works are anticipated as part of the build period. The Applicant undertook consultation exercises with the neighbouring properties on 24th June 2019, details of which are included in this document.

3.7. The development faces on to Kentish Town Road at the front, with access to the residential parts of the building being gained from York Mews to the rear.

Programme

3.8. The development is expected to commence in Winter 2019, with construction works anticipated to finish within 12 months.

3.9. The initial phase comprises strip out (1 month), followed by roof frame construction and associated works (8 months), and fit out (1 month).

Standard Working Hours

3.10. The Site will be open and working the following hours:

- Monday to Friday 8.00am - 6.00pm;
- Saturday 8.00am - 1.00pm;
- No Sunday, bank holiday or public holiday working.

3.11. Work may be permitted outside of these hours in exceptional circumstances and only by prior agreement with the Council and will be conditional on the Principal Contractor informing local residents in advance of the proposed activity.

4. Community Liaison

Sensitive / Affected Receptors

4.1. Key potential receptors that could be affected during construction include:

- Kentish Town Church of England Primary School;
- Residential Development immediately around the Site.

4.2. The potential air quality impacts during the construction phase are anticipated to be (based on adjacent applications):

- Release of dust and PM_{10} may to occur;
- Low risk of dust soiling and health impacts at neighbouring properties.

4.3. Resultant impacts of dust and PM_{10} are considered to be negligible through following good Site practices and implementing suitable mitigation measures.

Consultation – Local Residents & Businesses

4.4. The Applicant has considered the issues likely to affect neighbouring premises and occupiers as part of developing options for the Site; they have been incorporated in this CMP.

4.5. The Applicant organised a consultation event at the Site on 24th June 2019 at 335 Kentish Town Road. As shown on the figures below the proposals were displayed with feedback / comments forms within the premises.

Figure 2: Consultation Material

4.6. The event took the form of an open evening at the Site between 5pm and 7pm. The Applicant notified the surrounding premises in good time ahead of the event.

4.7. Overall, little feedback was received with regard to the proposals. Only one couple attended the consultation from '*Tolli Patisserie*'. They did not raise objection to the proposals, but did not leave any feedback.

4.8. The Applicant will continue to keep residents and businesses updated as the works progress.

4.9. It is noted that minimal concerns were received for other applications regarding construction processes, timings, etc.

Consultation – Local Authority

4.10. Members of the design team have considered matters arising from other applications near the Site. Based on previous experience, the main points arising regarding construction activities are summarised below:

- Compliance with Considerate Constructors Scheme;
- Reduction in noise and disturbance.

4.11. The summarised pre-application comments from the Council relating to transport, access and parking are presented below:

> *'Policy T2 of the Camden Local Plan states that the council will limit the availability of parking and require all new developments in the borough to be car-free. This is in order to ensure that the proposed scheme does not lead to an increase in pressure on on-street perking permit spaces. A Car-free development for all the units (including existing but reconfigured) would be secured by a legal agreement.*
>
> *The legal agreement would also secure a financial contribution towards repaving the footway should there be any damage to the public highway during the construction phase of any future development and to ensure that the footway ties the development into the surrounding urban environment. The fees estimate would be confirmed during the application stage.*
>
> *Policy T1 of the new Camden Local Plan requires developments to provide cycle parking facilities in accordance with the minimum requirements of the London Plan and design requirements outlined in CPG7. A minimum of seven cycle parking spaces would be required for the 6 new units to be provided and should not be placed at first floor level within the courtyard.*
>
> *Highway officers have determined that a Construction Management Plan (CMP) would be required for the scale of development. The verification of its implementation during Construction Phase would cost £3,136.*
>
> *Refuse / Waste: The proposal should provide ground floor level access to a communal refuse area associated with the residential flats. This has not be depicted on plan appropriately.'*

Construction Working Group

> *This section will be updated once a Principal Contractor has been appointed.*

4.12. This plan will be reviewed through the on-going monitoring strategy, to ensure that it remains relevant to the identified matters as the project progresses. This will be in conjunction with the Council, local parties (businesses, schools, churches etc.) and local residents.

4.13. If required, the Applicant notes they will work with the Principal Contractor and establish a Construction Working Group that will deal with potential issues as they arise. The Group would also relay programme updates etc. to the community.

Scheme Registration

This section will be updated once a Principal Contractor has been appointed.

4.14. The Principal Contractor will register the scheme with the Considerate Contractors Scheme (reinforced through BREEAM – or equivalent – compliance) and will also adhere to the Council's Construction Site Noise Code (amongst others).

5. Transport Information

This section will be updated once a Principal Contractor has been appointed.

Principal Contractor

5.1. The contact details for the Principal Contractor are:

Company:	*[To be completed prior to commencement of the works.]*
Address:	*[To be completed prior to commencement of the works.]*
Email:	*[To be completed prior to commencement of the works.]*
Phone:	*[To be completed prior to commencement of the works.]*

CLOCS Compliance

5.2. It is noted that the Site and works comprise a minor and short-term redevelopment. However, given the proximity to Kentish Town Station and Kentish Town Road's function as a key bus route, suitably scaled proposals for CLOCS compliance are set out below.

5.3. The Site is located within a predominantly retail High Street environment. In the interests of public safety and avoiding any disruption to the local area, the method and route of deliveries to Site will be controlled in agreement with the relevant authorities.

5.4. The CMP will be reviewed and the formal monitoring regime established to ensure all appropriate measures are put in place. Risks will be identified, scheduled, assessed and managed.

5.5. The complaints procedure will be formalised and circulated to local parties and the Council, reinforced (if required) through a local working group. Consideration will be given to other developments with regard to potential coordination of deliveries (subject to timely feedback from the Council).

5.6. This will be regularly reviewed as part of the Site Manager's responsibility. Details will be made available to the Council and local parties as required.

5.7. Wherever possible, and especially for vehicles over 3.5 tonnes, drivers will be required to be accredited with the Fleet Operator Recognition Scheme (FORS), Silver or Gold Level. Drivers will have undertaken cycle awareness training and vehicles associated with the development will:

- Need to have sideguards fitted (unless demonstrably unable to do so);
- Have close proximity warning systems fitted, external warning devices, rear facing CCTV camera (or Fresnel Lens);
- Have a Class VI mirror;
- Have prominent signage warning cyclists of the dangers of 'undertaking' on the inside of such vehicles.

5.8. The Applicant will seek to promote CLOCS within their supply chain although it must be noted that the developer and contractors are not major organisations and therefore have limited impact on their supply chains.

5.9. Loading will follow similar practices to those at nearby Sites (e.g. 325 Kentish Town Road in 2015/2016). A designated signed loading area and CLOCS inspection point will be provided where possible.

5.10. The CMP will be reviewed and the formal monitoring regime established to ensure all appropriate measures are put in place. Risks will be identified, scheduled, assessed and managed. In terms of monitoring compliance, records will be taken at the point of arrival/departure to improve data capture and analysis of the fleet operator requirements.

5.11. The possibility of larger vehicles servicing the Site is noted, but the CMP seeks to minimise this risk wherever possible through the ordering, programming and monitoring processes. Swept-path analysis of the largest anticipated vehicle using York Mews (i.e. Transit Van or equivalent) is included at the Appendices. In the event of 'special' or outsized deliveries, larger vehicles would use Kentish Town Road with Banksmen supervision/management.

5.12. The Applicant will liaise fully with the Council if larger deliveries appear likely and arrange for the necessary dispensations etc.

5.13. The amount of construction traffic and the level of disturbance to the public will be kept to a minimum – this will be continually reviewed through the monitoring process. Vehicles are only allowed to stop at the Site to load/unload of goods/materials or actively engaged on construction activity.

5.14. Through consultation with local parties and the Council, the Site Manager will agree the schedules to notify residents, schools etc. whilst seeking to minimise the overall impact to them, in line with the monitoring and complaints procedures. This may include liaison with other developments to seek to schedule coordinated deliveries.

5.15. Weather conditions may affect the works programme and therefore impact on the delivery schedules. Regular monitoring of the weather forecasts will be carried out and the implications circulated to local parties via the monitoring procedures.

5.16. A waste plan would ensure that waste production is minimised and that recycling and re-use is maximised through monitoring and recording. Strategies including just-in-time deliveries and suitable storage of materials prior to use will also be applied to prevent spoiling. The scheduled domestic and commercial collections will be reviewed with the Council etc. and will be unimpeded by the Site's activities.

5.17. The Site Manager and the nominated waste contractor will be responsible for maintaining and updating the plan, through the monitoring procedure.

5.18. Processes will be subject to ongoing reviews to confirm that the measures implemented comply with the CMP requirements. In the event of complaints being raised by local parties, organisations etc, the Site Manager will be the designated single point of contact.

5.19. If complaints are raised and issued through the Council, the relevant Officers will liaise with the Site Manager – all complaints will be logged, reviewed and acted upon.

5.20. If complaints are issued directly to the Site Manager, they will also be logged, reviewed and acted upon, and circulated to the Council for information. The outcome of the complaints procedures will be notified to all relevant parties.

5.21. Contact details for the contractor's Site Manager will be shown below and will be circulated to all local parties, once their appointment has been confirmed.

Applicant & Contractor Confirmation

5.22. The applicant confirms that they have included the requirement to abide by the CLOCS Standard in

their contracts to their contractors and suppliers.

Table 1: Applicant & Contractor Confirmation

Applicant / Developer	Principal Contractor
Signature:	Signature:
Name: Mr Anish Shah	Name:
Company: Developer	Company:

Site Traffic

5.23. Construction access to the Site will be directly from the A400 Kentish Town Road, which connects to the Transport for London Road Network (TLRN) in Camden Town to the south and at its junction with the A1 at Archway to the north-east. It is proposed that construction traffic will avoid residential streets wherever possible.

5.24. The A400 Kentish Town Road is a borough-maintained road and hosts a mix of advisory and mandatory cycle lanes along its length. Whilst acknowledging the cycle routes, this alignment provides the widest carriageway environment to safely accommodate construction vehicles.

5.25. In the area of the Site, Kentish Town Road is covered by Controlled Parking Zone (CPZ) CAM, which is in operation between:

- Monday to Friday – 08:30 to 18.30.

5.26. Double yellow lines are in place along both sides of Kentish Town Road that front the Site. Loading restrictions are also in place, and loading is not permitted between the hours of:

- 07:00 – 10:00; and
- 16:00 – 19:00.

5.27. There is a southbound bus stop on the eastern side of Kentish Town Road directly to the north of the Site. All roads in the immediate vicinity of the Site are subject to a boroughwide 20mph speed limit.

5.28. The roads in the immediate vicinity of the Site form part of the London Lorry Control Scheme (LLCS). The Excluded Road Network (ERN) restricts the movement of HGVs in London at night and weekends.

5.29. Enforced by the London Councils, it applies to vehicles weighing more than 18 tonnes. It aims to limit noise pollution in residential areas. Restrictions apply between:

- 21:00 to 07:00, Monday to Saturday;
- 13:00 Saturdays to 07:00 Mondays.

5.30. It is possible operate a vehicle over 18 tonnes within the restricted area or outside the ERN during restricted times. Permission is free; applications in writing must be made to:

London Lorry Control Scheme, 59½ Southwark Street, London, SE1 0AL

5.31. Pedestrian footways along Kentish Town Road are typically 2.5-3.0m wide. Pedestrian access will be maintained at all times.

5.32. Kentish Town Road is a two-way street along its whole length. It is not shown as a cycle route by

London Cycle Route mapping. The existing traffic restrictions along Kentish Town Road will be obeyed at all times during the construction phase.

5.33. Banksmen will be prominent at all times during construction operations to control construction vehicle movements in order to maintain safety of residents and other users of the highway environment.

5.34. The turning movements of the larger Site clearance, construction and delivery vehicles will be accommodated within Kentish Town Road wherever possible, respecting the existing loading restrictions. In the event of a requirement to deliver materials or services to the rear of the development via York Mews, residents will have priority and Banksmen will be on hand to manage (smaller, e.g. Transit) servicing / construction vehicles.

5.35. All vehicles will manoeuvre to/from this Site successfully via the agreed access arrangements (namely via Kentish Town Road). The turning movements of Site clearance, construction and delivery vehicles will be accommodated within the carriageway wherever possible. The volumes of materials and waste are expected to be low, the anticipated vehicle types to be used are:

- Long Wheel Base Panel Van;
- Rigid Delivery Vehicle (7.5T);
- 10m Rigid Vehicle.

5.36. The possibility of larger vehicles servicing the Site is noted, but the CMP seeks to minimise this risk wherever possible through the ordering, programming and monitoring processes.

5.37. Swept-path analysis of the largest anticipated vehicle using York Mews (i.e. Transit Van or equivalent) is included at the Appendices. In the event of 'special' or outsized deliveries, larger vehicles would use Kentish Town Road with Banksmen supervision/management.

5.38. The Applicant will liaise fully with the Council if larger deliveries appear likely and arrange for the necessary dispensations etc.

5.39. Due to possible damage or impact on the state of the carriageway, roll-on roll-off skips are not to be placed on the public highway. All deliveries and collections will be scheduled to avoid domestic and commercial waste collections, school opening/closing times etc.

