GROVE LODGE ADMIRAL'S WALK HAMPSTEAD LONDON NW3 6RS



CONSTRUCTION MANAGEMENT PLAN

JULY 2015

Burke Hunter Adams Chartered Quantity Surveyors Project Managers 50 Gresham Street London EC2V 7AY

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APPENDIX

A Construction Vehicle Servicing Summary

1.00 INTRODUCTION

This document is the draft Construction Management Plan (CMP) for the proposed works at Grove Lodge, Admiral's Walk, Hampstead, London NW3 6RS. The objective of the Plan is to describe how the works are planned to be carried out and to explain how the effects of the works on the surrounding community will be mitigated to minimise them as far as is practicable.

This CMP follows the London Borough of Camden's preferred format and responds to feedback received from the local community in particular:

- Phased access from Admiral's Walk or Lower Terrace
- Restriction on timing of deliveries and noisy works
- Further definition of the number of anticipated vehicle movements
- Co-ordination with other Contractors working locally
- Management and mitigation of construction noise
- Access from Heath Street rather than Frognal
- Further detail in respect of construction vehicle tracking diagrams

The CMP confirms that the Contractor will be required to implement the plan in full and to instigate independent compliance monitoring with reports being issued directly to the Client and his Project Manager.

In addition, the Project will be registered with the Considerate Constructors Scheme and independently monitored by that body to see that the Code of Considerate Practice is respected and enforced.

A copy of the agreed plan shall be kept on site for reference.

2.00 DIRECTORY AND SITE CONTACTS

2.01 Site Address

Grove Lodge Admiral's Walk London NW3 6RS

2.02 Construction Management Plan

This Construction Management plan has been compiled by:

Burke Hunter Adams LLP Chartered Quantity Surveyors and Project Managers 50 Gresham Street London EC2V 7AY

2.03 Contractor

The Client has yet to appoint a Contractor. However, Walter Lilly and Company have provided advice and assistance to inform this CMP. Walter Lilly have considerable experience and a demonstrable track record of delivering high quality residential refurbishment projects such as proposed at Grove Lodge.

The project construction works will be tendered to a select list of Contractors who have demonstrated through pre-qualification their ability to undertake the works and the strength of their management systems.

The Contractor bidding process will include the requirement for prospective contractors to accept, adopt, finalise and implement this CMP for the Works should they be successful in being awarded the Building Contract. This commitment will be enforced with a contractual obligation placed upon the Contractor through the Building Contract.

2.04 Contractor's Details

Following selection and appointment of the Contractor, this CMP will be revised to include the following information:

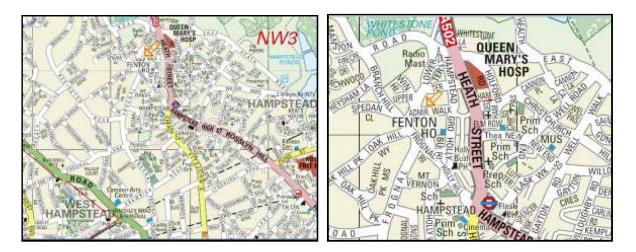
- Contact Details for Contractor's Project Manager
- Contact Details for Contractor's Site Manager
- Contact details for Contractor's Community Liaison Manager
- Contractor's address for receipt of formal notices.

3.00 DESCRIPTION OF THE SITE AND THE WORKS

3.01 Area Map and Site Location Plan

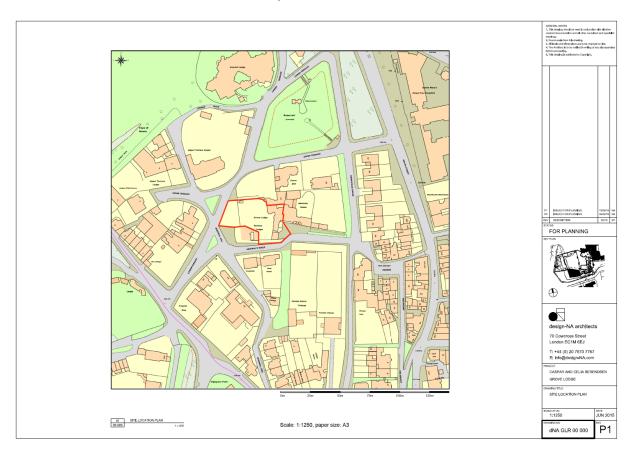
Area Map

The property is located to the North of Hampstead Village, close to and south of West Heath.



Site Location Plan

The site is located close to and bounded by Admiral's Walk and Lower Terrace as indicated below.



