LANMOR Consulting

Civil Engineers & Transport Planners

Wetherby House Green Lane

Construction Logistics Plan

September 2021

211454/CLP/RS/KL/01

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CONTENTS

1 INTRODUCTION AND SCOPE OF REPORT 1
1.1 General 1
1.2 Site Description and Proposed Development 1
1.3 Scope of Plan 2
2 CONSTRUCTION MANAGEMENT 3
2.1 Consultation and Community Liaison 3
2.2 Programme 4
2.3 Construction Phasing 5
2.4 Working Hours 6
2.5 Control of Noise, Vibration and Dust 7
2.6 Waste Disposal 9
2.7 Condition Survey 10
2.8 Materials Storage and Security 10
3 CONSTRUCTION TRAFFIC MOVEMENTS 11
3.1 Construction Traffic Type 11
3.2 Frequency of Construction Traffic 11
3.3 Hoarding Requirements 14
3.4 Parking Suspension 14
3.5 Management of Access Routes 14
3.6 Access Routes 15
3.7 Pedestrian Safety Routes 17
3.8 Management of Traffic 17
4 MONITORING AND REVIEW 19

FIGURES

FIGURE 1.1 – SITE LOCATION 1

APPENDICES

APPENDIX A
Proposed Logistics Management Plan

1 INTRODUCTION AND SCOPE OF REPORT

1.1 General

1.1.1 Lanmor Consulting has been commissioned to prepare this Construction Logistics Plan (CLP) in respect of development proposals at Wetherby House, Green Lane, Northwood, Hillingdon.

1.2 Site Description and Proposed Development

1.2.1 Planning permission for the redevelopment of Wetherby House was obtained in January 2020. The site is located off the B469 Green Lane. The existing building is to be demolished and replaced with a 2 storey building containing 9 x 2 bed units and a basement car park.

1.2.2 Figure 1.1 below shows the location of the site.

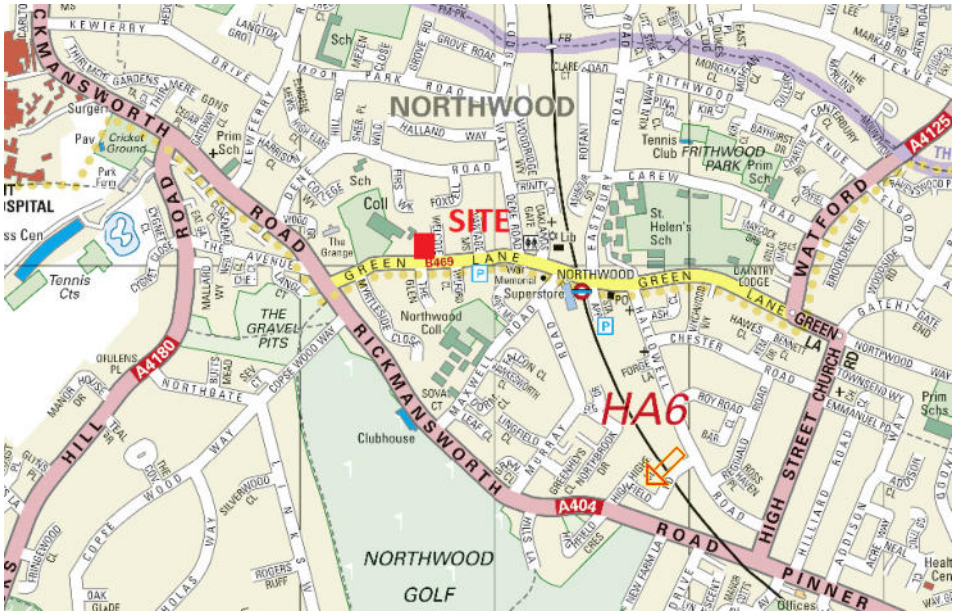


Figure 1.1 – Site Location

1.2.3 The development proposals will see the demolition of the existing building and construction of new residential flats. Copies of the site layout and internal floor plans are included in Appendix A.

1.3 Scope of Plan

1.3.1 This CLP has been prepared in support of the discharge of Planning Condition 20 of the consented planning permission for the redevelopment of the site. This CLP has been produced with reference to Transport for London's (TfL) 'Construction Logistics Plan Guidance' July 2017.

