URS

Construction Traffic Management Plan

10a Belmont Street, Camden

47059671/CTMP

December 2012

Prepared for: Hallmark Property Group

UNITED KINGDOM & IRELAND

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1	Aug 2011	Draft for Comment	Ewa Skupinska Consultant	Beckie Woodland Senior Consultant	Margaret Theobald Associate
2	Aug 2012	Revised Report	Beckie Woodland Senior Consultant	Beckie Woodland Senior Consultant	Margaret Theobald Technical Director
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4	Dec 2012	Revised Report (incorporating minor amendments to proposal)	Eva Edwards Transport Consultant	Beckie Chapman Senior Consultant	Mark Watson Principal Consultant

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1. INTRODUCTION

1.1 Scope of Works

The works that are the subject of this Construction Management Plan (CMP) involve the part-conversion of the existing structure and construction of a rear extension to accommodate enhanced B1a office and new C3 residential use at 10A Belmont Street, London, NW1 8HH.

The proposed development will house three new residential flats on the top three floors by way of replacement of the roof attic plus two additional floors, in addition to the proposed rear extension to compensate and add commercial floor space that is lost within the existing top floor attic. The top level extension construction is proposed to be built with the use of materials in keeping with the existing building. Thus the lowest floor of the new 3-storey rooftop extension will be built in brick to match the existing building design. Lightweight glass extension will be constructed on the middle level which will be set back from the face of the existing brick building and the parapet edge. The top floor of the extension will be set back further and set in curtain wall and cladding to match the other two storeys below it.

The proposed development is car free with provision for 30 cycle parking spaces and refuse store located on the ground floor lobby area adjacent to lift and stair core.

The planning application black line plan shown below shows the development outline. Further details of the proposed development and associated servicing and access arrangements can be found in the Transport Statement by URS submitted to support the planning application for this development.

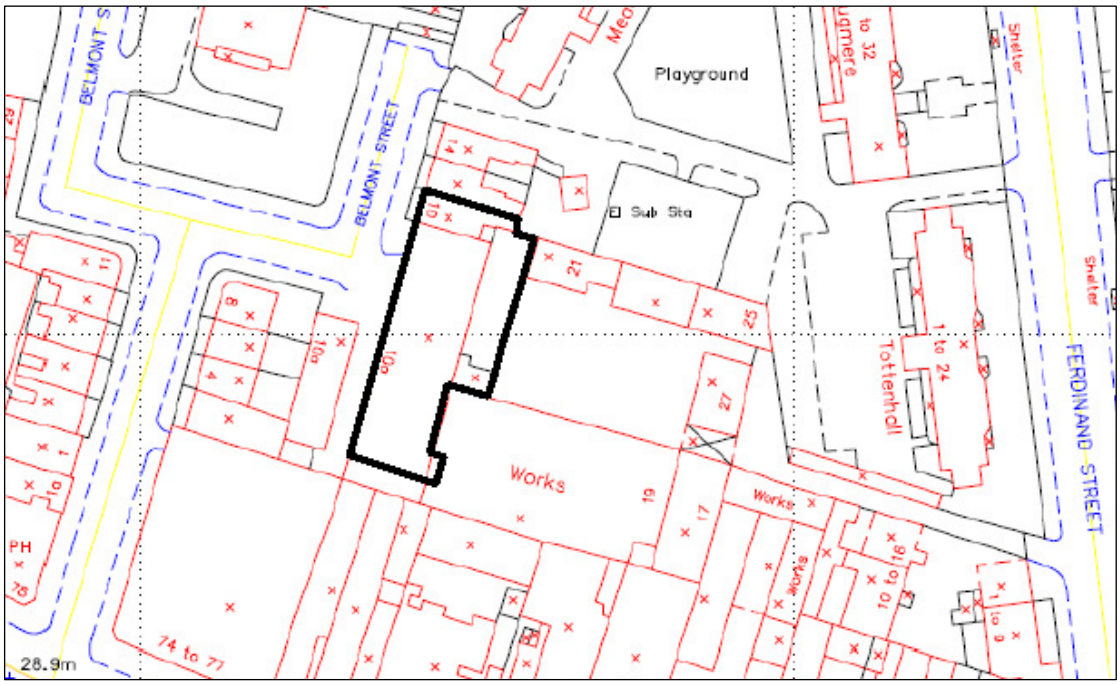

Figure 1.1 Site Boundary

The construction of the proposed development follows Modern Methods of Construction (MMC) which provides a route to improve construction from a sustainable perspective. MMC encourages innovative construction methods which reduce construction periods, reduce on-site risk and improve quality by a number of methods including off-site manufacturing.

The proposed development will be constructed under the "Considerate Contractors Scheme" (www.consideratecontractorsscheme.org.uk), and the contractor will also follow the "Guide for Contractors Working in Camden" as required by the London Borough of Camden.

1.2 Purpose of the CMP

The CMP describes the proposals to safely manage vehicular, cyclist and pedestrian traffic during the construction of the development proposals.

The purpose of this CMP is to achieve the following:

- Provide details of the Construction Management Plan to be applied to provide a safe environment for traffic, road users, pedestrians, cyclists and construction staff
- Ensure that any impacts on road users are mitigated
- Ensure that access is maintained for the local resident community and local businesses
- Outline how potential construction-related environmental effects identified in the London Borough of Camden's (LBC) 'Sustainable Design and Construction Policy' will be avoided, remedied or mitigated during the construction period.

Outline the potential stakeholder issues and set out strategies, systems and procedures to provide for ongoing consultation between local residents and businesses, LBC and Transport for London (TfL).

1.3 Overarching Objective of the CMP

- Provision of a safe environment for pedestrians, cyclists, and vehicular traffic through the implementation of plans to effectively warn, protect, inform and guide in accordance with best practice guidance
- Plan and stage all works effectively to minimise delays to pedestrian, cyclist and vehicular traffic, and minimise conflict points on the respective transport networks
- Enable pedestrians, cyclists, and other road users to plan their journeys by providing them with timely and accurate information on programmed traffic management measures
- Limit obstructions and restrictions to current movement patterns, and where required, provide alternative routes for use by pedestrians, cyclists and vehicular traffic
- Actively liaise with key stakeholders and ensure they are informed about proposed changes to plan measures and implementation programmes.

1.4 Status of the CMP

The CMP should be referred to when:

- Planning works to minimise, remedy or mitigate the effects on the environment;
- Undertaking all works that may have an impact on the environment;
- Communicating with stakeholders.

Once the CMP has been agreed with relevant stakeholders, it will be adopted and developed in further detail by the successful contractor and made available to all parties, so that it can be used as a practical construction and communication management tool and reference source.

The agreed contents of the CMP must be complied with unless otherwise agreed with the LBC. The person responsible for implementing the CMP shall work with the LBC to review this CMP if problems arise in relation to the construction of the development. Any future revised plan must be approved by the LBC and complied with thereafter

An up-to-date CMP will be kept in the proposed site office and all construction staff will be made aware of its location for reference as required.

1.5 Construction Environment Management System Overview

The CMP forms one of a suite of documents specifying processes and mitigation measures for all potential areas of construction impact. These documents will cover the following areas:

- Dust and Air Pollution Management
- Noise and Vibration Management
- Water/Sediment Management
- Spoil and Fill Management
- Management of Construction Waste and Re-use
- Site Hazards and Risk Management
- Incident Management.

It should be noted that there are overlaps between some of these documents and the CMP. For example, construction traffic can contribute to noise and vibration and will need to be mentioned in the relevant construction management document.

1.6 Exclusions

The appointed contractor will prepare a specific Health and Safety Plan for site works to cover all activities within the construction process for the development. This CMP only considers traffic related risks and management.

1.7 Consultation

The development of this CMP has been based on consultation with transport planners, highways officers and environmental health officers at the LBC.