3.00 DESCRIPTION OF THE SITE AND THE WORKS (Continued)

3.02 Description of the Site, Surrounding Area and Proposals

Grove Lodge is a Grade II listed building and is situated within the Hampstead Conservation Area.

The site is at the convergence of Admiral's Walk, Windmill Hill and Lower Terrace.

The existing property is a semi-detached three-storey house with an existing basement. It is of traditional construction of load-bearing brickwork, timber joist and boarded floors, timber pitched roof covered with slates, and with timber windows and doors. Alterations have been made and extensions have been added at various times. The house shares Party Walls with Admiral's House to the east and Netley Cottage to the north. It has a paved forecourt at the front of the property on Admiral's Walk.

The works comprises the alteration and refurbishment of the property, consisting of the following:

- Site establishment.
- Taking down and removal of existing single-storey extensions, conservatory and garage.
- Excavation of basement, including bored piling, within the area currently occupied by single storey extensions and within the existing rear garden area.
- Construction of basement with basement slab and walls and suspended ground floor slab, including waterproofing and tanking.
- Two storey addition to main house over part of the basement.
- Structural alterations to the existing main house to suit new extension.
- Refurbishment and restoration works to the interior and exterior of the existing main house.
- Replacement of existing garden lightweight structures with a single-storey orangery.
- Re-landscaping of the garden areas.
- All necessary drainage works.

It is recognised that:

- The surrounding area is primary residential with closely-adjoined properties.
- The access to the site is restricted due to its location and the narrow approach roads from the South and the North.

The nearest potential receptors likely to be affected by the activities on site are:

- Admiral's House adjoining to the East.
- Netley Cottage adjoining to the North.
- Terrace Lodge adjacent to the South.
- Broadside and Fleet House across Admirals' Walk to the South.
- Nos. 1 4 Lower Terrace across Lower Terrace to the South West.
- Upper Terrace House across Upper Terrace to the North-West.
- Fenton House to the South East.

3.00 DESCRIPTION OF THE SITE AND THE WORKS (Continued)

3.03 Programme

The overall duration of the Construction Works has been assessed at 70 weeks. The summary programme below identifies the duration and sequence of the principal elements of construction together with the constraints imposed through site access.

The Client's intention is for the works to commence in January 2017. Based upon a construction duration of 70 weeks, the works will complete at the beginning of May 2018 as illustrated below.

	GROVE LODGE, ADMIRAL'S WALK, HAMPSTEAD BURKE HUNTER ADAM									
SUMMARY PROGRAMME OF WORKS AND ACCESS PERIODS										
ID	Task Name	Duration	Start	Finish	2017 Jan 17 Feb 17 Mar 17 Apr 17 May 17 Jun 17 Jul 17 Jul 17 Aug 17 ISao 17 IOct 17 Nov 17 IOct 17 Jun 18 Feb 18 Mar 18 Apr 18 May 18 Execconica 30 oct 320 2706/1302 2705 10 17 24 01 08 15 222 005 121 026 05 10 17 24 31 07 14 21 280 41 11 8250 200 16 23 30 06 13 20 27 06 31 01 24 01 08 15 22 200 51 21 026 05 12 1026 05 01 62 30 07 142					
1	Overall Works Programme (70 weeks)	350 days	Mon 02/01/17	Fri 04/05/18						
2										
3	Site Access from Admiral's Walk (10 weeks)	50 days	Mon 02/01/17	Fri 10/03/17	// 🕶					
4	Commencement	0 days	Mon 02/01/17	Mon 02/01/17	7 6 0201:					
5	Site Establishment	2 wks	Mon 02/01/17	Fri 13/01/17						
6	Site Clearance and Deconstruction	8 wks	Mon 16/01/17	Fri 10/03/17						
7	Structural Repairs	2 wks	Mon 27/02/17	Fri 10/03/17						
8										
9	Site Access from Lower Terrace (40 weeks)	200 days	Mon 13/03/17	Fri 15/12/17	/w					
10	Substructure & Groundworks	135 days	Mon 13/03/17	Fri 15/09/17						
11	Piling and Temporary Propping	10 wks	Mon 13/03/17	Fri 19/05/17	* ***********************************					
12	Excavation Works	10 wks	Mon 22/05/17	Fri 28/07/17						
13	Reinforced Concrete Works	14 wks	Mon 12/06/17	Fri 15/09/17						
14	External Works	80 days	Mon 28/08/17	Fri 15/12/17						
15	External Works	16 wks	Mon 28/08/17	Fri 15/12/17						
16	Superstructure Works	200 days	Mon 13/03/17	Fri 15/12/17						
17	Alterations to Structure	4 wks	Mon 13/03/17	Fri 07/04/17						
18	Refurbish Existing Superstructure	30 wks	Mon 13/03/17	Fri 06/10/17						
19	Construct New Superstructure	11 wks	Mon 18/09/17	Fri 01/12/17	7 ************************************					
20	New Roofworks	7 wks	Mon 30/10/17	Fri 15/12/17						
21	Internal Fitout	90 days	Mon 14/08/17	Fri 15/12/17						
22	Internal Fit-Out	18 wks	Mon 14/08/17	Fri 15/12/17	<mark>,</mark> ************************************					
23										
24	Site Access from Admiral's Walk (20 weeks)	100 days	Mon 18/12/17	Fri 04/05/18						
25	Complete External Works and Landscaping	15 wks	Mon 18/12/17	Fri 30/03/18						
26	Complete Internal Fit-Out	18 wks	Mon 18/12/17	Fri 20/04/18						
27	Commissioning	5 wks	Mon 02/04/18	Fri 04/05/18						
28	Handover	0 days	Fri 04/05/18	Fri 04/05/18						
Proie	ect: Outline Programme of Works and Access Periods		Task		Progress Summary Fremai Tasks Deadline &					
Dafe: June 2015 Spit Project Summary V External Milestone IV										
					Page 1 2641_150616. Outline Programme of Wo					

