Hampstead, London, NW3 1HP

# **Construction Management Plan**

January 2017

Martin Evans Architects

18 Charlotte Road London, EC2A 3PB



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Proposed elevation of 6 Streatley Place

#### 1. Introduction

This construction method statement has been prepared to support the planning application for a residential development at 6 Streatley Place. The proposal seeks for the demolition of the existing three workshops & stores and the removal of six existing trees on the site and their replacement with four new self-contained flats across three floors.

The construction management plan has been co-ordinated with the help of contractors within the construction industry, a qualified structural engineer and review of documentation from the London Borough of Camden and New End School. We have also had informal discussions from local residents to the site and have received some useful feedback. The intention is to create the best outcome for all concerned to allow the development of the site to take place in an efficient way whilst causing minimum disruption to the people living and working around the site.

We would hope to continue having discussions and consultations with the local residents and in particular the local school and nursery in order to provide a safe and suitable method of constructing the development as will be set out in a final agreed Construction Management Plan. We understand that this may not in itself be complete during the planning process and may be subject to a condition as part of the approval.

The intention of the neighbourhood consultation has been to try and reach a full and detailed CMP at this stage. This will, however, continue to be an ongoing process as various parties engage with these discussions.

The final Document will detail the two main principles of a CMP - 'Environmental impact' and 'Transport and traffic management'. This is to ensure the impact of demolition and construction related traffic, on the local residents and immediate highway network, is minimised and the appropriate control measures are identified.

This construction method statement has also been assembled with considerations to Camden's core strategy policies:

CS5 - Managing impact of growth & development,

SP20 - Movement of goods & materials,

DP26 - Managing impact of development on occupiers and neighbours

CPG6 - Amenity Proposed building.

Where possible we have referenced each of the core strategies within this document.

## 2. Existing Site condition

The site is located on a steep slope bounded to the North-West by Streatley place. To manage the gradient of the street, Streatley place has a set of 7no. steps directly neighbouring the site. The ground level of the site itself slightly slopes down to the rear of the plot becoming level with the bottom of the steps.

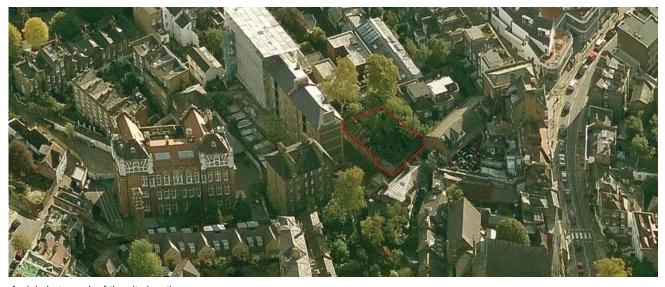
The site currently comprises of 3 disused workshops & stores, parts of which likely date back to the early-mid 19th Century. These buildings are in a poor state of condition a few having to be supported with reinforcing truss work. The site is landlocked on three sides by neighbouring properties and a narrow access pathway at the front.

## 3. Site location

The site at 6 Streatley Place is located at the centre of Streatley place, a small pedestrian access route, connecting Heath Street to New End Square. The site is at the higher end of a large slope that runs down from east to west. The street lies on the east side of Hampstead Village approximately 100m North of Hampstead underground station. 6 Streatley place lies within the historic parish of St Johns Hampstead and now resides within the Greater London Borough of Camden.

Streatley place is regularly used for New End School and nursery. The general opening hours of the school are between 8:30 – 15:45, however, there are multiple clubs and events that run before and after opening hours. As a result, large numbers of children arrive and depart from school between the hours of 8:00 – 18:00.

Back Lane is a cobbled and unsuitable access point for large lorries and heavy wheel based vehicle. New End has a tarmacadam surface and is more suitable for access and deliveries.



Aerial photograph of the site location



Front Elevation from Streatley Place



Streatley Place junction

#### 4. Management – Pre-construction

4.1 Initial consultation with local residents / Council officers

Two informal meetings were held where local residents, the school and nursery were invited to see the proposals and make comment. Most comments were in relation to how the development is to be built. Council officers welcomed the principle of entering into discussions with local residents, school, nursery, local councillors, developers & contractors. The main concerns raised include:

- 1. Access along Streatley Place for the delivery of goods and removal of waste
- 2. Site working hours
- 3. Any closure of Streatley Place, partial, permanent or temporary
- 4. Where the site lockable local compound is the be positioned
- 5. How long the project will take.
- 6. Parking for the construction workers
- 7. Position of delivery vehicles
- 8. Noise and dust
- 9. The need for hoarding and screens around the construction site
- 10. What is the construction likely to be? prefabricated or traditional
- 11. How the timing and program for the construction will be affected or affect other developments taking place in the local area

Attempts have been made to enter into discussions with New End School and the Nursery. Local Residents and the school responded with comments on the previous application, the main points of which are also relevant to this application. This also comprised comments made as part of a local group of residents and the school to highlight their concerns about the original construction management plan. A copy of the letter is included in the report and the main comments are set out below.

