Former Reservoir,
Gondar Gardens,
West Hampstead.

Construction Management Strategy

November 2013

Contents

1.0 Introduction

This Construction Management Strategy contains the arrangements that will be implemented to ensure the environmental issues concerning the project will be managed to ensure there is minimum impact on the surrounding environment by this development. We shall use all best endeavours to minimise disturbances, including noise, vibration, dust, smoke and plant emissions.

This is a live document and will be maintained, reviewed and updated by the project team, as necessary and as required throughout the development process. It will also inform the creation of a construction phase methodology and Health and Safety Plan.

This project comprises the erection of 28 dwellings, comprising 26 x 1, 2, 3 and 4 bed apartments and duplexes, and 2 x 4 bed houses, located along the site frontage together with new access, car parking, landscaping and wildlife area. Part of the site is occupied by a redundant reservoir and the roof and internal structure will be demolished and the retaining walls and buttresses retained and regarded to create a landscaped/wildlife area. Following completion of demolition, the new dwellings will be created utilising a re-enforced concrete frame structure under a tiled roof. Internal partitions will be constructed of lightweight materials and the external envelope will comprise of traditional construction materials as noted on external elevations.

Works will not commence until this plan has been completed to a satisfactory standard and has been authorised and signed. Further detailed work in respect of construction management will be required via the planning S106 agreement and once detailed technical drawings and specification in confirmed.

The principle elements of construction are currently assumed as noted below and the following pages highlight the key operations that could impact local residents and how we will deal with these issues:

- Demolition of the reservoir
- Piled foundation
- Concrete and steel frame construction
- Construction of external envelope
- Completion of roof works and installation of windows
- Internal partitions and finishes.
- Hard and soft landscaping to all external areas.

2.0 General Principles

The site is located on Gondar Gardens. It is surrounded by existing residential properties on all sides. Neighbouring residents have the potential to be affected by construction works and thus the site will be closely planned and monitored, in order to minimise the potential impact on neighbouring residents.

The site although extending to approximately 1.24 hectares is heavily constrained given the retention of the existing reservoir which is located towards the front of the site. Also land levels rise from the site boundaries up to the reservoir roof. Surrounding residential streets are heavily parked during the evening and early morning. Gondar Gardens is Controlled Parking Zone (CPZ) during the hours of 10am – 12 noon.

Above: Former reservoir site outlined in red

Site Photographs

Above: The site and its surroundings

3.0 Site Layout

Given the constrained nature of the site, welfare accommodation will initially be located towards the front of the development. This will be located securely behind wooden hoarding that will secure the site and help to minimise dust and noise pollution. Pedestrian and vehicular access will also be created and maintained with designated loading and material storage areas. Following demolition and the creation of permanent access all welfare, general storage and office accommodation

will be relocated to the basement area further minimising disruption to the site frontage area.

4.0 Programme

Attached as appendix A is a programme for the construction and redevelopment of this site, which will take approximately 24 months from commencement to completion. The programme indicates the duration of the key elements throughout construction. The likely times when we will seek to minimise disturbance is during the demolition, ground works and initial superstructure phase. Once internal works commences impact on the surrounding area would be further minimised.

5.0 Publicity

The site will be registered with CCS (Considerate Constructors Scheme), posters with site contact details etc will be clearly displayed on the site hoarding in prominent locations.

Our own internal policies ensure we will be liaising with residents and GARA throughout the course of the construction process, highlighting any issues of the construction that maybe relevant to local resident.

6.0 Contacts

Linden Homes would the principal contractor on the Project and ultimately responsible for all aspects of this management plan. Further details of site personnel will be supplied once the project has received planning permission and personnel are appointed.

7.0 Traffic management

There are 3 aspects to traffic management for this Project;

- Deliveries to site and waste removal
- Operatives travel to and from the site
- On site traffic movements

Deliveries to site and Waste removal

The site is located approximately 0.5km from the A5. All deliveries will access the site via Mill Lane and the A5, thus avoiding the immediate surrounding residential streets.