3.04 Working Hours

The proposed working hours are from 08:00 to 18:00 Monday to Friday and from 08:00 to 13:00 on Saturdays which accord with the standard working hours for construction sites in Camden.

Although the LB of Camden allow for noisy works to be undertaken on Saturdays from 08:00 to 13:00, to reduce the potential for noise and disruption from the site upon local residents, it is not intended to carry out noisy works at weekends or on Public or Bank Holidays. In addition, the programme allows for the site to shutdown over the Christmas and New Year period.

3.05 Utility Companies Services

There are no requirements for new incoming Utility Companies' services or alterations to existing services; therefore no excavation in footpaths or roadways is anticipated.

3.06 Asbestos

An Asbestos Survey is planned to be carried out prior to commencement of works on site.

If the survey indicates the presence of asbestos-containing materials, it is the Client's intention to have these removed in accordance with the relevant Regulations.

4.00 TRANSPORTATION ISSUES ASSOCIATED WITH THE SITE

4.01 Construction Vehicle Servicing

The site is located in a residential area and with schools in the vicinity. Peak traffic flows on the local roads have been identified between 08.00 – 09.30am and 03.00 and 04.00pm, Monday to Friday.

In consequence, to avoid increasing peak traffic flow and to limit the effect of the construction activities on the local residents and local road network, construction vehicle servicing traffic movements will be restricted to the following hours:

• 10:00 a.m. to 3:00 p.m. Monday to Friday

This is a reduction against LB of Camden's stipulated hours of 09.30 to 3.00pm in the locality.

Delivery and removal of larger items of construction equipment will be scheduled as above to minimise disruption to neighbouring properties. The proposed dates and times of these movements will be notified to all local residents and occupiers at the earliest opportunity. Comments and feedback received will be considered before finalising dates and times. Such liaison and co-ordination shall also include other Contractors working on larger projects in the locality.

All sub-contractors and suppliers will be required to plan for and provide a schedule of deliveries to the Main Contractor. The Main Contractor will then collate these and co-ordinate an overall delivery schedule to ensure as far as is practicable:

- Deliveries are made with the smallest size of the vehicle required.
- No two deliveries take place at the same time to avoid congestion on local roads.
- Opportunities to combine deliveries can be explored to reduce vehicle movements.
- The identity of the delivery vehicle can be established in case of any incidents.

Further consultation with other Contractors working in the area will also take place to plan and coordinate as far as is reasonably practicable that no conflicting construction vehicle movements occur at the same time to reduce congestion on local roads.

4.02 Phased Construction Vehicle Servicing

Liaison with the Environment and Transport Section of the LB of Camden's Engineering Service has identified a clear preference for the construction works to be serviced via Lower Terrace as per previous proposals.

However, subsequent dialogue and consultation with the local residents has identified that access via Admiral's Walk may also be deemed appropriate for construction vehicle servicing during the less intense periods of site enabling works, deconstruction and later fit out works.

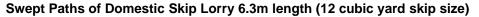
This consultation with local residents has led to the development of a phasing strategy for construction vehicle servicing as below.

