# Chapter 15: Mitigation and Monitoring Schedule

## INTRODUCTION

**15.1** **Table 15.1** below provides a summary of all the mitigation measures and monitoring commitments detailed within this ES (**Volumes 1-4**).

**15.2** The ways in which the identified mitigation measures and monitoring commitments will be secured is ultimately for the GLA and the LBS to determine as the local planning authority. In relation to conditions, Section 70(1)(a) of the Town and Country Planning Act 1990 enables the local planning authority, in granting planning permission, to impose such conditions on the planning permission "as they think fit". In practice, however, the Courts and national policy has imposed limits on the permissible scope of planning conditions. Paragraph 55 of the NPPF states that planning conditions should only be imposed where they are necessary, relevant, enforceable, precise and reasonable. It is also recognised in the NPPF and PPG that, it is good practice for planning conditions to be discussed and agreed between a local planning authority and an applicant, before they are imposed and the Applicant for the Proposed Development will discuss and seek to agree with the GLA/LBS an appropriate package of suitably worded planning conditions to secure the identified mitigation measures. As to planning obligations, paragraph 56 of the NPPF states that they must only be sought where they meet the tests in Regulation 122(2) of the Community Infrastructure Levy Regulations 2010 (as amended) which are that the obligations are (a) necessary to make the development acceptable in planning terms; (b) directly related to the development and (c) fairly and reasonably related in scale and kind to the development.

**15.3** All mitigation measures listed below apply to the Proposed Development under both Option 1 and Option 2 unless stated otherwise.

**Table 15.1 Mitigation and Monitoring Schedule**

| Reference | Summary of Mitigation Measures | Suggestion for Securing |
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| **ES Volume 1, Chapter 5: Demolition and Construction** | | |
| D&C1 | **Surveys, Investigations, Consents and Licenses**<br>An indicative list of pre-commencement surveys and investigations, as well as necessary consents and licences required to commence an onsite activity (to be obtained ahead of the works commencing and giving the appropriate notice period) that are envisaged are presented below:<br>• Condition survey of any adjoining party walls and boundary walls;<br>• Structural surveys of existing buildings;<br>• Asbestos survey of existing buildings;<br>• Topographical survey to confirm existing site levels;<br>• Utility surveys to determine the position of any assets;<br>• CCTV survey of the surface water and foul water drainage to confirm size and condition;<br>• Permission for connections to existing statutory services and main sewers;<br>• Licences for discharge of water from the site into the public sewer, if required;<br>• Party Wall Act notices and agreements;<br>• Civil Aviation Authority (CAA) crane consents;<br>• Approval of an Environmental Code and Construction Management Plan, including agreements for the control and monitoring of construction logistics and aspects such as demolition and construction noise; and<br>• Network Rail consents related to design and construction. | Planning Condition/s |
| D&C2 | **Hoarding**<br>The boundary of the site will be established and a 3m high hoarding will be constructed around the entire perimeter of the site. The hoarding will stay fixed in position until completion of the works and handover. | Planning Condition |
| D&C3 | **Hours of Work**<br>The anticipated core working hours for demolition and construction works are:<br>• 08:00 – 18:00 hours on weekdays;<br>• 08:00 – 14:00 hours on Saturdays; and<br>• No working on Sundays, Bank or Public Holidays.<br>In order to maintain the above working hours, the Main Contractor may require at certain times a period of up to one hour before and after normal working hours to start and close down activities (this will not include works that are likely to exceed any agreed maximum construction works noise levels). Specialist construction operations and deliveries may also be required to be carried outside these core hours in agreement with LBS and other relevant parties. | Planning Condition |
| D&C4 | **Preferred Traffic Routes**<br>The preferred transport routes to and from the site to be used by heavy goods vehicles (HGVs) for deliveries of materials to the site and removal of wastes will be agreed with the LBS prior to commencement of construction works. | Planning Condition |
| D&C5 | **Site Access / Car Parking**<br>No car parking will be available on site for construction staff as the assumption is that staff members will access the site via public transport. | Planning Condition |
| D&C6 | **Deliveries / Construction Logistics**<br>A Construction Logistics and Interface Manager will manage all deliveries and ensure the coordinated flow of vehicles to and from the site.<br>Deliveries will be managed by a system of timed / booked deliveries, which will be implemented and controlled by the Construction Logistics and Interface Manager.<br>To ensure the timely management of deliveries to the site, the following will be enforced:<br>• No stopping or parking on the adjoining roads to the site;<br>• All deliveries are to be made during the stipulated site working hours;<br>• All deliveries must be booked in advance (i.e. at least a week) with the Construction Logistics and Interface Manager. Unscheduled deliveries will not be accepted; and<br>• The size of and type of delivery vehicles will be stipulated where necessary to suit the construction process and access available. | Planning Condition |

| Reference | Summary of Mitigation Measures | Suggestion for Securing |
