# 1 Triton Square & St Anne's

### Construction Management Plan

OCTOBER 2016



### **1 TRITON SQUARE & ST ANNE'S PLANNING DOCUMENTS**

EXISTING & PROPOSED DRAWINGS VOL. 1 (1 TSQ) EXISTING & PROPOSED DRAWINGS VOL. 2 (ST ANNE'S) DESIGN & ACCESS STATEMENT VOL. 1 (1 TSQ) DESIGN & ACCESS STATEMENT VOL. 2 (ST ANNE'S) HOUSING STUDY TOWNSCAPE & VISUAL IMPACT ASSESSMENT HERITAGE STATEMENT LANDSCAPE MASTERPLAN PLANNING STATEMENT STATEMENT OF COMMUNITY INVOLVEMENT TRANSPORT ASSESSMENT ENERGY STATEMENT SUSTAINABILITY STATEMENT DAYLIGHT AND SUNLIGHT STUDY OVERSHADOWING STUDY INTERNAL DAYLIGHT STUDY AIR QUALITY ASSESSMENT SURFACE WATER DRAINAGE PROFORMA

#### CONSTRUCTION MANAGEMENT PLAN

SOCIO-ECONOMIC ASSESSMENT ARBORICULTURAL ASSESSMENT

# Construction Management Plan pro forma v2.1

1 Triton Square & St Anne's By: Lendlease Construction Ltd October 2016



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# Revisions & additional material

#### Please list all iterations here:

Date	Version	Produced by
16/09/2016	1	I Ronchetti
10/09/2016	2	I Ronchetti

#### Additional sheets

Please note – the review process will be quicker if these are submitted as Word documents or searchable PDFs.

Date	Version	Produced by



## Introduction

The purpose of the **Construction Management Plan (CMP)** is to help developers to minimise construction impacts, and relates to both on site activity and the transport arrangements for vehicles servicing the site.

It is intended to be a live document whereby different stages will be completed and submitted for application as the development progresses.

The completed and signed CMP must address the way in which any impacts associated with the proposed works, and any **cumulative impacts of other nearby construction sites**, will be mitigated and managed. The level of detail required in a CMP will depend on the scale and kind of development. Further policy guidance is set out in Camden Planning Guidance (CPG) 6: Amenity and (CPG) 8: Planning Obligations.

This CMP follows the best practice guidelines as described in <u>Transport for London's</u> (TfL's Standard for <u>Construction Logistics and Cyclist Safety</u> (**CLOCS**) scheme) and <u>Camden's</u> <u>Minimum Requirements for Building Construction</u> (CMRBC).

The approved contents of this CMP must be complied with unless otherwise agreed with the Council in writing. The project manager shall work with the Council to review this CMP if problems arise in relation to the construction of the development. Any future revised plan must also be approved by the Council and complied with thereafter.

It should be noted that any agreed CMP does not prejudice or override the need to obtain any separate consents or approvals such as for road closures or hoarding licences.

If your scheme involves any demolition, you need to make an application to the Council's Building Control Service. Please complete the "<u>Demolition Notice.</u>"

Please complete the questions below with additional sheets, drawings and plans as required. The boxes will expand to accommodate the information provided, so please provide as much information as is necessary. It is preferable if this document, and all additional documents, are completed electronically and submitted as Word files to allow comments to be easily documented. These should be clearly referenced/linked to from the CMP.

Please notify that council when you intend to start work on site. Please also notify the council when works are approximately **3 months from completion.** 



(Note the term 'vehicles' used in this document refers to all vehicles associated with the implementation of the development, e.g. demolition, site clearance, delivery of plant & materials, construction, etc.)

Revisions to this document may take place periodically.



### Timeframe



# Contact

1. Please provide the full postal address of the site and the planning reference relating to the construction works.

Address: 1 Triton Square, Regent's Place, London NW1 3HG

Planning ref: N/A

Type of CMP - Section 106 planning obligation/Major sites framework:

2. Please provide contact details for the person responsible for submitting the CMP.

Name: Ian Ronchetti

Address: 20 Triton Street, Regent's Place, London NW1 3BF

Email: ian.ronchetti@lendlease.com

Phone: 02034309000

3. Please provide full contact details of the site project manager responsible for day-to-day management of the works and dealing with any complaints from local residents and businesses.

Name: George Axson, M3 Consulting

Address: Dashwood House, 69 Old Broad Street, London, EC2M 1QS

Email: G.Axson@m3c.co.uk

Phone: 02077104404



4. Please provide full contact details of the person responsible for community liaison and dealing with any complaints from local residents and businesses if different from question 3. In the case of <u>Community Investment Programme (CIP)</u>, please provide contact details of the Camden officer responsible.

Name: Rebecca Burns

Address: British Land, York House, 45 Seymour Street, London W1H 7LX

Email: Rebecca.Burns@britishland.com

Phone: 02074672966

5. Please provide full contact details including the address where the main contractor accepts receipt of legal documents for the person responsible for the implementation of the CMP.

Name: Ian Ronchetti

Address: 20 Triton Street, Regent's Place, London NW1 3BF

Email: ian.ronchetti@lendlease.com

Phone: 02034309000



# Site

6. Please provide a site location plan and a brief description of the site, surrounding area and development proposals for which the CMP applies.

This CMP has been prepared by Lend Lease as part of a planning application by British Land Property Management Limited (BL or the 'Applicant'). This planning application seeks full planning permission for the extension and refurbishment of the 1 Triton Square office building and the redevelopment of St Anne's for residential use along with works to the public realm. Both of these buildings lie within the London Borough of Camden (LBC).

This document has been written in relation to both buildings.

The sites are located within and adjacent to the Regents Place Estate which is located to the north of A501 (Euston Road), the west of Euston station and east of Regent's Park



7. Please provide a very brief description of the construction works including the size and nature of the development and details of the main issues and challenges (e.g. narrow streets, close proximity to residential dwellings etc.).

The site is within the Regent's Place Estate and is the redevelopment of an existing building, 1 Triton Square.

Lendlease have inspected the site on numerous occasions and are fully aware of the proximity of the existing occupied buildings around the site and the live highways that bound the north side of the site.



General overview of the build sequence and works:

**Description of Development**: Extension of the existing 1 Triton Square office building by three storeys for office use (B1), flexible retail (A1, A3, A4), affordable workspace (B1) and reprovision of a gym (D2); demolition of St Anne's Church and its replacement with a residential (C3) building of part 6, part 9 storeys; hard and soft landscaping; reconfigured vehicle and pedestrian accesses and works to the public highway; and all necessary ancillary and enabling works, plant and equipment.

**Deconstruction**: The removal of all internal finishes and building services. Removal of the existing main entrance, roof coverings and atrium rooflight.

**Substructure**: Supplemental piles, foundations and concrete raft to support the additional 3 floors of superstructure.

**Superstructure**: The existing atrium is infilled between levels 2 and 6 to create a smaller atrium. The new 3 floors at levels 6, 7 and 8 are constructed of steelwork and metal decking with a concrete topping slab. Structural stability is provided by the existing 4 cores that are at the corners of the building. The existing envelope is retained with new glazing installed and the new envelope between levels 6 and 8 is a double glazed panelised construction, as is the new façade to the existing entrance from levels ground to roof.