1.8 Structure of this document

The remainder of this document is therefore structured as follows:

- **Chapter 2** – Provides background on the construction site activities, phasing and layout
- **Chapter 3** – Provides details on the proposed access for construction vehicles and routing to the site

- **Chapter 4**- Provides details on the management of construction vehicles and general traffic
- **Chapter 5** – Outlines additional considerations for the CMP
- **Chapter 6** - Indicates how the CMP is envisaged to be developed as further information becomes available.
- **Appendix A –** Contains the drawings of the indicative site layout during construction
- **Appendix B –** Contains a construction management programme
- **Appendix C –** Contains tracking drawings of the site layout proposals
- **Appendix D –** Provides the site access statement
- **Appendix E –** Provides the construction travel leaflet.

2. CONSTRUCTION SITE ACTIVITIES, PHASING AND LAYOUT

2.1 Existing Heavy Goods Vehicle Movements

Vehicular access to the site is currently made via two access points:

- Ferdinand Street provides access to the rear of the site via an un-named access road located between Kent House and Tottenhall House. The rear of the site operates as a car park and main service area. This access point to the rear service area has a height restriction of 3.2 metres.
- To the front of the site there is a paved area in front of 10a Belmont Street which is used as a loading area for deliveries which require large vehicles that cannot negotiate the height restriction at the rear of the property.

There is no access to the north of the site via Mead Close, due to a locked keycard operated gate preventing vehicle and pedestrian access by non-residents.

During construction of the development in is anticipated that the number of trips by large vehicles will increase over the existing situation. Further details of estimated construction traffic volumes are provided later in this document.

2.2 Outline Description of Proposed Development

The development proposals are for mixed use development of B1a office and C3 residential units, in the form of rear extension and the replacement of existing roof loft space. The existing loft space will be replaced with dormer windows and roof lights with lightweight levels on top.

The proposed development will house three new residential flats at the top three floors by way of conversion of part of the existing fourth floor and replacement of the roof attic plus an additional two floors, in addition to the proposed rear extension.

It is proposed that the top floor extension construction is carried out using construction materials to compliment the style of the existing building. Thus building of the lower floor will be done in brick to match the existing building design and lightweight glass extension at the upper floor which is set back from the face of the existing brick building and the parapet edge.

The proposed development is car free with provision for 30 cycle parking spaces throughout the development and refuse store located at ground floor lobby area adjacent to lift and stair core.

It is suggested that during the redevelopment it will be necessary to re-locate tenants at the fifth floor into commercial spaces within 17 Ferdinand Street across the rear courtyard. This will be on a temporary basis if possible but on a permanent basis if necessary, until such time that the rear extension is complete.

The tenants within the current ground floor North Studio will be asked to accommodate the loss of 1.5m strip of office space against the current corridor/lobby to allow construction of residential corridor access from Belmont Street to the rear extension and residential access core lobby. The tenants within this area will be compensated with additional floor space once the rear extension is complete.

2.3 Main Contractor

The main contractor responsible for the delivery of the proposed development is **Designated Contractors Ltd**.

The full contact details of the main office for the duration of the works are as follows:

Contact Name: Mr Andrew Bacon

Address: 46 Great Marlborough Street, London, W1F 7JW.

Telephone Number: 020 7479 4607.

The contact details for the site and project manager responsible for the delivery of works on site are:

Site and Project Manager. Mr Denis Enright.

Telephone Number: 07831 665752.

2.4 Construction Site Activities

The proposed activities to be conducted during the construction of the proposed development are as follows:

- Demolition and clearance of the store room at the rear yard.
- Construction of site compounds and placement of site offices near the current rear access through the service yard.
- Construction of new residential corridor access through the North Studio on the ground floor to provide access to the rear of building.
- Placement of scaffolding around the building, making sure to minimise obstruction to all windows. The scaffold will include a hoist/service lift.
- Fixing a temporary water-proof roof in the form of Mono-flex on to the scaffolding.
- Demolition and removal of roof attic/loft and dormers.
- Excavation for foundations to the proposed rear steel frame extension.
- Installation of specially manufactured lift and cradle (by a company called “Tractel”) which will be mounted on to the roof throughout all of construction work and will be used as a substitute for a conventional crane.
- Haulage operations of spoil and building material to be placed in allocated skips ready for recycling.
- Deliveries of construction materials, and plant equipment.
- Delivery and placement of building materials, structural framework and internal stud work on to roof space.
- Construction of new fifth floor with matching brickwork and windows including internal flat layouts for the proposed new two four-bedroom apartments.

- Construction of new sixth floor with light-weight steel frame and glazed panels including an internal flat layout to create the bottom floor of the six-bedroom duplex penthouse.
- Construction of the new seventh floor in curtain wall and cladding to create the top floor of the duplex penthouse to match its bottom floor.
- Construction of proposed rear light-weight steel frame structure, with solid render and glazed panel cladding including the new stair and lift core.
- Placement of drainage pipes and services.
- Installation of all internal fixtures and fittings.
- Internal alterations to all floors linking the existing commercial floor space to the new proposed rear extension by way of window replacement with glass doors.
- Final internal decorations and repair of any damage done to the interior of the existing building.
- Reinstatement of local roads, footway and traffic calming measures including rear service yard.

2.5 Site Layout

Appendix A of this report contains a drawing indicating the proposed site layout during the construction period. The access and hoarding arrangements for all the construction programme is expected to remain unchanged throughout and therefore only one site layout drawing is required.

2.6 Construction Programme

A full construction management programme is provided in Appendix B.

The total construction programme will take approximately 15 months to complete. Approximately 1 month has been allowed for the minor demolition and site clearance works and a further 1 month for the laying of foundations and other preliminary work including the delivery of the roof mounted Lift/crane by Tractel. Approximately 13 months has then been identified for the building construction and completion.

The construction works and programme has been planned in detail to ensure all elements of the build are coordinated. In additional, all materials and equipment have already been ordered to avoid any delay in the construction programme.

2.7 Construction Stages and Phasing

The construction of the proposed development has been divided into three distinct phases, with the final phase made up of five separate construction stages. The access arrangements for the construction period are described in Chapter 3.

At all stages of the construction work all construction vehicle movements will be managed by the contractors to minimise disruption to existing businesses within the rear yard. The following phases are envisaged.

2.7.1 *Phase 1 – Demolition and Site Clearance*

The demolition stage of the construction process will include the following:

- Site establishment / set Up
- Setting out / surveys
- Dilapidation survey and photos
- Disconnection of all services to roof loft level
- Scaffolding around the building parameter
- Demolition of existing roof loft structure
- Instillation of specially manufactured lift and cradle (by a company called “Tractel”) and mounted to the roof for all construction work as substitute for conventional crane.

The location of the Tractel Lift is shown on the site layout drawing in Appendix A. The lift and scaffold is located on private land owned by the developer and does not impact on the adjacent footpath. The location of the lift is demonstrated in Figure 2.1 below.

Figure 2.1 Tractel Lift and Scaffold Location

The site establishment/office would be placed near the rear boundary and within the site boundary.

2.7.2 *Phase 2 – Foundation to Rear Extension*

The second phase will be centred around the construction of a new residential corridor access from the building frontage on Belmont Street to rear of building with the new proposed stair and lift core. This will be constructed by way of partitioning a 1.5m strip off the current ground floor North Studio.

The construction of concrete strip foundation for the new steel frame rear extension will involve minimum excavation of the existing site.

2.7.3 *Phase 3a – Construction Stage 1*

Phase 3 is made up of five distinct stages. For the first stage of the construction phase, all necessary building materials including brick work will be installed to construct the proposed new fifth floor extension.

All necessary building materials including steel framing and glazing panels will be installed to construct the proposed top floor lightweight extension. Materials required in this stage including bricks, steel and timber will be lifted from delivery vehicles from Belmont Street and put into position with the “Tractel” construction lift mounted to the roof and the hoist/service lift within the temporary scaffold.