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| | To further minimise the likelihood of congestion, strict monitoring and control of all vehicles entering, exiting and travelling across the site will be maintained, including the adoption of the following measures (where appropriate):<br>• The setting of specific delivery and collection times;<br>• Consolidation of deliveries wherever possible;<br>• A system of 'just in time' deliveries; and<br>• The requirement for prior authorisation when visiting the site by vehicle, which will be managed by the Construction Logistics and Interface Manager. Delivery schedules will be agreed with management at least a week in advance of delivery.<br>The possibility of identifying a holding area will be investigated along the traffic routes.<br>The Construction Logistics and Interface Manager will be assisted by trained banks men and entrance security personnel to ensure vehicles arriving and leaving the site are coordinated with the works on site.<br>The project will look to coordinate the works with that of the other construction projects in the St Thomas Street East development, working harmoniously with their respective teams and other stakeholders. To this end we will take a leading role in the following:<br>• Coordinated Programmes – It is likely that the projects will run concurrently, a coordinated Master Programme will high-light barriers in advance and will allow opportunities to be developed.<br>• Traffic Masterplan - Develop a masterplan with the other developments to include traffic routes, consolidation areas, holding areas, materials loading, swept path analysis, vehicle timings, Temporary Traffic Management, road closures, crane erection and dismantling, Network Rail, LBS and TfL approvals.<br>• Utilities Masterplan – Coordinated utilities schedule, coordinated contact with utility providers, joint studies of existing services, sharing of utilities works and Design of combined schemes.<br>• Community Liaison – A combined team to provide a holistic approach.<br>• Coordination with Emergency Services – A combined Emergency Management Plan. | |
| D&C7 | **Construction Environmental Management Plan (CEMP)**<br>The Applicant will develop and implement an CEMP through which mitigation and compliance with the Greater London Authority's (GLA) 'Sustainable Design and Construction Supplementary Planning Guidance (SPG)' and 'The Control of Dust and Emissions During Construction and Demolition SPG' will be managed. The CEMP will also refer to industry standards, best practice and guidance, such as the 'Considerate Constructors Scheme'. The CEMP will include roles and responsibilities, details of control measures and activities to be undertaken to minimise environmental effects, and monitoring and record-keeping requirements.<br>The CEMP will be periodically reviewed, and regular environmental audits of its implementation will be undertaken during the construction phase.<br>The CEMP will include (and not limited to) the following matters listed below in order to minimise the environmental effects during the period of construction of the Proposed Development:<br>• Construction Method Statement (CMS);<br>• Considerate Constructors Scheme;<br>• Neighbour and public relations;<br>• Management of effects from noise, vibration and air quality;<br>• Waste management;<br>• Ground conditions;<br>• Protection of water resources; and<br>• Energy and water usage.<br>*Construction Method Statement*<br>The CMS will include the following elements:<br>• The construction programme;<br>• A programme of the construction works, highlighting the various stages and their context within the project, including a full schedule of materials and manpower resources, as well as plant and equipment schedules;<br>• Details (including plans) of enabling works, including provision of temporary services, utility diversions, and re-alignment / replacement of hoarding;<br>• Detailed site layout and access arrangements, including plans for storage, site office set-up, vehicular movements, site access and egress;<br>• Details of the transport routes for HDVs;<br>• Prohibited or restricted operations (i.e., locations, site working hours, etc.);<br>– Details of operations that are likely to result in disturbance, with an indication of the expected duration of each phase with key dates, including a procedure for prior notification of the LBS and relevant statutory and non-statutory consultees (including neighbours) so that local arrangements can be agreed in advance;<br>• A procedure to ensure communication is maintained with the LBS and the local community to provide information on any operations likely to cause disturbance (e.g. through meetings and newsletters); and<br>• Provision for affected parties to register complaints and the procedures for responding to complaints.<br>*Considerate Constructors Scheme*<br>The site will be registered with the 'Considerate Constructors Scheme'. This scheme ensures that contractors carry out their operations in a safe and considerate manner with due regard to passing pedestrians and road users.<br>The Principal Contractor will aim to exceed the Considerate Constructors minimum requirements.<br>In addition to the standard banner and information board erected as part of the Considerate Constructors Scheme, an additional information board will be displayed on the external hoarding around the Site to enable it to be read by the general public. The additional board will contain project specific information relating to the progress of the Proposed Development. This will be periodically updated to include any changes to the site layout and access routes.<br>*Neighbour and Public Relations*<br>The contractor will endeavour to communicate with all those affected by the works and wherever possible give notice of forthcoming activities on site, particularly those that may have an impact.<br>Engagement with the community could be achieved by:<br>• Facilitating community group regular meetings; | Planning Condition |

| Reference | Summary of Mitigation Measures | Suggestion for Securing |