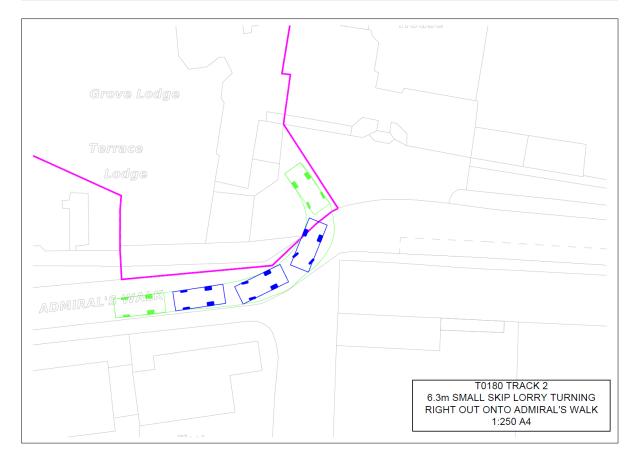
Phase 1 - Access from Admiral's Walk

The Summary Programme at 3.03 above identifies that for weeks 1-10 of the works, construction vehicle servicing will be via the front of the property from Admiral's Walk.

The swept paths below illustrate that it is possible for a skip lorry of 6.3m in length to safely service the site from Admiral's Walk. Construction vehicles servicing the works during this time will be limited to domestic sized skip lorries and trucks of a similar size. Waste materials, demolition and excavation materials will be taken off site in skips (not tipper trucks) during weeks 1-10.

Grove Lodge Terrace Lodge Total Terrace Lodge Total TRACK 1 6.3m SMALL SKIP LORRY REVERSING IN OFF ADMIRAL'S WALK 1:250 A4





In order to further validate the proposal to service the site from Admiral's Walk, the Client has undertaken a trial run of a skip lorry servicing the front of the property with a 12 cubic yard capacity skip as captured in the images below. It is important to note that the skip lorry enters and exits Admiral's Walk from Lower Terrace in forward gear and when in position allows traffic to pass on Admiral's Walk. This servicing does not impact upon the residents parking on Admiral's Walk in any way.



Image 1 – Skip lorry approaches Grove Lodge from Lower Terrace



Image 2 - skip lorry passes corner of Fenton House Garden Wall with approx 1m clearance



Image 3 – skip lorry passes site entrance to reverse onto Grove Lodge forecourt



Image 4 - skip lorry reverses onto Grove Lodge forecourt



Image 5 – skip lorry in position to collect skip allowing traffic to pass by



Image 6 - skip lorry loading 12 cu yard skip



Image 7 - skip lorry exits Grove Lodge forecourt in forward gear



Image 8 – skip lorry leaving site along Admiral's Walk towards Lower Terrace

Phase 2 - Access from Lower Terrace

The activities scheduled during weeks 11-50 on the Summary Programme include excavation, substructure and concreting works and call for larger construction vehicle servicing. It is proposed to implement the construction vehicle access from Lower Terrace during this period.

The swept path diagrams below have been prepared for an 8 wheel tipper lorry to service the site and demonstrate that it is possible to service the site with such a vehicle. However, to limit the impact on the local residents it is proposed to service the project from Lower Terrace using smaller (6 wheel) tipper lorries as well as concrete delivery and skip lorries.





During weeks 11-50, it will be necessary to take the five residents' parking bays adjacent to the Grove Lodge boundary wall out of use; by phasing the site access, this will be limited to a period of 40 weeks.

As described below, the garden wall to Lower Terrace will be partially dismantled and later reinstated (along with reinstatement of small fruit trees adjacent as further described in the Arboricultural Implications Report) to facilitate construction vehicle access on and off the site. The dividing wall between the main garden and vegetable garden will also be partially taken down and later reinstated to facilitate construction access.

Phase 3 - Access from Admiral's Walk

From week 51 through to completion in week 70, the construction works become less intensive in nature and are focused on internal fit out and landscaping.

In order to mitigate the disruption to residents on Lower Terrace and to minimise the reduction in residents parking bays, it is proposed for construction vehicle servicing to revert to Admiral's Walk as per Phase 1 above.

4.03 Site Hoardings and Gates

The construction vehicle access phasing strategy set out above requires secure hoardings to be erected in two locations:

Admiral's Walk

To provide segregation, a 2.40 metre high hoarding constructed of timber studs, strutting and plywood facing shall be erected from the North West corner of the forecourt of Grove Lodge to the back edge of the public footpath, with a return along the back edge of the public footpath to its junction with Admiral's Walk to the south; the return shall be complete with a pair of lockable gates overall width approx 5m. Both the hoarding and the gates will be decorated and maintained to a high standard in keeping with the surroundings.

The existing Grove Lodge forecourt paving will be removed, stored on site and reinstated at the end of the project.