No articulated vehicles will be used for deliveries. They will be rigid vehicles or vans . Delivers will be scheduled in advance to ensure the loading and unloading areas are clear to accommodate, and that there is sufficient space to allow storage of

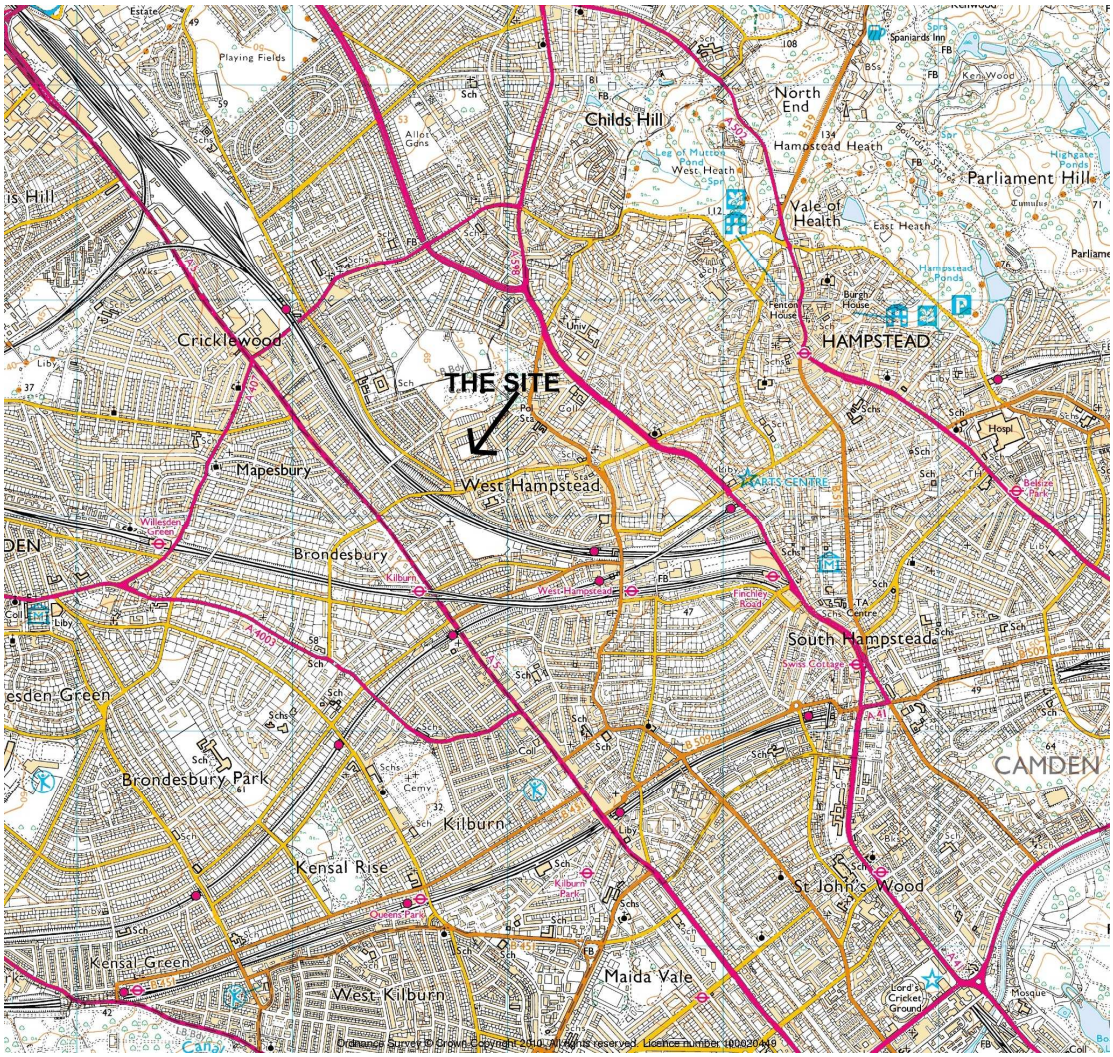
materials. Vehicles trips to site during the demolition and main construction phase will be approximately 5 - 10 vehicles visiting per day.

