PARLIAMENT HILL AND WILLIAM ELLIS SCHOOLS
HIGHGATE RD, LONDON NW5 1RL

Draft Construction Management Plan

Client: A-studio

Report No. 13-255-02 Rev C
December 2014

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Odyssey Markides
Elizabeth House
39 York Road
London
Tel: 0207 620 2444
Fax: 0207 620 1168
enquiries@odysseymarkides.com

Project No. 13-255
December 2014

DOCUMENT CONTROL SHEET

REV	ISSUE PURPOSE	AUTHOR	CHECKED	REVIEWED	APPROVED	DATE
	Draft for Comment	SR	PJH	SR	SRB	August '14
A	Second Draft	SR	PJH	SR	SRB	November '14
B	For Issue	SR	PJH	SR	SRB	December '14
C	Final For Issue	SR	PJH	SR	SRB	December '14

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1.0 INTRODUCTION

1.1 This draft Construction Management Plan (CMP) has been prepared by Odyssey Markides on behalf of A-studio and relates to the site at Parliament Hill School (PHS) and William Ellis School (WES) in Highgate Road, Camden NW5 1RL (refer **Figure 1** - Site Location Plan).

1.2 This CMP has been produced to support a planning application at the above site (comprising both schools). There is accordingly, at the time of writing, insufficient details to allow wholly accurate estimation of the number of construction vehicular movements associated with the works, or indeed the exact construction periods for each of the construction phases. This Plan therefore, as agreed with Camden Council highways officers during pre-application discussions, takes the form of a 'draft' document to be revised post receipt of any planning permission once more detailed design has been completed and a main contractor appointed.

1.3 The aim of this Plan is to minimise the impact of construction vehicle activity in the immediate vicinity of the development site and on the surrounding public highway. This Plan has taken into account guidance published by Transport for London (TfL) for the production of Construction Logistics Plans entitled: *"London Freight Plan"*, the stated vision of which is set out at paragraph A7 of that publication as follows:

> *'…the safe, reliable and efficient movement of freight and servicing trips to, from, within and, where appropriate, through London to support London's economy, in balance with the needs of other transport users, the environment and Londoners' quality of life…'*

1.4 In line with the above vision, the London Freight Plan specifically requires the following, relevant to construction activity:

- A strategy leading to the reduction of the number of servicing and delivery trips associated with construction;

- A Plan showing when and where construction deliveries and servicing can take place safely and legally.

1.5 In accordance with the above guidance, this report considers vehicular activity associated with the proposed construction works at the schools, including the following:

- Volume and frequency of construction-related trips;
- Vehicle type;
- Expected vehicle types;
- Initial programme of works;
- Loading/ unloading operations;
- Identification of CMP measures including vehicle call-up arrangements;
- Construction vehicle routeing on the wider highway network;
- Management of dust, noise and vibration associated with construction vehicles.

1.6 This CMP additionally relies on guidance published by LB Camden as follows:

- Camden Planning Guidance 6 (Amenity) – 2011;
- Guide for Contractors Working In Camden – February 2008;
- Local Development Framework Policy DP20 – November 2010;
- 'CMP Checklist' issued by Camden Council;
- Construction Management Plan Section 106 Wording.

1.7 The contents of the approved (Final) Construction Management Plan will be complied with by the contractor. The project manager/ contractor will liaise with the Council as necessary to review and revise the Construction Management Plan. Any revised plan must be approved by the Council and complied with thereafter.

1.8 This Plan is set out as follows:

- **Section 2.0** – Describes the development proposals and the existing highway network conditions in the vicinity of the site;
- **Section 3.0** – Describes the management of the on-site operations;
- **Section 4.0** – Considers the impact of construction vehicles on the local public highway by identifying the type of construction vehicles expected at the site during the works. This section also considers 'local' access routes to the site in the context of existing road geometry;
- **Section 5.0** – Considers construction traffic routes to and from the strategic road network. This section also sets out the expected frequency and volume of construction-related traffic;
- **Section 6.0** – Describes the principles and codes of practice which construction traffic at the site will be subject to, as well as the measures to be implemented in managing construction traffic with a view to minimising the impact on other users of the public highway and local residents;
- **Section 7.0** - Summarises and concludes how this Plan accords with the London Freight Plan and Camden Council's own requirements in managing construction activity for the purpose of minimising the impact of the construction works at the considered site.

2.0 EXISTING HIGHWAY CONDITIONS AND PROPOSED DEVELOPMENT

The Site and Surrounding Highway Network

2.1 The site, which comprises Parliament Hill and William Ellis schools, is bounded to the north-east by Highgate Road (B518) and to the north and west by Hampstead Heath. The southern boundary of the site is formed by dwellings fronting onto Lissenden Gardens. Highgate Road is a two-way single carriageway road which provides access to Kentish Town to the south and Highgate to the north (refer **Figure 1**). A 20mph speed limit is operational on Highgate Road in the vicinity of the campus.

2.2 Highgate Road has an approximate carriageway width of between 8 - 10 metres along the site frontage, with lit footways on either side approximately 3.5 metres in width.

2.3 Parking provision on Highgate Road along the site frontage takes the form of parallel bays on the western side of the carriageway, with these bays subject to the following restrictions between Monday and Friday between 10am and Noon:

- Permit Holders (CA-U);
- Pay and Display (maximum stay 1.5 hours).