5.40. The larger/outsize deliveries will take place from Kentish Town Road with vehicles pulling up to kerbside at the front of the Site, respecting the existing loading restrictions. In the event of having to use York Mews, smaller vehicles would reverse from Kentish Town Road (under Banksmen supervision) and exit in forward gear to Kentish Town Road; residents' priority will always be maintained.

5.41. Wherever possible material will be stored on site or will be delivered on a Just-In-Time basis. Waste will be managed in an equivalent manner: stored on site and transferred to called-in vehicles.

5.42. It is proposed to keep the footways of Kentish Town Road open at all times, especially when deliveries are not occurring. Traffic management barriers will be in place to demarcate the delivery areas and to segregate them from traffic in compliance with Chapter 8 of the Traffic Signs Manual and Red Book etc.

5.43. Construction vehicles will only access the Site from A400 Kentish Town Road. Vehicles will be required to manoeuvre within the extent of public adopted highway whilst supported by Banksmen. To this end, the preferred delivery route is northbound so that turning manoeuvres do not adversely

affect buses, through traffic and the local population.

5.44. The applicant notes that the Council may require alternative routes and will engage fully with the Council to minimise potential disturbance to residents.

5.45. Initially waste will be stored within the Site's boundary and transferred to a waiting vehicle during the working day – the typical loading time is 15 minutes and Banksmen will manage pedestrian movements. Pedestrians may be diverted to the alternate footway, or temporarily held back, if necessary using fully compliant temporary traffic management measures.

5.46. An unobstructed roadway width will remain wherever possible. This should be sufficient to allow for unobstructed two way operation in accordance with DfT document '*Safety at street works and road works*'.

5.47. The amount of construction traffic and the level of disturbance to the public will be kept to a minimum – this will be continually reviewed through the monitoring process. Vehicles are only allowed to stop at the Site to load/unload of goods/materials or actively engaged on construction activity.

5.48. Visits by the professional supervision, and other parties involved in the project (i.e. consultants in charge of the Project Management, H&S, Building Control etc.) will be required to travel via public transport where possible.

5.49. If they need to drive, they will be directed to park in public car parks if car use is essential. They will not be permitted to use the on-street parking supply.

5.50. It is anticipated that Banksmen will provide assistance to other road users on in the vicinity of the Site to enable them to pass by safely, especially when vehicles are servicing the Site.

5.51. All deliveries and collection of Site rubbish (wait and load lorries) will be planned to take place outside both the morning and afternoon peak hours and will be limited between 10:00 and 15:00, also to avoid potential conflicts with school operations. The Schools and nurseries in the area will receive copies of the CMP, be invited to comment further, and will be kept updated.

5.52. Delivery and removal should not take longer than 20-30 minutes and deliveries will be coordinated by the Site Manager to prevent multiple traffic movements during the same period and reduce congestion during the busy hours.

5.53. 'Special' deliveries (including outsize materials etc.) will take longer but will be programmed specifically – and notified to local parties. All deliveries and collections will be scheduled to avoid domestic and commercial waste collections.

5.54. For construction traffic, the route indicated below must be followed, presented in order. The route has been identified to prevent vehicles using residential roads and to optimize the use to wider carriageways. Vehicles will be expected to approach the Site from the south only.

5.55. The junctions on the approach routes have been the subject of traffic management measures so vehicle speeds will be kept to a minimum:

Inbound Journeys from the North

- A1 Holloway Road (typically from A1 Archway Road, TLRN);
- A503 Camden Road (TLRN - westbound);
- Bayham Street (southbound);

- Pratt Street (westbound);
- A4200 Camden High Street (northbound);
- A400 Kentish Town Road (northbound); or
- Via A400 Junction Road / Fortess Road / Kentish Town Road.

Inbound Journeys from the South

- A400 Hampstead Road (TLRN - northbound);
- A400 Camden High Street (TLRN - northbound);
- A400 Kentish Town Road (northbound).

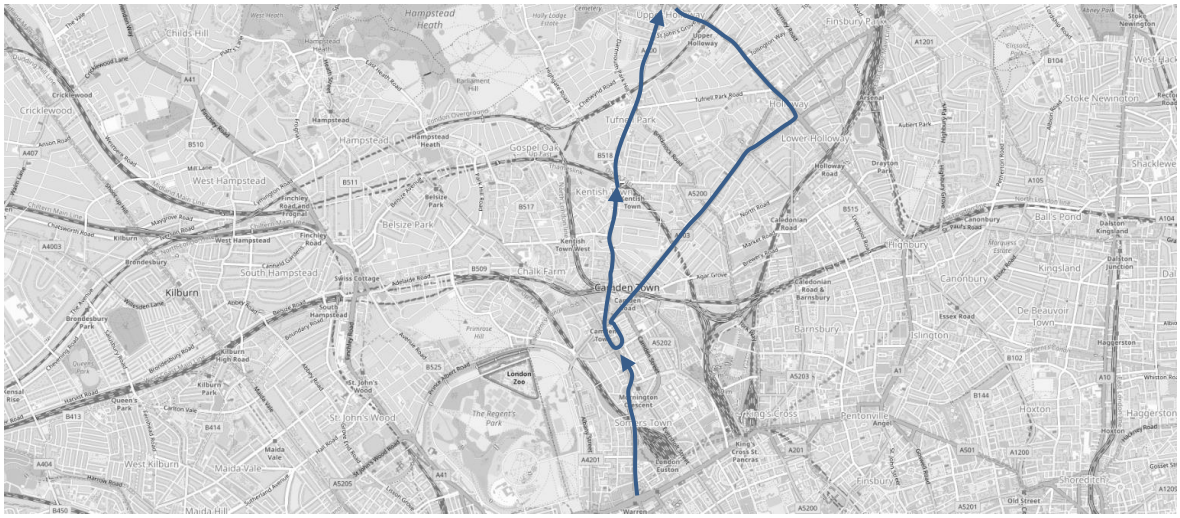
Outbound Journeys

- A400 Kentish Town Road (northbound);
- A1 Archway Road (TLRN – northbound).

5.56. The Contractors will seek to register the scheme with the Considerate Contractors Scheme (reinforced through BREEAM – or equivalent – compliance) and will also adhere to the Council's Control of Pollution Noise from Demolition and Construction Codes of Practice. Furthermore, Contractors will be required to follow the "Guide for Contractors Working in Camden" also referred to as "Camden's Considerate Contractor's Manual" Guide for Contractors Working in Camden.

5.57. This information will be issued to all organisations accessing the Site; failure to comply will result in the contractor, or sub-contractor, being banned from the Site. Figure3 below presents the preferred routings described above which must be followed.

Figure 3: Proposed Routing to/from Site



Road Trip Reduction

5.58. Where possible, measures will be taken to pre-fabricate elements of the building off-site in order to reduce the number of deliveries to Site.

5.59. Certain construction periods will be more intensive than others and will result in more frequent deliveries/collections. These include excavation waste and concrete deliveries.

5.60. Through consultation with local parties and the Council, the Site Manager will agree the schedules to notify residents, schools etc. whilst seeking to minimise the overall impact to them, in line with the monitoring and complaints procedures. This may include liaison with other developments to seek to schedule coordinated deliveries.

5.61. Weather conditions may affect the works programme and therefore impact on the delivery schedules. Regular monitoring of the weather forecasts will be carried out and the implications circulated to local parties via the monitoring procedures.

5.62. Deliveries will be monitored and reviewed regularly, ensuring domestic and commercial waste collections are unimpeded (liaison with the Council etc. will be maintained).

5.63. Vehicles must not wait in the area before or after making deliveries / collections. Deliveries are required to be Just-In-Time (JIT).

5.64. Deliveries and collections must take place between 10:00 and 15:00 to avoid potential conflict with local residents and schools, as well as to comply with loading restrictions in effect on Kentish Town Road. Clear and sustained dialogue will be maintained with affected parties throughout the works.

5.65. In the (unlikely) event of temporary Traffic Management Orders (including road closures) being required, the applicant will ensure adequate liaison takes place with the relevant Council Officers in good time.

Site Setup & TROs

5.66. The local highway network is not affected by the works as the construction vehicle routings will focus on the Principal road network or Transport for London Road Network. The immediate Site layout is shown at the Appendices, including the extent of existing parking/loading controls.

5.67. It is proposed that deliveries will be coordinated to comply with the prevailing loading restrictions (i.e. loading / deliveries between 10am and 4pm) and to not suspend any existing restrictions unless absolutely necessary.

Occupation of the Public Highway

5.68. No occupation of the public highway is proposed.

Motor Vehicle and/or Cyclist Diversions

5.69. No diversions to traffic are proposed.

Scaffolding, Hoarding, and Associated Pedestrian Diversions

5.70. It is anticipated no scaffolding or hoarding will impact on the public highway. As a result, no pedestrian diversions are required.

Services

5.71. New utility connections are proposed as part of the works and some work will be required in York Mews.

6. Environmental Impact

Noise Generating Activities

6.1. Measures may be required to protect the workers on Site and suppress noise generated on the Site during the construction phase.

6.2. Consequently, all sources of noise arising from the construction should be identified and assessed. The Informative associated with the Consent is also noted. Mitigation measures will include the following, where possible:

- Good public relations with the adjacent residents/workers, including timely warning/notice of likely periods of noisy activities;
- Where possible, 'silenced' plant and equipment to be used;
- Workers using 'noisy' plant should be trained and provided with ear protection;
- Where vehicles are standing for a significant period of time, their engines to be switched off;
- Screening around those parts of the Site where activities are likely to generate noise;
- Location of noise generating plant at a low level and as distant as possible from sensitive receptor;
- Acoustic enclosures to be fitted where possible to suppress noisy equipment;
- Plant to operate at low speeds, where possible, and incorporate automatic low speed idling;
- Location of Site entrances and exits to prevent the need for vehicles to reverse and also minimise impacts upon sensitive receptors;
- All plant to be properly maintained (greased, blown silencers replaced, saws kept sharpened, teeth set and blades flat, worn bearings replaced etc.);
- Consideration to be given to temporary screening or enclosures for static noisy plant to reduce noise emissions and plant should be certified to meet any relevant EC Directive standards; and
- All contractors to be made familiar with the guidance in BS 5228 (Parts 1 and 2) which should form a pre-requisite of their appointment.

Recent Noise Surveys

6.3. The Applicant has commissioned a noise survey ahead of the works. The results of the environmental sound survey are summarised in the table below.

Table 2: Summary of Noise Survey Results

Measurement Period	Range of recorded sound pressure levels (dB)			
	$L_{Aeq(15mins)}$	$L_{AFmax(15mins)}$	$L_{A10(15mins)}$	$L_{A90(15mins)}$
Daytime (07:00 – 23:00 hours)	52 – 69	66 – 98	54 – 63	46 – 54
Night-time (23:00 – 07:00 hours)	49 – 58	61 – 84	50 – 60	42 – 50
Café Nero plant operating hours (06:30 – 19:30 hours)	53 – 69	66 – 98	55 – 62	46 – 54

6.4. The lowest existing background sound pressure levels at nearby noise sensitive premises are therefore:

- 46dB L_{A90} during daytime period;
- 42dB L_{A90} during night-time period;
- 46dB L_{A90} during Café Nero plant operating period.

6.5. For completeness, a copy of the noise report is contained at the Appendices.

Noise & Vibration Levels

Vibration Level

6.6. In the case of vibration, measured vibration levels shall be compared with the criteria in BS 5228: 2009 part 2 (i.e. 1mms^{1-} PPV for potential disturbance in residential and using a suggested trigger criteria of 2mms^{1-} for commercial).

6.7. Lower limits must be agreed with the Council if there is a risk that vibration levels may interfere with vibration sensitive equipment or other vibration sensitive objects.

6.8. The locations of accelerometers (vibration monitors) are intended to be located on or near the party walls, and shall (following agreement at a Site meeting) be identified on an OS map and submitted to the Council's Environmental Health team. Any exceedance of vibration trigger limits shall initiate a review of works, to enforce changes of methodology or equipment, in order to keep within reasonable vibration levels.

Noise Monitoring

6.9. The main Contractor shall carry out prediction of noise and vibration levels before any work is carried out on site. These predicted noise and vibration levels shall be registered in the Construction/Demolition Management Plan.

6.10. Noise monitoring – if required – would be undertaken using a combination of semi-permanent (continuous) and attended monitoring methods. The locations of the semi-permanent (continuous) and attended monitoring and the frequency of the sampling will be agreed with the Council in writing (noting that the locations are dependent on the changing locations of construction related plant, to be agreed on site with the EHO).

6.11. Where the measured noise levels are more than 3dB (A) above the predicted noise level, or in the event of a complaint of noise an investigation shall be carried out to ascertain the cause of the exceedance or the complaint and to check that Best Practicable Means are being used to control the noise.

6.12. Noise levels shall be reduced further if it is reasonably practicable to do so. The Applicant notes that construction noise limits may be applied by the Council.