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| | • Providing specific notices, emails and warning letters for ad hoc construction activities, for example, wide loads to be delivered out of hours;<br>• Providing quarterly newsletters on progress and forthcoming activities; and<br>• Engaging with the neighbouring construction projects to ensure a coordinated approach and minimizing disruption to the local community.<br>In order to ensure that any comments or feedback from the public or neighbours are captured and effectively responded to, a complaints register will be implemented. The register will be held at the Site office. All complaints will be recorded for action in the register. Complaints will be responded to in writing within prescribed timescales outlined in the CEMP (unless alternatively agreed in writing) and following the appropriate action.<br>*Waste Management*<br>A key objective during the period of demolition and construction works would be to reduce the amount of waste generated and exported from site. This approach complies with the waste hierarchy of the Waste Management Plan for England 2021 whereby the intention is first to minimise, then to treat at source or compact and, finally, to dispose of off-site as necessary.<br>All contractors would be required to investigate opportunities to either avoid, minimise and reduce waste generation by means of appropriate measures either involving material selection or management of handling materials.<br>If waste can be re-used at the site, exemption or permit forms would be obtained from the Environment Agency in advance.<br>The disposal of waste or other materials removed from the site would be in accordance with the requirements of all relevant legislation, including:<br>• The Environmental Permitting (England and Wales) Regulations 2016;<br>• The Waste (England and Wales) Regulations 2011 (as amended);<br>• Clean Neighbourhoods and Environment Act 2005; and,<br>• Contractors would be encouraged to adopt the principals of the Site Waste Management Plans Regulations 2008 (repealed) as good working practice.<br>The potential risks associated with waste disposal would be adequately managed through industry recognised standards and best practice measures.<br>The detailed CEMP prepared by the Principal Contractor prior to the commencement of works would contain the measures to manage and dispose waste. The CEMP, in terms of waste management, would contain:<br>• Classification of all wastes;<br>• Performance measures and target setting against estimated waste forecasts;<br>• Measures to minimise waste generation;<br>• Opportunities for reuse and recycling;<br>• Provision for the segregation of waste streams on site that are clearly labelled;<br>• Recording of proposed carriers and licences for disposal sites;<br>• An audit trail encompassing waste disposal activities and waste consignment notes;<br>• Measures to avoid fly tipping by others on land being used for construction;<br>• Measures to provide adequate training and awareness through toolbox talks; and<br>• Considerable alternatives means of removing waste other than by road.<br>In addition, it is expected that 95% of all demolition and excavation waste and 98% of all construction waste will be diverted from landfill<br>*Site Health & Safety*<br>The Principal Contractor would carry out their duties in accordance with the Construction Design Management Regulations (CDM). They would ensure that all site personnel have the correct training and qualifications, every site visitor would have a site induction, there would be a programme of toolbox talks for site operatives and the construction works would be tidy and well maintained with all safety measures in place. Appropriate Personal Protective Equipment (PPE) would be worn by all operatives at all times when on the construction site.<br>*Water Usage*<br>Where existing pipes are likely to be disrupted by construction works, new potable water supply pipes would be installed.<br>Processes during the construction phase require large volumes of water supply include mixing (especially relating to concrete), water for washing down and potable water for sanitary facilities for the construction workforce.<br>It is expected that the water supply to the construction site during the demolition and construction works will be provided from the existing Thames Water sources via an application to use an existing water supply for building purposes.<br>The CEMP will outline the appropriate strategy for the sustainable management of water use across the site. The CMP will require relevant contractors during the period of works to investigate opportunities to sustainably manage the use of water.<br>*Energy Usage*<br>All relevant contractors would be required to investigate opportunities to minimise and reduce the use of energy so as to avoid any likely significant adverse effects associated with excessive energy consumption and resulting greenhouse gas emissions.<br>*Monitoring, Inspection and Auditing*<br>The CEMP would define responsibilities and procedures for the management of the potential impacts on the environment arising during demolition, enabling and construction. A monitoring programme of the environmental effects of demolition and construction would be implemented to agreed LBS requirements. This programme would:<br>• evaluate the effectiveness of environmental mitigation, and identify environmental problems and appropriate responses at an early stage;<br>• ensure that the works are carried out in accordance with the provisions of the CMP; and<br>• identify and implement any environmental improvements that would contribute to the overall environmental performance of the Proposed Development.<br>To ensure that the contractors are adhering to the CEMP, the Applicant would require that site inspections and more formal audits would be undertaken and a checklist pro-forma would be used, which would cover the environmental issues addressed in the CEMP.<br>Where a problem is identified, corrective action would be identified and implemented in conjunction with the Site Manager and Principal Contractor. | |