2.4 The remainder of the site frontage is subject to single and double yellow lines, with waiting prohibited on single yellow lines between 7am and Noon (Monday to Friday). Loading along the site frontage is prohibited between 7am and Noon (Monday to Friday).

2.5 Pedestrians are catered for in the immediate vicinity of the site by the means of the following facilities:

- A Pelican crossing of Highgate Road approximately 95m to the south of the main PHS pedestrian access;
- A raised table crossing of Lissenden Gardens at its junction with Highgate Road;
- Dropped kerbs, tactile paving and a pedestrian refuge crossing immediately to the south of the vehicular access to William Ellis School;
- A Zebra crossing on the northern side of the above school access.

Proposed Development

2.6 Parliament Hill and William Ellis schools have been identified as facilities requiring improvement and redevelopment, particularly for the purpose of improved sustainability. The improvement works are funded by LB Camden as part of their Community Investment Programme.

2.7 The aim of the project is to provide buildings which meet relevant Department of Education standards, improving school accommodation spaces and maximising the energy efficiency of the site.

2.8 The aims of the project will be met by redeveloping both schools, constructing a new accommodation building at PHS, constructing a new courtyard at WES and constructing a new LA SWAP building on the existing PHS site.

Programme

2.9 It is anticipated that works will begin in Autumn 2015 (subject to receipt of planning permission) and will take approximately 30 months to complete the construction and landscaping work.

2.10 Works at the site are to be split into phases as shown on the phasing diagrams prepared by A-studio and included in **Appendix A**. The works phasing is summarised below:

- **Phase 1** - Enabling Works;
- **Phase 2** - Demolition of the existing Gym, Teaching Block, Canopy at the DT building and Caretakers House at PHS;
- **Phase 3** - New Build works to include the LA SWAP building, PHS Teaching Building and Sports Block with landscaping at Highgate Road, as well as the Teaching Block at WES;
- **Phase 4** - Demolition works to include the Heath Building, Hall Block and Octagonal Building at PHS as well as the existing court yard building at WES; and
- **Phase 5** - New build works to include the Dining Block and remainder of the Teaching accommodation at PHS, including landscaping as well as the new roof over the existing court yard at WES with landscaping works.

2.11 For the purpose of this CMP the construction will be grouped into two main stages. Stage 1 will include Phases 1 to 3 and Stage 2 will include Phase 4 and 5.

3.0 SITE MANAGEMENT

3.1 The appointed Contractor will be required to adhere to the management measures described in this section of the Plan. The Plan will be reviewed and updated with the contractor once appointed.

Induction / Site rules / Consultation

3.2 Each person wishing to access the site will receive a project specific induction, with such inductions providing an introduction to the project, a description of the project risks and a review of the individual's competency. Site access passes will only be distributed following the formal site induction from the Principal Contractor's management personnel. All site operatives and visitors will be inducted prior to commencement on site in a clearly defined facility without exception.

3.3 The induction process will include the following:

- Behaviour toward others on site;
- Drugs and alcohol policy;
- Identification of smoking areas;
- PPE and safety issues;
- Welfare facilities and use thereof;
- Security Issues;
- Emergency procedures;
- Good and bad practice.

3.4 The Principal Contractor will also provide site inductions in languages other than English where appropriate and site signage in picture format to assist communications.

3.5 Regular "tool box talks" will be undertaken by the Principal Contractor and sub-Contractors, highlighting relevant health and safety issues as the works progress.

Health and Safety

3.6 To minimise risk and control exposure, the Principal Contractor will provide input at the early detailed design stage on all activities. The Principal Contractor will ensure that all H&S procedures are diligently monitored throughout the project.

First Aid

3.7 Sufficient numbers of qualified First Aiders will be in attendance on-site at all times. Sub-Contractors will be required to provide First Aid trained staff, who will clearly be identified by badges.

Construction Activities

3.8 Demolition and construction will be carried out in accordance with details, method statements, and risk assessments approved by the Principal Contractor's site management and as part of the Final CMP.

Site Management

3.9 Contact numbers for the Contractor will be displayed at the site should local residents/ members of the public have any concerns that they wish to raise. Relevant officers at Camden Council will be issued with the above contact details as soon as the contract is awarded. Any issues raised relating to the construction works will be taken seriously and addressed promptly by the Contractor.

3.10 Safety signs and notices will be displayed at strategic access and egress points as well as at suitable locations across the site. Such boards will display the project particulars, contact details of relevant persons, site access and egress procedure, site rules, emergency procedures and health and safety information.

3.11 The Contractor will ensure that vehicles linked to the works cause minimal obstruction or inconvenience to the operation of the public highways and local residents by strict adherence to the measures set out in this Plan.

3.12 Site management will be responsible for seeing that all plant and materials are stored safely and securely after the workday ends.

Site Management and Site Working Hours

3.13 The Principal Contractor will adhere to the Construction Code of Practice within the Borough of Camden which limits working hours as follows:

- Monday to Friday – 08.00 hours to 18.00 hours;
- Saturday – 08.00 hours to 13.00 hours;
- Sunday or Bank Holidays - No Works.

3.14 Where dispensations are required in respect to the above, such will be requested in good time (in writing) from Camden Council's Environmental Team.

Site Security – Lighting

3.15 Construction lighting will be sited so as to minimise visual intrusion and light spillage/ pollution at nearby residential properties, in so far as is consistent with the site safety requirements.