Many of these issues came up as part of the previous planning application and not all issues were dealt with at the time of the planning consent. Where we can, we have set out specific answers to each point as below.

## 4.2 Understanding of local residents' concerns

In response to the invitation to the community consultation, the applicant was given a copy of the letters and correspondence in relation the previous planning application. This was presented by governors of the school but also represents local residents and the nursery. These letters set out the objections to the proposals of the previous application and the need for consultation between the developers of the site and the local community.

1. Access along Streatley Place for the delivery of good and removal of waste

Due to the positioning of the Site location the movement of goods and waste will need to pass adjacent to the New End School & nursery at the bottom of Streatley Place. In order to minimise impact to the students, staff & public timing of deliveries will have to be coordinated regularly between the foreman and the schools.

## 2. Site working hours

The scheme has taken into consideration the working hours of the school and nursery whilst devising a schedule for the site working hours. Camden sets out that site working hours as between 8:00-17:00 Monday to Saturday & 8:00-13:00 Sundays and Bank Holidays. The regular school hours of New End School and the Nursery are between 8:55am to 3:30pm. There are extracurricular activities however that are undertaken between 8am & 6pm.

The site works, deliveries and removals will take these timings into account and regularly interact with the school in order to produce the most appropriate timings.

3. Any closure of Streatley Place, partial, permanent or temporary

There will be no closure of Streatley place during the process of construction. A covered scaffolding walk way will be introduced adjacent to the site along Streatley Place.

4. Where the site lockable local compound is to be positioned

The scheme has undergone a rigorous assessment to weigh up the benefits and detriments of different locations for the compound. Though the school amongst other local residents were not keen on this location it is the most appropriate and least detrimental location for the delivery and removal of products.

5. How long the project will take.

To minimise the impact upon the residents & local infrastructure construction will be kept to a minimum using modern techniques and well organised procedures. We are expecting the construction to take approximately 52-72 weeks.

6. Parking for the construction workers

In order to reduce the impact of the development upon local residents there should be no parking permits for construction workers and public transport must be promoted.

7. Position of delivery vehicles

Deliveries must not interfere with the opening hours of the school in order to protect the 500 students.

#### 8. Noise and dust

The site is surrounded by residences and infrastructure and therefore it is imperative that the impact of noise and dust is kept at a very minimum. Noise limits will be set out & monitored during construction while dust levels will be controlled and mitigated accordingly.

9. The need for hoarding and screens around the construction site

Hoarding and screens need to be installed throughout the site in order to increase security and prevent dust & noise pollution to local residents.

10. What is the construction likely to be – prefabricated or traditional

Construction methods can vary the time scale of the build and also the impact on the local residents. Both a traditional & prefabricated construction type come with their benefits and limitations and therefore will need to be analysed rigorously in a later period of design with the contractor, engineer & architect.

11. How the timing and program for the construction will be affected or affect other developments taking place in the local area

Construction methods can vary the time scale of

## 4.3 Setting up of 'working group' (of client / architect / contractor / local residents / School etc)

The client has met with local residents at two informal meetings where the overall scheme was presented. The CMP was not discussed in specific detail at these meetings & a separate meeting for late January 2017 is being arranged for New End School and Nursery, the local councillors and a transport representative from Camden to attend.

As part of the development of the CMP, the applicant wishes to set up a working group to be able to discuss and agree the terms of the CMP. From the above-mentioned meeting we would seek a more focused group representing local residents, the school, nursery, resident associations, the developer, the architect and the contractor to have a series of further meetings to agree the terms of the CMP. The local ward councillors will also be invite to attend these meetings.

The intention is that the discussions and consultations will be able to bring about a final worked up CMP which will be presented as a condition of the planning application and which will be agreeable to the highways department, planning officers and council members.

During construction it is proposed that relevant interested bodies would also attend regular meetings with the contractors, clients & Architects in order to address concerns and queries.

## 4.4 Management of meetings for regular updates / feedback

The intention is that as the project moves forward to the contract stage of demolition and construction, the group already formed as part of the CMP agreement will continue to meet on a regular basis or as and when needed. This will allow regular and continued notifications of the various stages of the work and the work that is to take place. This will have particular relevance to the movement of goods along Streatley Place, the delivery of goods and removal of waste. This forum will also allow local residents to give feedback on the day-to-day running of the site and if any improvements can be made to the CMP during the construction phase.

#### 5. Construction

## 5.1 Scope of works / building types & methods

Various different construction types are currently being considered for the site. All of these have been measured in response to the specific difficulties created by the difficult nature of the site. These include traditional construction methods, prefabrication, partial prefabrication, timber or concrete.

#### 1 Prefabricated

This would involve panels of various sizes for the roof, floor and walls being fabricated off site and delivered to site on small manageable loads. These panels would then be carried and partially craned into the site over a short period of time therefore shortening the overall construction period and nuisance to the surrounding residents.

The pre-fabricated panels would have to be moveable along Streatley Place and then stored on site and manoeuvred into position. Prefabricated panels would typically be of timber frame construction and could include internal and external finishes.