During the course of the works, a temporary concrete hardstanding will be laid on the forecourt and the existing pavement will be protected. Wheel washing facilities will be used to prevent dirt and mud being tracked from the site onto the road. In addition, the local roads used for egress from the site will be regularly inspected for debris and arisings from the site and cleaned away as necessary.

Upon completion of the Project the hoarding and the gates to Admiral's Walk shall be removed and the forecourt paving reinstated.

Lower Terrace

It is proposed that the construction vehicle servicing of the site during excavation, substructure and concreting works will be from Lower Terrace. To enable this, a section of the existing rear boundary wall to Lower Terrace will be carefully taken down with the bricks salvaged and stored on site for later reinstatement. A pair of lockable gates approx 5m wide shall be erected within the temporary opening to maintain the security of the site and the safety of the public. These will be decorated and maintained to a high standard in keeping with the surroundings.

A temporary hardstanding will be created within the rear garden area and across the grassed verge to Lower Terrace. Wheel washing facilities will be used to prevent dirt and mud being tracked from the garden onto the road. As noted above, the local roads used for egress from the site will be regularly inspected for debris and arisings from the site and cleaned as necessary.

Upon completion of the second phase of the works the gates shall be removed, the rear garden wall reconstructed and the grassed verge reinstated.

Prior to commencement of the works, a Schedule of Condition including a photographic record of the roads adjacent to the site will be compiled. Subject to regulatory compliance, agreement with LBC and the local residents, CCTV cameras will be installed on the boundary of the property to monitor and record construction vehicles servicing the site during the currency of the works with the intent of capturing damage suspected of being caused by site traffic. If damage to the roads, footpaths, pavements etc is confirmed as being caused by Grove Lodge site traffic, such damage will be made good and the affected areas reinstated upon completion of the works.

4.04 Oversailing

No site establishment will overhang the public highway or footpath.

It is not anticipated that oversailing of adjacent property will be required.

4.05 Works in the Public Highway

There are no works required to be executed within the Public Highway.

4.06 Parking Bay Suspensions

The phased access provisions allow for the suspension of the five Residents' parking spaces on Lower Terrace alongside the rear garden wall of Grove Lodge to be limited to a duration of 40 weeks.

No other parking bays will be taken out of use during the works.

A separate application will be made to the Council for Parking Bay Suspensions and a copy of the application and the granting of the application will be annexed to this plan.

No Temporary Traffic Restrictions (Road Closures) are required.

5.00 TRAFFIC MANAGEMENT

5.01 Link to Major Road Network

Options have been considered for Construction Vehicle Traffic routes to/from the site and the Transport for London Road Network (TLRN).

In order to respond to the local residents concerns, the site traffic route to/from the major road network will be phased to correlate with the phasing of site access between either Admiral's Walk or Lower Terrace.

Phases 1 & 3 - Access from Admiral's Walk

The Summary Programme at 3.03 above identifies that for weeks 1-10 and later during weeks 51-70 of the works, construction vehicle servicing will be via the front of the property from Admiral's Walk.

Access to / from the site from Hampstead Grove via Admiral's Walk is very restricted and would necessitate additional suspension of resident's parking bays. It is for these reasons that access for Construction Vehicle Traffic via Hampstead Grove has been discounted.

Therefore during this phase of the works, traffic will be directed to travel to the site from the Finchley Road onto Frognal Lane then Frognal and Admiral's Walk from Lower Terrace. Traffic will service the site from Admiral's Walk as noted above.

Phase 2 - Access from Lower Terrace

The Summary Programme at 3.03 above identifies that for weeks 11-50 of the works access will be via Lower Terrace. This has been proposed to accommodate servicing by larger construction vehicles, therefore reducing the number of journeys on the local roads.

However, concerns have been expressed by local residents that the route to the Finchley Road via Frognal would be less suitable for larger construction vehicles. In order to respond, and during this period, it is proposed that the route to / from the main road network will from the North, via Whitestone Walk and Heath Street as illustrated below.

During this period, site traffic during the will be directed to/from the site entrance via Heath Street (A502) which links to the TLRN A406 at Golders Green. This has been validated through subsequent liaison and discussion with the Environment and Transport Section of the LB of Camden's Engineering Service with a clear preference for construction traffic to be directed to and from site from the North, through Lower Terrace and Heath Street.