3.16 The Principal Contractor will comply with the Institute of Lighting Engineers document *'Guidance notes on reduction of light pollution'* (2000) to a degree that is practicable and applicable to the construction works.

3.17 Adequate security shall be implemented to prevent unauthorized entry or exit from the site. Site gates will be closed and locked when there is no site activity, whist accesses will be manned during work periods.

Site Security – Fire Escape Routes

3.18 Fire escape routes, fire-fighting stations, alarm points, muster points and practice drills within the works will be as per the Principal Contractor's standard health and safety procedures and agreed with the local fire officer. All operatives

and sub-Contractors will be made aware of the fire procedure prior to accessing the site.

Site Security – Emergency Access

3.19 Access for emergency services during the works will be via the construction accesses. Local emergency services will be notified of the access point before work starts on site and in good time in the event that access arrangements are altered during the works.

3.20 Hailing of emergency services will be actioned in accordance with on-site emergency procedures.

Asbestos

3.21 An Asbestos survey will be completed at the early detailed design stage. If any Asbestos is present, this will be removed by licensed Contractors only, and only after submission of the 14 day notice (ASB5) to the relevant authorities. The HSE will be notified of the works prior to implementation and subsequent to completion of asbestos removals method statements. All works areas will be sealed off from members of the public. The HSE will be notified on form NNLW1.

Pollution and Dust Control

3.22 The site will implement suitable measures to ensure minimal dust pollution, with the Principal Contractor overseeing the detailed measures to be implemented in this respect which include the following (discussed in detailed in **Section 6.0)**:

- Ensuring that all materials transported to and from site are in enclosed containers or fully sheeted;
- Ensuring stock piles of topsoil etc. are kept below hoarding heights and kept damp in dry windy conditions;
- Making sure all dust generating materials are adequately packaged;

- Keeping the loading drop heights of soil into lorries as low as possible;
- Establish air quality procedures to minimise dust generation and control plant and vehicle dust emissions.

3.23 Any environmental issues raised by local residents or members of the public will be addressed as a matter of priority.

Noise / Vibration

3.24 The Principal Contractor will adhere to the key legislation on noise and vibration as detailed in the following documents:

- Control of Pollution Act 1974;
- Environmental Protection Act 01990 (ss79-82);
- BS 5228:1997 Code of Practice on Construction and Open Site.

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

3.26 Specific construction management measures are discussed in **Section 6.0**.

4.0 LOCAL HIGHWAY IMPACT

Construction Vehicles

4.1 It is, prior to detailed input from the scheme Contractor (who has not been appointed at the time of writing) anticipated that the following construction vehicles would be utilised during the works:

- Small skip lorry – 6.26m in length;
- Concrete mixer – 8.36m in length;
- Rigid truck – 10m in length;
- Large tipper – 10.2m in length;
- Low Loader (piling rig delivery) – 17.9m in length.

Site Access/ Internal Highways

4.2 The site access arrangements and on-site layout will vary for the two construction Stages previously described. The site will during Stage 1 be accessed via the existing car park access point at the southern end of the site (refer **Drawing 13-255-101 and 102)**.

4.3 It is acknowledged that the existing access would need to be widened to accommodate the largest expected construction vehicles. As indicated on **Drawing 13-255-101**, for large vehicles exiting the site to the north, consideration may need to be given to the temporary suspension of the indicated length of existing parking bays to ensure that construction vehicles do not encroach onto the southbound lane of Highgate Road. It is however relevant to note that refuse collection vehicles (of similar length to the assessed Tipper-type vehicle) currently undertake this manoeuvre within the context of the existing bays. The matter of any potential parking bay suspension will form the subject of details discussions with Camden Highways post receipt of any planning permission.

4.4 During Stage 2, access to the site will be via the existing vehicular entrance to William Ellis School located on Highgate Road.

4.5 **Drawings 13-255-103** and **13-255-104** indicate the swept paths of a 'Large Tipper' (10.2m) vehicle successfully accessing and egressing the site for Stage 2 of the works. A number of on-site parking bays along the route of construction vehicles during this stage of works would need to be suspended. All school staff would be notified in good time of the arrangements.

Conflict Management

4.6 While the schools are operational, interaction between staff/ pupils and construction activity will be limited by having staff/ students use alternative entrances, minimising construction vehicle movements to isolated areas and providing pedestrian access locks where any interaction may occur. Pedestrian access for each of the schools, for each Phase, is shown on the phasing diagrams in **Appendix A**.

Materials Unloading / Storage

4.7 The site will accommodate plant and material storage areas free of the public highway during the entirety of the works. The storage area for Stage 1 will be within the proposed car park area. For Stage 2, the storage area will likely be within one of the proposed sporting areas or within a proposed landscaping area at the western end of the site. **Drawings 13-255-101** to **13-255-104** indicate the location of the storage areas**.** No reliance will thus be made on an on-street storage facility at any stage of the works.

Diversion on the Public Highway/ Car Parking Bay Suspension

4.8 The expected volume and type of construction traffic required for the considered works will not lead to the requirement for diversion of traffic on the public highway. Similarly, no on-street parking bays are expected to require suspension owing to the proposed construction works (subject to confirmation from Camden Highways as previously identified).

Provision for Pedestrians

4.9 As there are no existing pedestrian crossing facilities (of Highgate Road) in the vicinity of the site entrance for Stage 1, diverting pedestrians is not considered appropriate for this Stage. Pedestrian flows at the site entrance will accordingly be controlled by qualified banksmen, who will be on duty at all relevant periods. Additionally, deliveries will be programmed to avoid peak school periods at the start and end of each day.