Mitigation Measures

6.13. Noise attenuation screening is to be used, if deemed appropriate, with noise monitoring to be carried out at the start and at regular intervals during each task period. Any mobile screens shall have sufficient mass so as to be able to resist the passage of sound across the barrier and to be free of significant holes or gaps between or under any acoustic panels or board materials as far as reasonably practical. Barriers would be:

- Fairly uniform panels, free from holes with no gaps or openings at joints (uneven ground may leave gaps to be filled);
- Stable and robust enough to stand up to Site conditions and;
- Of a height and width sufficient enough to completely cut off sight of the source from the receiver.

6.14. Any exceedance of vibration trigger limits shall initiate a review of works, to enforce changes of methodology or equipment, in order to keep within reasonable vibration levels.

Potential Impacts on Air Quality

6.15. Impacts on air quality from the proposed development can occur both during construction and operation. During construction there is the potential for emissions of dust to cause annoyance. The development is in a residential area with a number of residential properties that border the Site.

6.16. The Institute of Air Quality Management (IAQM) published guidance on how to assess impacts of emissions of dust from demolition and construction sites[2]. This guidance has been followed in Table 3 which shows the steps undertaken to determine the risk of dust from construction giving rise to annoyance.

Table 3: IAQM Dust Risk Assessment Methodology

Step	Description	Outcome
1	Need for Detailed Assessment	Detailed assessment required due to proximity of sensitive receptors within 350 m
2	Assess the Risk of Dust Effect	High risk site due to receptors within 20 m
3	Identify the Need for Site-Specific Mitigation	Mitigation measures detailed in the GLA best practice guidance for High Risk will be followed
4	Define Effects and their Significance	Slight Adverse impact (following mitigation)

6.17. Given the close proximity of sensitive receptors, the risk of dust annoyance occurring during construction is considered to be high, although with the implementation of appropriate mitigation measures the significance of the impacts is only slight.

6.18. Potentially significant air quality impacts during the construction phase are associated with dust generating activities in close proximity to potentially sensitive receptors.

6.19. Appropriate Site management practices will manage the possible impacts including the potential for localised air quality impact from dust, site plant and vehicle emissions during the works.

6.20. Guidance within the London Councils '*The Control Of Dust and Emissions From Construction and Demolition*' has been, and shall be followed in order to reduce the impact of construction activities on air quality.

6.21. There are a number of mitigation measures that can be employed to lessen the nuisance and human-health impacts of the dust and particulates generated during construction activities and in this case, sheeting of lorries and damping down would be employed as appropriate.

6.22. Construction dust usually responds well to these measures as long as a co-ordinated Management Plan is implemented. A comprehensive list of measures is as follows:

- Use of water spraying, especially on access roads, in order to reduce dust generation, as and when conditions dictate;

[2] IAQM (January 2012) Guidance on the Assessment of the Impacts of Construction on Air Quality and the Determination of their Significance

- Effective wheel/body washing facilities to be provided and used as necessary;
- A road sweeper to be readily available whenever the need for road cleaning arises; Dampening of exposed soil and material stockpiles, where necessary;
- Consideration will be given to wind speed and direction prior to conducting dust generating activities to determine the potential for dust nuisance to occur and avoid such activities during periods of high or gusty winds;
- Stockpiles of soil and materials should be located as far as possible from sensitive receptors, taking account of prevailing wind directions;
- Windbreak netting should be positioned, where possible, around material stockpiles and vehicle loading /unloading areas;
- Completed earthworks should be covered or vegetated as soon as possible;
- Ensuring that all construction plant and equipment is regularly maintained in good working order;
- Vehicles carrying waste material off-site to be sheeted;
- Under no circumstances should fires be allowed on site; and
- Special provisions will apply for any materials containing asbestos, as appropriate. The safety method statement should outline the control measures necessary to minimise the risks to an acceptable level, and all statutory notices will be placed with the Health and Safety Executive (HSE).

6.23. Where activities are likely to cause disturbance to local sensitive receptors, dust monitoring should take place at most affected facades. All contractors and sub-contractors will also be required to go beyond best practice site management as defined by the Considerate Constructors Scheme (and LBC's guidance, as necessary).

Dust Generating Activities

6.24. Mechanical disturbance of granular material exposed to air creates atmospheric dust. This is termed 'fugitive' as it is not discharged in to the atmosphere in a confined stream. The potential sources of these fugitive emissions are summarised below:

- Site clearance and excavation;
- On-site earth moving operations, site levelling, cut and fill etc.;
- Vehicle movements over haul routes;
- Vehicle movements on-site during dry periods;
- Wind blowing across the Site during dry periods;
- Stockpiling of excavated materials;
- Cutting and grinding;
- Accidental spillage and loss of load from vehicles carrying loose material;
- Deep excavations.

6.25. This generation of fugitive dust required consideration of additional factors, including:

- Prevailing wind (speed, direction etc.);
- Prevailing climate, including rainfall;

- Location of sensitive receptors (including residential and commercial premises, habitats and watercourses).

6.26. Prevailing winds are important when considering fugitive dust. The speed of winds can determine the dispersion of dust; high winds can increase the initial generation of dust in addition to carrying the dust over greater distances.

Control of Dirt and Dust on the Public Highway

6.27. The Applicant will ensure that debris deposits onto the public road are minimised as much as possible and cleared away if they occur. In addition, no concrete will be washed in to highway gullies.

6.28. Mud and debris on the road is one of the main environmental nuisance and safety problems arising from construction sites. The contractor will make provision to minimise this problem.

6.29. In the early stages of the project, when demolition and associated works are being carried out, staff will be on hand to ensure all vehicles that enter/leave the construction site in a tidy manner. Muck-away lorries will be fully sheeted to minimise the risk of debris over-spilling onto the highway.

6.30. Table 4 shows the further dust mitigation methods to be employed.

Table 4: Dust Mitigation Measures

Risk	Mitigation
Construction Traffic	• All construction traffic to follow the designated routes; once groundworks are complete, delivery traffic will be restricted to the public highway. • Limited on-site traffic due to site constraints, materials will be handled by forklift after unloading from highway. • Highway permits will be obtained in good time for footway closure(s). • Speed limits on site at 5mph, where necessary. • All granular materials will be covered when in transport (part of Supplier Agreements). • Wheel wash facilities at the site. Comprising hardstanding from the entrance with water supply and cleaning. Minimal number of vehicles accessing Highway having run through the Site.
Highways	• Road sweepers will be deployed as required. • Road edges will be swept by hand and damped down as required.
Stockpiles	• Due to site constraints, limited quantities of materials will be stockpiled.
Dust Suppression	• Dry weather – use water bowser to damp the site down. • Hoarding erected around the site for security and fugitive dust suppression. • All cutting operations will be done off-site where possible or with the use of dust suppression on-site.
Monitoring	• On and off-site monitoring at regular intervals by the site manager and visiting contracts manager. • Regular liaison to take place with local EHO and residents. • Mitigation methods to be reviewed at each DTM.

Mitigation Measures During Specific Activities

Site Preparation

- Due to the aspects of the operation being undertaken, dust is not likely to occur.
- It is anticipated that daily vehicle movements on and off site during this phase of work will be restricted to disposal of surplus material, and for imported material.

Materials handling and storage

- Concrete will be delivered pre-mixed where possible to prevent dust from dry stockpiled material.
- The superstructure envelope is constructed of a mixture of existing block and brick cladding. There are limited areas for Site storage and deliveries will scheduled to suit immediate use.
- Materials for construction will be off loaded by the haulier to the Site for transportation to an area of hardstanding within the Site by hand or trolley. They will be distributed to the work face.
- The construction of the building is block and brick cladding. Internal walls and linings consist of lightweight metal studding with plasterboard coverings.
- Handling, erection and installation of these components will not generate dust due to mitigation measures of shrink wrapped packs, ready mixed concrete.
- Haul routes, vehicles and plant. There are no significant haul routes through the Site which can generate dust. There is limited Site traffic due to the Site's size restrictions.

Construction and Fabrication

- Dust generating construction is limited to structure, and superstructure masonry. Dust will be controlled by suppression kits being used during on Site cutting.
- Below ground construction, if required, will be with pre-mixed in-situ concrete reinforced piled foundations.
- Above ground construction is block, brick and floors, with lightweight internal walls. Internal works will be kept clean and clear to prevent dust arising, with adequate resources and supervision.
- The method of construction and fabrication does not give rise to a risk of nuisance by dust.

Waste

- Quantities of waste will be detailed in the Site Waste Management Plan.
- Excavation waste will be disposed of via covered tippers and/or skips, and waste generated by the construction activities will be segregated at the point of disposal (waste transfer station) and will be stored and removed in skips.
- The method of storing and disposing of waste does not give rise to a risk of nuisance by dust.

Risk Assessment

6.31. The risk assessment must take account of proximity to sensitive receptors (e.g. schools, care homes etc.). In line with GLA's '*Control of Dust and Emissions Supplementary Planning Guidance*'[3] a dust risk assessment has been undertaken following the steps detailed within the guidance:

[3] https://www.london.gov.uk/what-we-do/planning/implementing-london-plan/supplementary-planning-guidance/control-dust

1. Screen the Need for Detailed Assessment;
2. Assess the Risk of Dust Impacts;
3. Define the Sensitivity of the Area;
4. Define the Risk of Impacts.

6.32. If required, the location, number and specification of the monitors will be confirmed in line with guidance and it is noted that these would be installed 3 months prior to the commencement of works, and that real time data and quarterly reports will be provided to the Council detailing any exceedances of the threshold and measures that were implemented to address these.

Asbestos Management

6.33. Special provisions will apply for any materials containing asbestos, as appropriate. The safety method statement should outline the control measures necessary to minimise the risks to an acceptable level, and all statutory notices will be placed with the Health and Safety Executive (HSE).

Waste

6.34. The Applicant will follow the principles of a Site Waste Management Plan (SWMP) in accordance with BRE SMARTWaste or similar.

6.35. Through careful design and specification, the amount of waste will be reduced on Site such as off-Site manufacturing, the factory cutting of plasterboard and the reduction of packaging by specification. The plan would ensure that waste production is minimised and that recycling and re-use is maximised through monitoring and recording.

6.36. Strategies including just-in-time deliveries and suitable storage of materials prior to use will also be applied to prevent spoiling. The scheduled domestic and commercial collections will be reviewed with the Council etc. and will be unimpeded by the Site's activities.

6.37. The Site Manager and the nominated waste contractor will be responsible for maintaining and updating the plan, through the monitoring procedure. The destination of all waste or other materials removed from the Site will be notified by the Site Manager for approval.

6.38. Loads will only be deposited at authorised waste treatment and disposal sites. Waste may be collated into skips and then be separated off-site, or separated at source. Materials access and muck-away would be via the property frontage of the Site, supported by Banksmen where appropriate.

6.39. The applicant confirms that vehicle wheel washing facilities will be provided. It should be noted that adjoining roads will also be swept daily, over and above the benefits of the wheel washing facilities proposed on the Site. No waste will be flushed in to gullies. Existing roadside waste collections will be maintained throughout the works.

6.40. The following details are confirmed by the Applicant:

- Construction time period: 12 months
- Is the development within the CAZ? (Y/N): No
- Will the NRMM with net power between 37kW and 560kW meet the standards outlined above? (Y/N): Yes
- Please provide evidence to demonstrate that all relevant machinery will be registered on the

NRMM Register, including the Site name under which it has been registered: *[to be updated following planning consent]*

- Please confirm that an inventory of all NRMM will be kept on Site and that all machinery will be regularly serviced and service logs kept on Site for inspection:*[to be updated following planning consent]*
- Please confirm that records will be kept on Site which details proof of emission limits, including legible photographs of individual engine plates for all equipment, and that this documentation will be made available to local authority officers as required: *[to be updated following planning consent]*

7. Agreement

Summary

7.1. The agreed contents of this Construction Management Plan must be complied with unless otherwise agreed in writing by the Council. This may require the CMP to be revised by the Developer and reapproved by the Council. The project manager shall work with the Council to review this Construction Management Plan if problems arise in relation to the construction of the development. Any future revised plan must be approved by the Council in writing and complied with thereafter.

7.2. It should be noted that any agreed Construction Management Plan does not prejudice further agreements that may be required such as road closures or hoarding licences.