A banksman will supervise deliveries entering and exiting the site.

Operatives travel to and from the site

The site is situated in a sustainable location close to rail and tube stations, and bus routes. When operatives are inducted on site they will be told that there is only limited parking and that they should consider other means of transport such as

- Public Transport
- Car sharing
- Bicycle



Above: Surrounding highway network and rail links

Onsite Traffic Movements

Due to the constrained nature of the development site, the importance of the retained wildlife area and the location of the development along the site frontage, vehicle movement on site will be limited. During the demolition and early construction phases vehicle movements within the reservoir will be unnavoidale and

necessary to effect the safe and timely completion of this phase of the works. Due to concrete frame construction methodology, and to further reduce on-site vehicle movements a tower crane will be required on site, also allowing safe and effective loading and unloading of materials across site.

Material deliveries will be scheduled in advance and monitored to ensure that there is adequate space within the site for materials to be loaded, unloaded and stored on site.

8.0 Demolition

The first operation prior to demolition will be that the site is fenced in accordance with the reptile mitigation strategy and existing trees protected in line with the arboriculture tree protection plan. Additional hoarding as noted above will be placed to the site frontage.

The following operation will be the removal of the front section of the existing structure to enable suitable machinery to access the internal reservoir areas. This in turn will enable the safe removal of the roof in sections. Materials will be sorted and stockpiled and to enable correct sequencing of the works the areas to the front of the site have been highlighted as temporary storage areas. The demolition arisings will be crushed on site and utilised in the formation of the new banks to the reservoir walls to create the new wildlife area. By utilising the demolition arising on site it minimises waste and vehicle trips. Demolition is currently forecast to take approximately 2 months as illustrated on the programme attached as Appendix A.

Plant will be obscured as once they are in the floor of the reservoir and they will be approximately 6 meters below the external wall of the reservoir. Although some noise and vibration will be generated this will be monitored to ensure that they remain within acceptable levels in accordance with LB of Camden's' guidance.

The plant will generate noise, but this will be greatly reduced by the fact that the works are "below" ground level, and the existing reservoir walls and hoardings around the site.

9.0 Noise and Vibration

The noisy operations are generally associated with the demolition and construction of the structure of the building. Once the external walls of the new dwellings are constructed the internal trades would have no impact on noise audible at the site boundary.

Mitigation measures which control the noise and vibration levels will be implemented as recommended by the noise and vibration reports which have been produced.

Groundworks will involve bored piling operations. The selected method for the piling activity on this site will uses the lowest vibration impact method based on continuous flight auger (CFA). Furthermore receiver position monitoring will be implemented to record vibration and noise levels to ensure they are maintained within appropriate levels.

During the demolition, ground works and structure works, several measures will be adopted to ensure noise and vibration is minimised to prevent undue impact. The items below highlight remedial measures which may be necessary;

- All plant and equipment will be checked and maintained. Any static plant such as compressors will be located away from the boundary and 'sound reduced' with lined and sealed covers which will be kept closed.
- It is anticipated that main items of plant will run off a temporary electricity supply. Therefore there should be no requirement for diesel generators. This is subject to a temporary builders supply being available. If this is not possible and generators are required they would be located away from existing properties and switched off when not required.
- Pneumatic percussive tools will be used in short durations only during the demolition and ground work periods. These items will be maintained to ensure noise is kept to a minimum.
- Mobile plant such as dumpers, excavators etc will not be left running for long durations and throttled down to a minimum.