4.10 For Stage 2, it is proposed to divert pedestrians during peak periods using the western side of Highgate Road in the vicinity of the construction access, to the eastern side of the carriageway. This will be achieved by installing temporary signs at the existing pedestrian crossing facilities located on either side (to the north and the south) of the site entrance. **Drawing 13-255-105** shows the proposed arrangement for diverting pedestrians.

Contractor's Vehicles

4.11 The Principal Contractor will actively manage use of on-site parking. All staff and sub-contractors will be informed that on-street parking in the vicinity of the site is restricted, with on-site parking provided for essential trips only, and only by prior arrangement with the site manager. It is thus anticipated that the amount of staff-related traffic resulting from the construction works at the development will not result in any material impact on the operation of the public highway.

4.12 All construction staff will be encouraged to use public transport, with the nearest rail station being Gospel Oak and the nearest tube station being Tufnell Park. Buses operating on Highgate Road along the site frontage additionally provide access to the site which has a PTAL of 3.

5.0 CONSTRUCTION TRAFFIC ROUTEING, FREQUENCY AND VOLUME

5.1 This section of the CMP discusses the routeing of construction traffic on the wider highway network. This section also provides details relating to the anticipated works programme (Note: As identified previously, this CMP has been prepared prior to appointment of a Contractor and as such detailed matters relating to the works programme and total vehicle movements will be included in the 'Final' version of this Plan).

Routeing of Construction Traffic

5.2 Construction traffic will access the site from the strategic (Class A road) network via the following routes (refer to **Figure 2**):

- **From the North:** From the A1 via Highgate Hill (B519), Highgate High Street (B5119), S Grove, Highgate West Hill and Highgate Road;
- **From the East:** From the A1 via Junction Road (A400), Fortess Road (A400), Fortess Walk and Highgate Road (B518);
- **From the West:** From Rosslyn Hill (A502) to Pond St (B518), Agincourt Road (B518), Mansfield Road (B518), Gordon House Road (B518) and Highgate Road (B518).

5.3 Construction traffic will exit the site to the strategic (Class A road) network via the following route (refer to Figure 3):

- **To the North:** Left onto Highgate Road (B518), Highgate West Hill, S Grove, Highgate Hill (B519) and the A1 (or via West Hill, North Road and N Hill toward the A1);
- **To the East:** Right onto Highgate Road (B518), Fortess Walk, Fortess Road (A400), Junction Road (A400) and the A1;
- **To the South:** Right onto Highgate Road (B518) and proceed via Kentish Town Road;

- **To the West:** Right onto Highgate Road (B518), Gordon House Road (B518), Mansfield Road (B518), Fleet Road (B518), Pond St (B518), Rosslyn Hill (A502).

5.4 The above routes have not been assessed by means of the AUTOTrack software as they follow main routes suitable for larger vehicles.

5.5 Routeing information will be supplied to all contractors/ suppliers at the site. Records of correspondence with suppliers relating to the agreed access routes will be maintained, so that in the event of non-compliance in this matter, suppliers could be held accountable.

Works Programme/ Phasing

5.6 Construction is due to commence in Autumn 2015 (subject to planning consent) with completion of construction in William Ellis School, Parliament Hill School and LAS scheduled for completion after 30 months. The Phasing of the development is shown on the plans in Appendix A.

5.7 It is relevant to note, as this is a preliminary Construction Management Plan (and as agreed by the LB Camden) that the works schedule will be refined and confirmed upon appointment of the Contractor.

Anticipated Construction Vehicle Volumes

5.8 Given the project is still in the design phase and no contractor has been appointed it is difficult to accurately quantify the volume of materials to be delivered and removed from the site and the exact methods/ vehicles used. It is however reasonably assumed that the maximum number of heavy vehicles would not exceed 10 HGVs per day during the peak periods of the construction phase. These vehicles would include tipper-type vehicles, delivery and concrete mixer trucks. The number of heavy vehicles accessing the site is expected to be considerably less during the demolition and fit out phases.

5.9 In view of the strict management of construction vehicle activity at the site (detailed in **Section 6.0**), it is considered unlikely that more than one large vehicle would access the site simultaneously. In the event that this does occur however, **Drawings 13-255-101** to **13-255-104** indicate sufficient area within the Contractor's storage areas to hold additional vehicles.

5.10 More detailed information will be provided once detailed design of the project is complete and the Contractor is appointed. The approach of preparing a preliminary Construction Management Plan has been agreed by LB Camden during pre-application discussions.

Site Hours of Operation

5.11 The site will operate within timescale noted below with no deliveries to the site taking place outside of those hours:

- Monday to Friday: 8:00am – 6:00pm;
- Saturdays: 8:00am – 1:00pm;
- Sundays and Bank Holidays: No operation.

5.12 The works manager / site foreman will programme all construction vehicle trips such that none take place outside of the above hours. All suppliers will be informed of the site's hours of operation and any Contractors arriving after the identified deadlines will be turned away.

6.0 CONSTRUCTION TRAFFIC MANAGEMENT MEASURES

6.1 The site manager, and by delegation the site foreman, will take ownership of the final/ approved CMP and will ultimately be responsible for implementing the measures set out therein. The Contractor will contact Camden Highways Officers prior to commencement of works to agree any final matters relating to the Construction Management strategy.