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| | It is envisaged that there would be a requirement for regular reporting of monitoring and auditing to LBS, and LBS would be asked to review implementation of the protective measures as necessary during demolition and construction, and would have direct access to the monitoring representative to ensure that any non-compliances with the requirements of the CEMP are speedily rectified.<br><br>*Emergency Response and Environmental Incidences*<br><br>Protocols to be implemented on-site in instances of emergencies and environmental incidences would be set out within the CEMP for approval by LBS.<br><br>Before construction works commence on-site, emergency procedures and fire exit routes from the site would be identified within the fire safety plan. Throughout the course of the construction works, these would be regularly inspected and maintained. The fire safety plan would be updated regularly as construction works progress, particularly as areas are progressively completed, and as the means of escape from the evolving buildings change. Fire alarm points and extinguishers would be situated at each floor of the buildings at the stair cores and within main corridors.<br><br>Site management, operatives and any visitors to the site would undergo an induction to ensure they are briefed on what actions to take in case of an emergency and also in case of an environmental incident.<br><br>*General Site Management*<br><br>Hoardings erected around and within the site to provide a clear and secure demarcation between operational activities and other areas with an acceptable visual outlook. The hoarding would be used to provide information regarding the Proposed Development and the progress of the construction works. Particular attention would be paid to locations supporting high volumes of pedestrian movement, demolition and construction routes, access gates and security arrangements.<br><br>A 'clean site' policy would be maintained to keep the site clean and tidy internally, and contractors and their subcontractors would be expected to maintain this policy. For example, materials would be stored with care, spills would be cleaned up immediately and various dust mitigation measures would be put in place and managed through the CEMP.<br><br>Staff facilities would be kept clean and maintained in good working order. Waste would be collected regularly, with food waste removed from site daily. Smoking areas would be provided as necessary. They would be located away from sensitive boundaries and neighbouring residences and businesses.<br><br>Any damage incurred to the public realm and highway would be repaired in conjunction with LBS and TfL requirements. A street sweeper would also be employed as and when required during the demolition, piling and excavation periods to ensure the surrounding streets remain clean during the works. | |
| **ES Volume 1, Chapter 7: Traffic and Transport** | | |
| TRAFFIC1 | **Framework Travel Plan**<br>The Applicant will implement a Framework Travel Plan which will cover all employees based at the Proposed Development and visitors. The Travel Plan will contain a range of measures and targets to reduce travel by car and public transport and encourage shorter trips by foot and cycle. | Planning Condition |
| TRAFFIC2 | **Delivery and Servicing Management Plan**<br>To reduce the impact of servicing and deliveries, a Delivery and Servicing Management Plan (DSMP) will be secured via suitably worded planning obligation / condition (as appropriate) which will set out how delivery and servicing activities will be managed, and where possible, reduced and scheduled outside of transport network peak periods. | Planning Condition |
| **ES Volume 1, Chapter 8: Air Quality** | | |
| AQ1 | **Construction Dust Management Plan**<br><br>The following is a set of best-practice measures from the GLA guidance (GLA, 2014b) that should be incorporated into the specification for the works. These measures should be written into a Dust Management Plan. Some of the measures may only be necessary during specific phases of work, or during activities with a high potential to produce dust, and the list should be refined and expanded upon in liaison with the construction contractor when producing the Dust Management Plan.<br><br>• Site Management;<br>– If there is concurrent construction work on sites within 500 m of the Proposed Development, the construction contractors should hold regular liaison meetings with other high risk construction sites within 500 m of the site boundary, to ensure plans are coordinated and dust and particulate matter emissions are minimised. Ideally the developments should be phased such that construction work does not take place in adjacent areas at the same time;<br>– Develop and implement a stakeholder communications plan that includes community engagement before work commences on site;<br>– Develop a Dust Management Plan (DMP);<br>– Display the name and contact details of person(s) accountable for air quality pollutant emissions and dust issues on the site boundary;<br>– Display the head or regional office contact information;<br>– Record and respond to all dust and air quality pollutant emissions complaints;<br>– Make a complaints log available to the local authority when asked;<br>– 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;<br>– 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 are being carried out and during prolonged dry or windy conditions; and<br>– Record any exceptional incidents that cause dust and air quality pollutant emissions, either on or off the site, and ensure that the action taken to resolve the situation is recorded in the log book.<br>• Preparing and Maintaining the Site;<br>– Plan the site layout so that machinery and dust-causing activities are located away from receptors, as far as is possible;<br>– erect solid screens or barriers around dusty activities or the site boundary that are at least as high as any stockpiles on site;<br>– fully enclose site or specific operations where there is a high potential for dust production and the site is active for an extensive period;<br>– avoid site runoff of water or mud;<br>– keep site fencing, barriers and scaffolding clean using wet methods;<br>– remove materials that have a potential to produce dust from site as soon as possible, unless being re-used on site. If they are being re-used on-site cover as described below;<br>– cover, seed, or fence stockpiles to prevent wind whipping;<br>– carry out regular dust soiling checks of buildings within 100 m of site boundary and provide cleaning if necessary;<br>– put in place real-time dust and air quality pollutant monitors across the site and ensure they are checked regularly;<br>– agree monitoring locations with the Local Authority; and<br>– where possible, commence baseline monitoring at least three months before work begins.<br>• Operating Vehicle/Machinery and Sustainable Travel;<br>– Ensure all on-road vehicles comply with the requirements of the London LEZ (and ULEZ);<br>– Ensure all Non-road Mobile Machinery (NRMM) comply with London's NRMM emission standards. Currently, NRMM used on any site within Greater London are required to meet Stage IIIA of EU Directive 97/68/EC (The European Parliament and the Council of the European Union, 1997) and its subsequent amendments as a minimum, while NRMM used on any site within the Central Activity Zone, Canary Wharf or one of London's Opportunity Areas are required to meet Stage IIIB of the | Planning Condition |