Signed: ……

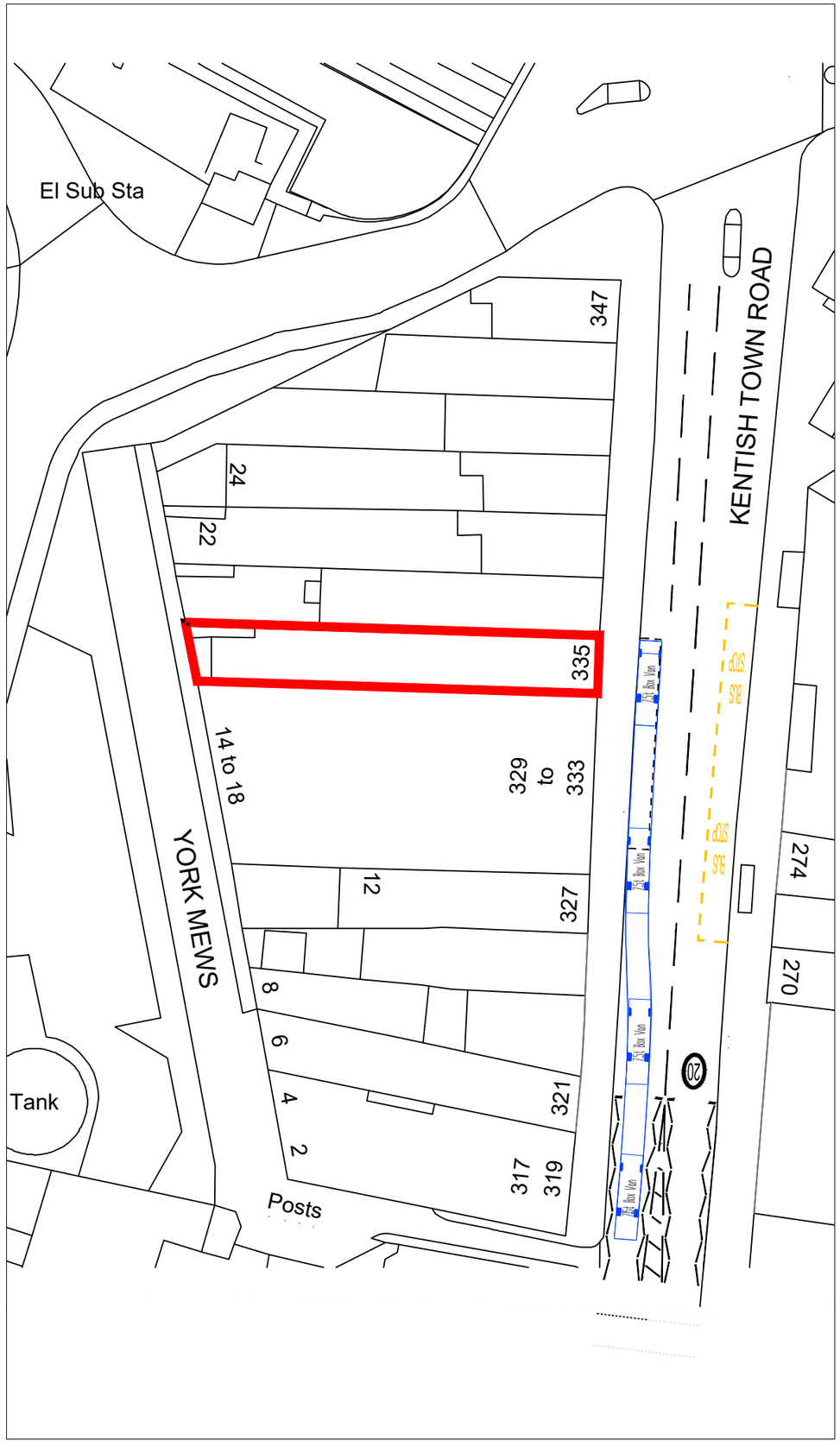
Date: ……

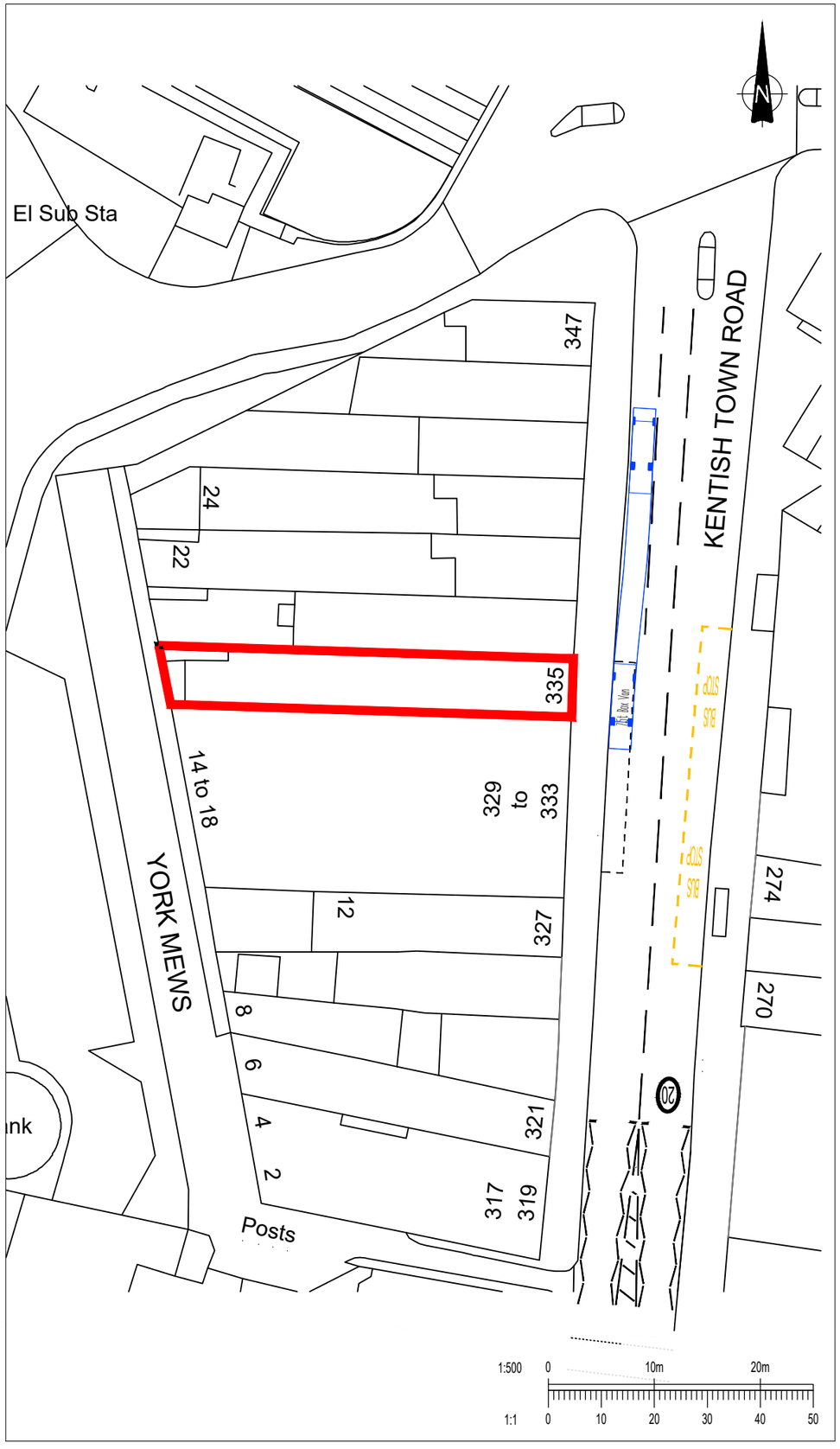
Print Name: ……

Position: ……

APPENDICES

A. Swept-Path Analysis





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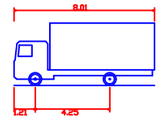

7.5t Box Van	
Overall Length	8.010m
Overall Width	2.100m
Overall Body Height	2.556m
Min Body Ground Clearance	0.351m
Track Width	2.064m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	7.400m

Rev	Date	Description	By
A01	18.07.19	ISSUED	TA

Amendments

Project

335 Kentish Town Road & 20 York Mews

Title

Loading Bay
Autotrack Analysis

Client

Anish Shah

Pickfords Wharf Clink Street London SE1 9DG
t 020 7928 7888
mail@watermangroup.com www.watermangroup.com

Status

PRELIMINARY

Designed By	Checked By	Waterman Ref
KZ	MP	WIE16128
Drawn By	**Date**	**Scales @ A3**
TA	JULY 2019	1:500

Project - Originator - Volume - Level - Type - Role - Number

WIE16128-SA-95-0001-A01

Revision

A01

1:500 0 10m 20m

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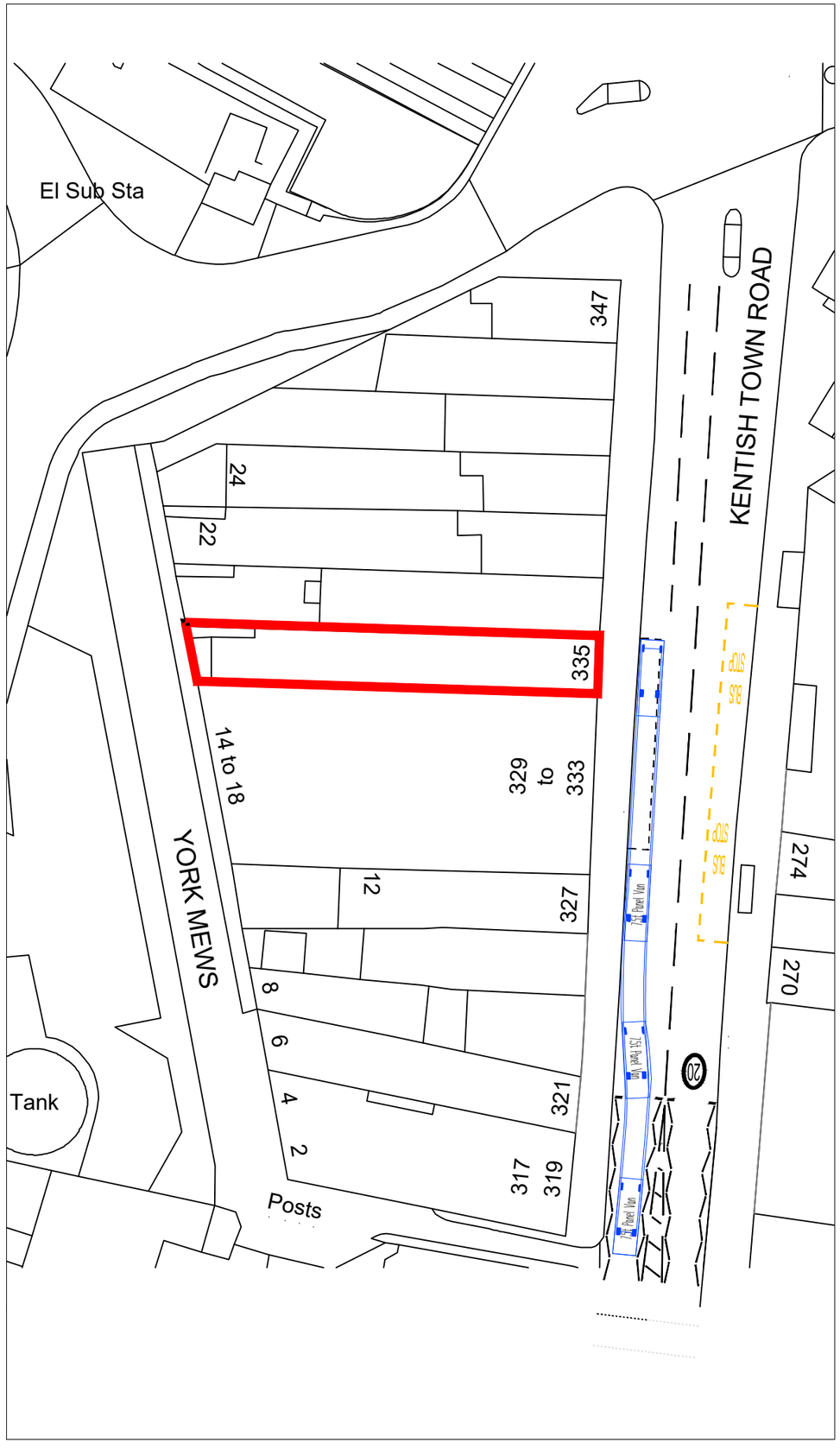
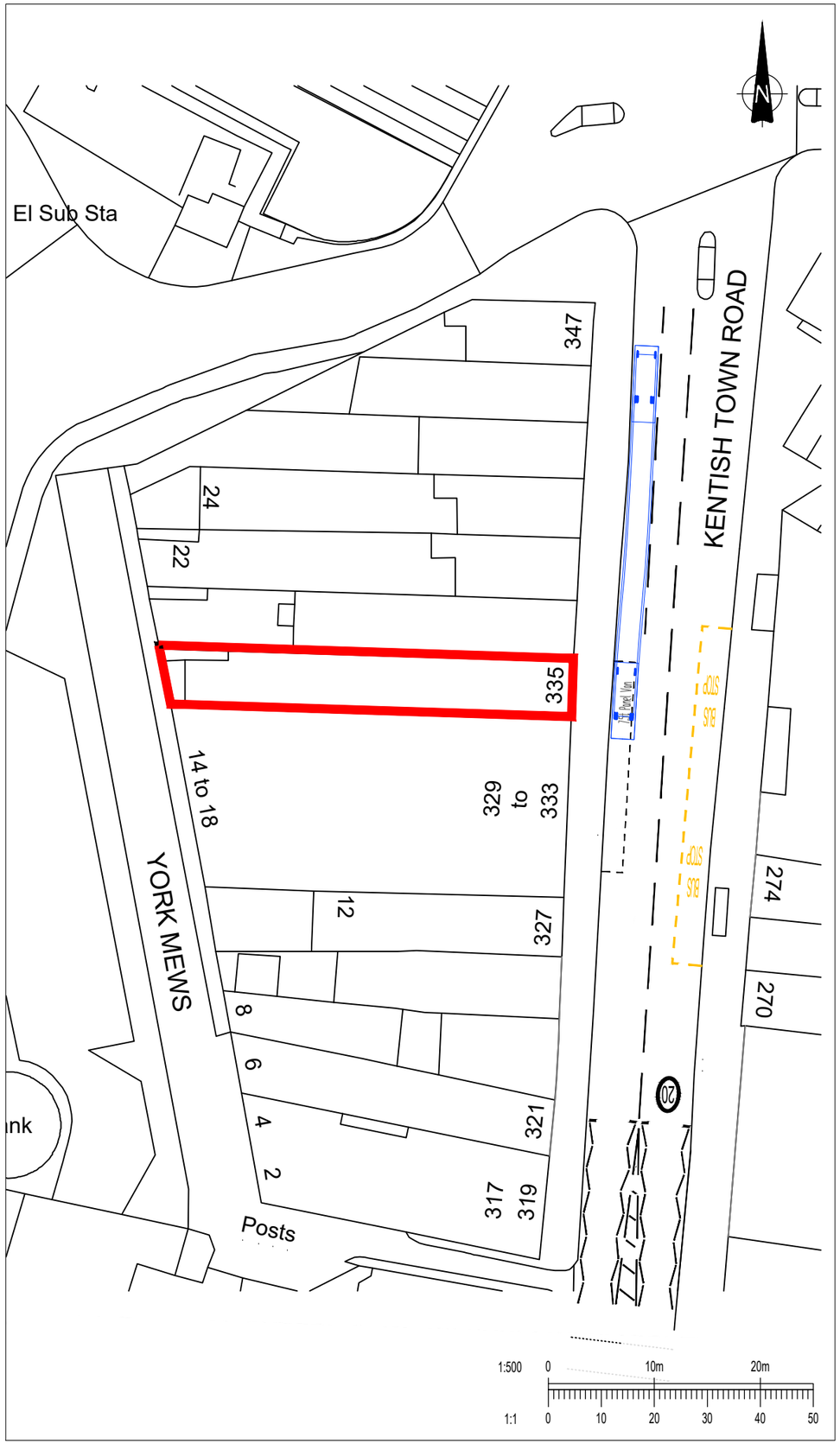
A3-Wat-BS-S