Vehicle Call Up Procedure/ Vehicle Holding Areas

6.2 Pre-arranged delivery times will be set by the site manager and will be strictly adhered to in order to prevent more than one delivery vehicle accessing the site at any one time. Drivers will be required to make contact with the site 30 minutes before arrival to ensure a clear space. The above requirement will form part of all contract documentation with suppliers. In view of the above procedure, no 'wider' off-site vehicle holding areas are proposed in association with the proposed works.

6.3 It has previously been discussed that the site will make sufficient/ suitable provision in the event that more than one (large) vehicle simultaneously attends. This situation is however not expected to regularly occur owing to strict management of arrivals.

Parking Suspensions

6.4 It is not expected that any parking suspensions will be necessary on the public highway.

Co-ordination with Other Construction Activity

6.5 The site manager will, prior to commencement on site and at regular intervals during the construction and in liaison with relevant officers at Camden, check for other local construction activity for the purpose of liaising with those sites on matters relating to construction activity (including vehicle movements).

Co-ordination with Domestic Waste Collections

6.6 The LB Camden's website states that domestic rubbish and recycling collection activity in the vicinity of the site takes place on Mondays. The Contractor, all sub-contractors and suppliers will be made aware of the existing collection activity and will ensure that waste collection vehicles are not unduly obstructed by the construction works. To this end, priority will be given by banksmen to waste collection vehicles where relevant.

Wheel Washing

6.7 A wheel washing facility will, in accordance with good practice, be provided at the site for use throughout the construction period. Any mud or debris that might find their way onto the public highways will be removed by a dedicated member of the Contractor's staff.

General Management

6.8 The following general measures will be in place:

- All parties to sign In & Out (name / time) at main entrance;
- A daily record of visitors will be kept on site;
- Deliveries to site will be restricted between the hours of:
  - 08.00 – 17.00hrs Monday to Fridays;
  - 08.00 – 13.00hrs Saturdays and no other times, including Sundays and Public Holidays and not within school afternoon period 15.00 – 16.00;
- Trade Contractors are to submit material delivery requests to the Site Manager a minimum of 24 hours in advance;
- The main Contractor, once appointed, is to liaise with all sub-Contractors to inform them of the agreed vehicle routes to and from the site;
- The Contractor is to notify all suppliers that no waiting or queuing is permitted on local roads;

- No vehicles will be left unattended. No stacking of vehicles or parking within parking bays is permitted. Vehicles not adhering to the above can and will be turned away by the Contractor;
- All vehicles will access the site off Highgate Road. The Contractor is to maintain safe control of traffic and deliveries across the public highway in and off site;
- A banksman will be provided to manage the site access. The banksman will additionally be tasked with ensuring that pedestrian access can be safely provided whilst works are taking place;
- The Demolition and Principal Contractor is to provide evidence of recycling by means of a waste data receipt/ form, which will be forwarded on to the CDM / Project Manager;
- All vehicles loading/ off-loading materials to and from high level bedded vehicles will need to provide suitable guard rail protection;
- Implementing an effective procedure to deal with complaints from third parties to ensure issues are dealt with efficiently and quickly, via an advised and dedicated telephone number.

Pollution and Dust Control

6.9 Camden Council require the control of construction vehicle and plant emissions, with particular emphasis on PM10 and NOx emissions. Upon appointment of a Contractor, and prior to any works taking place, a Method Statement will be prepared and submitted in line with the minimum recommendations set out in Camden's *"Construction Management Plan"* document included in **Appendix B**.

6.10 Similarly, the Method Statement will include details relating to the control of dust emissions from demolition and construction activity.

6.11 The method Statements should include measures to reduce dust pollution and other airborne debris such as:

- Ensuring that all materials transported to and from site are in enclosed containers or fully sheeted;
- Ensuring stock piles of topsoil etc. are kept below hoarding heights and kept damp in dry windy conditions;
- All vehicles removing dust generating materials or waste are to be completely sheeted with tarpaulin/ netting;
- Ensuring materials have a minimum of packaging;
- Ensuring all polystyrene and similar lightweight materials are weighted down;
- Making sure all dust generating materials are adequately packaged;
- Ensuring all vehicles leaving the site have been through the wheel wash and that loads are covered where spoil or demolition material is being removed;
- Keeping the loading drop heights of soil into lorries as low as possible;
- Establish air quality procedures to minimise dust generation and control plant and vehicle dust emissions;
- Undertaking regular air quality sampling to monitor air quality levels.

6.12 In addition to the above provisions, the following measures will be taken to reduce any further negative effects on the environment:

- Ensuring all contaminants on site are safely stored with the necessary procedures put in place for leaks and spillages etc.
- A waste management system will be implemented on site.

Noise / Vibration

6.13 A variety of measures will be used to minimise the noise levels at the site, including:

- Coordinated delivery times and efficient traffic management to prevent queuing of 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 system during the demolition process;
- Strict adherence to the site working hours;
- Using acoustic hoarding where necessary;
- Carry out periodical noise surveys at perimeter of site and record findings;
- Implement an action plan where noise levels exceed acceptable levels;
- Positioning plant away from properties;
- Machines not in use will be throttled down to a minimum;
- Cutting operations will be kept off site as much as possible by pre-fabrication;
- Localised shrouding of plant in accordance with BS5228.