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| | Directive as a minimum. The Proposed Development is within an area where this stricter requirement applies. From January 2025, NRMM used anywhere in London will be required to meet stage IV, while from January 2030 the stage V standard will apply. From January 2040 only zero emission machinery will be allowed;.<br>– Ensure all vehicles switch off engines when stationary – no idling vehicles;<br>– Avoid the use of diesel- or petrol-powered generators and use mains electricity or battery-powered equipment where practicable;<br>– Impose and signpost a maximum-speed-limit of 15 mph on surfaced and 10 mph on un-surfaced haul roads 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);<br>– Produce a Construction Logistics Plan to manage the sustainable delivery of goods and materials; and<br>– Implement a Travel Plan that supports and encourages sustainable staff travel (public transport, cycling, walking, and car-sharing).<br>• Operations;<br>– 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;<br>– Ensure an adequate water supply on the site for effective dust/particulate matter suppression/mitigation, using recycled water where possible and appropriate;<br>– Use enclosed chutes, conveyors and covered skips;<br>– Minimise drop heights from conveyors, loading shovels, hoppers and other loading or handling equipment and use fine water sprays on such equipment wherever appropriate; and<br>– 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.<br>• Waste Management;<br>– Reuse and recycle waste to reduce dust from waste materials; and<br>– Avoid bonfires and burning of waste materials.<br>• Measures Specific to Demolition;<br>– Soft strip inside buildings before demolition (retaining walls and windows in the rest of the building where possible, to provide a screen against dust);<br>– Ensure water suppression is used during demolition operations;<br>– Avoid explosive blasting, using appropriate manual or mechanical alternatives; and<br>– Bag and remove any biological debris or damp down such material before demolition.<br>• Measures Specific to Earthworks;<br>– Re-vegetate earthworks and exposed areas/soil stockpiles to stabilise surfaces as soon as practicable;<br>– Use Hessian, mulches or trackifiers where it is not possible to re-vegetate or cover with topsoil, as soon as practicable; and<br>– Only remove the cover from small areas during work, not all at once.<br>• Measures Specific to Construction;<br>– Avoid scabbling (roughening of concrete surfaces), if possible;<br>– 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;<br>– 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; and<br>– For smaller supplies of fine powder materials ensure bags are sealed after use and stored appropriately to prevent dust.<br>• Measures Specific to Trackout;<br>– Regularly use a water-assisted dust sweeper on the access and local roads, as necessary, to remove any material tracked out of the site;<br>– Avoid dry sweeping of large areas;<br>– Ensure vehicles entering and leaving sites are covered to prevent escape of materials during transport;<br>– Inspect any on-site haul routes for integrity and instigate necessary repairs to the surface as soon as reasonably practicable;<br>– Record all inspections of any haul routes and any subsequent action in a site log book;<br>– Install hard surfaced haul routes, which are regularly damped down with fixed or mobile sprinkler systems or mobile water bowsers, and regularly cleaned;<br>– Implement a wheel washing system (with rumble grids to dislodge accumulated dust and mud prior to leaving the site where reasonably practicable);<br>– 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;<br>– Access gates should be located at least 10 m from receptors, where possible; and<br>– Apply dust suppressants to locations where a large volume of vehicles enter and exit the construction site. | |
| AQ2 | Based on the results for 1-hour and 10-minute testing set out in Table 8.9 of ES Chapter 8, an annual 2-hour test shall be carried out outside of the medical facility operating hours to minimise remove the risk of exposure at this sensitive receptor. **This mitigation measure is only applicable to Option 1.** | Planning Condition (Applicable to Option 1 only) |
| **ES Volume 1, Chapter 9: Noise and Vibration** | | |
| N&V1 | Mitigation measures that the contractor/s shall be required implement include those presented below:<br>• The production of a construction noise and vibration report that evaluates the construction activities and provides specific Best Practicable Means (BPM) to reduce noise and vibration;<br>• Limiting high impact activities (including piling) to specific times during the day, e.g. 1 hour on – 1 hour off, or 09:00-12:00 and 14:00-17:00;<br>• Plant is to be properly maintained and operated in accordance with manufacturer's recommendations. Electrically powered plant is preferred, where practicable, to mechanically powered alternatives;<br>• When appropriate all mechanically powered plant will be fitted with suitable silencers. Items of plant on site operating intermittently are to be shut down in the intervening periods between use;<br>• Where feasible, all stationary plant would be located so that the noise effect at all occupied residential and commercial properties is minimised and, if practicable, every item of static plant when in operation is to be sound attenuated using methods based on the guidance and advice given in BS 5228;<br>• Trade contractors would at all times apply the principle of Best Practicable Means as defined in Section 72 of the COPA and carry out all work in such a manner as to reduce any disturbance from noise and vibration to a minimum; and<br>• The timing of building operations will be critical in avoiding noise and vibration nuisance to surrounding areas and premises. The contractor would identify particularly sensitive periods in the works so that the potential problems can be minimised and that early and good public relations with the adjacent tenants and occupants of buildings are maintained.