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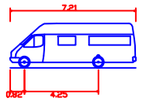

7.5t Panel Van	
Overall Length	7.210m
Overall Width	2.192m
Overall Body Height	2.544m
Min Body Ground Clearance	0.316m
Track Width	1.865m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	7.400m

Rev	Date	Description	By
A01	18.07.19	ISSUED	TA

Amendments

Project

335 Kentish Town Road & 20 York Mews

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Loading Bay
Autotrack Analysis

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KZ	MP	WIE16128
Drawn By	**Date**	**Scales @ A3**
TA	JULY 2019	1:500

Project - Originator - Volume - Level - Type - Role - Number

WIE16128-SA-95-0002-A01

Revision

A01

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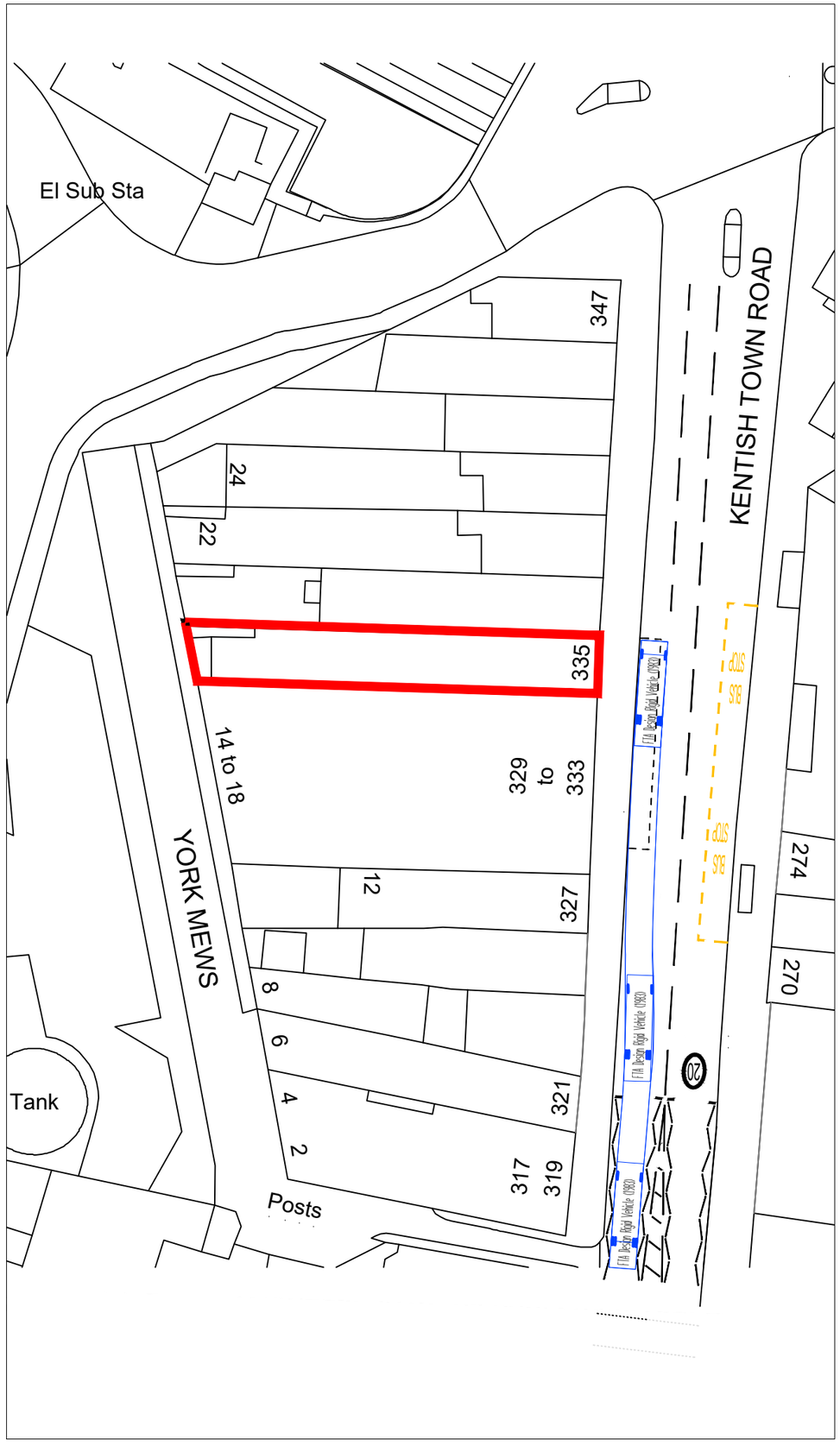

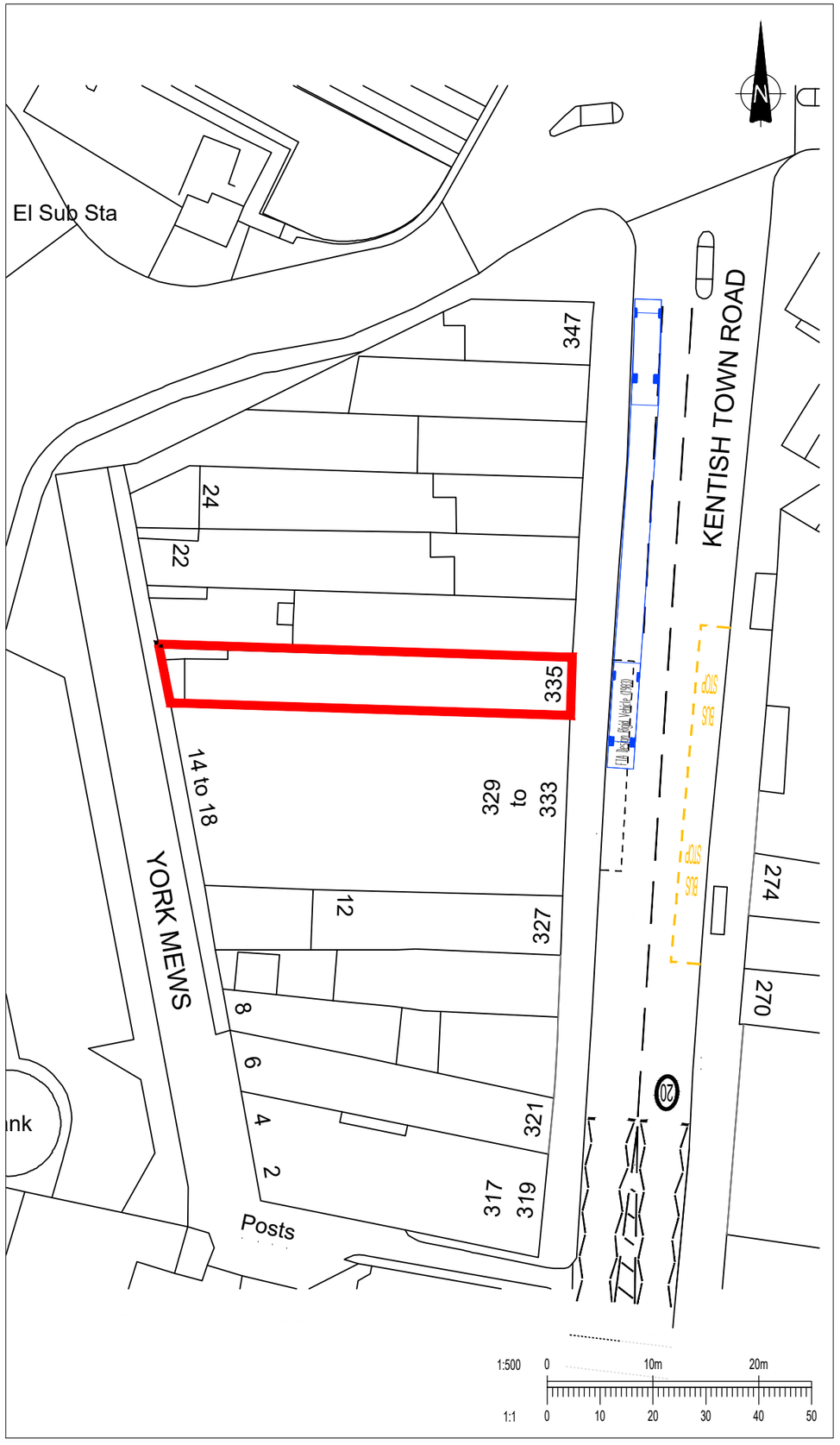

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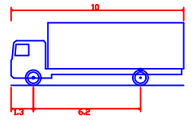

FTA Design Rigid Vehicle (1983)

Overall Length	10.000m
Overall Width	2.500m
Overall Body Height	3.630m
Min Body Ground Clearance	0.457m
Track Width	2.500m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	12.000m

Rev	Date	Description	By
A01	18.07.19	ISSUED	TA

Amendments

Project

335 Kentish Town Road & 20 York Mews

Title

Loading Bay
Autotrack Analysis

Client

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Status

PRELIMINARY

Designed By	Checked By	Waterman Ref
KZ	MP	WIE16128
Drawn By	**Date**	**Scales @ A3**
TA	JULY 2019	1:500