2.7.4 *Phase 3b – Construction Stage 2*

This phase includes the construction of the majority of the site including the lift/stairwell cores and the rear extension including all internal wall layouts.

All of the steel, timber and other external materials in this phase will be lifted from delivery vehicles and put into position with the "Tractel" construction lift mounted to the roof, which will be relocated to the top of the new build extension steel framing once it is complete.

2.7.5 *Phase 3c – Construction Stage 3*

The third stage of the construction phase includes the external cladding and internal layout fittings, including walls and roof cladding.

All of the materials used in this stage will be lifted from delivery vehicles and put into position with the "Tractel" construction lift mounted to the roof

2.7.6 *Phase 3d – Construction Stage 4*

During the fourth stage of the construction the work will focus on the distribution and connections to all services including those of the existing commercial floors. Final internal fittings and finishes to all commercial, communal and residential areas will be installed.

2.7.7 *Phase 3e – Construction Stage 5*

The final stage of the construction will utilise weekend working as much as possible in order to minimise disruptions to the existing commercial tenants.

At least one window will be replaced with full height glass doors to link the new rear extension with the existing commercial floor space and repair any construction-related damage.

The final construction stage will also include the removal of any scaffold sections that remain during the construction.

2.8 Hours of Site Operation

In accordance with the hours recommended in the LBC 'Noise from Construction Sites', the hours of work are proposed to be:

- Monday to Friday 08:00 – 18:00
- Saturday 08:00 – 13:00
- No work to be carried out on Sundays or bank holidays unless necessary; when Sunday or bank holiday working is required a license will be obtained from Camden Council.

It is proposed that to minimise traffic impact and help vehicle movements on the Belmont Street residents, all deliveries to be limited to between the hours of 10.00am – 4.00pm.

Should there be any requirement for works to be carried out outside the construction hours outlined above, the construction site management will approach the LBC and TfL prior to this taking place.

2.9 Crane Use and Location

Due to the specially manufactured lift and cradle by "Tractel" being used on site during the construction period, there will be no requirement for the use of a tower crane at any stage of the construction. The lift will operate within the boundaries of the site at all times.

3. CONSTRUCTION SITE ACCESS

3.1 Construction Traffic Approach Routes

It is envisaged that the A400 Camden High Street and the A503 Camden Road will form the most suitable link in the strategic road network to accommodate construction vehicles. Primary routes providing connections to the A400 (i.e. A501 Euston Road and A1 Holloway Road) will therefore form the main approach routes to the site.

The construction traffic route into and out of the proposed site can be seen in the diagram below:

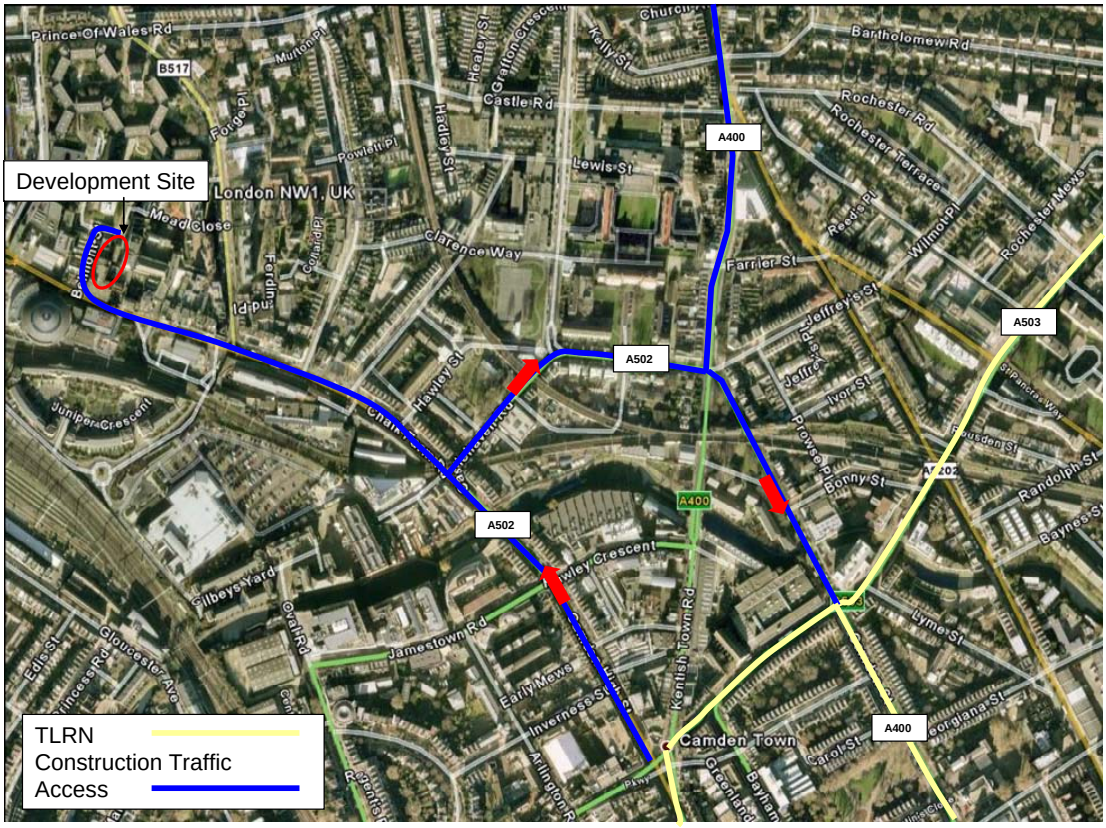

Figure 3.1 Construction Traffic Route Into/Out of Proposed Site (Not to Scale)
Source: ©Google Earth Image 2009 BlueSky

It is proposed that construction vehicles access and egress the proposed development site via the A502 one-way system to/from the A400 and A503 to the east of the site.

It should be noted that the roads outlined above form part of Camden's Strategic Road Network or Local Distributor Network and are therefore suitable to accommodate the construction traffic associated with the proposed development.

From Chalk Farm Road (A502), vehicles are able to turn right into Belmont Street. The tracking of this movement can be seen in Appendix C.

Belmont Street operates one lane in each direction, although lanes are not always marked on the carriageway. Residential parking bays are located along the length of Belmont Street, with

a motorcycle parking bay located on the western carriageway of Belmont Street close to its junction with Chalk Farm Road. These bays are shown below.