<br>A Construction Method Statement (CMS) would be employed to mitigate the potential noise and vibration effects on nearby noise sensitive premises, with the primary method for the control of noise and vibration being a Section 61 agreement under the Control of Pollution Act 1974 (COPA) with LBS being established.<br>A Section 61 agreement under the COPA will contain appropriate noise and vibration limits at the nearby properties depending on their use and ownership. These limits are recommended to be monitored and reported. The reports and monitoring will highlight when it is likely that the construction limits will be exceeded, so that construction activities can be effectively altered. | Planning Condition |

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| | In addition, a Section 61 agreement also sets out a dispensation and variation procedure under which consent can be applied for to carry out works which would potentially exceed the agreed noise and vibration limits or must occur at times when such work is otherwise not approved. Such dispensation/variations would be applied for where there are good engineering, safety or practical reasons for undertaking the works at these times. The selected contractor should adopt measures, including site supervision arrangements, to reduce noise and vibration to a minimum in accordance with Best Practicable Means (BPM), as defined in Section 72 of the COPA.<br>Vibration limits would-be set-in accordance with BS5228-2 to minimise the risk of complaints or building damage. These limits would be controlled through the implementation of the CMS as set out above, in addition to vibration monitoring.<br>Noise emissions from building services plant will be controlled by the selection of suitable items of plant and the provision of suitable attenuation packages, as required. The building services plant will be designed to ensure that the noise limits outlined in Table 9.16 of ES Chapter 9 are not exceeded. | |
| **ES Volume 1, Chapter 10: Wind Microclimate** | | |
| WIND1 | **Wind Mitigation**<br>To include the following measures:<br>• Proposed landscaping scheme;<br>• Consented landscaping scheme around Capital House, and proposed landscaping scheme around the Edge, and the Sellar Schemes;<br>• 2.5m wide solid canopy at the south-east corner of the Main Building at the top of the colonnade extended around the south-eastern corner;<br>• 1.5m high dense shrubs approximately 2m long added underneath the solid canopy along the southern side of the Main Building;<br>• 1.5m high dense shrubs approximately 2m long added underneath the solid canopy;<br>• One 10m high deciduous tree added between the Proposed Development and the Sellar Scheme;<br>• 1.5m high line of dense shrubs added along the north-western side of the Sellar Scheme extended from the tree to the building's corner;<br>• Three 10m high deciduous trees and five 7m high deciduous trees added to the south of the Proposed Development; and<br>• Retention of five existing trees along Vinegar Yard.<br>A figure illustrating these wind mitigation measures can be seen in Annex A of this ES Chapter. | Planning Condition |
| **ES Volume 1, Chapter 12: Archaeology** | | |
| ARCH1 | The mitigation strategy is preservation by record. The details of the scope of the mitigations will be agreed in due course with LBS. It is anticipated the strategy will comprise a combination of boreholes and targeted areas of excavation. Where archaeological remains will be preserved by record, the analysis and reporting of the results of the archaeological works will occur off site, however the results will be published in a variety of technical and non- technical formats. | Planning Condition |
| **ES Volume 3: Appendix EIA Methodology: Annex 1 EIA Scoping Report** | | |
| WATER1 | **Water Resources**<br>• Discharge arrangements into the foul water sewer will be agreed with Thames Water Utilities Limited (TWUL).<br>• All existing utilities will be identified and marked before works commence, with the use of signs to warn of their presence. Any damage to existing water supply infrastructure will be immediately repaired.<br>• Settlement facilities and oil / petrol interceptors will be installed at relevant discharge points into the sewers (for surface water runoff and wastewater discharges).<br>• On-site provisions will be made to contain a serious spill or leak through the use of booms, bunding and absorbent material in accordance with an Emergency Response Plan (ERP).<br>• Any waste effluent will be tested and any water that may have come into contact with contaminated materials or be identified as being contaminated, will be disposed of appropriately and, to the satisfaction of the EA and/or TWUL; and where necessary, disposed of at the correctly licensed facility by a licensed specialist contractor/s.<br>• Plant and machinery will be kept away from controlled waters and will have drip trays installed beneath oil tanks/engines/gearboxes/hydraulics, which will be checked and emptied regularly via a licensed waste disposal operator.<br>• Refuelling and delivery areas will be located away from the local sewer network drains.<br>• All liquids and solids of a potentially hazardous nature (e.g., diesel fuel, oils and solvents) will be stored in designated locations with specific measures to prevent leakage and release of their contents, include the siting of storage areas away from surface water drains, on an impermeable base with an impermeable bund that has no outflow and is of adequate capacity to contain 110% of the contents in accordance with the EA's requirements. Any tanks storing more than 200 litres of oil on-site, will have secondary bunding.<br>• All storage will be protected from vandalism and kept locked up when not in use.<br>• All relevant contractors will be required to investigate opportunities to sustainably manage the use of water, such as turning off taps when not in use, both on site and within site offices and the use of recycled water / a rainwater harvesting system for equipment such as wheel washes.<br>• The water consumption throughout the demolition and construction works will be monitored, either through sub-metering or reading of utility bills, to allow comparison against best practice benchmarks and improvements to be made. | Planning Condition |