Competent Heavy Vehicle Operators

6.14 All contractors and sub-contractors operating vehicles over 3.5 tonnes must meet all of the following conditions:

- Operators must be a member of TfL's Fleet Operator Recognition Scheme (www.tfl.gov.uk/fors) or similar at the Bronze level;
- All drivers must have undertake cycle awareness training such as the Safe Urban Driver module through FORS or similar;
- All vehicles associated with the construction of the Development must:
    - Have Side Guards fitted unless it can be demonstrated to the reasonable satisfaction of the Contractor that the vehicle will not perform the function for which it was built if Side Guards are fitted;

- Have a 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 driver's planned manoeuvre;
- Have a Class VI Mirror;
- Bear prominent signage on the rear of the vehicle to warn cyclists of the dangers of passing the vehicle on the inside.

Construction Management Plan Review

6.15 The site manager will deal with any complaints from local residents and businesses. To this end, contact details of the project team will be displayed at the site.

6.16 The site manager will also review the CMP, in liaison with the foreman, on a bi-weekly basis and will update the Plan as required. This will take into account local resident, business and Council views on how the operation may be improved. Any significant changes to the CMP will be reported to the Borough's Department of Planning and Borough Development by the main Contractor. It is highlighted that the main Contractor will be a member of the 'Considerate Constructors Scheme'. The Principal Contractor shall follow the recommendations and requirements set out in LB Camden's *"Guide for Contractors Working in Camden"*.

7.0 SUMMARY AND CONCLUSIONS

7.1 This draft Construction Management Plan has considered construction activity potentially resultant from the proposed works at the Parliament Hill and William Ellis schools in the London Borough of Camden.

7.2 This Plan has been prepared in accordance with TfL and LB Camden's guidance and requirements.

7.3 This Plan has considered construction vehicle access to the site on local roads in the context of existing road geometry and on-street parking provision. Such consideration has relied on swept path analysis of relevant construction vehicles. The exercise has confirmed that construction vehicles are suitably able to access and exit the site during both Stages of construction within the existing highway constraints.

7.4 Loading/ unloading at the site by means of construction vehicles will take place on-site, therefore minimising the effect on the local highway network that would result from on-street loading.

7.5 Access between the site and the strategic highway network can be achieved via main roads within the local area as shown on **Figures 1 and 2**.

7.6 Suitable measures have been identified in this Plan which will be implemented at the site with a view to reduce the traffic impact of the works on the public highway.

FIGURES

DRAWINGS

APPENDIX A

APPENDIX B

CONSTRUCTION MANAGEMENT PLAN

DEFINITIONS:

2. ”the Certificate of Practical Completion” — the certificate issued by the Owner’s contractor architect or project manager certifying that the Development has been completed

2. “Construction Management Plan” — a plan setting out the measures that the Owner will adopt in undertaking **[**the demolition of the Existing Buildings and**]** the construction of the Development using good site practices in accordance with the Council's Considerate Contractor Manual to ensure the Construction Phase of the Development can be carried out safely and with minimal possible impact on and disturbance to the surrounding environment and highway network including (but not limited to):-

(i) a statement to be submitted to Council giving details of the environmental protection highways safety and community liaison measures proposed to be adopted by the Owner in order to mitigate and offset potential or likely effects and impacts arising from the demolition of the Existing Buildings or structures on the Property and the building out of the Development;

(ii) **[**incorporation of the provisions set out in the First Schedule annexed hereto**] to be used for major developments only!**

(iii) incorporation of the provisions set out in the Second Schedule annexed hereto

(iv) **[**proposals to ensure the protection and preservation of the listed building during the Construction Phase;**]**

(v) **[**proposals to ensure there are no adverse effects on the Conservation Area features**]**

(vi) effects on the health and amenity of local residences site construction workers local businesses and adjoining developments undergoing construction;

(vii) amelioration and monitoring measures over construction traffic including procedures for notifying the owners and or occupiers of the residences and businesses in the locality in advance of major operations delivery schedules and amendments to normal traffic arrangements (if any);

(viii) the inclusion of a waste management strategy for

		handling and disposing of construction waste; and (ix) identifying means of ensuring the provision of information to the Council and provision of a mechanism for monitoring and reviewing as required from time to time
2.	"the Construction Phase"	the whole period between (i) the Implementation Date and (ii) the date of issue of the Certificate of Practical Completion **[**and for the avoidance of doubt includes the demolition of the Existing Buildings**]**
2.	"the Council's Considerate Contractor Manual"	the document produced by the Council from time to time entitled "Guide for Contractors Working in Camden" relating to the good practice for developers engaged in building activities in the London Borough of Camden

SUBSTANTIVE CLAUSES:

4.1 **CONSTRUCTION MANAGEMENT PLAN**

4.1.1 On or prior to the Implementation Date to provide the Council for approval a draft Construction Management Plan.

4.1.2 Not to Implement nor allow Implementation of the Development until such time as the Council has approved the Construction Management Plan as demonstrated by written notice to that effect.

4.1.3 The Owner acknowledges and agrees that the Council will not approve the Construction Management Plan unless it demonstrates to the Council's reasonable satisfaction that the Construction Phase of the Development can be carried out safely and with minimal possible impact on and disturbance to the surrounding environment and highway network.

4.1.4 To ensure that throughout the Construction Phase the Development shall not be carried out otherwise than in strict accordance with the requirements of the Construction Management Plan and not to permit the carrying out of any works comprised in demolition or building out the Development at any time when the requirements of the Construction Management Plan are not being complied with and in the event of non compliance with this sub-clause the Owner shall forthwith take any steps required to remedy such non-compliance.