The delivery to the site along Streatley Place could then be concentrated over a few days outside school hours to minimise the impact on the local residents, school and the nursery.

#### 2 Traditional construction

This method of construction is a much more common choice for construction within the UK and would involve the build to be erected in block or timber and brick. The material will have to be delivered regularly over a long period of time. On site construction is labour intensive potentially increasing the overall construction period.

All materials will be delivered to the compound, manually taken to 6 Streatley place during the course of the day and stored on site. Due to the commonality of construction there is a proven track record with multiple skilled tradesman potentially reducing the construction period.

There is also the opportunity to create a hybrid construction implementing both traditional and prefabricated construction methods.

## 5.2 Protective works & compound

#### Storage of plant, Materials & Compound

The site is large enough to accommodate most plant and materials necessary to complete the work. During deliveries, however, there will need to be a short-term compound offsite that is easily accessible by a main road. Multiple options were looked at for placement of this compound and after great deliberation with the London Borough of Camden & local residents the proposal seeks to utilise Boardes Mews as the storage area. Materials will be delivered to this location and transported by hand or light machinery to the site where it will be stored. No materials shall be stored within the compound overnight.

Removal of waste materials will be carried from the site by small automated trollies to the offsite drop off point and then into skips or small grab loader lorries along Boardes Mews & New End Road which is the most appropriate location for larger machinery.

#### **Hoarding & Scaffolding**

2.4m high hoarding around the perimeter of the site will prevent pedestrian traffic from danger and inconvenience from the site works and will also facilitate the logistics of the construction phases and allow secure space for temporary transit storage so that the road and pavement is kept free of materials and operatives as much as possible. Scaffolding will be required for the new works. At some stage of the construction when the main block of flats is erected, a double-boarded fan may be needed above ground floor level in order to protect passing pedestrians, staff and adjacent occupants. The upper sections of scaffolding will be fully netted and Licences will be obtained from the Local Authority for the location of the scaffolding as some of this may need to be on the pavement. Safety lights and warnings will be included on the scaffolding. The scaffolding will be stretched over the top of the stairs being supported at both ends.

Alterations to the scaffolding will not be carried out except by authorised personnel and operatives will be made aware of this point. Scaffolding hand-over certificates will be copied and kept on site. Scaffolding will not be used until the certificate has been obtained from the scaffolding sub-contractors.

A weekly inspection will be carried out of the scaffolding by the foreman or competent person. Any sections of scaffolding that are thought not to be safe will need to be taped off accordingly. The Hoarding will likewise be inspected regularly.

## 5.3 Designated Access Route for deliveries / removal

Due to 6 Streatley Place being inaccessible to vehicles, an access route and drop-off compound will be devised offsite. The designated access routes for the delivery and removal vehicles are indicated on the map (see Appendix D) attached to this CMP. All deliveries & removals will be made directly to the offsite compound where they shall be stored for short periods of time. These processes will be made quickly and rigorously to reduce the stress upon the traffic. All deliveries will also be made using small delivery vehicles. All delivery vehicle operatives will be in direct contact with the foreman and site manager in order to provide best timings and reduce congestion on the streets.

In order to prevent disruptions to the local residents, New End School & the nursery, vehicles entering New End Road will be coordinated at quiet times. To further insure this the foreman will need regular weekly updates from local establishments for when Streatley place is in use and when the peak periods will be. All vehicular access to the site compound will be made outside of the school hours to ensure the safety of the children whom attend. Deliveries and removal of materials to and from the site will be undertaken either outside of school hours or during the morning or afternoon of the school day in order to minimise disruption.

## 5.4 Demolition phase

The cutting down of 5 existing trees across the site will be carried out by a qualified tree surgeon.

The careful deconstruction of four existing structures on site and the retention of two existing walls.

## 5.5 Construction Phase

## **Foundations**

The work comprises the removal of top soil in order to level the site.

The existing boundary wall to no.3 Streatley place will be retained with a large concrete wall and piling foundations across the site.

Prior to commencing piling the ground will be prepared, including removing any old foundations where piles are to be bored and providing a safe and level piling mat where necessary.

The engineer must be present on site during the commencement of piling work

All working piles shall be tested using the vibration/transient dynamic response method.

#### **Excavation**

The ground floor will be excavated in an agreed sequence to avoid damage to the piles down to the level shown on the drawings.

#### **Ground Floor slab**

The ground floor slab will be cast in one pour over the blinding, cellcore and drainage and will be tied to the piled wall in accordance with the drawings.

#### Construction

The main structure of the building will be constructed using light materials to minimise the impact it has upon the foundations and subsequent terraces.

## 5.6 Programme

Works will begin with the clearance of the site and removal of many of the planting upon the site. This can be undertaken during the school term as there will be minimal impact to Streatley Place.

The programme will attempt to commence the construction during summer holidays. This will be the least demanding period for the street and will undergo the busiest elements of the build.

It is expected that the overall period of construction will be between 52 & 78 weeks. The busiest time period being the first 10-15 weeks during the setting out of foundations and commencement of construction. It is anticipated that the main structure of the build will be completed within a further 15-20 weeks and the internal finishes will take 25-30 weeks.