1.3.2 This CLP provides an informative/recommended strategy for the efficient movement and management of construction traffic, materials and personnel during the construction of the proposed development. A more detailed report (Construction Management Plan) will be prepared by the principal contractor once appointed which will set hours of working, types of delivery vehicles and timings, based on the principals establish by this CLP.

1.3.3 The key aim of the CLP is to minimise any potential negative impacts of construction on the local environment, road network and upon local businesses and occupants and to demonstrate that any construction traffic or impacts generated by the works can be safely accommodated at the site and on the surrounding highway network.

2 CONSTRUCTION MANAGEMENT

2.1 Consultation and Community Liaison

2.1.1 The main point of contact in relation to the content of the CLP during construction will be confirmed upon appointment of a contractor and will be referred to as the CLP Coordinator.

2.1.2 Contact details of the site project manager responsible for day-to-day management of the works and dealing with any complaints from local residents and businesses will be

Project Manager Contact Details (CLP Coordinator)

Name:	TBA
Address:	TBA
Email:	TBA
Phone:	TBA

Community Liaison Officer Contact Details

Name:	TBA
Address:	TBA
Email:	TBA
Phone:	TBA

Main Contractor Contact Details

Name:	TBA
Address:	TBA
Email:	TBA
Phone:	TBA

2.1.3 Prior to works commencing onsite, the CLP Coordinator will ensure that local businesses and residents are informed of the works programme and have contact details for any concerns.

2.1.4 In order that the works on site are undertaken in a safe and efficient manner the contractor would be an affiliate to the 'Considerate Contractors Scheme'. The non-profit scheme encourages best practice beyond statutory requirements. Contractors follow a 'Code of Considerate Practice' requiring adherence to the following topics to improve the image of construction:

i) Care about Appearance;

ii) Respect the Community;

iii) Protect the Environment;

iv) Secure Everyone's Safety; and

v) Value their Workforce.

2.1.5 The scheme provides information, advice and e-learning for the aforementioned topics in relation to real world scenarios through a 'Best Practice Hub'. This uses previous projects as examples of best practice, leading to future improvement.

2.2 Programme

2.2.1 The construction duration is expected to take approximately 20 months. The detailed programme will be developed and finalised when the main contractor has been appointed.

2.3 Construction Phasing

2.3.1 The development will involve the construction of a 2-storey building with basement.

Description of Construction Works

The works include the demolition of the existing building which will consist of the removal of internal components within the building such as bathrooms and kitchens this also includes internal partition walls and floor coverings etc. before the roof is removed and the external structure is demolished. This will be followed by construction of the building excavation of basement/installation of foundations, construction of the superstructure.

The main construction works will comprise of the 1) demolition 2) basement construction, 3) Superstructure construction / scaffolding erection, 4) First Fix internal, 5) final fix / installation of kitchens, wardrobes, furniture etc, painting, External works and make good.

The duration of the works will last approximately 20 months, the demolition will be 4 months, the basement construction 4 months, erection of superstructure 6 months, services fix and installation will take 3 months, the external works and painting 3 months

1) The existing building will need to be demolished this will involve the removal of all internal fixtures, walls and removal of the roof structure. Next phase will involve the demolition of the walls and removal of foundation in total 4 months have been allowed to remove and demolish the existing building.

2) Install pilling around the perimeter of the basement, excavate out basement and install below ground drainage for basement. Cast ground beams and ground floor a total of 4 months has been allowed for this stage.

3) For the construction of the superstructure 6 months have been allocated. On the basement slab construct walls, erect internal walls / install floors, stairs etc. next would-be installation of roof and external windows and doors.

4) Undertake first fix of plumbing, carpentry, electrical and coms as well as dryline & plaster will also take place over 3 months.

5) The final stage would be to complete carpentry, electrical, coms and plumbing as well as the installation of kitchens etc. and completion of external works. will also be carried out all over a duration of 3 months.

2.3.2 Other residential properties also exist in the area that could be affected by the construction activities on site. Suitable mitigation measures will be implemented to minimise the impact on local residents, these will include the following.