**Cores**: The fit out will consist of new core finishes including male and female toilets on every floor, risers and lift shafts. A brand new entrance to the South East core and a secondary entrance adjacent to the south west core.

**Mechanical and Electrical**: New building services installation throughout the building, including all plant and equipment. AHU plant will be located on the roof, and electrical switch rooms, generators, sprinkler tanks in the basement. All the lifts will be new. Smoke extract will be via the atria roof.

**External and other works**: The paving to the north along Longford Street will be landscaped. There will be a new gym, cycle storage and retail units on the ground floor.

Sequence of the works:

The development will be constructed in the following sequence:

- Site set up and hoarding erection
- Deconstruction consisting of: soft strip, core removal, all services strip out and existing entrance removal
- Removal of the basement slab in part and installation of new piling
- Construction of the new basement raft
- Strengthening of the existing structure
- Erection of steelwork and concrete floor slabs to form the new atria and the three new floors
- Fit out of the cores, toilets and entrances
- New roofing membrane

Suitable protection of biodiversity and trees will be provided, and is details in the Arboricultural Assessment.



8. Please identify the nearest potential receptors (dwellings, business, etc.) likely to be affected by the activities on site (i.e. noise, vibration, dust, fumes, lighting etc.).

The existing sites are adjacent to and within the Regent's Place Estate and the occupied offices and residential dwellings adjacent to the site will be aware of the construction activities. The measures set out in this CMP will seek to mitigate: noise, vibration, dust, fumes, lighting etc.

Minimal intervention to existing structure, therefore it is not anticipated the proposals will impact on the structural stability of surrounding properties. Temporary Works scheme and I



The plan below locates land users adjacent to the Regent's Place Estate.

9. Please provide a scaled plan detailing the local highway network layout in the vicinity of the site. This should include details of on-street parking bay locations, cycle lanes, footway extents and proposed site access locations.



Due to the location of the site all construction traffic will access the site via Hampstead Street and or Albany Street which is part of the TFL road network. Construction traffic will follow the routes shown on the plan below onto Longford Street.



10. Please provide the proposed start and end dates for each phase of construction as well as an overall programme timescale. (A Gantt chart with key tasks, durations and milestones would be ideal).

The overall duration of the site works is 36 months.

The construction programme is attached in Appendix A, where each phase is detailed.

The key milestones are:

Activity	Date	Duration						
Planning Submission	Oct 2016	-						
Start on Site	Subject to Planning Application	-						
Demolition		5 months						
Piling and New Structure		9 months						
New facade		15 months						
Building Services &	Subject to Planning Application	18 months 15 months						
Commissioning								
Core Works & Finishes								
Landscaping		8 months						
Note: Activities will be overlapped, as detailed in Programme								



11. Please confirm the standard working hours for the site, noting that the standard working hours for construction sites in Camden are as follows:

- 8.00am to 6pm on Monday to Friday
- 8.00am to 1.00pm on Saturdays
- No working on Sundays or Public Holidays

The site hours will be:

- 8.00am to 6pm on Monday to Friday
- 8.00am to 1.00pm on Saturdays
- No working on Sundays or Public Holidays

12. Please indicate if any changes to services are proposed to be carried out that would be linked to the site during the works (i.e. connections to public utilities and/or statutory undertakers' plant). Larger developments may require new utility services. If so, a strategy and programme for coordinating the connection of services will be required. If new utility services are required, please confirm which utility companies have been contacted (e.g. Thames Water, National Grid, EDF Energy, BT etc.) You must explore options for the utility companies to share the same excavations and traffic management proposals. Please supply details of your discussions.

The site forms part of the Regent's Place Estate and some existing services within the estate and on Longford Street will need to be altered or diverted. Lendlease are aware of these works and will commission the existing utility services surveys by desktop study and the use of ground radar.

The surveys available to date are within Appendix B.

A detailed programme and plan of works will be developed with the respective utility companies to alter and divert their services as necessary.



### **Community Liaison**

A neighbourhood consultation process must have been undertaken prior to submission of the CMP first draft. This consultation must relate to construction impacts, and should take place following the grant of planning permission in the lead up to the submission of the CMP. A consultation process specifically relating to construction impacts must take place regardless of any prior consultations relating to planning matters. This consultation must include all of those individuals that stand to be affected by the proposed construction works. These individuals should be provided with a copy of the draft CMP, or a link to an online document. They should be given adequate time with which to respond to the draft CMP, and any subsequent amended drafts. Contact details which include a phone number and email address of the site manager should also be provided.

Significant time savings can be made by running an effective neighbourhood consultation process. This must be undertaken in the spirit of cooperation rather than one that is dictatorial and unsympathetic to the wellbeing of local residents and businesses.

These are most effective when initiated as early as possible and conducted in a manner that involves the local community. Involving locals in the discussion and decision making process helps with their understanding of what is being proposed in terms of the development process. The consultation and discussion process should have already started, with the results incorporated into the CMP first draft submitted to the Council for discussion and any community liaison groups being regularly updated with programmed works and any changes that may occur due to unforeseen circumstances through newsletters, emails and meetings.

Please note that for larger sites, details of a construction working group may be required as a separate S106 obligation. If this is necessary, it will be set out in the S106 Agreement as a separate requirement on the developer.

#### **Cumulative impact**

Sites located within high concentrations of construction activity that will attract large numbers of vehicle movements should consider establishing contact with other sites in the vicinity in order to manage traffic routeing and volumes. Developers in the Tottenham Court Road area have done this to great effect.

#### The Council can advise on this if necessary.



#### 13. Consultation

The Council expects meaningful consultation. For large sites, this may mean two or more meetings with local residents **prior to submission of the first draft CMP**.

Evidence of who was consulted, how the consultation was conducted and a summary of the comments received in response to the consultation. Details of meetings including minutes, lists of attendees etc. must be included.

In response to the comments received, the CMP should then be amended where appropriate and, where not appropriate, a reason should be given. The revised CMP should also include a list of all the comments received. Developers are advised to check proposed approaches to consultation with the Council before carrying them out. If your site is on the boundary between boroughs then we would recommend contacting the relevant neighbouring planning authority.

Please provide details of consultation of draft CMP with local residents, businesses, local groups (e.g. residents/tenants and business associations) and Ward Councillors.

Throughout the Planning Stage, there has been extensive consultation carried out by the Applicate.

A summary of the consultation that took place can be reviewed in the Statement of Community Involvement.

Lendlease will implement the following in connection with the Community Liaison and Consultation in connection with the development and see regular improvement and upkeep of the Construction Management Plan.

Communication will be via:

- A quarterly newsletter will be published and delivered tour neighbours. The newsletter will also be displayed on a fixed notice board that will be mounted on the site gates.
- Our site manager will be our first point of contact for any liaison with the local community including addressing and complaints or concerns.
- The contact details for our site manager will be displayed prominently on the site gates with communication available with the site manager 24/7
- "meet the contractors" events

Our site manager will maintain a log of all visits to the site by the public and neighbours where they wish to make any complaints – any such complaints will be acted upon and reported to the client and estate management as appropriate. The site manager will be available to address and concerns or questions every day.