Project - Originator - Volume - Level - Type - Role - Number

WIE16128-SA-95-0003-A01

Revision

A01

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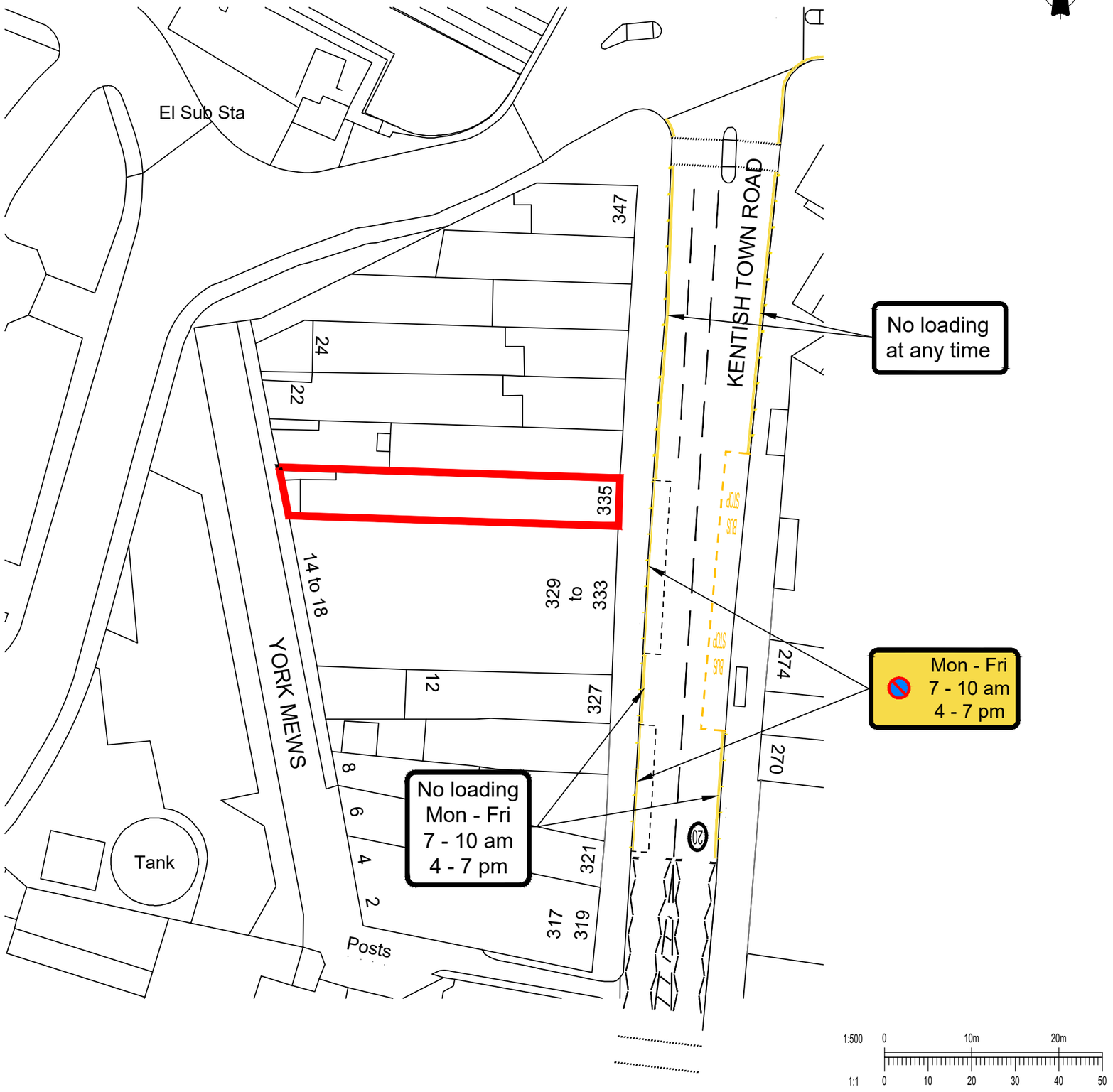
1086- 401 location plan, A3-Wat-BS-S

B. Site & On-Street Layout



KEY:

Site

Rev	Date	Description	By
A01	19.07.19	ISSUED	TA

Amendments

Project

335 Kentish Town Road & 20 York Mews

Title

Existing Highway Restrictions

Client

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Status

PRELIMINARY

Designed By	Checked By	Waterman Ref
KZ	MP	WIE16128
Drawn By	**Date**	**Scales @ A3**
TA	JULY 2019	1:500

Project - Originator - Volume - Level - Type - Role - Number	Revision
WIE16128-SA-95-0004-A01	A01

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1086- 401 location plan, A3-Wat-BS-S

C. Noise Report

NSL
Noise Solutions Ltd

Dr. Anish Shah

18 Temple Mead Close
London
HA7 3RG

Plant Noise Impact Assessment

On behalf of
Dr. Anish Shah

Project Reference: 88567 | Revision: 00 | Date: 14th June 2019

T: 01252 519881
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Noise Solutions Ltd, Unit 5, Oriel Court, Omega Park, Alton, GU34 2YT Reg no. 3483481

Document Information

Project Name	:	**335 Kentish Town Road**
Project Reference	:	**88567**
Report Title	:	**Plant Noise Impact Assessment**
Doc Reference	:	**88567/NIA**
Date	:	**14th June 2019**

	Name	Qualifications	Initials	Date
Prepared by:	Danny Bhatt	BSc (Hons), MSc, AMIOA	DB	14th June 2019
Reviewed and approved by:	Nigel Chandler	BSc(Hons) MIOA	NAC	14th June 2019
For and on behalf of Noise Solutions Ltd				

Revision	Date	Description	Prepared	Reviewed/ Approved

Reg no. 3483481 Trading office 5 Oriel Court, Omega Park, Alton, GU34 2YT

Contents

Appendices

Executive summary

Noise Solutions Limited has carried out a noise impact assessment of the existing AC plant serving Café Nero on Kentish Town Road, London on proposed new residential dwellings adjoining the site.

The results of the assessment demonstrate that the AC plant must be attenuated to comply with the local authority's typically accepted noise criteria. It is recommended that this is provided using an acoustic enclosure to each unit, to prevent issues of air recirculation through the use of an acoustic screen.

Should the recommendation by NSL be followed, there would not be a reason for the refusal of planning permission.

1.0 Introduction

1.1. Noise Solutions Ltd (NSL) has been commissioned by Dr. Anish Shah to provide a noise impact assessment of the existing AC plant, serving Café Nero, on the proposed new residential development at 335 Kentish Town Road, London.

1.2. An environmental sound survey has been undertaken to establish the prevailing background sound pressure levels at a location representative of the sound levels outside the nearest noise sensitive receptors to the site.

1.3. Cumulative plant noise emission levels for the existing plant have been predicted at the most affected noise sensitive receptors and assessed against the requirements of London Borough of Camden Council.

1.4. To assist with the understanding of this report a glossary of acoustic terms can be found in **Appendix A**. An in-depth glossary of acoustic terms can be viewed online at www.acoustic-glossary.co.uk.

2.0 Details of the development

2.1. The proposal is for the redevelopment of the site to provide five residential apartments, three occupying the existing building at 335 Kentish Town Road (Flat C, D & E) and two apartments within a new 3-storey building on York Mews (Flat A & B).

2.2. It is proposed that a 2-storey extension is to be built at the rear of 335 Kentish Town Road (Flat C & D) with the bedrooms facing the rear courtyard. Flat A has the kitchen (at first floor level) facing the courtyard and the bedroom of Flat B (second floor level) is also facing the courtyard.

2.3. The AC units that serve Café Nero are located centrally between the two proposed buildings. It is proposed to enclose the AC units within acoustic enclosures to achieve the required attenuation to satisfy the council criteria.

2.4. The operational hours of the café are 06:30 to 19:30 hours Monday to Friday, 07:00 to 19:30 hours on Saturday and 07:30 to 19:30 hours on Sunday.

3.0 Nearest noise sensitive receptors

3.1. The bedrooms of Flat C & D (Receptors R1a and R1b) face the courtyard and are approximately 5m from the nearest AC plant. The kitchen and bedroom of Flat A & B (Receptors R2a & R2b) also face the courtyard and are approximately 6m from the nearest AC plant.

3.2. A site plan showing the site and surrounding area, the nearest noise sensitive properties and noise monitoring location used in this assessment is presented in **Appendix B**.

4.0 Existing noise climate

4.1. An environmental noise survey was undertaken to establish the typical background sound levels at a location representative of the noise climate outside the façades of the nearest noise sensitive receptors to the proposed plant area during the quietest times at which the plant will operate.

4.2. The results of the environmental sound survey are summarised in Table 1 below. The full set of measurement results and details of the survey methodology are presented in **Appendix C**.

Table 1 Summary of survey results

Measurement period	Range of recorded sound pressure levels (dB)			
	$L_{Aeq(15mins)}$	$L_{AFmax(15mins)}$	$L_{A10(15mins)}$	$L_{A90(15mins)}$
Daytime (07.00 – 23.00 hours)	52-69	66-98	54-63	46-54
Night-time (23.00 – 07.00 hours)	49-58	61-84	50-60	42-50
Café Nero plant operating hours (06:30 – 19:30 hours)	53-69	66-98	55-62	46-54

4.3. The lowest existing background sound pressure levels at nearby noise sensitive premises are therefore:

- 46dB L_{A90} during the daytime period;
- 42dB L_{A90} during the night-time period;
- 46dB L_{A90} during Café Nero plant operating period.

5.0 Plant noise design criteria

National Planning Policy Framework

5.1. A new edition of NPPF was published in February 2019 and came into effect immediately. The original National Planning Policy Framework (NPPF[1]) was published in March 2012, with a revision in July 2018 - this document replaced the existing Planning Policy Guidance Note 24 (PPG 24) "Planning and Noise." The 2019 revised edition contains no new directions or guidance with

[1] National Planning Policy Framework, DCLG, March 2012

respect to noise, and hence, all previous references remain extant. The paragraph references quoted below relate to the February 2019 edition.

5.2. Paragraph 170 of the NPPF states that the planning system should contribute to and enhance the natural and local environment by, (amongst others) *"preventing both new and existing development from contributing to or being put at unacceptable risk from, or being adversely affected by unacceptable levels of soil, water or noise pollution or land stability."*

5.3. The NPPF goes on to state in Paragraph 180:

" planning policies and decisions should ...

a) Mitigate and reduce to a minimum potential adverse impacts resulting from noise from new development, - and avoid noise giving rise to significant adverse impacts on health and quality of life;
b) identify and protect tranquil areas which have remained relatively undisturbed by noise and are prized for their recreational and amenity value for this reason ...

5.4. The NPPF document does not refer to any other documents or British Standards regarding noise other than the Noise Policy Statement for England (NPSE[2]).

5.5. Paragraph 2 of the NPPF states that *"planning law requires that applications for planning permission must be determined in accordance with the development plan unless material considerations indicate otherwise."*

5.6. Paragraph 12 of the NPPF states that *"The presumption in favour of sustainable development does not change the statutory status of the development plan as the starting point for decision making. Where a planning application conflicts with an up-to-date development plan (including any neighbourhood plans that form part of the development plan), permission should not usually be granted. Local planning authorities may take decisions that depart from an up-to-date development plan, but only if material considerations in a particular case indicate that the plan should not be followed"*.

5.7. Paragraph 117 states that *"Planning policies and decisions should promote an effective use of land in meeting the need for homes and other uses, while safeguarding and improving the environment and ensuring safe and healthy living conditions. Strategic policies should set out a clear strategy for accommodating objectively assessed needs, in a way that makes as much use as possible of previously-developed or 'brownfield' land"*.

[2] Noise Policy Statement for England, DEFRA, March 2010

London Borough of Camden

5.8. Pre-application advice provided by London Borough of Camden[3] requires an assessment of the noise impact of plant associated with the commercial units on the proposed new dwellings.

5.9. Section 6 of the Camden Planning Guidance Amenity, published March 2018, gives guidance on noise and vibration.

5.10. Clause 6.8 refers noise thresholds within Appendix 3 of the Local Plan and to refers to the principles of No observed effect level (NOEL), Lowest observable adverse effect level (LOAEL) and Significant observed adverse effect level (SOAEL) and defines their meanings. Specifically, in the context of this report, LOAEL is defined as:

> *The level above which changes in behaviour (e.g. closing windows for periods of the day) and adverse effects on health (e.g. sleep disturbance) and quality of life can be detected.*

5.11. SOEAL is defined as:

> *The level above which adverse effects on health and quality of life occur. This could include psychological stress, regular sleep deprivation and loss of appetite.*

5.12. Clause 6.27 states that:

> *Developments proposing plant, ventilation, air extraction or conditioning equipment and flues will need to provide the system's technical specifications to the council accompanying any acoustic report. "BS4142 Method for rating Industrial and Commercial Sound' contains guidance and standards which should also be considered within the acoustic report.*

5.13. Appendix 3 within the Camden Local Plan published 2017 states:

> *"A relevant standard or guidance document should be referenced when determining values for LOAEL and SOAEL for non-anonymous noise. Where appropriate and within the scope of the document it is expected that British Standard 4142:2014 'Methods for rating and assessing industrial and commercial sound' (BS 4142) will be used. For such cases a 'Rating Level' of 10 dB below background (15dB if tonal components are present) should be considered as the design criterion)."*

5.14. Table 2 of the appendix states the criteria at which development related noise levels will be acceptable:

[3] 2018/4203/PRE, dated 20 December 2018

Table 2: Noise levels applicable to proposed industrial and commercial development (including plant and machinery)

Existing Noise sensitive receptor	Assessment Location	Design Period	LOAEL (green)	LOAEL to SOAEL (Amber)	SOAL (Red)
Dwellings**	Garden used for main amenity (free field) and Outside living or dining or bedroom window (façade)	Day	'Rating level' 10dB* below background	'Rating level' between 9dB below and 5dB above background	'Rating level' greater than 5dB above background
Dwellings**	Outside bedroom window (façade)	Night	'Rating level' 10dB* below background and no events exceeding 57dBL_{Amax}	'Rating level' between 9dB below and 5dB above background or noise events between 57dB and 88dBL_{Amax}	'Rating level' greater than 5dB above background and/or events exceeding 88dBL_{Amax}

**10dB should be increased to 15dB if the noise contains audible tonal elements. (day and night). However, if it can be demonstrated that there is no significant difference in the character of the residual background noise and the specific noise from the proposed development then this reduction may not be required. In addition, a frequency analysis (to include, the use of Noise Rating (NR) curves or other criteria curves) for the assessment of tonal or low frequency noise may be required.*

***levels given are for dwellings, however, levels are use specific and different levels will apply dependent on the use of the premises.*

BS 4142:2014 Methods for rating and assessing industrial and commercial sound

5.15. BS 4142:2014 is intended to be used to assess the likely effects of sound on people residing in nearby dwellings. The scope of BS 4142:2014 includes *"sound from fixed plant installations which comprise mechanical and electrical plant and equipment"*.