2.3.3 Measures Proposed to Mitigate Impact of Construction Activities

- Erect tree protection fencing prior to occupation of construction activities onsite.
- The use of quieter alternative methods or mechanical plant, where reasonably practical.
- Locating plant, equipment, site offices, storage areas and worksites away from neighbouring properties where reasonably practical.
- Machines and equipment, in intermittent use will be shut down or throttled down to a minimum when not in use;
- The use of site hoardings or portable acoustic enclosures/screens where practical.
- Maintaining and operating all vehicles, plant and equipment such that extraneous noise from mechanical vibration, creaking and squeaking is kept to a minimum.
- All temporary site lighting will be faced into the site, and not directed towards any neighbouring properties.
- During works the main air pollution emissions are the dust generated when building materials are broken up and the fumes from machinery, high pressure hoses will be used to saturate all bulk materials with water during the process and whilst loading the waste materials for disposal.
- Machinery exhaust emissions will be kept as low as is practical by using well maintained vehicles and machinery at all times.
- Hoarding will be erected around the site. Along with reducing the visual impact and providing protection for the construction workers and public, this will also act as a barrier for dust and dirt originating from within the site.
- All HGV's removing spoil from the site will be fully sheeted to minimise the risk of any mud over spilling onto the highway. The excavated material being loaded will be directly into a lorry on a hardstanding area, so the wheel washing requirement is minimised, any overspill will be washed off the road surface.
- The area around the site including the public highway is to be regularly and adequately swept to prevent any accumulation of dust and dirt.
- Burning of materials on site will not be permitted in order to prevent smoke emissions.

2.4 Working Hours

2.4.1 The working hours allowable on site will likely be specified within any planning consent, it is anticipated that the standard hours of work would be as set out below:

Site Working Hours

- 08:00-18:00hrs Monday to Friday;
- 08:00-13:00hrs Saturday; and
- No working on Sunday and Bank Holidays.

2.4.2 Although work would not normally be permitted outside these hours, it is possible that certain works may have to be undertaken outside of normal working hours. If necessary, the hours of operation for such works would be subject to prior agreement and reasonable notice with the Council of the London Borough of Hillingdon, except in emergency conditions.

2.5 Control of Noise, Vibration and Dust

2.5.1 The appointed contractor will confirm details of compliance with British Standard BS5288: 2009 'Code of Practice for Noise and Vibration Control on Construction and Open Sites'. and 'The Control of Dust and Emissions during Construction and Demolition Supplementary Planning Guidance' (SPG) provided by the Greater London Authority.

2.5.2 Under the guidance the potential dust emission, the magnitude is considered small as existing building to be demolished is less than 20,000m^3 and the proposed building is less than 25,000m^3 and HDV trips will be less than 10 trips per day.

2.5.3 The guidance suggests suitable mitigation measures to combat dust and these will be incorporated during the works to limit and supress the generation of dust. Suitable mitigation measures that will be implemented are set out below.

2.5.4 The following best practice mitigation measures would be included within the CMP:-

- The contact details for the individual(s) responsible for air quality and dust issues and/or the CMP Coordinator should be displayed at the site boundaries.
- Complaints regarding air quality should be logged by the CMP Coordinator, and the log made available to the local authority on request.

- The site should be at least visually monitored for dust on a daily basis, with the frequency of monitoring increased during dry and windy conditions.

- The site should be organised so that:

  - physical barriers or screens are installed around the site to limit the dispersal of dust emissions; and

  - loose materials are covered as soon as possible.

- Haul routes should be kept free from dust as far as possible, and swept regularly (water assisted). No dry sweeping of large areas will be carried out.

- All vehicles carrying loose or potentially dusty material to or from the working areas will be fully sheeted.

- Materials will not be burnt on site.

- Minimum drop heights will be used from conveyors, loading shovels and loading equipment.

- Provision of adequate water will be supplied to the working areas.

- Suitable dust suppression techniques such as water sprays or local extraction will be used when cutting, grinding or sawing materials onsite.

- Dust soiling checks at sensitive receptors and automatic monitoring of PM10 at the site boundary should be undertaken to ensure that the mitigation measures are being effective.

- PM10 concentration thresholds should be implemented at these locations, with exceedance alerts being sent to the individual responsible for air quality on the site. Where the site threshold is being significantly exceeded, work should cease on site until the source of the dust emissions is identified and negated.

- Given the site is small scale, it is considered the site has a low risk of impacting the air quality however will be monitored by keeping an accurate log of complaints from public and the measures implemented to address any complaints. The above mitigation measures will be implemented as part of the construction in accordance with the SPG and British Standard BS5288.