SCHEUDULES:

THE FIRST SCHEDULE
Construction Management Plan
Air Quality and Carbon Reduction

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Requirements to control and minimise NOx, PM10, CO_2 emissions from construction sites and avoid nuisance and dust complaints.

A method statement shall be prepared and adopted as part of the Construction Management Plan to minimise gaseous and particulate matter emissions generated during the Construction Phase. The method statement shall identify the specific measures which will be implemented to control air pollution emissions during each of the following stages of the Construction Phase: (a) demolition; (b) ground breaking; and (c) construction/build.

The Construction Phase shall be carried out in accordance with the Best Practise Guidance Note "Control of dust and emissions from construction and demolition" published by London Councils, 2006. The risk rating of the site shall be defined in the

method statement and determined using the risk assessment methodology in the Best Practise Guidance. Techniques to control dust from construction activities and emissions from vehicles and plant, and undertake air quality monitoring, shall conform to the 'medium' or 'high' risk categories outlined in the Best Practice Guidance.

The following best practise measures shall be included as a minimum in the method statement:-

A - Techniques to control PM10 and NOx emissions from vehicles and plant

a) Low emission plant fitted with catalysts, diesel particulate filters or similar devices shall be used;
b) Plant shall be well maintained, with routine servicing of plant and non-road mobile machinery (NRMM) to be completed in accordance with the manufacturers recommendations;
c) Avoid the use of diesel or petrol powered generators and use mains electricity or battery powered equipment;
d) Non-road mobile machinery (NRMM) shall use ultra low sulphur tax-exempt diesel and be fitted with appropriate exhaust after-treatment such as catalysts, diesel particulate filters as stated on the approved list managed by the Energy Saving Trust. Details of the plant and control equipment shall be included in the method statement.
e) All construction vehicles shall comply with the Euro 4 emissions standard and where possible use low emission fuels and alternative technology.
f) Plant and vehicles shall be located way from the closest receptors or house in closed environments where possible.

B - Techniques to control dust emissions from construction and demolition

a) Keep site fencing, barriers and scaffolding clean using wet methods;
b) Buildings to be demolished shall be wrapped
c) Provide easily cleaned hard standing for vehicles and clean using wet sweeping methods;

d) Provide the use of wheel-wash facilities near the site exit. Fit wheel-washes with rumble grids to dislodge accumulated dust and mud prior to leaving the site to avoid carrying dust or mud off the site;
e) Inspect internal haul routes for integrity and instigate necessary repairs to the surface as soon as reasonably practicable;
f) Routinely clean the Public Highways and accesses using wet sweeping methods especially during dry periods;
g) Impose and signpost maximum speed limits of 10 mph on surfaced haul routes and work areas within the Site;
h) Ensure all vehicles carrying loose or potentially dusty material to or from the site are fully sheeted;
i) Store materials with the potential to produce dust away from site boundaries;
j) Sheet, seal or damp down stockpiles of excavated material held on site;
k) Any loose materials bought onto the site shall be protected by appropriate covering
l) The site shall be dampened down during the working day and again at the end of the day to reduce the amount that is re-suspended dust.
m) Ensure water suppression is used during demolition operations;
n) Ensure mobile crushing and screening plant and cement batching plant which are regulated under the Local Air Pollution Prevention and Control regime operate in compliance with a Part B Permit. This shall be submitted to the local authority prior to operation.
o) Site personnel shall be trained in dust mitigation and a manager shall be present for managing dust on site.

C - Air Quality Monitoring

a) Throughout the Construction Phase continuous particulate matter (PM10) monitoring shall be undertaken. Two instruments will be deployed at the site boundary in a transect orientated to the prevailing wind direction, with a third monitor located at the nearest sensitive receptor. One monitor shall be co-located with an anemometer.

b) Adequate quality assurance/quality control procedures shall be in place including monitor maintenance and calibration as well and data checking. PM10 data shall be collected automatically on an hour basis.

c) A trigger action level for PM10 concentrations of 200µg.m^{-3} (15 minute average) shall be used to identify incidences of elevated dust emissions at the site boundary. The development site shall comply with the trigger action throughout the demolition and construction phases.

d) An on-site alert system (email or SMS) shall be in place to notify appropriate staff that the trigger action level has been reached. Immediate and appropriate measures can be put in place to rectify abnormal particulate emissions. A procedure shall be established to deal with abnormal dust emissions. All incidences of abnormal particulate emissions leading to breaches of the trigger action level, shall be documented in the site log book (date and time), with details of the action take to remediate dust emissions.

e) An e-mail specifying details of any alert to be sent out to the Council's air quality officer as soon as practicable following any breach of the site trigger action level.

f) An electronic report shall be submitted to the Council's air quality officer every three months summarising the following information from each monitoring site – 24 hour average PM10 concentration, date and time of any breach of the trigger action level with the 15 minute mean concentration, prevailing wind direction and details of the cause of elevated dust emissions and mitigation measures.

g) The Council shall be notified of any changes to the location and operation of dust PM10 monitoring instrumentation.

h) A 24-hour phone hotline shall be set up so that residents can complain about high dust or PM10 levels directly to the developer.