#### 14. Construction Working Group

Please provide details of community liaison proposals including any Construction Working Group that will be set up, addressing the concerns of the community affected by the works, the way in which the contact details of the person responsible for community liaison will be advertised to the local community, and how the community will be updated on the upcoming works i.e. in the form of a newsletter/letter drop, or weekly drop in sessions for residents.

Name: Rebecca Burns
Address: British Land, York House, 45 Seymour Street, London W1H 7LX
Email: Rebecca.Burns@britishland.com
Phone: 02074672966

#### 15. Schemes

Please provide details of any schemes such as the 'Considerate Constructors Scheme', such details should form part of the consultation and be notified to the Council. Contractors will also be required to follow the "<u>Guide for Contractors Working in Camden</u>" also referred to as "<u>Camden's Considerate Contractors Manual</u>".

The site will be registered with the above scheme and also the National Considerate Constructor Scheme.

#### 16. Neighbouring sites

Please provide a plan of existing or anticipated construction sites in the local area and please state how your CMP takes into consideration and mitigates the cumulative impacts of construction in the vicinity of the site. The council can advise on this if necessary.



There are currently not any live construction sites in the immediate vicinity of the proposed works at the Regent's Place Estate.

There are works in progress to UCHL to the south of Euston Road, and Crossrail at Tottenham Court Road.

Information available from the HS2 (HS2 Environment Statement) shows that the scheme is programmed to achieve Royal Assent in December 2016.

Lendlease will communicate with the managers of these sites and work with them to coordinate construction traffic and routes so as to minimise impact on the neighbourhood.





# Transport

This section must be completed in conjunction with your principal contractor. If one is not yet assigned, please leave the relevant sections blank until such time when one has been appointed.

Camden is a CLOCS Champion, and is committed to maximising road safety for Vulnerable Road Users (VRUs) as well as minimising negative environmental impacts created by motorised road traffic. As such, all vehicles and their drivers servicing construction sites within the borough are bound by the conditions laid out in the <u>CLOCS Standard</u>.

This section requires details of the way in which you intend to manage traffic servicing your site, including your road safety obligations with regard to VRU safety. It is your responsibility to ensure that your principal contractor is fully compliant with the terms laid out in the CLOCS Standard. It is your principal contractor's responsibility to ensure that all contractors and sub-contractors attending site are compliant with the terms laid out in the CLOCS Standard.

Checks of the proposed measures will be carried out by the council to ensure compliance. Please refer to the CLOCS Standard when completing this section. Guidance material which details CLOCS requirements can be accessed <u>here</u>, details of the monitoring process are available <u>here</u>.

Please contact <u>CLOCS@camden.gov.uk</u> for further advice or guidance on any aspect of this section.

Please refer to the CLOCS Overview and Monitoring Overview documents referenced above which give a breakdown of requirements.

#### **CLOCS Considerations**

17. Name of Principal contractor:

Lendlease Construction Limited

18. Please submit the proposed method for checking operational, vehicle and driver compliance with the CLOCS Standard throughout the duration of the contract (please refer to our CLOCS Overview document in the appendix and CLOCS Standard point 3.4.7).



Having reviewed the CLOCS documentation we will at Lendlease be including within our subcontract orders the requirements for compliance, including:

- All contractors vehicles will be certified by the fleet operators recognition scheme (FORS)
- Any collisions or incidents serving our sites will be thoroughly investigated
- Traffic routing will be strictly policed (see routes defined earlier in the CMP)
- Vehicles will be fitted with all necessary warning signage, side protection, blind spot mirrors and vehicle manoeuver warnings.
- Drivers will receive awareness training and be FORS registered

19. Please confirm that you as the client/developer and your principal contractor have read and understood the <u>CLOCS Standard</u> and included it in your contracts. Please sign-up to join the <u>CLOCS Community</u> to receive up to date information on the standard by expressing an interest online.

I confirm that I have included the requirement to abide by the CLOCS Standard in my contracts to my contractors and suppliers:

I, Ian Ronchetti (Operations Director) at Lendlease Construction Limited and my team have read, are aware and will be abide by the CLOCS Standards

Please contact <u>CLOCS@camden.gov.uk</u> for further advice or guidance on any aspect of this section.



### Site Traffic

Sections below shown in blue directly reference the CLOCS Standard requirements. The CLOCS Standard should be read in conjunction with this section.

**20. Traffic routing**: "Clients shall ensure that a suitable, risk assessed vehicle route to the site is specified and that the route is communicated to all contractors and drivers. Clients shall make contractors and any other service suppliers aware that they are to use these routes at all times unless unavoidable diversions occur." (P19, 3.4.5)

Routes should be carefully considered and risk assessed, taking into account the need to avoid where possible any major cycle routes and trip generators such as schools, offices, public buildings, museums etc. Where appropriate, on routes that use high risk junctions (i.e. those that attract high volumes of cycling traffic) installing Trixi mirrors to aid driver visibility should be considered.

Consideration should also be given to weight restrictions, low bridges and cumulative impacts of construction (including neighbouring construction sites) on the public highway network. The route(s) to and from the site should be suitable for the size of vehicles that are to be used.

a. Please indicate routes on a drawing or diagram showing the public highway network in the vicinity of the site including details of links to the <u>Transport for London Road Network</u> (TLRN).





b. Please confirm how contractors, delivery companies and visitors will be made aware of the route (to and from the site) and of any on-site restrictions, prior to undertaking journeys.

We will ensure that all sub-contractors and suppliers that are part of our supply chain who make deliveries to the site will be members of Transport for London's Fleet Operators Recognition Scheme (FORS) or similar at the bronze level. We will use our contractor selection process and procurement process to select contractors who are members of FORS (or similar), by doing this we will be using drivers who are aware of the demands of driving large vehicles in central London in particular the awareness of cyclists.

By using suppliers and subcontractors who are FORS (or similar) members then all delivery vehicles will have:

- 1. Side guards fitted (unless it can be demonstrated that the lorry will not perform to function for which it was built if they are fitted)
- Close proximity warning system fitted comprising of a front mounted, rear facing CCTV camera (or Fresnel Lens where this provides reliable alternative), a close proximity sensor, an in cab warning device (visual or audible) and an external warning device to make the road user in close proximity aware of the drivers planned manoeuvre.
- 3. A Class VI mirror
- 4. Bear prominent signage on the rear of the vehicle to warn cyclists of the dangers of passing the vehicle on the inside.

All contractors and suppliers will be made aware of the site location and site access routes.

### **21.** Control of site traffic, particularly at peak hours: "Clients shall consider other options to plan and control vehicles and reduce peak hour deliveries" (P20, 3.4.6)

Construction vehicle movements are generally acceptable between 9.30am to 4.30pm on weekdays and between 8.00am and 1.00pm on Saturdays). If there is a school in the vicinity of the site or on the proposed access and/or egress routes, then deliveries must be restricted to between 9.30am and 3pm on weekdays during term time. (Refer to the <u>Guide for</u> <u>Contractors Working in Camden</u>).