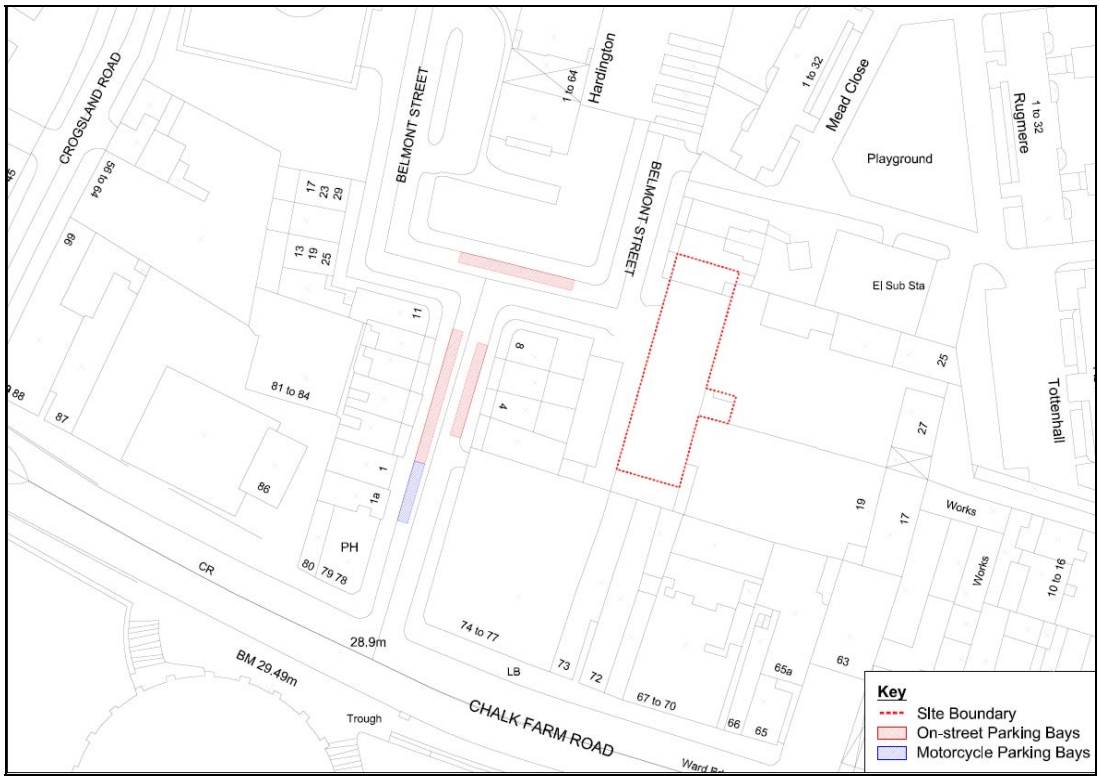

Figure 3.2 Belmont Street Parking and Motorcycle Bays

Due to the location of the parking bays, Belmont Street is reduced to one-way operation (as shown above) when the bays are in use with vehicles waiting for one vehicle to pass before travelling forwards itself. Due to the low vehicular flow on this link, the one-way operation does not have a significant impact on the operation of the link.

Figure 3.3 Belmont Street Parking Bays

The residential Controlled Parking Zone (CPZ) on Belmont Street operates between 0830-1830 on weekdays, 0930-1730 on Saturdays and between 0930-1730 in residential bays on Sundays.

An alternative access route to the site is available along Ferdinand Street. This route provides access to the rear of the site via an un-named access road located between Kent House and Tottenhall House. The rear of the site operates as a car park and main service area. This access point to the rear service area has a height restriction of 3.2 meters.

There is no access to the north of the site from Ferdinand Street to Belmont Street via Mead Close due to a locked key-card operated gate preventing vehicle and non-resident pedestrian access.

However, the Belmont Street route is the preferred alternative for construction traffic access, with its paved area to the front of 10a Belmont Street, particularly as it provides a loading area for deliveries which utilise vehicles that cannot negotiate the height restriction to the rear of the property. All existing maintenance and refuse vehicle movements via the rear yard will be maintained.

There are a number of bus routes which operate in both directions on Chalk Farm Road.

3.2 Immediate Site Access

3.2.1 *Pedestrian Access*

Pedestrian access for authorised site personnel will be from Belmont Street and through the new access (finally to be used for the proposed residential access) into the site office at the rear of the building.

3.2.2 *Vehicle Access*

The majority of construction vehicles will access the proposed site via Belmont Street, with only smaller vehicles during the final stages of the construction phase making use of the Ferdinand Street accesses route. It is proposed that no large construction vehicles will access the site off via Ferdinand Street as discussed with the LBC.

Authorised site personnel will enter the site via the proposed temporary entrance at the rear of the property.

It is proposed that a suitable gate arrangement will be incorporated into the site boundary hoarding facing Belmont Street. The proposed gate will open further than 90 degrees in order to assist in entrance to the site. The gate will be controlled by a banksman.

As outlined in Chapter 2 there are a number of stages that make up the construction period. However it should be noted that the access/egress to the site will be maintained throughout the construction period. The access arrangements are managed as discussed below.

Early in the first phase of construction, a Tractel lift and cradle will be delivered to the site and will be fixed onto the roof of the redeveloped building outside the North Studio fronting Belmont Street as shown in Appendix A. The lift will remain in place throughout the construction period. Its usage will eliminate the need for the installation of any other cranes on site as all materials will be transported using the lift.

Construction vehicles will use Belmont Street to access the front of the site. From here goods will be loaded/unloaded into the site. Where necessary vehicles may wait temporarily on the paved area to the front of the site.

Vehicles will turn right into Belmont Street from Chalk Farm Road and travel north towards the site. In order that the impact of vehicles accessing/egressing the site is minimised, it is proposed that construction vehicles travel both north and south on Belmont Street using the eastern carriageway only where necessary. As discussed earlier in this section, this link is currently reduced to one-way operation when the parking bays are occupied. This limits the amount of parking bays requiring suspension during the construction period.

It is recommended that construction vehicles turn left into the northern part of Belmont Street and reverse back to the site. Vehicles exiting the site will then move forwards, turning left into them main section of Belmont Street, and then left onto Chalk Farm Road.

During the final fit-out of the building at the end of the construction period, the rear service area will be utilised, as these deliveries will be via smaller transit vans which can be accommodated within the height, view, and manoeuvrability restrictions associated with this access point. Signage would prompt exiting vehicles to give way to incoming vehicles.

The tracking demonstrating the operation of the site access during construction is shown in Appendix C.

3.2.3 *Phase 1 – Demolition and Site Clearance*

During the demolition of the existing roof loft structure, the need for vehicle access is minimal and approximately 12 loads full will be sufficient.

All deliveries will come and leave via Belmont Street.

Skips will be positioned close to the building access to be filled by the Tractel lift fixed on the existing roof and removed by tipper bodied rigid vehicles removing building materials and skips for materials to be recycled.

3.2.4 ***Phase 2 – Foundation to Rear Extension***

As with Phase 1, required vehicle access is expected to be minimal, with deliveries able to arrive and leave via Belmont Street.

3.2.5 ***Phase 3a – Construction Stage 1***

Delivery vehicles will be required to deliver the construction materials for this stage. The access for this stage of the development process will take place via Belmont Street.

3.2.6 ***Phase 3b – Construction Stage 2***

Delivery vehicles will continue to deliver the construction materials for this stage. As before, the access for this stage will take place via Belmont Street.

3.2.7 ***Phase 3c – Construction Stage 3***

As with the previous two stages, delivery vehicles will be required to deliver the construction materials during the third construction stage. The access for this stage of the development process will remain along Belmont Street.

3.2.8 ***Phase 3d – Construction Stage 4***

Delivery vehicles will be delivering more construction materials during this phase. However, unlike the previous three stages, the access for this stage of the development process will not be restricted to Belmont Street only. A small number of movements will also take place from Ferdinand Street, particularly for the movements which are made by smaller vehicles.

3.2.9 ***Phase 3e – Construction Stage 5***

Similarly to stage 4 of the construction phase, delivery vehicles during stage 5 will be required to deliver construction materials to the site. The access for this stage of the development process will once again be divided between Belmont Street and Ferdinand Street. Larger vehicles will continue accessing the site from Belmont Street. Deliveries made using smaller vehicles will be able to access the development site from the rear of the property, via Ferdinand Street.

3.2.10 ***General Comments***

Belmont Street will remain open as a public vehicular route throughout the construction period.

A single parking bay suspension will be required on the eastern side of Belmont Street to the front of numbers 8, and a single space to the front of number 11. This is discussed in more detail in Section 5.

In addition, a temporary parking suspension will also be required on the northern carriageway of Belmont Street to facilitate the delivery and removal of the Tactel Lift equipment and other large deliveries as required. This is discussed further in Section 5.

Whilst the Tractel Lift and scaffolding will be located to the front of the building, the land required to accommodate the lift scaffold is all within the site boundary and does not impact on the existing footway as shown in Figure 3.4 below.

Figure 3.4 Proposed Tractel Lift location.

Banksmen will be stationed at the site access throughout the construction period to assist construction vehicles to enter and exit the site safety, whilst minimising inconvenience to traffic on Belmont Street and Ferdinand Street.

A delivery booking system will be implemented to minimise the potential for vehicles queuing along Belmont Street. More details are provided in Section 4.