5.16. The procedure contained in BS 4142:2014 is to quantify the *"specific sound level"*, which is the measured or predicted level of sound from the source in question over a one-hour period for the daytime and a 15 minute period for the night-time. Daytime is defined in the standard as 07:00 to 23:00 hours, and night-time as 23:00 to 07:00 hours.

5.17. The specific sound level is converted to a rating level by adding penalties on a sliding scale to account for either potentially tonal or impulsive elements. The standard sets out objective

methods for determining the presence of tones or impulsive elements but notes that it is acceptable to subjectively determine these effects.

5.18. The penalty for tonal elements is between 0dB and 6dB, and the standard notes: "Subjectively, this can be converted to a penalty of 2 dB for a tone which is just perceptible at the noise receptor, 4 dB where it is clearly perceptible, and 6 dB where it is highly perceptible."

5.19. The penalty for impulsive elements is between 0dB and 9dB, and the standard notes: "Subjectively, this can be converted to a penalty of 3 dB for impulsivity which is just perceptible at the noise receptor, 6 dB where it is clearly perceptible, and 9 dB where it is highly perceptible."

5.20. The assessment outcome results from a comparison of the rating level with the background sound level. The standard states:

- *Typically, the greater this difference, the greater the magnitude of the impact.*
- *A difference of around +10 dB or more is likely to be an indication of a significant adverse impact, depending on the context;*
- *A difference of around +5 dB is likely to be an indication of an adverse impact, depending on the context;*
- *The lower the rating level is relative to the measured background sound level, the less likely it is that the specific sound source will have an adverse impact or a significant adverse impact. Where the rating level does not exceed the background sound level, this is an indication of the specific sound source having a low impact, depending on the context.*

5.21. The standard does state that "*adverse impacts include, but are not limited to, annoyance and sleep disturbance. Not all adverse impacts will lead to complaints and not every complaint is proof of an adverse impact.*"

5.22. The standard goes on to note that: *"Where background sound levels and rating levels are low, absolute levels might be as, or more, relevant than the margin by which the rating level exceeds the background. This is especially true at night."*

5.23. In addition to the margin by which the Rating Level of the specific sound source exceeds the Background Sound Level, the 2014 edition places emphasis upon an appreciation of the context, as follows:

"An effective assessment cannot be conducted without an understanding of the reason(s) for the assessment and the context in which the sound occurs/will occur. When making assessments and arriving at decisions, therefore, it is essential to place the sound in context."

5.24. BS 4142:2014 requires uncertainties in the assessment to be considered, and where the uncertainty is likely to affect the outcome of the assessment, steps should be taken to reduce the uncertainty.

Summary of proposed criteria

5.25. Using the methodology in BS 4142:2014 it would be appropriate to assess noise from the plant against the background sound level typical of the period when the plant operates, in this case between 06:30 and 19:30 hours. By extension, London Borough of Camden should accept a plant rating level up to 36 dBA (i.e. 10dBA below the lowest background sound level within that period) as falling within the "green" category within their guidance.

5.26. It is therefore proposed that the rating level of the new plant, at the nearest residential window, does not exceed the limit shown in Table 4.

Table 3 Proposed plant noise emissions level limits at noise sensitive receptors

Receptor	Period	Cumulative plant rating noise level, dB(A)
New residential windows	Plant operating hours (06.30 – 19.30 hours)	36

5.27. This will also result in a plant noise level significantly below the level where a "low impact" would be expected, using the method described in BS 4142:2014.

6.0 Plant noise impact assessment

6.1. The cumulative plant noise level at the most affected noise sensitive receptor has been predicted. The assessment has taken into consideration distance attenuation, acoustic screening and directivity corrections.

6.2. It should be noted that under normal practice the AC units will operate only when the café is open and is not anticipated to exhibit any tonal or impulsive characteristics, provided it is well maintained. All proposed external plant will be inverter driven and, therefore, will gently ramp up and down depending on the demands on the various systems. However, a penalty of 3dB as described in BS 4142:2014 has been applied for the possible presence of "*...characteristics that are neither tonal nor impulsive, though otherwise are readily distinctive against the residual acoustic environment...*".

6.3. Table 3, below, summarises the results of the assessment at the nearest residential windows. All other receptors benefit from increased distance/screening to the plant. The full set of calculations can be found in **Appendix E**. The predictions have been based on the proposed plant operating simultaneously at full capacity.

Table 4 Assessment of predicted noise levels at receptors (R1a, R1b, R2a & R2b)

Receptor	Period	Predicted rating level at receptor L_{Aeq} (dB)	Proposed design criterion (dB)	Difference (dB)
R1a (1st floor Kentish Town Rd)	Plant operating hours (06.30 – 19.30 hours)	27	36	-9
R1b (2nd floor Kentish Town Rd)	Plant operating hours (06.30 – 19.30 hours)	26	36	-10
R2a (1st floor York Mews)	Plant operating hours (06.30 – 19.30 hours)	29	36	-7
R2b (2nd floor York Mews)	Plant operating hours (06.30 – 19.30 hours)	27	36	-9

6.4. It should be noted that the noise predictions are based on the site plans found in **Appendix F**.

6.5. The above assessment, taking into account the AC units being housed within acoustic enclosures (as detailed in section 7.0 below), demonstrates that noise from the proposed plant will be more than 10dBA below the lowest measured background sound level and should therefore be acceptable to London Borough of Camden Council.

Context and uncertainties

6.6. As BS 4142:2014 advises, the estimated impact must be considered within the context of the site and the surrounding acoustic environment. The following must, therefore, also be taken into consideration when determining the potential impact that may be experienced:

- The assessments are undertaken at the nearest residential windows. The impact on all other residential premises will be lower due to distance losses.

6.7. Where possible uncertainty in this assessment has been minimised by taking the following steps:

- The measurement of the background sound levels was undertaken over a period including the quietest times of the day and night.
- The sound level meter and calibrator used have a traceable laboratory calibration and the meter was field calibrated before and after the measurements.
- Uncertainty in the calculated impact has been reduced by the use of a well-established calculation method.

- Care was taken to ensure that the measurement position was representative of the noise climate outside the nearby residential dwellings and not at a position where higher noise levels are present.

7.0 Recommendations

7.1. NSL recommend, in order to meet the noise criteria set by the local authority at 1m from the façade of the nearest noise sensitive receptor, the AC units are housed within acoustic enclosures. The assessment has been based on these providing at least 15dBA attenuation.

7.2. In order that adequate airflow is maintained to the AC units, the screen shown on the architect's drawing in **Appendix F** is considered to be for visual screening only and therefore not provide any appreciable acoustic benefit.

8.0 Summary

8.1. Noise Solutions Ltd (NSL) has been commissioned by Dr. Anish Shah to provide a noise impact assessment of the plant serving Café Nero affecting the proposed new residential development at 335 Kentish Town Road and York Mews, London.

8.2. An environmental noise survey has been undertaken to establish the existing prevailing noise levels at a location representative of the noise climate outside the nearest noise sensitive receptors to the plant area.

8.3. Cumulative noise emissions from the proposed plant have been predicted at the most affected noise sensitive receptors and assessed against typically accepted criteria. Noise from the plant meets the proposed design criteria provided the proposed recommendations have been put into place.

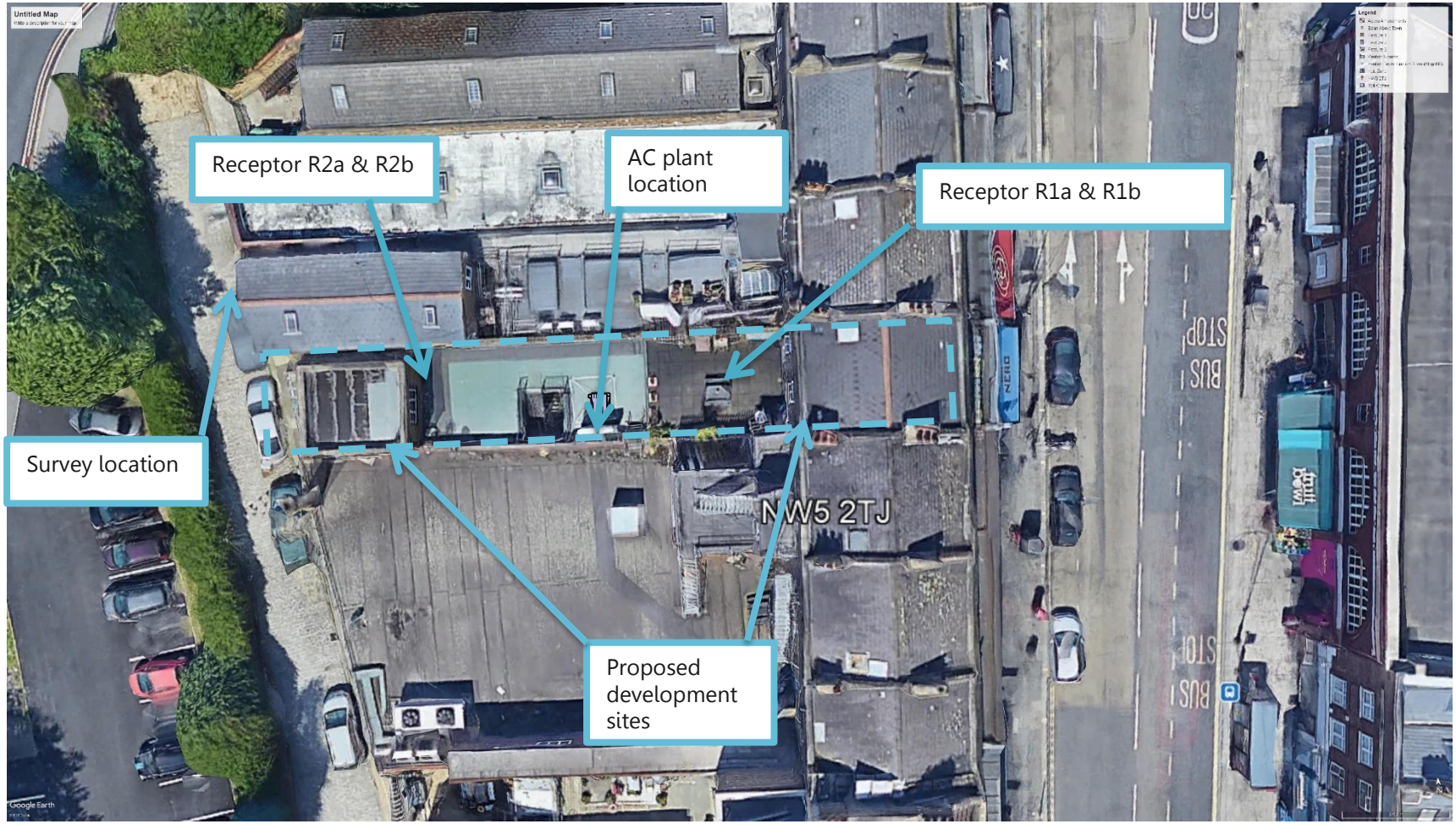
8.4. The assessment has demonstrated compliance with local policies, NPPF and guidance from BS 4142:2014.

8.5. Noise from the AC plant should, when attenuated as described should not, therefore, be a reason for refusal of planning permission for the proposed residential development.

Appendix A Acoustic terminology

Parameter	Description
Ambient Noise Level	The totally encompassing sound in a given situation at a given time, usually composed of a sound from many sources both distant and near ($L_{Aeq,T}$).
Decibel (dB)	A scale for comparing the ratios of two quantities, including sound pressure and sound power. The difference in level between two sounds s1 and s2 is given by 20 log10 (s1/s2). The decibel can also be used to measure absolute quantities by specifying a reference value that fixes one point on the scale. For sound pressure, the reference value is 20μPa. The threshold of normal hearing is in the region of 0 dB and 140 dB is the threshold of pain. A change of 1 dB is only perceptible under controlled conditions.
dB(A), L_{Ax}	Decibels measured on a sound level meter incorporating a frequency weighting (A weighting) which differentiates between sounds of different frequency (pitch) in a similar way to the human ear. Measurements in dB(A) broadly agree with people's assessment of loudness. A change of 3 dB(A) is the minimum perceptible under normal conditions, and a change of 10 dB(A) corresponds roughly to halving or doubling the loudness of a sound. The background noise in a living room may be about 30 dB(A); normal conversation about 60 dB(A) at 1 metre; heavy road traffic about 80 dB(A) at 10 metres; the level near a pneumatic drill about 100 dB(A).
Fast Time Weighting	Setting on sound level meter, denoted by a subscript F, that determines the speed at which the instrument responds to changes in the amplitude of any measured signal. The fast time weighting can lead to higher values than the slow time weighting when rapidly changing signals are measured. The average time constant for the fast response setting is 0.125 (1/8) seconds.
Free-field	Sound pressure level measured outside, far away from reflecting surfaces (except the ground), usually taken to mean at least 3.5 metres
Façade	Sound pressure level measured at a distance of 1 metre in front of a large sound reflecting object such as a building façade.
$L_{Aeq,T}$	A noise level index called the equivalent continuous noise level over the time period T. This is the level of a notional steady sound that would contain the same amount of sound energy as the actual, possibly fluctuating, sound that was recorded.
$L_{max,T}$	A noise level index defined as the maximum noise level recorded during a noise event with a period T. L_{max} is sometimes used for the assessment of occasional loud noises, which may have little effect on the overall L_{eq} noise level but will still affect the noise environment. Unless described otherwise, it is measured using the 'fast' sound level meter response.
$L_{10,T}$	A noise level index. The noise level exceeded for 10% of the time over the period T. L_{10} can be considered to be the "average maximum" noise level. Generally used to describe road traffic noise. $L_{A10,18h}$ is the A –weighted arithmetic average of the 18 hourly $L_{A10,1h}$ values from 06:00-24:00.
$L_{90,T}$	A noise level index. The noise level that is exceeded for 90% of the measurement time interval, T. It gives an indication of the lower levels of fluctuating noise. It is often used to describe the background noise level and can be considered to be the "average minimum" noise level and is a term used to describe the level to which non-specific noise falls during quiet spells, when there is lull in passing traffic for example.