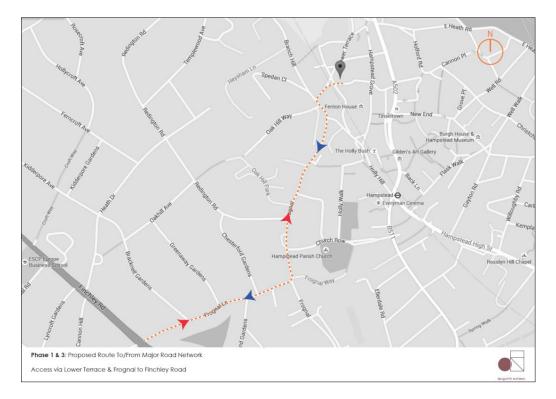
Maps illustrating the proposed phased routes to / from the major road network are included overleaf.

An assessment of the number of construction vehicles that will be required to service the project has been made against the current proposals. This has been summarised and included at Appendix A.

The directions to the site will be included within the Main Contractor's, sub-contractors' and suppliers' instructions in order that they can plan for the constrained routes. The directions will be included within the building contract and sub-contract documents such that the Contractor, his sub-contractors and suppliers are contractually bound to comply.

5.00 TRAFFIC MANAGEMENT (Continued)

5.02 Major and Local Routes Maps (Continued)



Map 1 - Construction Vehicle Access Route Phases 1 & 3 (weeks 1–10 and 51–70)



Map 2 - Construction Vehicle Access Route Phase 2, Weeks 11 - 50

5.00 TRAFFIC MANAGEMENT (Continued)

5.03 Traffic Management at Site Entry/Exit

All site traffic will be planned and a banksman will be deployed to meet vehicles and manage traffic entering and exiting the site.

<u>During Phases 1 and 3</u> when the construction vehicle access is via Admiral's Walk, the banksman will temporarily halt pedestrian, cyclist and motorised traffic to the east of Grove Lodge on Admiral's Walk. The delivery vehicle will pass the site entrance, come to a halt past the entrance and reverse onto the site. As soon as the delivery vehicle is onto the site, the banksman will release any traffic held.

Upon the vehicle exiting the site, immediately prior to the departure, the banksman will check if there are any approaching pedestrians, cyclists or motorists and let them pass, then temporarily halt further traffic to both the eastern and the western approaches on Admiral's Walk. The vehicle will leave site in forward gear and be directed onto Lower Terrace towards Frognal. As soon as the vehicle has joined Lower Terrace, the banksman will release any held traffic.

<u>During Phase 2</u> when the construction vehicle access to the site is via Lower Terrace, it is proposed that the banksman will temporarily halt all pedestrian, cyclist and motorised traffic at (a) the convergence of Lower Terrace, Windmill Hill and Admiral's Walk as the delivery vehicle is approaching and (b) the point where Lower Terrace narrows between the junction with Upper Terrace as soon as the delivery vehicle has passed. The delivery vehicle will pass the site entrance, come to a halt past the entrance and reverse into the site.

As soon as the delivery vehicle is fully onto the site, the banksman will release all traffic. For exiting the site, immediately prior to the departure, the banksman will check if there are any approaching pedestrians, cyclists or motorists and whenever possible let them past, then temporarily halt all further traffic at (a) the convergence of Lower Terrace, Windmill Hill and Admiral's Walk and (b) at the junction of Upper Terrace and Lower Terrace. The vehicle will then leave site and be directed to leave the area to the north via Lower Terrace to re-join Heath Road. As soon as the vehicle has passed Upper Terrace, the banksman will release any held traffic.

Under no circumstances will a delivery vehicle be allowed to reverse onto the site if there are pedestrians, cyclists or motorists in the immediate vicinity of the manoeuvre. Similarly, a delivery vehicle will only be allowed to leave the site and pull onto the road if there is no traffic approaching from any direction.

All local roads used for egress from the site will be regularly inspected for debris and arisings from the site and anything found will be cleaned away.

5.04 Parking for Site Personnel

There will be no parking in the vicinity of the site for the Contractor's staff, managers, operatives or site visitors. All site personnel will be directed to use public transport to and from the area and to approach the site on foot.

5.05 Emergency Services' Vehicles

Access for emergency services vehicles will be maintained throughout the works.

6.00 ENVIRONMENTAL ISSUES

6.01 Noise and Vibration

Prior to commencement of works on site, a noise survey will be undertaken and a copy will be provided to the LB of Camden.

Noisy operations envisaged include the following:

- Excavation (excavator engine noise).
- Piling (piling rig engine noise)

Further, normal building operations can be noisy, such as:

- Concrete pumping/laying/vibrating.
- Drilling.
- Scaffold erection and dismantling.

Best Practical Means, as defined in Section 72 of the Control of Pollution Act 1974, shall be employed at all times to reduce noise (including vibration) to a minimum with reference to the general principles contained in BS5228:2009 'Noise and Vibration Control on Construction and Open Sites'.