4. CONSTRUCTION TRAFFIC MANAGEMENT

This section of the CMP identifies the environmental impacts specific to construction traffic and presents suitable mitigation measures.

4.1 Delivery Booking System

A delivery booking system will be produced and operated by the contractor's site traffic manager. The system will aim to mitigate the following:

- Queuing outside the site
- Arrival of unscheduled deliveries
- Deliveries arriving late due to supplier despatch misunderstandings
- Deliveries failing to arrive
- Wrong quantities or materials arriving by mistake, requiring the vehicle to be sent away, or an additional 'part-load' vehicle delivery to make up delivery requirements
- Delivery vehicles arriving early in the hope that they will be dealt with out of turn
- No staff or equipment being available on-site to unload the vehicle.

Mitigation of the above will avoid unnecessary vehicle movements to and from the site. It will also importantly reduce the possibility of construction vehicles queuing outside of the site waiting to be processed.

The delivery booking system will contribute towards decreasing / mitigating any potential negative environmental and/or social impacts the construction traffic may have on the surrounding area including neighbouring residents and businesses. Without the booking system in place the impacts could potentially include noise and air pollution as well as congestion and reduced accessibility to Belmont Street and adjoining roads.

The delivery booking system will be operated by the construction site traffic manager.

Banksmen will be employed to ensure the efficient and safe movement of vehicles into and out of the site. The banksmen will be coordinated by the site traffic manager, and will organise both the access points as necessary.

4.2 Heavy Goods Vehicle Types

A number of types of heavy goods vehicle will serve the site. Due to the constrained nature of the site, and the commitment of the development to maintain the maximum level of parking bay, the construction vehicles permitted to access the site on a day to day basis have been limited to the following vehicle types:

- Light Vans – used by individual trade contractors, typically during the final fit-out of the proposed development (approximately 7.2m long and 2.2m wide.
- Concrete Mixer – for the delivery of concrete (maximum of 8.4m long and 3.4m wide)
- Rigid Skip Lorries – for removal of demolition waste (approximately 7.5 meters long and 2.5 meters wide)

- Tipper Bodied Rigid Lorries – for removal of demolition waste and spoil from the site (maximum of approximately 9 meters long and 2.5 meters wide)

- Small Articulated Lorries – for the delivery of some construction materials (maximum 10.7m long and 2.4m meters wide).

Tracking for the above vehicle types is included in Appendix C of this report. In order to accommodate these vehicles two parking bays will need to be suspended for the duration of the construction period (see Section 5). The relevant applications will be made for these suspensions.

In addition to the above vehicles, it may occasionally be necessary to use larger vehicles to deliver materials and equipment to the site using the following vehicles:

- Box/Flatbed Rigid and Articulated Lorries – for the delivery of some plant and other construction materials (maximum 16.5 meters long and 2.5 meters wide); and

- Articulated Low Loader – for the delivery of some construction plant (maximum 16.5 meters and 2.5 meters wide).

- Tractel construction lift mounted to the roof.

The drawings in Appendix C also illustrate the swept paths for an articulated low loader and a flatbed lorry.

It should be noted that the use of these vehicles will be infrequent and for very short periods of time. As such, the additional parking suspensions which will be required to accommodate these vehicles will be applied for on a case by case basis, and the duration of any suspension will be limited to the time required (see Section 5). The relevant applications will be made for these suspensions.

The drawings demonstrate that these vehicles are able to access and egress the site with the implementation of the appropriate parking suspensions. Therefore all of the above vehicles could potentially access the construction site without overhanging or overrunning any kerblines.

4.3 Heavy Goods Vehicle Traffic Volumes

It is anticipated the maximum number of construction vehicle movements that will occur during the construction period is 16 movements per day (eight vehicles accessing and then egressing the site), which will occur for a limited period only.

Based on the current programme, and in consultation with potential contractors, a table indentifying the predicted volume of construction vehicles will be provided. It should be noted that although a time period has been set for each activity, the total number of vehicles specified for the associated task within that period will not be evenly spread over the allocated time period. Within the time allocated for each activity there will be peaks in vehicle generation due to the requirements of the site at any one time. The table below represents the anticipated peak movement of vehicles within the specified activity.

Construction Phase	Sub Phase Activity	Volume Delivered/ Removed	Activity Duration (Days)	Vehicle Type	Total Vehicles / Activity	Maximum Vehicles / Day	Maximum Movements / Day
Site Clearance and Demolition*	Soil Removal	10m^3	15 days	30 tonnes	2	1	2
	Hardcore	8m^3	5 days	30 tonnes	2	1	2
	Re-cycled material removal	360m³	5 days	30 tonnes	10	2	4
Excavation Stage 1 for foundations	Soil Removal	30m^3	2 days	30 tonnes	2	1	2
	Hardcore	6m^3	2 days	30 tonnes	2	1	2
	Concrete foundations	10m^3	2 days	9m^3 Lorry	2	1	2
Construction Stage 1	Brick work	180m^3	20 days	Flat Bed	22	8	16
	Timber	260m^3	30 days	Flat Bed	34	8	16
	Steel	65 tonnes	30 days	Flat Bed	4	2	4
	Concrete	16m^3	10 days	9m^3 Lorry	4	2	4
Construction Stage 2	Steel Delivery	40 tonnes	20 days	Flat Bed	3	2	4
	Concrete	22m^3	12 days	9m^3 Lorry	5	2	4
	Timber	110m^3	22 days	Flat Bed	16	4	8
	Block work	120m^3	6 days	Flat Bed	18	3	6
Construction Stage 3	Concrete	26m^3	2 days	9m^3 Lorry	4	2	4
	Composite panels	22 tonnes	10 days	Flat Bed	2	1	2
	Windows and glass frames	36 tonnes	12 days	Flat Bed	2	1	2
	Internal fittings	48m^3	15 days	Flat Bed	10	2	4
Construction Stage 4	Service connections	8m^3	4 days	Flat Bed	2	1	2
Construction Stage 5	Doors & Window frames	8 tonnes	8 days	Flat Bed	1	1	2
	Brick work	4m^3	2 days	Flat Bed	1	1	2
	Internal finishes	6m^3	4 days	Small vehicle / van	10	6	12
*** Site Clearance**	• Small vehicles (e.g. vans) to clear rubbish from site. No demolition required. 1. Necessary disconnection of all services to top floor for demolition. 2. Scaffolding around the building plus Lift/Hoist for access to top floor construction. 3. Large Skips in front of building on Belmont Street. 4. All bricks to be stored of site for re-use in parts of the proposed development. 5. All other materials (e.g. metal, timber doors, windows, railings, flooring and joists) to be re-cycled off site. 6. All delivery Lorries to come via Belmont Street to drop off empty large skips and remove filled ones. 7. The use of specially roof-mounted lift called **Tractel** for construction period.						

Table 4.1 Forecast Construction Vehicle Movements

4.3.1 *Existing Large Vehicle Movements*

The TRAVL database was examined to calculate the estimated number of delivery trips that are currently accessing the offices at 10a Belmont Street, which equate to an employment floorspace of approximately 2,243m² GFA.

2 sites from TRAVL, based on B1 (office) land use were selected using the search criteria of PTAL level 3-6 with fewer than 100 employees.

The Fuji Film House in Northwest London had the most similar characteristics to the current Belmont Street Offices (in terms of employees, PTAL and location) and so was chosen as representative of the deliveries at the site. The delivery profile is shown in Figure 4.1.