#### 5.7 Cleaning

It is imperative that Streatley Place be maintained in a clean state as the road will be in use throughout the construction period.

When vehicles are leaving the site vehicle wheels will be kept clean and roads and adjoining paths and roads kept clean of mud/debris etc. The road and pavement will be maintained, cleaned and washed when required. Pressure washing machines (Karcher or similar) will be available for cleaning heavier mud.

Each transportation journey from the compound to the site will be accompanied by two people. One operating the trolley and one cleaning the pathway whilst directing pedestrians.

#### 5.8 Loading & Unloading

Due to the sites inaccessibility of vehicular access the Construction Management Plan proposes a site compound that is offsite located at the crossover of New End Road & Boades Mews. A variety of construction vehicles will be employed.

All deliveries are to be organised so that materials are moved into the site as quickly as possible. (See Hoarding descriptions below)

We believe that this is the most appropriate access and drop off point for the site and all care will be taken in order to mitigate any risk to the local area and its occupants. A strategy will be devised weekly in order to safeguard the local children and establish a safe segregation from unloading and transportation. The works will therefore be fully separated from members of the public so that there will be no conflict between them and operations on site. Suitable arrangements will be in place for access to the pavement regarding means of escape and due consideration to this aspect will be given at all times during construction.

There are parking restrictions outside. A licence for a 7' wide container/ skip will be applied for onto the side road from time to time.

Hoarding will be erected on the perimeter of the site to separate it from the public and prevent unauthorised access or danger to pedestrians. The Hoarding will be within the site boundaries.

It has been suggested from representatives of the schools that the preference for a site compound would be at New End Square. It is felt, however, that this would be a greater disruption for the immediate neighbours and narrow their access route.

## 5.9 Nuisance / Dust / Noise & Site set up

The site is self-enclosed and has no party walls with other buildings. This will facilitate the functions of keeping nuisance, dust and noise to a minimum level for adjoining properties.

The proposed Hoarding will protect neighbours as much as possible.

The site will be strictly controlled with gates which will be manned at all times. Any visitors to the site will be noted and signed into a visitors' book.

All members of staff will be signed in and out daily so that in any emergency a check can be made to ensure that all persons have left the site.

Suitable method of induction is to be introduced so that the first time that any operative comes to site they will have a brief explanation of the current risks on site and how the site is being operated. Operatives will be required to sign to say that they have received such a talk.

The positioning of the existing services has already been investigated and cleared away. Temporary supplies for the works will be clearly marked and protected.

#### Site Rules:

The Following Specific Points Have Been Identified for Development Adoption within Site Rules as follows:

- a) All operatives must be inducted when they first attend site and must sign to say that such an induction has taken place.
- b) Access to site will be limited and all operatives are to ensure that access gates and facing are maintained at all times.
- c) Level of noise neighbouring properties are occupied and due consideration must be given. Radios will not be allowed.
- d) All deliveries of materials will be coordinated with the foreman & the school before these are taken onto site. This will allow for a suitable location of these to be agreed with the site

- management. An operative will also be asked to assess the congestion along Streatley Place and New End Road before deliveries are made.
- e) In an emergency, staff will congregate in Back Lane. The person responsible for the site book will check personal off to ensure that all have left site.
- f) Working at height. Any falls beyond 2m potential will need to have controls imposed. Operatives must not work in these circumstances unless the situation has been agreed whit the site foreman.
- g) Cartridge operating fixing tools are only to be used by trained operatives.
- h) Maintenance of welfare arrangements toilets and the like are to be kept clean by operatives and any serious deterioration must be reported to the site foremen.

#### 6. Pedestrian access

Streatley Place will remain open to the public throughout the period of construction. Scaffolding will be constructed in positions so that there is a protective access route as described within 'Hoarding & scaffolding'.

Should there be a need for Streatley place to be temporarily blocked then prior notice will be given to all the neighbouring occupants via posted letter and signage will be placed in relevant location at either end of the street.

## 7. Vehicle movements and type

Once a contractor has been appointed a specific schedule of works will be devised in order to develop an accurate plan of construction with regards to dates and delivery amounts. This information will be provided within a further final CMP submitted by the client & contractor with greater conclusions from relevant parties.

In order to reduce the impact of vehicles upon the local residents and amenities it is currently proposed that no large vehicles attempt to deliver or remove material from the sites compound. The largest vehicle will be the skip lorries and flatbed vehicles which will be 7m in length. The various vehicles and their respective dimensions are listed below. These vehicles may differ within the finalised construction management report as the contractor compiles a more rigorous analysis of the construction.

Flatbed vehicle – Approx. size 7 x 2.4 m

Box Van or large transit – used to deliver ancillary items & components. Approximate size 4x2 meters

Skip lorries - Approx. size 7 x 2.4m

Individual small vans

No vehicle listed above will remain within the compound/ drop off area for extend periods of time.

Operatives cars must make their own arrangements for parking and travelling and will not be allocated parking permits for nearby parking spaces. The use of public transport by operatives will be positively encouraged for the duration of the project.