A delivery plan should ensure that deliveries arrive at the correct part of site at the correct time. Instructions explaining such a plan should be sent to all suppliers and contractors. Consideration should be given to the location of any necessary holding areas for large sites with high volumes of traffic. Vehicles must not wait or circulate on the public highway. Whilst deliveries should be given set times to arrive, dwell and depart, no undue time pressures should be placed upon the driver at any time.



a. Please provide details of the typical sizes of all vehicles and the approximate frequency and times of day when they will need access to the site, for each phase of construction. You should estimate the average daily number of vehicles during each major phase of the work, including their dwell time at the site. High numbers of vehicles per day and/or long dwell times may require vehicle holding procedures.

In the histogram in Appendix C are the expected deliveries and vehicle movements. Approximately 50 % of the vehicles will be white vans or similar and the remaining 50% will be ridged delivery or articulated vehicles.

Clear directives will be given to all contractors and suppliers that if lorries are waiting to deliver to a site then the engines must be turned off, there is to be no idling of engines.

b. Please provide details of other developments in the local area or on the route.

We have assessed the local area and the main route to the site and believe that there are not any current projects of significance that will impact on our works or our works on theirs. Should other projects come on line, we will liaise with these projects and expect them to contact us so that our planning and traffic management is coordinated.

c. Please outline the system that is to be used to ensure that the correct vehicle attends the correct part of site at the correct time.

All deliveries will be pre booked and all deliveries will be known for each site. This will be controlled and managed by our on-site logistics manager. This will be achieved via use of our subcontractor coordination meetings where we will have short term look ahead programmes that include the booking of deliveries and use of an internet based vehicle management system for booking vehicles.

d. Please identify the locations of any off-site holding areas (an appropriate location outside the borough may need to be identified, particularly if a large number of delivery vehicles are expected) and any measures that will be taken to ensure the prompt admission of vehicles to site in light of time required for any vehicle/driver compliance checks. Please refer to question 24 if any parking bay suspensions will be required for the holding area.



Due to the nature of the works Lendlease do not anticipate the need for any construction material consolidation centre. We will be working with our supply chain to ensure that materials are delivered "just in time" for use on each site.

e. Please provide details of any other measures designed to reduce the impact of associated traffic (such as the use of <u>construction material consolidation centres</u>).

Due to the nature of the works Lendlease do not anticipate the need for any construction material consolidation centre. We will be working with our supply chain to ensure that materials are delivered "just in time" for use on each site.

### **22. Site access and egress:** "Clients shall ensure that access to and egress from the site is appropriately managed, clearly marked, understood and clear of obstacles." (P18, 3.4.3)

Vehicles entering and leaving the site should be carefully managed, using gates that are clearly marked and free from obstacles. Traffic Marshalls must ensure the safe passage of pedestrians, cyclists and other traffic when vehicles are entering and leaving site, particularly if reversing.

a. Please detail the proposed access and egress routes to and from the site

Detailed in Appendix D are our logistics plans setting out the detail in connection with access and egress to the site.

b. Please describe how the access and egress arrangements for construction vehicles will be managed.



All deliveries are to be supervised by a traffic marshal and reported to the site manager. All deliveries will be pre booked so that the traffic marshal knows when the delivery is coming and will take measures to ensure that the public are not affected by the delivery. The traffic marshal must be obeyed and no phones or hands free kits are to be used whilst driving, either on site roads or on public roads. A walkie talkie system will be used so that the traffic marshals can communicate with each other at all times.

Lendlease will plan the works including: vehicle movement, deliveries, temporary routes and facilities to ensure that the safety of the public is maintained at all times.

All deliveries will be coordinated and programmed to alleviate pressure on the road network. Deliveries will have to be pre booked with the site so that there are not any delivery vehicles waiting in the street. This will be achieved via the use of our weekly sub-contractor coordination meetings where deliveries will be planned and booked, using the internet system. Deliveries will only take place between 08.00 and 18.00 Mon to Fri and 08.00 and 13.00 on Saturdays.

All suppliers and sub-contractors who are supplying materials to the site will be issued with a transport plan which will include a prescribed route into the site to deliver materials form the Transport for |London Roar Network; refer to the plans earlier in this CMP.

As part of our plans to mitigate the impact of the project and its deliveries on the road network we will in the first instance look to our supply chain to store materials off site and only deliver the materials when they are needed.

c. Please provide swept path drawings for any tight manoeuvres on vehicle routes to and from the site including proposed access and egress arrangements at the site boundary (if necessary).

Detailed swept path analysis has not been carried out due to the fact that the site is accessible for the expected vehicle deliveries.

d. Provision of wheel washing facilities should be considered if necessary. If so, please provide details of how this will be managed and any run-off controlled.

In order to keep the roads and foot paths free from deposits of soil, mud and the like we will ensure that the wheels of any vehicles leaving the site are thoroughly cleaned and hosed down prior to going on the public roads. If any mud or construction debris does get onto the street within the vicinity of the site then these areas will be kept clean via the use of water hoses and manually swept. In addition a mechanical road sweeper will be used to clear any debris.



### **23. Vehicle loading and unloading:** *"Clients shall ensure that vehicles are loaded and unloaded on-site as far as is practicable."* (P19, 3.4.4)

If this is not possible, Traffic Marshalls must ensure the safe passage of pedestrians, cyclists and motor traffic in the street when vehicles are being loaded or unloaded.

Please provide details of the parking and loading arrangements for construction vehicles with regard to servicing and deliveries associated with the site (e.g. delivery of materials and plant, removal of excavated material). This is required as a scaled site plan, showing all points of access and where materials, skips and plant will be stored, and how vehicles will access and egress the site. If loading is to take place off site, please identify where this is due to take place and outline the measures you will take to ensure that loading/unloading is carried out safely. Please outline in question 24 if any parking bay suspensions will be required.

Detailed in Appendix D are our site logistics plans setting out the detail for the site and unloading areas.

All unloading will be controlled by our banksmen and traffic marshals with the public protected at all times.



### **Highway interventions**

Please note that Temporary Traffic Orders (TTOs) and hoarding/scaffolding licenses may be applied for prior to CMP submission but won't be granted until the CMP is signed-off.

#### **24.** Parking bay suspensions and temporary traffic orders

Please note, parking bay suspensions should only be requested where absolutely necessary. Parking bay suspensions are permitted for a maximum of 6 months, requirement of exclusive access to a bay for longer than 6 months you will be required to obtain <u>Temporary</u> <u>Traffic Order (TTO)</u> for which there is a separate cost.

Please provide details of any proposed parking bay suspensions and TTO's which would be required to facilitate construction. Building materials and equipment must not cause obstructions on the highway as per your Considerate Contractors obligations unless the requisite permissions are secured.

Information regarding parking suspensions can be found here.