TRAVL - Deliveries By Time

Address:	Fuji Film House 125 Finchley Road South Hampstead NW3 6HY	**Business**	Offices
		Class	B1 - Office
		Location	Inner
		Employees	77
SurveyCo	49	**PTAL**	5
Survey Da	22/06/1993		

Rigid 2 axles

Time	In	Out	% In	% Out
12:00-12:30	1	1	50	50
Total	1	1	50	50

Transit (2 axle < 7.5 Tonnes)

Time	In	Out	% In	% Out
08:00-08:30	1	1	50	50
Total	1	1	50	50

Managed by MVA Consultancy on behalf of Transport for London

Printed On 17/08/2011 Predictor Type : Employees TRAVL Version : 8.14

Table 4.2 TRAVL Site Office Accommodation Delivery Profile

Table 4.2 indicates that the offices currently have two inbound and two outbound delivery trips per day (or four movements) and are distributed throughout the day between 08:00 and 12:30. These are likely to include refuse, maintenance and servicing trips as well as cleaning and general supply deliveries such as office equipment or home grocery deliveries. As can be seen from the above tables, during construction of the proposed development the number of construction trips will at times be more than currently generated.

Table 4.1 indicates that at times during the construction, the level of large vehicle trips is likely to be greater than the existing situation. However, during most periods of the construction programme the level of vehicles generated by the site will be no greater than the existing situation therefore minimising the impacts on the surrounding highway network and environment for the local residents and businesses.

The maximum generation of large vehicle trips during construction is anticipated to be 16 movements per day (or eight inbound and eight outbound trips). This generation of trips will occur during the first construction phase within a one month period to facilitate the delivery of bricks and timber to the site. It should be noted that it is not anticipated that this level of trips will be maintained throughout the month period, but will occur on a small number of days as required by the construction programme.

Outside of this peak, the maximum number of vehicles per day is expected to occur during the final fit-out phase of the construction programme when a maximum level of 12 vehicle movements will occur per day. These movements will be carried out by smaller vehicles such as vans.

4.4 Vehicle 'Muck' Control

There will no need for vehicle wheel wash at the proposed construction site as all construction vehicles will stop on Belmont Street and a few smaller vehicles will access the site through the rear yard at early excavation stage.

There will be a road sweeper on hand to clear up any material inadvertently spread on the public highway by vehicles accessing/egressing the site. This will be done as quickly as possible after any identified occurrence.

4.5 Off Site Highways Works to Facilitate Construction

No off-site highway works are proposed which would facilitate the construction site access and egress via Belmont Street at this stage.

4.6 Workforce Traffic

The site workforce will peak at approximately 20 staff.

No staff parking will be provided. Construction contractors will be responsible for encouraging workers to share vehicles or use sustainable methods of transport to the site such as works buses and public transport.

The existing Controlled Parking Zone (CPZ) surrounding the site will deter workforce parking on residential streets in the area. The CPZ operates between 0830-1830 on weekdays, 0930-1730 on Saturdays and between 0930-1730 in residential bays on Sundays, covering the proposed working hours of the site.

The close proximity of Chalk Farm Underground Station and Kentish Town West Railway Station in addition to plentiful bus routes on Chalk Farm Road which stop approximately 100 metres from the site also assist in making workforce access to the site by public transport an attractive proposition for many site workers from a wide catchment. A travel leaflet has been developed and will be provided to all construction employees to advise on the travel options available to them in the local area (Appendix E).

Staggered shift patterns for the various trades and specialists employed on site will ensure that the impact of any workforce traffic is spread over a number of hours, and will therefore have a negligible impact on surrounding road network capacity.

5. ADDITIONAL CONSIDERATIONS

5.1 Road Closures and Traffic Diversions

5.1.1 *Belmont Street*

During the construction period it will be necessary to deliver and then remove a Tractel lift from the site of the development. This will require a temporary closure of a small section of Belmont Street to vehicular traffic. Each closure is only envisaged to last for less than one day and will be arranged with the LBC prior to the event taking pace.

5.1.2 *Court Yard Area*

Access to the parking areas behind the site in the rear courtyard servicing area will be maintained during the construction process.

5.2 Pedestrian Movement and Route Diversions

5.2.1 *Belmont Street*

All pedestrian footways will be maintained as per the existing situation during the construction period. It should be noted that the Tractel lift and scaffold will be located on privately owned land and will not impact on the adjacent footway.

5.2.2 *Court Yard Area*

Pedestrian access to the rear service area will be maintained during the construction period.

5.3 Parking Bay Removals/Suspensions

5.3.1 *Belmont Street*

Due to the constrained nature of the site, and the commitment of the development to maintain the maximum level of parking bay, the construction vehicles permitted to access the site on a day to day basis have been limited to the following vehicle types;

- Light vans
- Concrete mixer
- Rigid skip lorries
- Tipper bodied rigid lorries
- Small articulated lorries.

In order to accommodate the above vehicles, the suspension of one parking bay on the eastern side of Belmont Street to the front of numbers 8, and one space on the western side of the street to the front of number 11. This parking suspension will be required for the duration of the construction period.

In addition to the above vehicles, it may occasionally be necessary to use larger vehicles to deliver materials and equipment to the site using the following vehicles:

- Box/flatbed rigid

- Large tipper

The use of these vehicles will require the additional suspension of three parking spaces on the eastern side of Belmont Street to the front of numbers 4 to 6. It should be noted that the use of these vehicles will be infrequent and for very short periods of time. As such, the additional parking suspensions which will be required to accommodate these vehicles will be applied for on a case by case basis, and the duration of any suspension will be limited to the time required.

During Phase 1 of construction it will be necessary to temporarily suspend the parking spaces on the northern carriageway of Belmont Street in order that a low loader delivering the Tractel lift equipment can access the site. Phase 1 is programmed to last for a total of four weeks, however it is envisaged that the delivery of goods by low loader will be limited to one individual special delivery during which time the parking will be suspended. The same will be true when the lift equipment is removed during the final stages of the construction period,

It should be noted that the movement of an articulated vehicle has been included in the tracking assessment (Appendix C) to ensure a robust assessment. The tracking of the articulated vehicle indicates that any delivery by this type of vehicle will require the temporary suspension of the northern parking bays as in the above discussion. At the time of writing it is not anticipated that any articulated vehicles will be required during construction as a large tipper vehicle is able to cope with the size of deliveries required. Should any delivery become necessary during the programme, a temporary suspension of these spaces will be implemented and managed as outlined above for the low loader delivery.

The drawings provided in Appendix C indicate the tracking of the various construction vehicles, and the impact of parking bays in the area.

5.3.2 *Court Yard Area*

Access to the parking areas behind the site in the rear courtyard servicing area will be maintained during the construction process.

5.4 Access to Public Transport Facilities

No public transport infrastructure or routes will be affected by the construction.

Access to the courtyard area to the rear of the existing building will be restricted to site vehicles and construction workers only during the construction process with no access to pedestrians.

The bus stops located on Ferdinand Road will not be accessible using the servicing yard access as a short-cut route. However plenty of alternative routes exist and this is not foreseen as a problem.

5.5 Cycle Movement and Route Diversions

No London Cycle Network cycle routes will be affected by the construction.

Access to the courtyard servicing area will be restricted to site vehicles and construction workers only during the construction process. Therefore access to the LCN will not be available through the rear service yard during construction. However plenty of alternative routes exist and this is not foreseen as a problem.

The cycle parking located to the front of the building on Belmont Street will remain open during the construction period.

5.6 Noise, Vibration, Dust and Rodent Control

The proposed construction method for the proposed development which will be predominated constructed using timber and steel frame prefabricated section which will be delivered to site will mitigate against any potential noise, vibration and dust created by the construction. In additional all work will be monitored on a daily basis to that no excessive noise and dust is generated by the construction process

Should the construction process exceed the accepted noise or vibration level, noise and vibration a monitoring system will be installed on request. Similarly, should dust levels from the site exceed a minimal level, a monitoring system will be employed on site.

It is accepted that abatement techniques to prevent noise, vibration and dust nuisances will be exercised during all construction works to limit the potential generation of these elements.

Measures will be taken to ensure that rodents are not attracted to the site during the construction works. Where necessary any pest control job receipts will be retained and provided on request.