## 8. Management during construction

The management of the site during its construction will be carefully and rigorously devised in order to guarantee that there is minimal disruption to the local residents and occupants of Streatley Place.

## 9. Structural Engineers Statement

The structural engineer has produced their own construction method statement to accompany this document. This report also contains diagrams to retain the neighbouring wall at 3 Streatley place and introduce mini piling to the site in order to support the structure and terraced landscape. Some of the key points that have been raised within this document are listed below.

"The proposed sequence and method of construction needs to take account of temporary stability during construction, both of the site itself but also the neighbouring buildings."

"The proposed construction sequence has been conceived to provide lateral stability to adjacent structures and existing boundary masonry walls."

"The proposed works will not affect the structural stability or integrity of the neighbouring structures."

"It will also be necessary for site operatives to move materials into the site along Streatley Place. The building will need to be designed to allow all materials to be moved onto site using wheel barrows or narrow self-propelled barrows, only used with a banksman to ensure public interface remains safe."

## 10. Conclusion & Appendices

The intention of this CMP is to reach a method of building which is efficient and agreeable to all parties concerned. The final CMP will be the result of consultation and discussions with various local councillors, residents, schools, resident associations and other key parties.

Various methods of construction will also be considered which will have an effect on the length of the building program, access to the site and length of time that construction site will exist. The method of excavation, type and design of the foundations will also have an important thing effect on the construction method of the new building.

The most important areas for consideration and agreement appear to be the position of the temporary site compound, delivery times and frequency and the access along Streatley place itself.

We would recommend that a meeting or series of meetings is held with various interested bodies attend a meeting or meeting in which to discuss and agree various items as part of the Construction Management Plan. This would ideally consist of the developer, contractor, representatives for the school, nursery and local residents, Camden highways officers and

At the time of submission of this application only initial discussions have taken place with local residents & the developer. Forthcoming meetings are to be arranged for late January & again in February to set out the main points for consideration & agreement by all parties.

Discussions will also take place with the Transport & Highway officials to agree preferred CMP.

This could be a useful and enjoyable process for the school whereby the developers & contractor could offer to the school occasional site visits for the children to be able to see what is going on. "Bob the Builder Days".

The principle here is to establish an ongoing dialogue with local residents to keep everyone informed of the progress of the application & proposed works throughout the life of the project. Local residents, schools & the nursery have been encouraged to put forward a working group who will meet regularly with the developer & the eventual contractor who will be able to agree a final CMP for the project. This core group will also then continue during the construction phase whereby the contractor can keep local residents, school & nursery up to date with weekly movement of goods & waste. These meetings will continue through to the end of the project.