Temporary crossovers are required to Longford Street – these applications will be applied for in advance of the works commencing and for the duration to meet the programme. The document in Appendix E makes reference to the temporary crossover.

#### 25. Scaled drawings of highway works

Please note that use of the public highway for storage, site accommodation or welfare facilities is at the discretion of the Council and is generally not permitted. If you propose such use you must supply full justification, setting out why it is impossible to allocate space on-site. You must submit a detailed (to-scale) plan showing the impact on the public highway that includes the extent of any hoarding, pedestrian routes, parking bay suspensions and remaining road width for vehicle movements. We prefer not to close footways but if this is unavoidable, you should submit a scaled plan of the proposed diversion route showing key dimensions.

 a. Please provide accurate scaled drawings of any highway works necessary to enable construction to take place (e.g. construction of temporary vehicular accesses).



There will be a requirement for section 278 agreements for permeant and temporary crossovers – these will be progressed with LBC.

See the Transport Assessment document for details on Stopping Orders.

Our logistics plan in Appendix E sets out the areas needed to be suspended in the highway to enable the works.

b. Please provide details of all safety signage, barriers and accessibility measures such as ramps and lighting etc.

Lendlease will deploy and use all necessary and appropriate safety signage and barriers to ensure that the public are protected and our operatives work safely at all times.

#### 26. Diversions

Where applicable, please supply details of any diversion, disruption or other anticipated use of the public highway during the construction period (alternatively a plan may be submitted).

Please refer to the logistics plan in Appendix D for impacts to the works on the public highways.

We do anticipate that there will be connection work to each of the utility mains (gas, electric and sewers). This will mean that each of the utility companies will need to apply to Camden for the necessary licences for these works. Lendlease will be coordinating this process and will seek to minimise the opening up of the highway for these connections.

#### 27. VRU and pedestrian diversions, scaffolding and hoarding

Pedestrians and/or cyclist safety must be maintained if diversions are put in place. Vulnerable footway users should also be considered. These include wheelchair users, the elderly, those with walking difficulties, young children, those with prams, the blind and partially sighted. Appropriate ramping must be used if cables, hoses, etc. are run across the footway.

Any work above ground floor level may require a covered walkway adjacent to the site. A licence must be obtained for scaffolding and gantries. The adjoining public highway must be kept clean and free from obstructions. Lighting and signage should be used on temporary structures/skips/hoardings etc.



A secure hoarding will generally be required at the site boundary with a lockable access.

a. Please provide details describing how pedestrian and cyclist safety will be maintained, including any proposed alternative routes (if necessary), and any Traffic Marshall arrangements.

When vehicles are entering or leaving the site, these will be supervised by our traffic marshals, at each site gate on Longford Street. Vehicles will be unloaded within the site hoarding.

The general public / pedestrians will have right of way along the footpaths that surround the site. We do not envisage the need for any pavement closures.

The construction site gates will be kept closed and monitored by site security, only when deliveries are made to the site will they be opened to allow vehicles onto the site, at which time barriers will be used to prevent access by pedestrians and warn any passing cyclists. These barriers will be manned by our site security. All delivery vehicles will be supervised /controlled by a traffic marshal.

The site manager will also ensure that the external perimeter of the site is regularly patrolled (at least twice a day) to ensure that pavements and site perimeter is clean at all times.

Should there be any complaints arising from the works, local residents will be able to personally call the site offices. Any residents or public visiting the site to raise a complaint will be requested to sign in and the security guard will escort the visitor to the site offices.

Our site manager will deal personally with comments or complaints from the public or neighbours and will ensure that they are resolved quickly. A record will be kept of all comments and complaints.

b. Please provide details of any temporary structures which would overhang the public highway (e.g. scaffolding, gantries, cranes etc.) and details of hoarding requirements or any other occupation of the public highway.

The location of hoardings and scaffold is detailed on the site logistics plan attached in Appendix D

SYMBOL IS FOR INTERNAL USE



# Environment

To answer these sections please refer to the relevant sections of **Camden's Minimum Requirements for Building Construction (CMRBC).** 

28. Please list all <u>noisy operations</u> and the construction method used, and provide details of the times that each of these are due to be carried out.

By its nature demolition and construction works cause noise. Noise is created by mechanical plant, cutting, drilling, hammering and sawing. All noisy work will be restricted to be after, 08.00 and before 17.00. We will always seek to not carry out noisy works on a Saturday when we are permitted to work between 08.00 and 13.00.

Detailed earlier in this CMP under the "site" section there is a description of the sequence of the works setting out the operations that will take place.

The activities that will create "noisy" operations are:

- The running of engines for piling rigs, concrete lorries, screed pumps etc. (most of these will be confined to the existing Regents Place Estate basement, and so the noise emitted will be enclosed by the existing structure).
- Drilling and the use of nail guns during the fit out.
- Removal of the existing basement concrete slab (will be confined to the existing Regents Place Estate basement, and so the noise emitted will be enclosed by the existing structure).
- Deconstruction of the existing internal fit out
- Erection of new steelwork and the metal floor slab decking

29. Please confirm when the most recent noise survey was carried out (before any works were carried out) and provide a copy. If a noise survey has not taken place please indicate the date (before any works are being carried out) that the noise survey will be taking place, and agree to provide a copy.

No noise survey has taken place to date. Once complete, a copy will be issued to LBC to supplement this report.



30. Please provide predictions for <u>noise</u> and vibration levels throughout the proposed works.

Where possible noise produced by work activities will be reduced or removed by design. When this is not possible controls will be introduced to reduce exposure so as to avoid harm or injury to persons on site or others within the vicinity of the site works.

During demolition and construction works noise will be continuously monitored, this will be compared against the baseline survey carried out prior to any works taking place, with the following trigger levels.

Green – no action

Amber – continue works but carry out a works assessment and propose mitigation measures

**Red** – immediate in depth review of the works and enforce changes to methodology, equipment in order to bring noise to acceptable levels.

Further controls will be detailed within activity method statements and compliance monitoring as necessary throughout the work process.

Records of controls and exposures of persons/environments will be kept in accordance with statutory requirements and company procedures.



31. Please provide details describing mitigation measures to be incorporated during the construction/<u>demolition</u> works to prevent noise and vibration disturbances from the activities on the site, including the actions to be taken in cases where these exceed the predicted levels.

Lendlease shall ensure that disruptive sound levels will be kept to a minimum. A variety of measures will be used to effect the reduction of noise transmitted from site using best practicable means, this will include:

- Coordinating delivery times and efficient traffic management to prevent queuing traffic accessing the site
- Ensuring all plant has sound reduction measures (mufflers, baffles or silencers)
- Utilising construction techniques that minimise the production of noise.
- Utilisation of baffle systems during the demolition works
- Strict adherence to the site working hours.
- Using acoustic hoardings where necessary
- Carry out daily noise surveys at perimeter of the site and record results
- Implementation of action plan where noise levels exceed acceptable limits.
- Positioning plant away from properties
- Machines in use will be throttled down to a minimum.
- Cutting operations will be kept off site where possible.
- The use of prefabrication where reasonably possible.
- Localised shrouding of plant.