5.7 Local Community Liaison

The developer of the site understands the importance of engagement with the local community regarding the development of this CMP and has already contacted all residents within the Belmont Street yard including the Charlie Ratchford Centre.

Residents were advised of the proposed development by way of a letter drop which also provided details of proposed dates and location of the meetings along with the contact details of the project manager.

At the time of writing, all residents included in the consultation have agreed with the proposed development with the exception of 19 Ferdinand Street who has not provided any response.

The developer will continue to liaise with the local community with respect of the construction of the proposed development as outlined above.

The person responsible for community liaison throughout the site works will be Simon Dodds from Hallmark Estates. Simon's email address is simon.dodd@hallmarkestates.com and his telephone number is 020 7479 4612.

The hoarding used to secure the site will make the construction purpose clear, in addition to displaying information on how, and where, to contact the site management and Simon Dodds as the community liaison person responsible for the site works.

5.8 Complaints Register

A complaints register will be kept at the site office and will include the following information regarding any complaints received:

- Complainant's details
- Date and time of complaint's made
- Causes of complaint
- Action taken to resolve the complaint

- Date and time of action taken to resolve the complaint
- Reasons for any unresolved complaint.

6. ONGOING DEVELOPMENT OF THE CMP

It is acknowledged that the agreed contents of the CMP must be complied with unless otherwise agreed with the LBC. The contractors project manager will work with the LBC to review this CMP if problems arise in relation to the construction of the development. Any future revised plan must be approved by the LBC and complied with thereafter.

This CMP has been developed in consultation with key stakeholders at a level of detail sufficient to inform them of construction traffic management proposals. The principles identified in this CMP are considered to form a robust basis and framework for ongoing development and implementation of the CMP.

It is envisaged that the principles described in this document will be developed in further detail as the construction methodology and logistics plans are progressed and contractors appointed. Contractors will be expected to employ their own 'in-house' management systems to meet the overall aims of the CMP.

The CMP may also be revised to maintain compatibility with other documents being developed as part of the Construction Environment Management System.

The overarching aim is to provide a safe environment for the site workforce and the surrounding business and residential community throughout the duration of construction.

APPENDIX A INDICATIVE SITE LAYOUT

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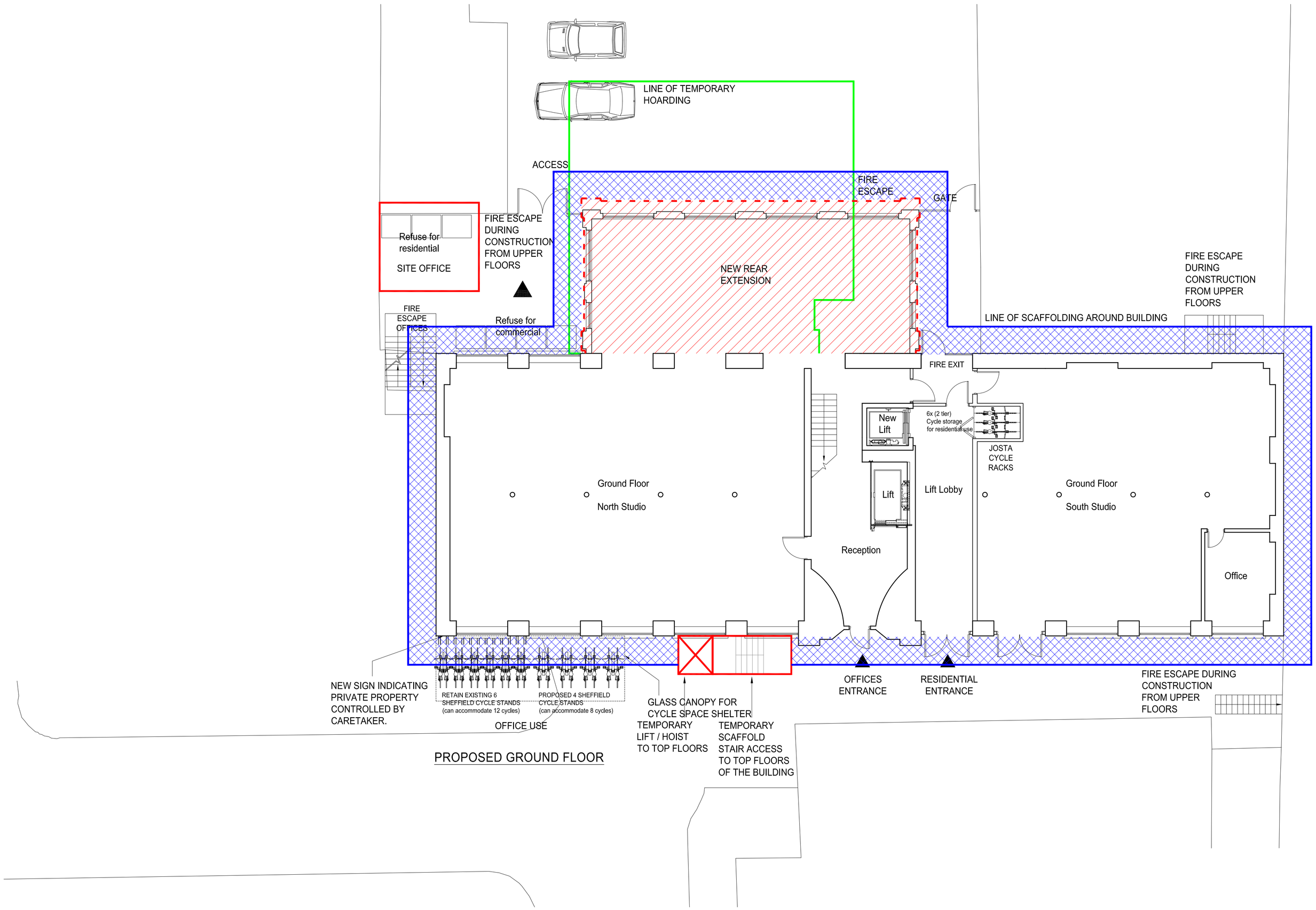
REVISIONS

Rev.	Date	By
-	-	-



PROPOSED GROUND FLOOR

N

0 1 2 3 4 5 10m

PLANNING APPLICATION

ALL DIMENSIONS TO BE CHECKED ON SITE
WORK TO FIGURED DIMENSIONS ONLY
REPORT DISCREPANCIES TO THE ARCHITECT
AT ONCE BEFORE PROCEEDING

Contemporary Design Solutions

46 Great Marlborough Street
London
W1F 7JW
Telephone: 020 7494 9000 Fax: 020 7494 4944

Client

RISETALL LTD

Project Title

Mixed-use residential extension
10A Belmont Street,
LONDON NW1

Drawing Title

Proposed Ground Floor Plan
with Hoarding Indication

Scale	1: 100@A1, 1:200@A3	Date	Dec '12
Drawn	AB	Checked	DL
Drawing No.			Rev.
121115-A(GA)100			-

CAD plot date: 17 Dec 2012 - 04:35pm

F:\01 Hallmark-Projects\121115 10a Belmont Street addituonal 7th Floor\06 Design\01 CAD\Sheets\Planning Application\A(GA)100 GFL with Hoarding Line.dwg > layout A(GA)100 GFL