**Appendices** 

Diagram A - Site Access Plan

Diagram B - Site Compound & Access

Diagram C - Other suggested compound sites

Received Correspondence from local residents

Structural engineers report

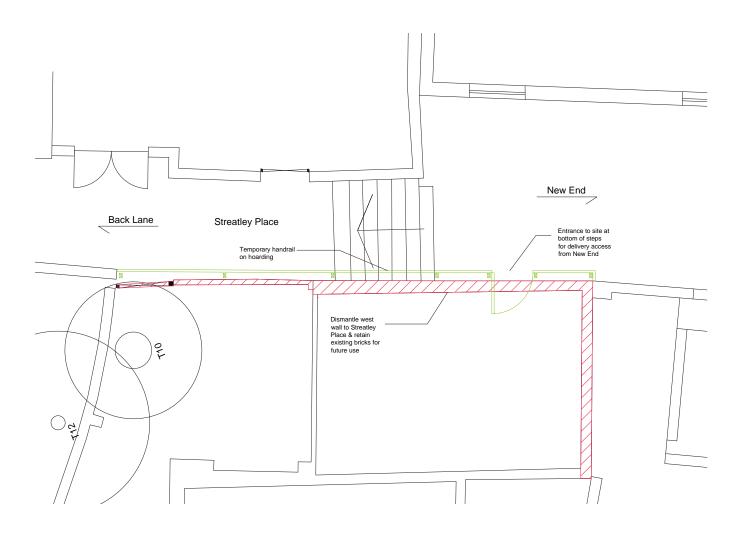


Diagram A - Site Access Plan

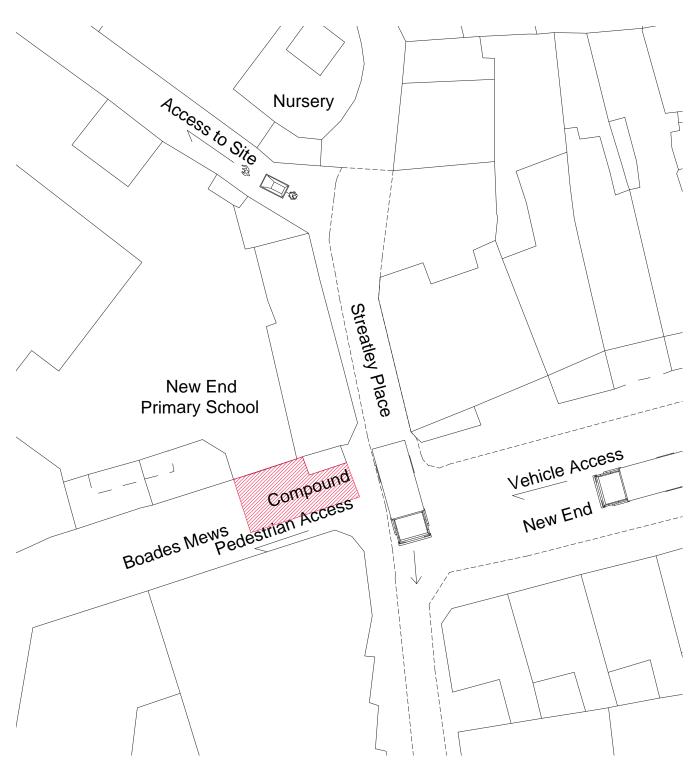


Diagram B - Site Compound & Access

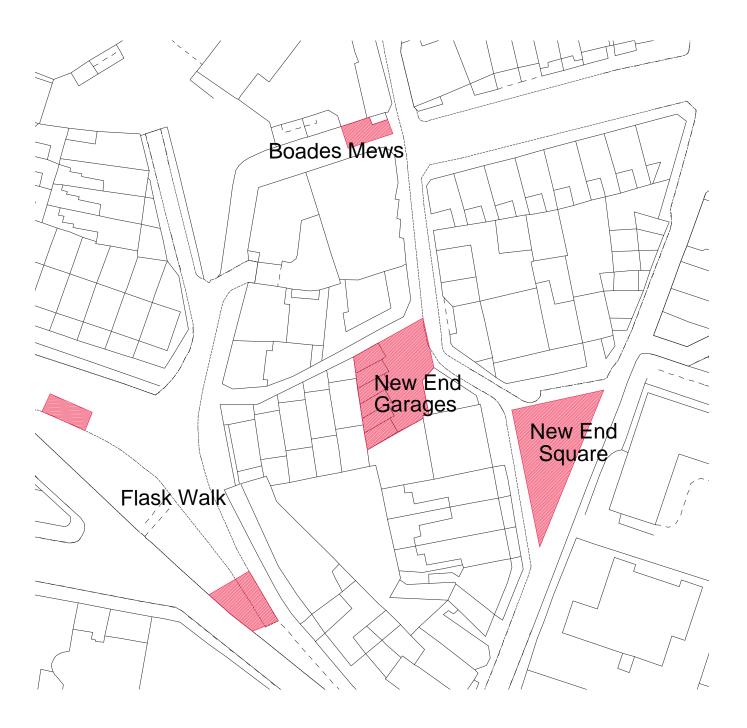


Diagram C – Other suggested & potential Compound sites

# Community Consultation 6 Streately Place

Address	Comments	
Address Flask Walk	Comments  Conserve with executation in particular relating to the	
Flask Walk	Concerns with excavation in particular relating to the slippage of the site	
	Worries about the maintenance of the greenery on the	
	roof, especially at the front where it is unaccessible	
New Court	Concerns with deliveries and how the construction	
Mansfield Place	may affect New Court's Gardens  Concerns with the dark Cladding of the building	
Flask Walk	Concerns with the dark cladding of the building  Concerns with the tile/timber cladding and their	
i idok vvaik	relationship to the windows - views the façade as "cheap" & "fussy"	
	Apprehensive about the overdevelopment of the site	
	No disabled access	
	Practicality of construction	
	Not happy the construction is directly up to the wall fronting Streatley Place. It doesn't need to be this way. Very few buildings are directly on Streatley	
	There is no detail in the elevation - It is too stark, make	
New Court, Lutton Terrace	it more interesting  Concerned about -	
inew Court, Luttorr refface	Loss of light, Removal of trees and the habitats they	
	create (especially bird life)	
	Solid edifice where now there is an area that is broken	
	trees	
	much more bulk than existing buildings	
	engineering concerns - water table  Existing retaining wall is listed and fragile. Wall was	
	done under guidance of English Heritage to preserve	
	character of wall. This design proposes to change the	
	wall.	
New Court NW3 1HD	Would prefer building to be set back from streatley	
	place wall - proposal limits light into Streatley place	
	Alley way and is not congruent with other houses along Streatley Place which are set back with gardens.	
	along Streamey Flace which are set back with gardens.	
	Cladding along Streatley Place wall not congruent with	
	area	
	Loss of trees on plot	
	loss of light for residents of 1-30 New Court	
	Stability of building - River Fleet runs under 1-30 New	
	Court - presumably surveys have been done to assess this?	
	Impact upon the party wall - New Court and Plot	
	Disruption from building work - access along Streatley	
	Place to New End runs directly behind my home i.e.	
	New Court 31-40	
opposite (assumed Streatley flats)	Fire services into the building	
	Issues about height	
	Original retaining wall on New Court side - Keeping? Removing? Or incorporating?	
	Brick tone is <u>very important</u> as this is the majority of	
	visible material	
Streatley Place	Major loss of daylight - give me a ring to discuss	
	Don't like the blank wall. If flats don't want to be	
	overlooking the should introduce frosted glass	
New Court	Looking out to the build	
Lakis Court	Like terraced effect not clay tiles on frontage, bit	
	oppresive. Shadow lines would help. Don't think fire	
Flask Walk	service access a problem	
i iask vvaik	Feels very strongly about retaining the retaining wall	
	Likes elevation and architecture - Prefers timber look	
	to clay tiles	
	Likes the introduction of the 1 & 2 bedroom flats to the	
	area. Fed up of 5 bedroom luxury houses	
	Suggested introducing the compound to flask walk rather than new end road	
	rather than new chu toau	