All works will be carried out to ensure that ground vibrations are contained within usual working limits.

32. Please provide evidence that staff have been trained on BS 5228:2009

At Lendlease our managers have attended the Site Managers Safety Training Scheme as run by the CITB. All sub-contractors supervisors will have attended the Site Supervisors Safety Training Scheme run by the CITB.

33. Please provide details on how dust nuisance arising from dusty activities, on site, will be prevented.



Lendlease will adhere to the key legislation on noise and vibration as detailed in the:

- Control of pollution Act 1974
- Environmental Protection Act 1990
- BS 5228:1997 Code of Practice on Construction and Open Sites

Site operations will be controlled so that all plant and machinery noise emissions (including ventilation, heating and cooling) shall be designed, installed and operated at noise levels that do not cause noise nuisance to the nearest adjoining residential and office properties.

We will, with our demolition and construction contractors implement a Dust Management Plan (DPM) that we will seek input and agreement with Camden. The DMP will include but not be limited to:

- Monitoring of dust levels in agreement with Camden
- Reacting to results from dust monitoring
- Establish site recording of levels of dust
- Plan our site management and logistics so that receptors for demolition waste are not located where they might cause nuisance to the neighbours
- Avoid site run off from vehicles
- Regular boundary inspections
- Use scaffold protection screens
- Clean down hoardings using wet cleaning methods
- Establish hard standing areas for cleaning down vehicles before they leave the site including wheel wash facilities
- Keep the public highway clear of any debris using wet cleaning methods
- Damp down any stock piled excavated materials on site
- Water suppression will be used during demolition

We are aware of the Dust & Air Emissions Mitigation Measures as prepared by the Institute of Air Quality Management and will use their mitigation and control measures to ensure that dust is controlled on the site both during demolition and construction.

34. Please provide details describing how any significant amounts of dirt or dust that may be spread onto the public highway will be prevented and/or cleaned.

Lendlease will deploy the use of a mechanical road sweeper to clear the road of excessive dust and dirt as a result of site operations. However any vehicle leaving site will be cleaned first.



35. Please provide details describing arrangements for monitoring of <u>noise</u>, vibration and dust levels.

Please see sections 31 and 33 above.

36. Please confirm that a <u>Risk Assessment</u> has been undertaken at planning application stage in line with the <u>GLA's Control of Dust and Emissions Supplementary Planning Guidance</u> (SPG), and the risk level that has been identified, with evidence. Please attach the risk assessment as an appendix if not completed at the planning application stage.

N/A

37. Please confirm that all of the GLA's 'highly recommended' measures from the <u>SPG</u> document relative to the level of risk identified in question 36 have been addressed by completing the <u>GLA mitigation measures checklist</u>.

The dust mitigation measures checklist as prepared by the GLA has been reviewed and checked. A copy marked up is in Appendix F

38. If the site is a 'High Risk Site', 4 real time dust monitors will be required. If the site is a 'Medium Risk Site', 2 real time dust monitors will be required. The risk assessment must take account of proximity to sensitive receptors (e.g. schools, care homes etc.), as detailed in the <u>SPG</u>. Please confirm the location, number and specification of the monitors in line with the SPG and confirm that these will 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.



The site is within the Regent's Place Estate and is not considered as a High Risk site, but the use of real time dust monitoring will be implemented.

39. Please provide details about how rodents, including <u>rats</u>, will be prevented from spreading out from the site. You are required to provide information about site inspections carried out and present copies of receipts (if work undertaken).

Lendlease will instruct a qualified pest control firm to survey the existing building 28 days prior to the demolition works commencing, to establish the existence of any pests and in particular rodents. If there is evidence of rodents following this survey the qualified pest control firm will follow the procedures laid out by the HSE information sheet MISC515 for the laying of baits. The baits will be approved under the Control of Pesticides Regulations 1986 (as amended). As part of the work by the qualified pest control firm Lendlease will require detailed method statements which can be issued to the Council.

There is evidence that rodents live in the sewer system. Lendlease will ensure that existing drains and sewers that re serving the existing building are either sealed up and/or grubbed out.

During the demolition works the monitoring for the evidence of rodents will continue.

Evidence of the pest control that has to be carried out will be provided to the Council in the form of pavement survey reports, method statements and payment receipts for the work carried out by the pest control firm.

40. Please confirm when an asbestos survey was carried out at the site and include the key findings.

Prior to any demolition, pre demolition hazardous surveys will be carried out and any notifiable asbestos or hazardous materials removed by our approved specialists to approved and licenced tips.

A survey of the 1TS building has been completed by the building owner and their findings show the presence of asbestos in the basement pipework gaskets only.

A survey of the St Anne's building has been completed by the building's previous owner and their findings show the presence of asbestos in the boiler room pipework gaskets and Level One floor tiles.



41. Complaints often arise from the conduct of builders in an area. Please confirm steps being taken to minimise this e.g. provision of a suitable smoking area, tackling bad language and unnecessary shouting.

Lendlease do not tolerate any bad language or unnecessary shouting on our sites. We operate a "red card2 system whereby any operative found to be acting in an anti-social way of smoking outside a designated smoking area will be given a "red card" and asked to leave the site immediately.

Lendlease do not allow radios on site.

42. If you will be using non-road mobile machinery (NRMM) on site with net power between 37kW and 560kW it will be required to meet the standards set out below. The standards are applicable to both variable and constant speed engines and apply for both PM and NOx emissions.

#### From 1st September 2015

(i) Major Development Sites – NRMM used on the site of any major development will be required to meet Stage IIIA of EU Directive 97/68/EC

(ii) Any development site within the Central Activity Zone - NRMM used on any site within the Central Activity Zone will be required to meet Stage IIIB of EU Directive 97/68/EC

#### From 1st September 2020

(iii) Any development site - NRMM used on any site within Greater London will be required to meet Stage IIIB of EU Directive 97/68/EC

(iv) Any development site within the Central Activity Zone - NRMM used on any site within the Central Activity Zone will be required to meet Stage IV of EU Directive 97/68/EC

Please provide evidence demonstrating the above requirements will be met by answering the following questions:



- a) Construction time period (03/17 10/19 ):
- b) Is the development within the CAZ? (Yes):
- c) Will the NRMM with net power between 37kW and 560kW meet the standards outlined above? (Yes):
- d) 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: (Yes the machinery will be registered on the NRMM Register)
- e) 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: (Yes an inventory of all NRMM will be kept on site)
- f) 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: (Yes the documentation will be made available to local authority officers)

SYMBOL IS FOR INTERNAL USE



# Agreement

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.

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.

Please notify that council when you intend to start work on site. Please also notify the council when works are approximately 3 months from completion.

Signed: ...I K Ronchetti..... Date: ...22 September 2016.....

Print Name: ... I K Ronchetti.....

Position: ...Operations Director for Lendlease.....

Please submit to: <a href="mailto:planningobligations@camden.gov.uk">planningobligations@camden.gov.uk</a>

End of form.