Appendix B Photograph of site showing areas of interest



Appendix C Environmental sound survey

Details of environmental sound surveys

C.1 Measurements of the existing background sound levels were undertaken between 13:00 hours on Tuesday 4th June and 12.30 hours on Wednesday 6th June 2019.

C.2 The sound level meter was programmed to record the A-weighted L_{eq}, L_{90}, L_{10} and L_{max} noise indices for consecutive 15-minute sample periods for the duration of the noise survey.

Measurement position

C.3 The representative measurement position was located on a lamppost on York Mews (location indicated on the site plan in **Appendix B**).

C.4 In accordance with BS 7445-2:1991 *'Description and measurement of environmental noise – Part 2: Guide to the acquisition of data pertinent to land use'*, the measurements were undertaken under free-field conditions.

Equipment

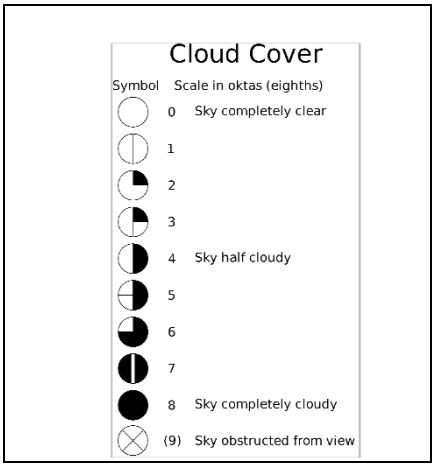
C.5 Details of the equipment used during the survey are provided in the table below. The sound level meter was calibrated before and after the survey; no significant change (+/-0.2 dB) in the calibration level was noted.

Environmental noise survey

Description	Model / serial no.	Calibration date	Calibration certificate no.
Class 1 Sound level meter	Svantek 977/ 69747	17/10/2018	Factory conformity declaration
Condenser microphone	ACO Pacific 7052E / 70829		
Preamplifier	Svantek SV12L / 73687		
Calibrator	Svantek SV 40A / 10843	26/09/2018	14010559

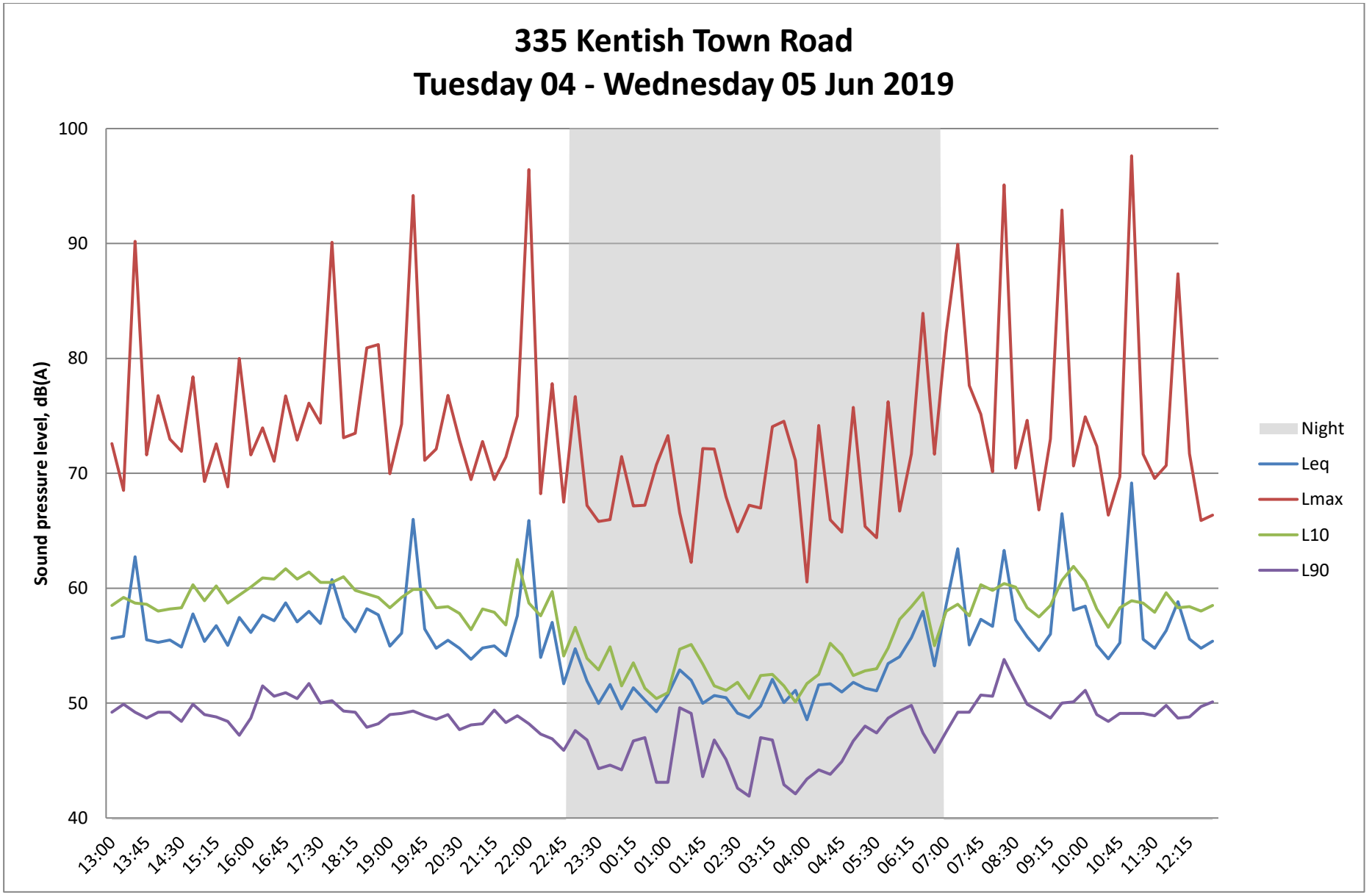
Weather Conditions

C.6 Weather conditions were determined both at the start and on completion of the survey. It is considered that the meteorological conditions were appropriate for environmental noise measurements. The table below presents the weather conditions recorded on site at the beginning and end of the survey.

Weather Conditions				
Measurement Location	**Date/Time**	**Description**	**Beginning of Survey**	**End of Survey**
As indicated on Appendix B	13:00 5/06/2019-12:30 6/06/2019	Temperature (°C)	17	19
		Precipitation:	Yes	No
		Cloud cover (oktas - see guide)	8	8
		Presence of fog/snow/ice	No	No
		Presence of damp roads/wet ground	Wet	Damp
		Wind Speed (m/s)	0	0
		Wind Direction	-	-
		Conditions that may cause temperature inversion (i.e. calm nights with no cloud)	No	No

Results

C.7 The results of the environmental survey are considered to be representative of the background sound pressure levels at the façades of the nearest noise sensitive receptors during the quietest times at which the plant will operate. The noise climate during the survey period was dominated by local and distant road traffic, local trains and aircrafts. The results of the survey are presented in a time history graph overleaf.


335 Kentish Town Road
Tuesday 04 - Wednesday 05 Jun 2019
Sound pressure level, dB(A)
100
90
80
70
60
50
40
13:00
13:45
14:30
15:15
16:00
16:45
17:30
18:15
19:00
19:45
20:30
21:15
22:00
22:45
23:30
00:15
01:00
01:45
02:30
03:15
04:00
04:45
05:30
06:15
07:00
07:45
08:30
09:15
10:00
10:45
11:30
12:15
Night
Leq
Lmax
L10
L90

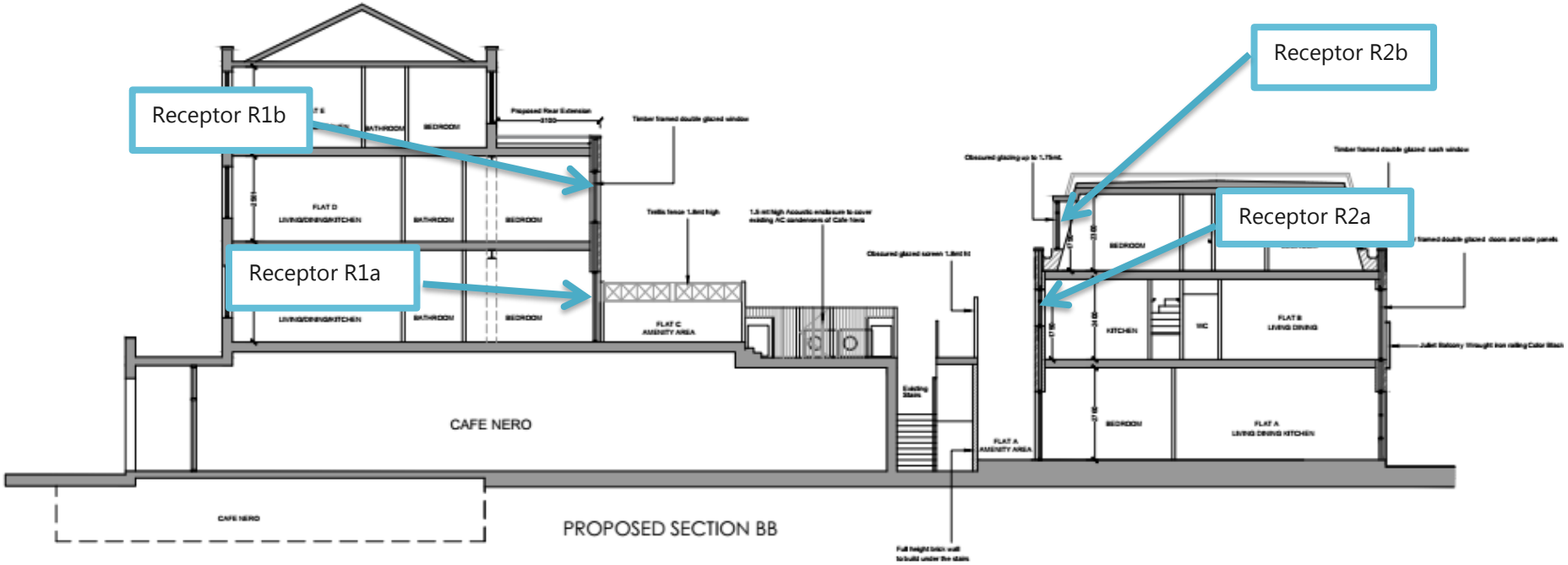
Appendix D Manufacturer's plant noise data

Plant item	Make/Model	Quantity	Period	Sound Pressure Level	
				dBA (per unit)	Distance (m)
Air conditioner	Daikin RZQG140L7Y1B	2	Plant operating hours (06.30 – 19.30 hours)	53	1

Appendix E Calculations

Receptor	AC unit	Plant noise level at source		DISTANCE (receptor)		DIRECTIVITY	ENCLOSURE	BS4142 FEATURE	RATING LEVEL AT RECEPTOR (dB)	Cumulative
		Noise level (dBA)	Distance (m)	Distance (m)	Correction (dB)	Correction (dB)	Correction (dB)	Correction (dB)		
R1a	ACU1	53	1	6.4	-16	0	-15	3	25	27
	ACU2	53	1	7.3	-17	0	-15	3	24	
R1b	ACU1	53	1	7.3	-17	0	-15	3	24	26
	ACU2	53	1	8.1	-18	0	-15	3	23	
R2a	ACU1	53	1	6.2	-16	0	-15	3	25	29
	ACU2	53	1	5.4	-15	0	-15	3	26	
R2b	ACU1	53	1	7.3	-17	0	-15	3	24	27
	ACU2	53	1	6.5	-16	0	-15	3	25	

Appendix F Proposed section drawing



UK and Ireland Office Locations