216193.101

December 2016

## STRUCTURAL FEASIBILTY REPORT

For

## CONSTRUCTION OF FLATS

Αt

6 STREATLY PLACE NW3 1HP

For

ADAM BIER



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- 3. Description, History and Proposals
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## 1.0 Summary

This report considers the structural feasibility of constructing a development at 6 Streatly Place NW3 with particular reference to the access restrictions of the site, the effects on nearby buildings given the slope of the site and need to retain existing site boundary structures. A concept structural layout and construction sequence has been developed as part of the considerations. This utilises mini piling and sequential construction techniques as are now frequently adopted for schemes of this type.

The proposals are considered entirely feasible using normal mini piling techniques and sequential construction techniques with only minor risk of non structural damage to nearby structures, which would be within category 1 of BRE Digest 365

## 2.0 <u>Instructions and Limitations</u>

- 2.1 Instructions were received from you via your Architect requesting a Structural Methodology Statement on the proposal to construct a low rise development of flats at 6 Streatley Place. We understand the report is required to supplement a Planning Application.
- 2.2 Our investigation and report is based on currently available information following an inspection of the site and walking available access routes, along with the Architects Panning drawings. This report has been prepared in consideration of the feasibility of constructing the building only and should not in any way be taken as a design for the construction.
- 2.3 This report is prepared for the information, benefit and use of Adam Bier only and any liability of Ian Harban Consulting Engineers to any third party, whether in contract or in tort, is specifically excluded. Any third party finding themselves in possession of this report may not rely upon it without first obtaining the written authority of Ian Harban Consulting Engineers.
- 2.4 RHS refers to the right hand side of the building when viewed from Streatley Place
- 2.5 LHS refers to the left hand side of the building when viewed from Streatley Place.



## 3.0 <u>Description, History and Proposals</u>

- 3.1 The site is broadly rectangular on plan although narrowing to the rear. Existing buildings are near the LHS, RHS and rear of the site, with the frontage to Streatley Place.
- 3.2 The site slopes from RHS to LHS by approximately two storeys.
- 3.3 It is proposed to construct a three storey building on the site footprint, requiring retaining walls to the RHS and a floor level higher than the neighbouring ground to the left hand side. Architectural drawings are included in the Planning Application and are not reproduced in this report for brevity.
- 3.4 Access to the site is from either direction along Streatley Place, with a slope down from the Back Lane and with steps from the entrance at New End.

## 4.0 Site

## 4.1 Existing Structures

- 4.1.1 The existing neighbouring buildings are predominantly of loadbearing masonry construction. Existing brick boundary walls form the LHS and RHS boundaries and are understood to be Listed and must be retained.
- 4.1.2 All neighbouring buildings do not abut the site, the closest being 5m away from the boundary.
- 4.1.3 The slope of the site will require material to be excavated and temporary and permanent restraint of the brick boundary walls will be required.

#### 4.2 Access

- 4.2.1 The current site access is from either end of Streatley Place. Access is both narrow and with steps from the New End road.
- 4.2.2 The proposed building will occupy the majority of the site footprint requiring careful consideration of site logistics and material delivery and disposal of material so off site.



## 5.0 <u>Structural Proposal and Construction Methods</u>

## 5.1 Structural Proposals

- 5.1.1 The drawings in Appendix A show the proposed concept structural cross section and construction proposals with respect to construction sequence and temporary and permanent stability of the adjacent structures.
- 5.1.2 It is proposed to install mini bored piles to support the proposed building and these can be used to provide temporary support to the existing site boundary walls.
- 5.1.3 The floor plate of the lowest and first level will be reinforced concrete to provide lateral stability to the piled walls.

#### 5.2 Proposed Construction Method

- 5.2.1 The proposed sequence and method of construction needs to take account of temporary stability during construction, both of the site itself but also the neighbouring buildings.
- 5.2.2 The works would need to be undertaken by a contractor familiar with working in tight confines and mini piling construction.
- 5.2.3 More particularly the proposed structural sequence would be as follows, assuming other site set up/ welfare etc has been completed:
  - 5.2.3.1 Isolate and make safe any existing services.
  - 5.2.3.2 Provide site hoarding to the Streatley Place elevation and secure site.
  - 5.2.3.3 Locally level site with terracing and form piling mat. Establish piling rig on site accessed from Back Lane End. This may require temporary local traffic restrictions at Back End, shown on Step 1 of SK01.
  - 5.2.3.4 Step 2, locally underpin existing wall on the 3 Streatley Place boundary, in 1m long sections using traditional underpinning techniques. During this process cut piles down adjacent to wall.
  - 5.2.3.5 Step 3, Reinforce upstand of wall as necessary and excavate to base of wall in sections, cut down piles and cast base supported onto piles.
  - 5.2.3.6 Step 4, Excavate remainder of site down to formation, cut back piles and cast ground slab. At this stage it may be necessary to provide concrete counterfort strengthening to the existing wall on the New Court boundary.
  - 5.2.3.7 Step 5, construct remainder of superstructure.