#### Appendices

- Appendix A Construction Programme
- Appendix B Utility Surveys
- Appendix C Vehicle Histogram
- Appendix D Logistics Plans Site Access and Egress (4 drawings)
- Appendix E Logistics Plans Temporary Crossovers (2 drawings)
- Appendix F GLA Mitigation Measures Checklist



#### Appendix A – Construction Programme



#### 1 Triton Square St Anne's Appendix A Construction Programme

Year	Y	r 1						1	Yr 2							Yr 3 Yr 4						Yr 5	5															
Month	1	23	-	4 5	5	6 7	7	89	10	0 11	12	? 13	14	15	16	17	18	19	20 2	21	22 23	3 2	24 25	26	27	28	29	30	31 3.	2 33	34	35	36	37	38 39	40	41	42
Town Planning Programme	•	Plannir Submiss	ng iion		esolu to Gra	tion nt	ull Plaı (ir	nning Cor ncl S106)	nsent																													
1 Triton Square								Pre	-Cons	structic 9 mon	on & S hths	Strip O	ut			Construction 27 months																						
Demolition						•[	Ea Implei	arliest mentation	1		[	Demol 5 Mon	l <b>ition</b> hths																									
Piling and New Structure																F	Piling a	nd Ne 9 Mor	ew Struc nths	cture																		
New façade																					N	<b>lew F</b> 15 M	açade Ionths															
Building Services and Commissioning																												Buildir	ng Serv	<b>ices aı</b> 18 Mo	nd Con nths	nmissio	oning					
Fitout																							Core Works & Finishes 15 Months															
Landscaping																																		La	andscapii 8 months	g		
St Anne's Residential Demolition, Shell & Core Construction																Demo 4 mo	olition onths					Shel	II & Core	Const 14 m	ructic onths	on and	Fit Ou	t										

#### Appendix B – Utility Surveys

NEQ Highway Works (Existing Combined Utilities) - Arup Associates - August 2012 NEQ Highway Works (Highway Drainage Layout) - Arup Associates - August 2012 NEQ Highway Works (Road Lighting and Ducting Plan) - Arup Associates - August 2012 UKPN Net Map - UKPN - September 2015 Thames Water ALS Sewer Map - Thames Water - July 2016 Thames Water ALS Water Map - Thames Water - July 2016 Underground Services Survey of Longford Place - Plowman Craven - March 2016

















#### **Sewer Fittings**

A feature in a sewer that does not affect the flow in the pipe. Example: a vent is a fitting as the function of a vent is to release excess gas.

A feature in a sewer that changes or diverts the flow in the sewer. Example: A hydrobrake limits the flow passing downstream.

End symbols appear at the start or end of a sewer pipe. Examples: an Undefined End at the start of a sewer indicates that Thames Water has no knowledge of the position of the sewer upstream of that symbol, Outfall on a surface water sewer indicates that the pipe discharges into a stream or river.

6) The text appearing alongside a sewer line indicates the internal diameter of the pipe in milimetres. Text next to a manhole indicates the manhole

reference number and should not be taken as a measurement. If you are

unsure about any text or symbology present on the plan, please contact a

member of Property Insight on 0845 070 9148.

#### **Other Symbols**



#### Other Sewer Types (Not Operated or Maintained by Thames Water)



#### Notes:

1) All levels associated with the plans are to Ordnance Datum Newlyn.

2) All measurements on the plans are metric.

- 3) Arrows (on gravity fed sewers) or flecks (on rising mains) indicate direction of flow.
- 4) Most private pipes are not shown on our plans, as in the past, this information has not been recorded.
- 5) 'na' or '0' on a manhole level indicates that data is unavailable.

Thames Water Utilities Ltd. Property Searches, PO Box 3189, Slough SL1 4W. DX 151280 Slough 13 T 0845 070 9148 E searches@thameswater.co.uk | www.thameswater-propertysearches.co.uk





#### ALS Water Map Key

#### Water Pipes (Operated & Maintained by Thames Water)

- Distribution Main: The most common pipe shown on water maps.
   With few exceptions, domestic connections are only made to distribution mains.
- Trunk Main: A main carrying water from a source of supply to a treatment plant or reservoir, or from one treatment plant or reservoir to another. Also a main transferring water in bulk to smaller water mains used for supplying individual customers.
- **Supply Main:** A supply main indicates that the water main is used as a supply for a single property or group of properties.
- STRE
   Fire Main: Where a pipe is used as a fire supply, the word FIRE will be displayed along the pipe.
- **Metered Pipe:** A metered main indicates that the pipe in question supplies water for a single property or group of properties and that quantity of water passing through the pipe is metered even though there may be no meter symbol shown.
  - Transmission Tunnel: A very large diameter water pipe. Most tunnels are buried very deep underground. These pipes are not expected to affect the structural integrity of buildings shown on the map provided.
  - Proposed Main: A main that is still in the planning stages or in the process of being laid. More details of the proposed main and its reference number are generally included near the main.

PIPE DIAMETER	DEPTH BELOW GROUND
Up to 300mm (12")	900mm (3')
300mm - 600mm (12" - 24")	1100mm (3' 8")
600mm and bigger (24" plus)	1200mm (4')

#### Valves General PurposeValve Air Valve Pressure ControlValve Customer Valve Hydrants

Single Hydrant



#### Meter

#### **End Items**

Symbol indicating what happens at the end of <sup>L</sup> a water main. Blank Flange Capped End

- O Emptying Pit
- Ondefined End
- Manifold
- —— Fire Supply

#### **Operational Sites**



#### **Other Symbols**

Data Logger

- Other Water Pipes (Not Operated or Maintained by Thames Water)
  - Other Water Company Main: Occasionally other water company water pipes may overlap the border of our clean water coverage area. These mains are denoted in purple and in most cases have the owner of the pipe displayed along them.
  - Private Main: Indiates that the water main in question is not owned by Thames Water. These mains normally have text associated with them indicating the diameter and owner of the pipe.

<u>Thames Water Utilities Ltd</u>, Property Searches, PO Box 3189, Slough SL1 4W, DX 151280 Slough 13 T 0845 070 9148 E <u>searches@thameswater.co.uk</u> I <u>www.thameswater-propertysearches.co.uk</u>



#### Appendix C – Vehicle Histogram





Appendix D – Logistics Plans – Site Access and Egress



### **1 TRITON SQUARE & SAINT ANNE'S**









Appendix E – Logistics Plans – Temporary Crossovers





Appendix F – GLA Mitigation Measures Checklist



#### APPENDIX 7 AIR QUALITY CONTROL

#### = To Be Implemented

#### MEASURES RELEVANT FOR DEMOLITION, EARTHWORKS, CONSTRUCTION AND TRACK-OUT

MITIGATION MEASURE	LOW RISK	MEDIUM RISK	HIGH RISK
Site management	^ 		
Develop and implement a stakeholder communications plan that includes community engagement before work commences on site.		XX	XX
Develop a Dust Management Plan.		XX	XX
Display the name and contact details of person(s) accountable for air quality pollutant emissions and dust issues on the site boundary.	XX	XX	XX
Display the head or regional office contact information.	XX	XX	XX
Record and respond to all dust and air quality pollutant emissions complaints.	ХХ	XX	XX
Make a complaints log available to the local authority when asked.	ХХ	XX	XX
Carry out regular site inspections to monitor compliance with air quality and dust control procedures, record inspection results, and make an inspection log available to the local authority when asked.	XX	ХХ	XX
Increase the frequency of site inspections by those accountable for dust and air quality pollutant emissions issues when activities with a high potential to produce dust and emissions and dust are being carried out, and during prolonged dry or windy conditions.	XX	XX	XX
Record any exceptional incidents that cause dust and air quality pollutant emissions, either on or off the site, and the action taken to resolve the situation is recorded in the log book.	XX	XX	XX