10.0 Dust and Air Pollution

Mitigation measures which control the level of dust will be implemented as recommended by the Air Quality Assessment which has been produced.

As with noise, the majority of dust generating activities that have the potential to affect local residents will be during the demolition, ground work and structure package. Once the structures are constructed all internal trades will not impact on dust creation that could affect local residents.

Following completion of the main work the external hard and soft landscaping will be implemented and it is only the cutting of paving materials which are likely to give rise to potential nuisance.

Several measures will be adopted to ensure any dust that is created has minimal affect on local residents. Below highlights the measures that will be adopted to minimise any impact;

- During the demolition and substructure works the site will continually be watered down to minimise dust transfer into neighbouring properties.
- The work method for the ground work package will be planned so that the handling of earthworks will be kept to a minimum. Any stockpiles will be damped down. Dampening down will be carried out very carefully and only

when necessary so the site does not become too wet and create a hazard of 'mud' spread onto the surrounding roads.

- There will be no large mixing of concrete or other material on site. All concrete will be brought in ready mixed. There will be a mortar silo for the brickwork, again to minimise any dust being generate from these activities.
- Waste will generally be removed from site by skips or compactors. When waste bins are being loaded into a compactor water will be used to suppress dust if required. When conventional skips are being used they will be covered with debris netting or similar, when leaving site.
- Air pollution is not envisaged to be a high concern on this project due to minimal use of generators (if at all). There will be no burning of materials on site.
- As with minimising noise from mobile plant, compressors or similar will not be left running for long durations and throttled down to a minimum to prevent any emissions or fumes drifting into the surrounding residential areas. This will be reinforced with stringent maintenance regimes to ensure the plant is operating efficiently and causing minimum noise and emission outputs.
- The scaffold along all elevations will be protected with debris netting or monoflex to ensure any noise and dust generated from the works on the scaffold does not present a nuisance to the surrounding properties.
- During external works the cutting of paving etc will be closely monitored with regards to noise and dust. A proprietary wet cutting grinder will be used to minimise dust to the surrounding areas.

11.0 Ancillary Site Activities

There are other activities that will be closely managed to ensure local residents are not impacted by them, the key issues are listed below:

- Keeping the surrounding roads clean. It may be necessary to use wheel washing facilities during the groundwork's programme. As required, we would also employ a road sweeping vehicle to ensure the site activities have minimal impact on the surrounding roads.
- We will ensure a delivery / traffic management plan is in place to ensure vehicles i.e. associated traffic, noise and fumes do not present themselves as problems to local residents. The control measures highlighted in that document will ensure minimal disruption from the traffic movements that are essential to build the development.
- Hoarding will be inspected and maintained to ensure the site is presented as well as possible at all times
- There will be external lights inside the site to provide safety lighting for the operatives on site. These lights will be positioned and directed so not to intrude unnecessarily on adjacent properties.

12.0 Conclusion

The key areas to ensure that this plan is adhered to and that minimal impact to local residents result are:

- Communicate with residents at all times, so they are always aware of any operations that are taking place that has the potential to affect them.
- Ensure the permitted site hours are adhered to at all times.
- To ensure our measures are affective, they shall be monitored frequently reviewed and refined where required.
- Any complaints will be dealt with in a professional way and ensure complaints are closed out sufficiently.
- Actively engage with CCS (Considerate Contactor Scheme) and London Borough of Camden's CCS and good working practices.
- Educate the workforce on the need to keep noise to a minimum and the importance of this plan to ensure residents are not disrupted by our activities. This will be carried out at our site inductions and regular tool box talks.

Appendix A

Gondar Garden Programme

Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Task																								
Enabling works																								
Demolition																								
Site Set up																								
Structural Pilling																								
Foundation Piling																								
Services																								
Ground Works / Concrete frame																								
Superstrucutre																								
Internal fitout																								
Hard and Soft Landscaping																								
Completion																								

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