## 5.3 Construction Good Practice.

- 5.3.1 Local parking is limited and therefore site operatives should use the many immediate public transport connections.
- 5.3.2 Demolition and excavation dust on site will be controlled by the watering of work at ground floor level. Inlets to the drainage system will be protected with filters bunded with sandbags to prevent slurry runoff entering the system.
- 5.3.3 The Contractor will adhere to, and respect any restrictions on working hours or the enforcement of silent periods throughout the day, which may be imposed by the Local Authority, Contract Documents or the Party Wall requirements.
- 5.3.3 All waste Substances from the site shall be disposed of offsite, under the appropriate Duty of Care and subject to approvals/consents from the relevant statutory bodies. Recycling is to be undertaken wherever appropriate. All vehicles leaving site carrying potentially dust-generating demolition or construction waste are to be completely sheeted with tarpaulin or netting, in good condition.
- 5.3.4 The site is to be securely hoarded along the boundary to the public right of way. The hoarding is to be designed by the contractor's Charted Civil or Structural engineer to resist appropriate wind loadings as defined by 8S6399:2.
- 5.3.5 All live emergency exits and access routes on site will be maintained at all times.



## 6.0 Effects of Proposed Works

## 6.1 Neighbouring Structures

- 6.1.1 The proposed construction sequence has been conceived to provide lateral stability to adjacent structures and existing boundary masonry walls.
- 6.1.2 However, with all construction of this type, the existing site boundary walls may suffer minor movement. Any settlement resulting from a properly executed scheme will be within reasonable limits and at worst may result in superficial cracking. Condition surveys should be undertaken as part of Party Wall Act requirements so that the effects of any minor movement that might occur can be monitored. We would also recommend datum level monitoring stations and targets are installed to monitor levels during the works.
- 6.1.3 The form of construction will also limit and lateral movement of the top of the wall, this being propped by the proposed reinforced concrete ground floor.
- 6.1.4 The proposed works will not affect the structural stability or integrity of the neighbouring structures.

## 6.2 Adjacent Trees and Root Protection

6.2.1 The proposals have been developed in way which minimises working to external areas where tree and root protection measures are required.

## 6.3 Pedestrian safety on Streatley Place

- 6.3.1 Spoil arising from the excavations will need to be disposed off site, using site personal to move the material down Steatley Place to the end of New End where skips can be located.
- 6.3.2 It will also be necessary for site operatives to move materials into the site along Streatley Place. The building will need to be designed to allow all materials to be moved onto site using wheel barrows or narrow self propelled barrows, only used with a banksman to ensure public interface remains safe.



## APPENDIX A

Drawings 216193 SK01 and SK02

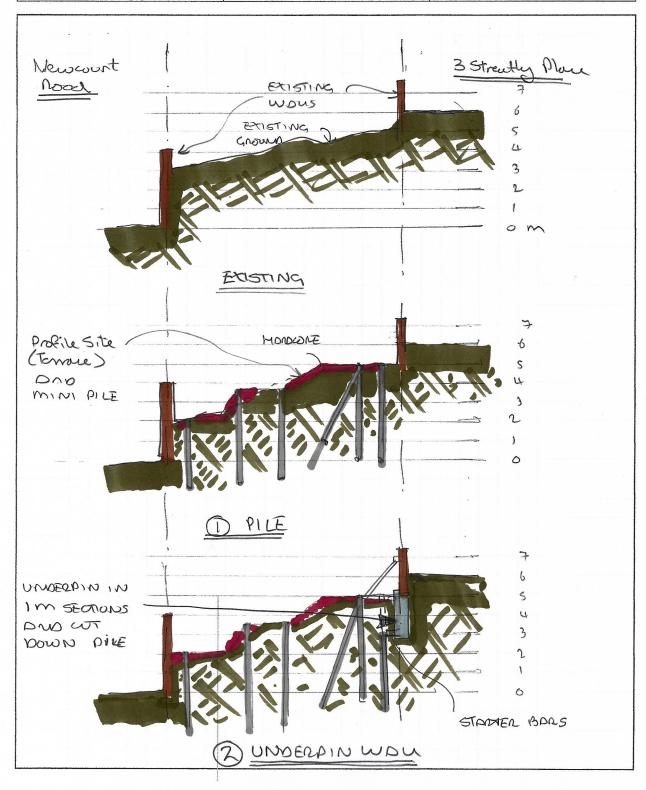


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Date Dec16	By IGH	Scale
Job Number 216193	Sheet Number SICOI	Rev



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