In particular, acoustic hoardings will be placed around those parts of the building being taken down, the area being excavated for the basement and for piling operations. The taking-down works will be carried out by hand to reduce noise. The piling method specified is bored piling, which is considerably quieter than driven piling. All plant, large and small, and hand tools will be fitted with the recommended sound-reducing equipment.

All plant and equipment will be switched off when not in use. All plant and equipment will be fitted with the recommended silencing equipment.

Mains electricity, converted to site 110V electricity, will be used for the construction works negating the requirement for on-site generators.

No radios will be allowed on site.

The Site Induction, for operatives, will include instructions for them to work and communicate as quietly as possible.

6.02 Noise and Vibration Levels

The Contractor will be required to carry out prediction of noise and vibration levels before any work is carried out on site. These predicted noise and vibration levels shall be registered in the CMP as agreed with LB of Camden as well monitoring strategies to limit noise and vibration emanating from construction operations.

6.03 BS 5228 Training

Basic instruction/training will be provided to all operatives during the Site Induction and Toolbox Talks on the application of BS 5228 Code of Practice for Noise and Vibration Control on Construction and Open Sites.

In addition, all operatives will be required to be CSCS-trained.

6.00 ENVIRONMENTAL ISSUES (Continued)

6.04 Air Quality

It is acknowledged that the local environment benefits from good air quality, and that there may be potential impacts upon local residents from the Construction works proposed at Grove Lodge.

Prior to commencement of the works on site, the Contractor will be required to prepare an Air Quality and Dust Risk Assessment and an Air Quality and Dust Management Plan for agreement with the LB of Camden. The Risk Assessment and Management Plan will be developed in due course yet typical control measures to be employed on the site will include:

- Reducing emissions from vehicles; all construction servicing vehicles associated with the site will comply with the standards of the London Low Emission Zone
- Reducing vehicle idling; the site will be managed so that vehicles do not have to wait to park safely.
- Utilising the existing electricity supply for the Construction works. This negates the requirement for on-site generators and the potential noise and air quality issues they present.
- Skips, chutes and conveyors will be covered and, if necessary, completely enclosed to ensure that dust does not escape. Similarly, drop heights will be minimised to control the fall of materials.
- No burning of any material will be permitted on site; any excess material will be reused or recycled on or off-site in accordance with appropriate legislation.
- All vehicles carrying dusty materials will be securely covered before leaving the site, to prevent dust spilling on the road and being swept away by the wind.

Demolition and deconstruction activities can generate dust and also cause resuspension of dust currently within the building. Soft stripping is an effective way of screening dust and preventing dispersion. Water suppression will also be used to damp down dust and other debris that could generate dust, and, where appropriate manual or mechanical demolition techniques will be used.

Construction plant and equipment on site will comply with the Non Road Mobile Machinery emission standards to be introduced in September 2015. As a preference, powered construction plant and equipment will be electrically powered from site supplies, not generators.

Following earthwork activities it is important to reduce the generation and resuspension of dust through re-vegetating exposed areas and soil stockpiles to stabilise surfaces. Where this is not possible, hessian and/or mulches will be used.

Other "Best practice" procedures will be used to minimise as far as is practicable issues with activities that cause dust, including but not limited to the following:

- Areas of excavation will be dampened down.
- The site delivery areas will be hardstandings.
- All plant and hand tools will be fitted with dust collection equipment where appropriate
- All fixed, external scaffolding will be fully sheeted.

6.06 Rodent Control

Prior to the commencement of works, a certified rodent control company will be engaged to survey and clear the site of all rodents as far as is reasonable practicable. The company will be retained to set all measures it deems necessary and practicable on the site, to maintain such set up and carry out regular monitoring surveys and at completion carry out a final clearance operation and clear away all equipment.

7.00 MONITORING, COMPLIANCE, REPORTING AND CONSULTATION

7.01 Communication with Neighbours

An introductory letter will be sent to all neighbours prior to the commencement of works, which will include all contact details of the Contractor's Project Manager and the Contractor's Community Liaison Manager.

It is proposed to then issue fortnightly newsletters to local residents and occupiers updating details on progress on site, the forthcoming delivery schedule, planned noisy works and other matters that may affect them. Open dialogue will be encouraged in order that concerns are raised and addressed at an early stage.

It is also proposed to hold regular meetings to augment the newsletters and to allow personal contact. The dates of these will be advised within the fortnightly newsletters at least a month in advance.

There will be a complaints book on site including the name of complainant and date, time, nature of complaint and action necessary to resolve with daily review.