| GEOENV1 | **Geo-Environmental**<br>The following mitigation measures are appropriate in line with current codes of construction practice to prevent any adverse effects to ground conditions and groundwater, human health and the wider environment:<br>• Preparation of a demolition plan, including asbestos demolition survey report;<br>• Preparation and implementation of a CEMP, including health and safety procedures;<br>• Preparation of an earthworks strategy. Mitigation measures relating to buried ordnance and munitions will be determined by a specialist subcontractor and stated as part of the earthworks strategy;<br>• Development of a dewatering strategy for groundwater perched above the London Clay Formation and within the superficial aquifer during construction of the basement structure;<br>• The appropriate use of Personal Protective Equipment (PPE) and implementation and adherence to appropriate health and safety protocols, plans and procedures;<br>• Appropriate handling and disposal of pile arisings, concrete, pastes and/or grouts during the laying of foundations will be undertaken;<br>• All liquids and solids of a potentially hazardous nature (e.g. diesel fuel, oils and solvents) are to be stored in designated locations with specific measures to prevent leakage and release of their contents, include the siting of storage areas away from surface water drains, on an impermeable base with an impermeable bund that has no outflow and is of adequate capacity to contain 110% of the contents, in accordance with the EA's requirements. Any tanks storing more than 200 litres of oil on-site, would have secondary bunding;<br>• All storage will be protected from vandalism and kept locked up when not in use;<br>• Wherever possible, plant and machinery will have drip trays beneath oil tanks/engines/gearboxes/hydraulics, which will be checked and emptied regularly via a licensed waste disposal operator; and<br>• On-site provisions will be made to contain a serious spill or leak through the use of booms, bunding and absorbent material in accordance with an Emergency Response Plan (ERP). | Planning Condition |

| Reference | Summary of Mitigation Measures | Suggestion for Securing |
|---|---|---|
| | In addition, the proposed layout incorporates a new public garden in the eastern area and therefore the Made Ground material is not a suitable growing medium for the planting. It is recommended that the Made Ground in the east of the site (approximately 2.65m thickness) is therefore removed and a suitable thickness of subsoil and topsoil is imported. The supplier of the subsoil and topsoil should provide laboratory chemical testing results to demonstrate the imported material meet the criteria for open space use. | |
| WASTE1 | **Demolition and Construction Waste**<br>Mitigation measures to avoid, remedy or mitigate adverse effects in terms of waste and recycling during the demolition / construction can include:<br>• CEMP to include waste reduction and management objectives;<br>• The appropriate management of any potential contamination identified on-site; and<br>• The minimising of stockpiling of construction materials. | Planning Condition |
| EI1 | **Electronic Interference**<br>For potentially affected residential dwellings located within the DTTV shadow area, standard measures are available to mitigate the likely adverse effect, these include:<br>• Upgrading the existing DTTV aerials by increasing their height and gain;<br>• The provision of a non-subscription satellite service which is available from the BBC and ITV ('Freesat') or Sky for a one-off cost; or<br>• Linking affected residential dwellings up to the existing available CATV network at a one-off cost. | Planning Condition |
| WASTE2 | **Waste**<br>An operational waste and recycling management strategy will be prepared and will calculate waste storage provisions based on the area schedule and will outline associated waste management measures. The Proposed Development will be designed to accommodate the required waste storage. In particular, the strategy will provide details on how each waste stream generated from each use class will be managed, and details on how waste will be reduced, minimised and recycled, where possible (in line with the Waste Hierarchy). | Planning Condition |
| **ES Volume 3: Appendix Arboriculture** | | |
| TREES1 | Protection of retained trees with tree protection fencing as per the recommendations set out in BS 5837:2012. | Planning Condition |
| TREES2 | Approval of an Arboricultural Method Statement (AMS) with the LBS where there are impacts within retained tree RPAs and agreement of the required measures to afford tree protection. | Planning Condition |
| **ES Volume 3: Appendix Flood Risk Assessment and Drainage Strategy** | | |
| FLOOD1 | Flood Resilient Measures. As per LBS Sustainable Design and Construction Supplementary Planning Document (2009), during construction the opportunity shall be taken to adopt flood resilient design techniques on the ground floor and basement, and to allow for the removal of water from the basement in the event of inundation. Resilient construction measures would reduce/remove the impact of a flood event on the structure of the building. The following has been identified as possible options for inclusion at this site:<br>• Locate a sub-surface sump in the basement for pumped removal of floodwater from any source;<br>• Use of flood resistant building materials;<br>• Use of solid concrete floors instead of timber flooring;<br>• Use of water-resistant wall coatings;<br>• Use of water-resistant plasters, including water resistant render, lime-based plaster finishes, ceramic tiles and hydraulic lime coatings;<br>• Use of horizontally laid plasterboard;<br>• Use of galvanized and stainless steel fixings;<br>• Use of treated wood instead of MDF or softwoods;<br>• Install non-return valves on the drainage outlets of the building, especially those from the basement; and<br>• Raising electrical wiring above ground levels, where practicable.<br>Additionally, the buildings shall be designed to accept the flow of water through passageways and to drain water after flooding, particularly the basement.<br>Access shall be available to all spaces to permit drying and cleaning after a flood event. | Planning Condition |