MITIGATION MEASURE	LOW RISK	MEDIUM RISK	HIGH RISK
Hold regular liaison meetings with other high risk construction sites within 500m of the site boundary, to ensure plans are co-ordinated and dust and particulate matter emissions are minimised.			XX
Preparing and maintaining the site			
Plan site layout: machinery and dust causing activities should be located away from receptors.	ХХ	XX	XX
Erect solid screens or barriers around dust activities or the site boundary that are, at least, as high as any stockpiles on site.	XX	XX	XX
Fully enclosure site or specific operations where there is a high potential for dust production and the site is active for an extensive period.	Х	XX	XX
Install green walls, screens or other green infrastructure to minimise the impact of dust and pollution.		Х	Х
Avoid site runoff of water or mud.	XX	XX	XX
Keep site fencing, barriers and scaffolding clean using wet methods.	Х	XX	XX
Remove materials from site as soon as possible.	Х	XX	XX
Cover, seed or fence stockpiles to prevent wind whipping.		XX	XX
Carry out regular dust soiling checks of buildings within 100m of site boundary and cleaning to be provided if necessary.		X	XX
Provide showers and ensure a change of shoes and clothes are required before going off-site to reduce transport of dust.			X
Agree monitoring locations with the Local Authority.		XX	XX
Where possible, commence baseline monitoring at least three months before phase begins.		XX	XX

MITIGATION MEASURE	LOW RISK	MEDIUM RISK	HIGH RISK
Put in place real-time dust and air quality pollutant monitors across the site and ensure they are checked regularly.		XX	XX
Operating vehicle/machinery and sustainable travel			
Ensure all on-road vehicles comply with the requirements of the London Low Emission Zone.	XX	XX	XX
Ensure all non-road mobile machinery (NRMM) comply with the standards set within this guidance.	XX	XX	XX
Ensure all vehicles switch off engines when stationary – no idling vehicles.	XX	XX	XX
Avoid the use of diesel or petrol powered generators and use mains electricity or battery powered equipment where possible.	XX	XX	XX
Impose and signpost a maximum-speed-limit of 10mph on surfaced haul routes and work areas (if long haul routes are required these speeds may be increased with suitable additional control measures provided, subject to the approval of the nominated undertaker and with the agreement of the local authority, where appropriate).	X	Х	XX
Produce a Construction Logistics Plan to manage the sustainable delivery of goods and materials.		XX	XX
Implement a Travel Plan that supports and encourages sustainable travel (public transport, cycling, walking, and car-sharing).	XX	XX	XX
Operations			
Only use cutting, grinding or sawing equipment fitted or in conjunction with suitable dust suppression techniques such as water sprays or local extraction, e.g. suitable local exhaust ventilation systems.	XX	XX	XX

MITIGATION MEASURE	LOW RISK	MEDIUM RISK	HIGH RISK
Ensure an adequate water supply on the site for effective dust/particulate matter mitigation (using recycled water where possible).	XX	XX	ХХ
Use enclosed chutes, conveyors and covered skips.	XX	XX	XX
Minimise drop heights from conveyors, loading shovels, hoppers and other loading or handling equipment and use fine water sprays on such equipment wherever appropriate.	XX	XX	XX
Ensure equipment is readily available on site to clean any dry spillages, and clean up spillages as soon as reasonably practicable after the event using wet cleaning methods.		XX	XX
Waste management			
Reuse and recycle waste to reduce dust from waste materials	XX	XX	XX
Avoid bonfires and burning of waste materials.	XX	XX	XX

#### **MEASURES SPECIFIC TO DEMOLITION**

MITIGATION MEASURE	LOW RISK	MEDIUM RISK	HIGH RISK
Soft strip inside buildings before demolition (retaining walls and windows in the rest of the building where possible, to provide a screen against dust).	Х	Х	XX
Ensure water suppression is used during demolition operations.	XX	XX	XX
Avoid explosive blasting, using appropriate manual or mechanical alternatives.	XX	ХХ	XX
Bag and remove any biological debris or damp down such material before demolition.	XX	XX	XX

#### **MEASURES SPECIFIC TO EARTHWORKS**

MITIGATION MEASURE	LOW RISK	MEDIUM RISK	HIGH RISK
Re-vegetate earthworks and exposed areas/soil stockpiles to stabilise surfaces.		Х	XX
Use Hessian, mulches or trackifiers where it is not possible to re-vegetate or cover with topsoil.		Х	XX
Only remove secure covers in small areas during work and not all at once.		X	XX

#### **MEASURES SPECIFIC TO CONSTRUCTION**

MITIGATION MEASURE	LOW RISK	MEDIUM RISK	HIGH RISK
Avoid scabbling (roughening of concrete surfaces) if possible	Х	Х	XX
Ensure sand and other aggregates are stored in bunded areas and are not allowed to dry out, unless this is required for a particular process, in which case ensure that appropriate additional control measures are in place	Х	ХХ	XX
Ensure bulk cement and other fine powder materials are delivered in enclosed tankers and stored in silos with suitable emission control systems to prevent escape of material and overfilling during delivery.		X	XX
For smaller supplies of fine powder materials ensure bags are sealed after use and stored appropriately to prevent dust.		X	Х

#### **MEASURES SPECIFIC TO TRACKOUT**

MITIGATION MEASURE	LOW RISK	MEDIUM RISK	HIGH RISK
Regularly use a water-assisted dust sweeper on the access and local roads, as necessary, to remove any material tracked out of the site.	Х	XX	XX
Avoid dry sweeping of large areas.	Х	XX	XX
Ensure vehicles entering and leaving sites are securely covered to prevent escape of materials during transport.	Х	XX	XX
Record all inspections of haul routes and any subsequent action in a site log book.		XX	XX
Install hard surfaced haul routes, which are regularly damped down with fixed or mobile sprinkler systems and regularly cleaned.		XX	XX
Inspect haul routes for integrity and instigate necessary repairs to the surface as soon as reasonably practicable;		XX	XX
Implement a wheel washing system (with rumble grids to dislodge accumulated dust and mud prior to leaving the site where reasonably practicable).	Х	XX	XX
Ensure there is an adequate area of hard surfaced road between the wheel wash facility and the site exit, wherever site size and layout permits.		XX	XX
Access gates to be located at least 10m from receptors where possible.		XX	XX
Apply dust suppressants to locations where a large volume of vehicles enter and exit the construction site		X	XX