The following items shall be included in the method statement:

a) A specific timetable identifying the start and finish dates of each phase, including dust generating activities and PM10 monitoring.

b) An inventory of stationary and fugitive dust, PM10 and NOx emission sources with an explanation of how these will be mitigated in accordance with the London Council's Best Practise Guidance.

c) A map identifying the location of dust generating activities, plant equipment associated with emissions to air and PM10 monitors.
d) An air quality monitoring protocol prepared in accordance with the requirements of section C.

D - Techniques to reduce CO_2 emissions from construction vehicles

A commitment from the Owner that contractors' vehicles involved in construction and demolition work will adopt 'green fleet management practices' that will result in a 10% reduction in tail-pipe CO_2 emissions over the duration of the construction phase. A green fleet management plan included in the method statement identifying measures to improve vehicle efficiency and reduce CO_2 emissions from construction vehicles. This could include the use of fuel monitoring equipment in vehicles, eco-driver training, accreditation with FORS (Freight Operator Recognition Scheme run by TfL) or SAFED (Safe and Fuel Efficient Driving run by the DfT) and use of low carbon vehicles such as hybrid electric, electric and bio-methane.

THE SECOND SCHEDULE
Construction Management Plan
Highway Measures

A Construction Management Plan outlines how construction work will be carried out and how this work will be serviced (e.g. delivery of materials, set down and collection of skips), with the objective of minimising traffic disruption and avoiding dangerous situations and minimising the impact on local amenity. A Construction Management Plan should cover both demolition and construction phases of development. Details of the Construction Management Plan will relate to the scale and kind and location of the development and they should assess the impact on transport and on local amenity including road user amenity. Should any one of these criteria be considered not to be relevant, then specific justification, as to why that particular criterion is not relevant, will need to be provided. The Construction Management Plan should demonstrate that the following has been considered and where necessary the impacts mitigated:

(Note the term 'vehicles' used here refers to all vehicles associated with the implementation of the development, e.g. demolition, site clearing, delivering of plant, material and construction, staff parking etc)

a) A brief description of the site, surrounding area and development proposals for which the Construction Management Plan applies.
b) Proposed start and end dates for each phase of construction.
c) The proposed working hours within which vehicles will arrive and depart.
d) The access arrangements for vehicles.
e) Proposed routes for vehicles between the site and the Transport for London Road Network (TLRN). Consideration should also be given to weight restrictions, low bridges and cumulative affects of construction on the highway. A map of the TLRN can be downloaded from the following site:- http://www.tfl.gov.uk/assets/downloads/TFL_Base_Map_Master.pdf
f) 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.
g) Swept path drawings for any tight manoeuvres on vehicle routes to the site.
h) Details (including accurate scaled drawings) of any highway works necessary to enable construction to take place.
i) Parking and loading arrangement of vehicles and delivery of materials and plant to the site.

j) Details of proposed parking bays suspensions and temporary traffic management orders.

k) Proposed overhang (if any) of the public highway (scaffolding, cranes etc.).

l) Details of hoarding required or any other occupation of the public highway.

m) Details of how pedestrian and cyclist safety will be maintained, including any proposed alternative routes (if necessary), and any Banksman arrangements.

n) Details of how traffic associated with the Development will be managed in order to reduce congestion.

o) Details of any other measures designed to reduce the impact of associated traffic (such as the use of construction material consolidation centres).

p) Details of how any significant amounts of dirt or dust that may be spread onto the public highway will be cleaned or prevented.

q) Details of consultation on a draft Construction Management Plan with local residents, business, local groups (e.g. residents/tenants and business associations) and Ward Councillors. Details should include who was consulted, how the consultation was conducted and the comments received in response to the consultation. In response to the comments received, the Construction Management Plan should then be amended where appropriate and where not appropriate a reason should be given why not. The revised Construction Management Plan should also include a list of all the comments received. You are advised to check your proposed approach to consultation with the Council before carrying it out.

r) Details of any Construction Working Group that will be set up, addressing the concerns of surrounding residents, as well as contact details for the person responsible for community liaison on behalf of the developer, and how these contact details will be advertised to the community.

s) Details of any schemes such as the “Considerate Contractors Scheme” that the project will be signed up to should form part of the consultation and be notified to the Council. Contractors will also be required to follow the “Guide for Contractors Working in Camden” also referred to as “Camden’s Considerate Contractor’s Manual”

t) Details of other construction sites in the local area and how your Construction Management Plan takes into consideration the cumulative effects of construction local to your site.

u) All contractors and sub-contractors operating large vehicles over 3.5 tonnes must meet all of the following conditions:-

1) Operators must be a member of TfL's Fleet Operator Recognition Scheme (www.tfl.gov.uk/fors) or similar at the Bronze level.

2) All drivers must have undertake cycle awareness training such as the Safe Urban Driver module through FORS or similar.

3) All vehicles associated with the construction of the Development must:

   i. Have Side Guards fitted, unless it can be demonstrated to the reasonable satisfaction of the Employer, that the Lorry will not perform the function, for which it was built, if Side Guards are fitted.

   ii. Have a 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 driver's planned manoeuvre.

   iii. Have a Class VI Mirror

   iv. Bear prominent signage on the rear of the vehicle to warn cyclists of the dangers of passing the vehicle on the inside.

v) Any other relevant information with regard to traffic and transport.

w) The Construction Management Plan should also include the following statement:-

"The agreed contents of the Construction Management Plan must be complied with unless otherwise agreed with 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 and complied with thereafter."

It should be noted that any agreed Construction Management Plan does not prejudice further agreement that may be required for things such as road closures or hoarding licences