APPENDIX B CONSTRUCTION MANAGEMENT PROGRAMME

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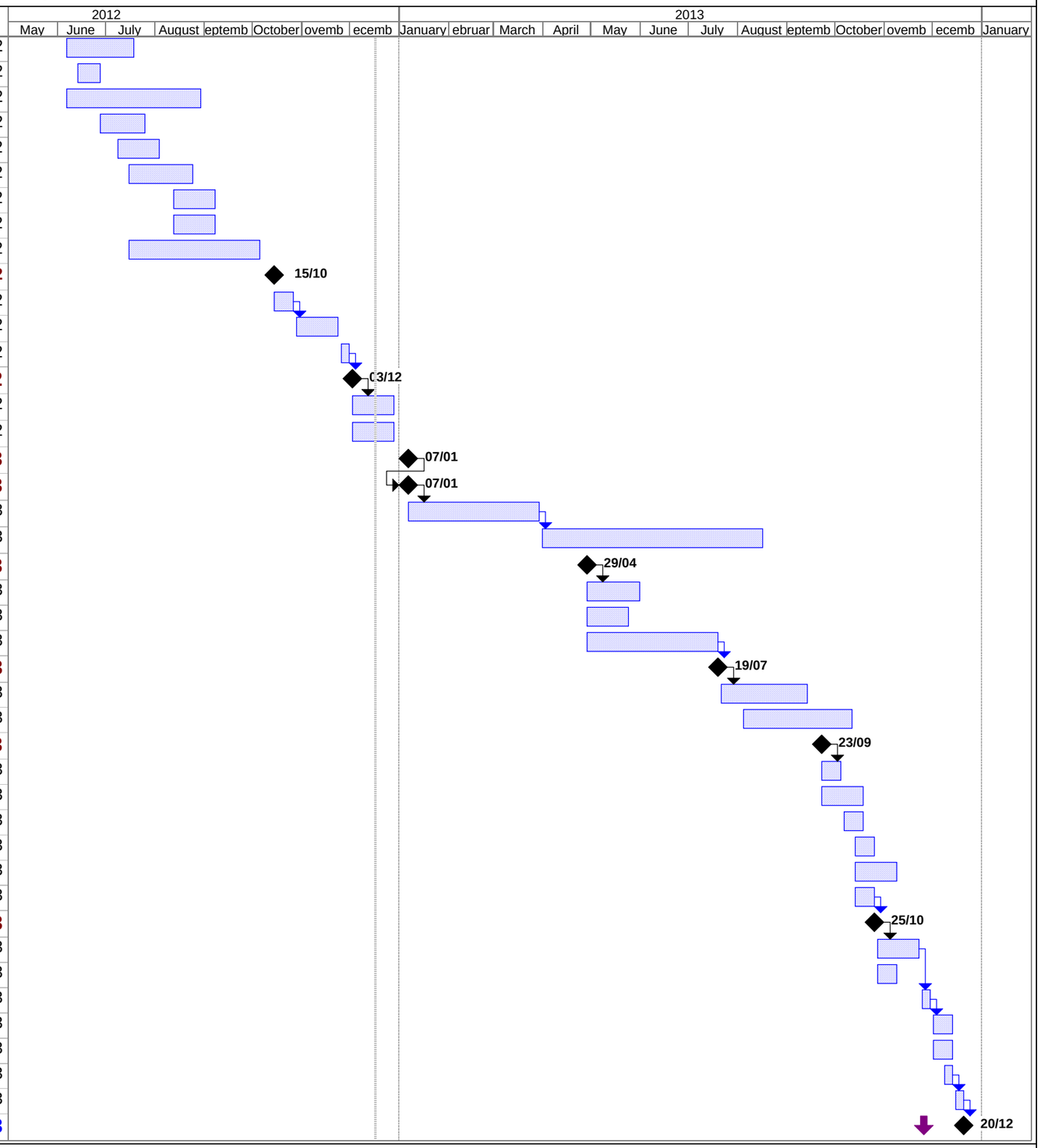
10a Belmont Street, Camden, London NW1
Residential & Commercial Mixed Use Development
Construction Programme December 2012

ID	Task Name	Duration	Start	Finish
1	Demolition Tender	6 wks	Thu 07/06/12	Wed 18/07/12
2	Ground Investigation Soil Test	2 wks	Thu 14/06/12	Wed 27/06/12
3	Part Wall Matters	12 wks	Thu 07/06/12	Wed 29/08/12
4	Sub-Structure Detail Drawing Package	4 wks	Thu 28/06/12	Wed 25/07/12
5	Structural Engineers Foundation Design	4 wks	Mon 09/07/12	Fri 03/08/12
6	Structural Engineers RC Frame Design	6 wks	Mon 16/07/12	Fri 24/08/12
7	Services Engineers Drainage Design	4 wks	Mon 13/08/12	Fri 07/09/12
8	ME Engineers Design	4 wks	Mon 13/08/12	Fri 07/09/12
9	Construction Detail Drawing Package	12 wks	Mon 16/07/12	Fri 05/10/12
10	**Phase 1 - Site Clearance**	**0 days**	**Mon 15/10/12**	**Mon 15/10/12**
11	Scaffold Instalation	2 wks	Mon 15/10/12	Fri 26/10/12
12	Demolition	4 wks	Mon 29/10/12	Fri 23/11/12
13	Setting out Survey	1 wk	Mon 26/11/12	Fri 30/11/12
14	**Phase 2 - Foundation to Rear Extension**	**0 days**	**Mon 03/12/12**	**Mon 03/12/12**
15	Foundation	4 wks	Mon 03/12/12	Fri 28/12/12
16	New Residential and Site Access	4 wks	Mon 03/12/12	Fri 28/12/12
17	**Phase 3 - Construction Stages**	**0 days**	**Mon 07/01/13**	**Mon 07/01/13**
18	**Construction Stage 1**	**0 days**	**Mon 07/01/13**	**Mon 07/01/13**
19	Super-Structure Construction Fifth Floor level	12 wks	Mon 07/01/13	Fri 29/03/13
20	Super-Structure Construction Sixth & Seventh Floor	20 wks	Mon 01/04/13	Fri 16/08/13
21	**Construction Stage 2**	**0 days**	**Mon 29/04/13**	**Mon 29/04/13**
22	Steel Frame-Stair well Construction	5 wks	Mon 29/04/13	Fri 31/05/13
23	Steel Frame-Lift Core Construction	4 wks	Mon 29/04/13	Fri 24/05/13
24	Steel Frame Construction to Rear Extension	12 wks	Mon 29/04/13	Fri 19/07/13
25	**Construction Stage 3**	**0 days**	**Fri 19/07/13**	**Fri 19/07/13**
26	All external Cladding to Rear & Top Floor Extension	8 wks	Mon 22/07/13	Fri 13/09/13
27	All Internal Fittings	10 wks	Mon 05/08/13	Fri 11/10/13
28	**Construction Stage 4**	**0 days**	**Mon 23/09/13**	**Mon 23/09/13**
29	Electric Distributions	2 wks	Mon 23/09/13	Fri 04/10/13
30	Heating & Water Distributions	4 wks	Mon 23/09/13	Fri 18/10/13
31	BT Cable Distributions	2 wks	Mon 07/10/13	Fri 18/10/13
32	Gas Boiler Installations	2 wks	Mon 14/10/13	Fri 25/10/13
33	Final Internal Residential and Commercial Fit out	4 wks	Mon 14/10/13	Fri 08/11/13
34	Mechanical Lift Installations	2 wks	Mon 14/10/13	Fri 25/10/13
35	**Construction Stage 5**	**0 days**	**Fri 25/10/13**	**Fri 25/10/13**
36	Internal Link between existing & New Extension	4 wks	Mon 28/10/13	Fri 22/11/13
37	Green Roof Installations	2 wks	Mon 28/10/13	Fri 08/11/13
38	Removal of Scaffold and Site Office	1 wk	Mon 25/11/13	Fri 29/11/13
39	External Landscaping	2 wks	Mon 02/12/13	Fri 13/12/13
40	Hard Surface Block Paving	2 wks	Mon 02/12/13	Fri 13/12/13
41	Final Building Inspections	1 wk	Mon 09/12/13	Fri 13/12/13
42	Building Operation Manual	1 wk	Mon 16/12/13	Fri 20/12/13
43	**Building Completion & Handover**	**0 days**	**Fri 20/12/13**	**Fri 20/12/13**



Project: 10a Belmont Street
Date: 10th December 2012

Task | Progress | Summary | External Tasks | Deadline
Split | Milestone | Project Summary | External Milestone