The Contractor will ensure there is a specific & known contact for neighbourly liaison, in particular with adjacent residents and for regular communication with the National Trust (Fenton House).

7.02 Communication with the Public

The Contractor's site board, which will be affixed to the hoarding at the entry to the site, will include the contact details of the Contractor's Community Liaison Manager in case any member of the public has cause to contact the Contractor.

7.03 Considerate Constructor Scheme

The Contractor will be required to register the site with the Considerate Constructor Scheme and to comply with all of its requirements including independently audited site inspections.

7.04 Records

A record will be kept of all incoming and outgoing correspondence, telephone calls, etc. in respect of community relations and will be reviewed monthly by the Client's Project Manager to ensure the Contractor is responding positively and effectively to any complaints.

7.05 Operatives' Behaviour

The Site Induction, which all operatives are required to attend sets out the site rules. These will include instructions for them to conform to the highest standards of behaviour, both on the site and also on their way to and from the site. Bad behaviour, bad language and littering will not be accepted. There will be a smoking area established within the Site Welfare facilities on site; smoking outside the confines of defined smoking area will not be permitted.

Any operative found to be in breach of these conditions will be warned and if further transgression occurs will be barred from site.

7.00 MONITORING, COMPLIANCE, REPORTING AND CONSULTATION (Continued)

7.06 Other Sites

It is known that Fleet House on Admiral's Walk is to be redeveloped. As such the Construction Management Plan prepared for the redevelopment of Fleet House (Webb Yates document J1264-Doc-04-P5) has been reviewed to identify cumulative effects of the Grove Lodge and Fleet House construction works.

Although the construction work at Fleet House has yet to commence, our understanding of the Fleet House programme is that it is anticipated to commence work in the Summer of 2015 and that it will continue for a period of approximately 12 months (refer para 6.4 of the Fleet House CMP). Completion can therefore be anticipated in the Summer / Autumn of 2016.

In order to negate the potential for noise and traffic congestion from two contemporaneous construction projects upon local residents, it is intended to defer commencement of works at Grove Lodge until January 2017, by which time the redevelopment of Fleet House will be complete.

It is further known that planning permission has been granted by the LB of Camden for works at Capo di Monte on Windmill Hill. Although the Capo di Monte construction programme is not known at this time, it is anticipated that commencement of those works on site will be achieved prior to Summer 2016 with the excavation and substructure works largely advanced by the close of 2016.

It follows therefore that the deferment of works at Grove Lodge until January 2017 will mitigate the potential for cumulative impacts upon local residents from two or more large two construction projects in the locality.

In any event, communication and cooperation between Contractors will be promoted so as to coordinate and plan construction works with the intention of minimising the impact of construction works on local residents and occupiers and to minimise conflict between Contractors.

7.07 Independent Monitoring

To provide reassurance to the LB of Camden, neighbours and local residents that the developed and agreed Grove Lodge Construction Management Plan will be implemented by and adhered to by the Contractor, the Client will engage an third party consultant independent of the Contractor to monitor his performance and compliance reporting directly back to the Client and his Project Manager.

Reported non-compliances or breaches of the CMP provisions will be reviewed with the Contractor and remedial measures agreed and implemented as appropriate to the non-compliance or breach.

BURKE HUNTER ADAMS

APPENDIX A

Construction Vehicle Servicing Summary

GROVE LODGE CONSTRUCTION VEHICLE SERVICING SUMMARY

			CONSTRUCTION SERVICE VEHICLES						
	Vehicle Typ and Capaci		Skip Lorry 8m ³	Concrete Lorry 6m ³	Delivery Lorry	Totals	Weekly Average	Daily Average	
PHASE 1	Enabling Works - site establishment / access		12	2	8	22			
Weeks 1 - 10	Site clearance, deconstruction & structural repairs		24	2	1	27			
	External works - Site clearance garden		7			7			
	Preliminaries		3	2	5	10			
	Phase 1 Totals	0	46	6	14	66	6.6	1.3	
PHASE 2 Weeks 11 - 50	Main Building Extension including basement	204	53	67	61	386			
Weeks II - 50	Main Building Alterations	5	12		22	39			
	Orangery	10	2	9	6	27			
	External works	52	3	3	15	73			
	Phase 2 Totals	270	70	80	104	524	13.1	2.6	
PHASE 3 Weeks 51 - 70	Fit Out works		40		39	79			
Weeks 51 - 70	Garden Works		18	8	31	58			
	Clear site at Completion		2		2	4			
	Phase 3 Totals	0	60	8	72	141	7.1	1.4	
	Totals All Phases	270	176	94	191	731	10.4	2.1	