| | The sub-stations and plant are contained in areas that are resistant to breach floodwater by protection by raised ground floor levels. | Planning Condition |
| FLOOD2 | Registration with the EA Flood Warning System. Implementation of a Flood Warning and Evacuation Plan. | Planning Condition |
| FLOOD3 | Due to the risk associated with the surface water flooding in St Thomas Street and Vinegar Yard, it is recommended that the protection of the basement is a permanent fixture capable of protecting to a minimum level of 4.39m AOD at the junction between St Thomas Street and Fenning Street and to a minimum of 3.69m AOD in Vinegar Yard. This protection would be achieved by setting the finished floor levels at or above breach levels. | Planning Condition |
| FLOOD4 | The surface water discharge to be restricted to a discharge rate of 2.65 litres/sec into the public sewer. | Planning Condition |
| **ES Volume 3: Appendix GHG Assessment** | | |
| GHG1 | **Water Consumption**<br>The Proposed Development will seek to incorporate water efficient design measures to minimise the water consumption. Water consumption aiming to be a 45% improvement over the baseline. | Planning Condition |
| GHG2 | **Re-use of Material**<br>Wherever possible, the design will incorporate the use of RCA (recycled concrete aggregate) up to a maximum mass faction of 20 % according with the BS8500-1; 10% total value of materials to be derived from recycled and reused content in products and materials selected. | Planning Condition |
| GHG3 | **Materials with Low Embodied Impact**<br>The LBS SPD's standards regarding sustainable materials specification and procurement include: Avoidance of insulation materials containing harmful substances which contribute to stratospheric ozone depletion; A preferred standard to specify at least 75% of main elements of the building to achieve A rating in the BRE Green Guide to Specification; Use of low emission finishes, construction materials, carpets and furnishings; Maximising the use of recycled construction materials; Use prefabricated and standardised modulation to minimise material waste; Prepare a green procurement plan detailing how construction materials will be sustainably sourced; 50% of construction materials by mass to be sourced within 35 miles of the site. | Planning Condition |
| GHG4 | **Material Efficiency** | Planning Condition |

| Reference | Summary of Mitigation Measures | Suggestion for Securing |
|---|---|---|
| | Opportunities and measures to optimise the use of materials in building design, procurement, construction, maintenance and end of life will be identified within a materials efficiency plan in alignment with the BREEAM criteria | |
| GHG5 | **Fabric Design**<br>Specification of building materials considered fabric efficiency to reduce heating and cooling loads. | Planning Condition |
| GHG6 | **Low NOx Emissions**<br>The plant to be installed to meet the building's delivered heating and hot water demand will have zero / low NOx emissions. | Planning Condition |
| GHG7 | **Energy Efficient Lighting Control**<br>Introducing presence detection and daylight dimming within spaces which have access to daylight will reduce the lighting levels for times when the lux levels are available via natural daylight. Furthermore, LED lighting will be required to achieve predicted lighting levels. All luminaires will be provided with dimmable control gear (addressable) to suit its type and application. | Planning Condition |
| GHG 8 | **Overheating**<br>Percentage of glass and shading devices on the façade shall be designed with the aim to minimise solar heat gains entering the building. | Planning Condition |
| GHG 9 | **Energy Efficient Ventilation**<br>The development achieves a comfortable environment under a mixed mode ventilated scenario. It is estimated that a saving of 19.6% on cooling energy will be achieved through the use of free cooled outside air to ventilate the spaces during mid-season and night-time in compliance with GLA cooling hierarchy due to the use of passive measures. | Planning Condition |
| GHG 10 | **Low Carbon Technology**<br>Façade and roof mounted PV panels will enable on-site electricity generation and are expected to provide 35,000kWh/year; Energy efficient and low carbon technology with passive design to be incorporated into the development. | Planning Condition |
| GHG 11 | **Building Management System**<br>This will fully control, monitor and record the various mechanical, electrical and public health systems in addition to fully monitoring the energy usage through installing local energy monitors. The building manager will be able to record energy usage and identify where additional energy savings can be made. | Planning Condition |
| GHG 12 | **Low GWP Refrigerants**<br>Any systems using refrigerants will have Direct Effect Life Cycle CO2 equivalent emissions (DELC CO2e) of ≤ 1000 kgCO2e/kW cooling/heating capacity. Additionally, where air-conditioning or refrigeration systems are to be installed the refrigerants used have a Global Warming Potential (GWP) ≤10. | Planning Condition |
| **ES Volume 3: Appendix Health Impact Assessment** | | |
| HEALTH1 | Create and adhere to commitments/targets set in a Site Waste Management Plan / Resource Management Plan | Planning Condition |
| HEALTH2 | Measures to promote local procurement during both construction and operation to be secured through a Section 106 agreement. | Planning Obligation |
| HEALTH 3 | Implementation of all embedded mitigation and mitigation measures proposed in the Environmental Statement, Energy and Sustainability Statement and Preliminary Biodiversity Offsetting Assessment. | Planning Condition |

## ANNEX A – WIND MITIGATION MEASURES