2.6 Waste Disposal

2.6.1 The appointed contractor will be required to provide a Site Waste Management Plan (SWMP) as part of their proposals. It is anticipated that the appointed contractor will incorporate into their plan the use of waste removal systems. The contractor will be responsible for:

- Ensuring the site is kept clean and safe;
- The collection of waste from a central point; and
- Segregation of waste on site.

2.6.2 The contractor is to be aware of their responsibilities regarding waste disposal and recycling in terms of current legislation as well as the client's requirements.

2.6.3 As well as construction material waste the appointed contractor will be responsible for any excavation waste. The contractor will be required to grade all excavated material and reuse selected and appropriate excavated materials and aggregates for sub bases and the like where practicable.

2.6.4 It is unknown if there is an asbestos register for the building as required, so an asbestos survey will be conducted of the building.

Details of Asbestos Survey

Date of Asbestos Survey: TBA Details:

2.7 Condition Survey

2.7.1 A condition survey prior to commencement of any construction works would be carried out. This would consist of a photographic aided report on the existing environment including existing structures, boundaries, footpaths, carriageways, access points, fence lines, walls, buildings, hedge lines, kerb lines, lighting columns, street furniture and road signs. The findings of the survey will be documented and stored within the project offices.

2.8 Materials Storage and Security

2.8.1 The majority of materials and other resources are to be delivered to site as and when needed. The confined space on site means there is limited opportunity to store materials on site and therefore all deliveries will be coordinated to ensure delivery vehicles do not arrive at the same time causing traffic congestion.

2.8.2 Deliveries will be monitored by the site team, with a banksman to guide the delivery vehicles to the unloading point where necessary. Delivery drivers will not be allowed to park on the surrounding roads before delivering or after. Any waiting vehicles will be moved on by the site management team.

3 CONSTRUCTION TRAFFIC MOVEMENTS

3.1 Construction Traffic Type

3.1.1 The construction activities that may take place during the construction works will require the use of a range of different delivery vehicle types. Due to the size of the development the number of delivery vehicles is likely to be relativity low, consisting of mainly the following types of vehicles identified below.

- Car/pick up/3.5 ton van
- 7.5 ton box van/panel van
- Skip lorry
- 20 ton rigid delivery vehicle

3.1.2 The on-site management team will ensure that all delivery company drivers entering the site will be FORS silver accredited, this will also apply to those driving 7.5 ton delivery vehicles.

3.2 Frequency of Construction Traffic

3.2.1 At this stage in the project, without an appointed contractor we can only undertake a preliminary estimate of the number and classification of vehicle movements that can be expected to and from the development site during the construction process.

3.2.2 The construction period is likely to be in the order of 20 months and there will be busier periods when construction traffic will be at its highest and quieter periods when very little construction traffic is expected.

3.2.3 Based on evidence collected elsewhere it is estimated the volume of construction traffic for each phase of the construction works will be:-

Phase 1 (Demolition)

3.2.4 Prior to the initial phase of works, hording and protective fencing will be erected. The materials for this are expected to delivered by 1 or 2 rigid vehicles movements. The initial stage of the construction involves the internal strip out of the existing building which will take one month, majority of material will be taken away by skips, at a frequency of 2 to 3 per week. No other construction traffic is expected during this period.

3.2.5 Next will be the removal of the roof and external walls, 2 months have been allowed to remove the roof and fabric of the building this will allow the contractor of sort the material into reusable piles. The existing hardstanding material from the car park will need to be removed. A total of 5-6 movements are expected during this phase for the removal of waste, with the peak being 1 or 2 movements per day

Phase 2 (Basement Construction)

3.2.6 The basement construction will involve the installation of a contiguous piled wall around the basement perimeter, a total of 3 weeks have been allowed to install the piles. During the pilling there will be one pilling rig and a number of concrete deliveries 3-4 per cement trucks per day during the busiest periods.

3.2.7 Next will be the insulation of ground beams and removal of excavated material from the basement. Finally, the basement slab will be cast. During the excavation activities up to five 20 ton tipper trucks per day are anticipated during the busiest periods. For the ground beams there is likely to be 1 or 2 deliveries of steel work on HGV's and 2-3 cement trucks, similarly for the slab the steel is likely to arrive on 1 or 2 HGV's but it is likely the concrete deliveries will peak at 4-5 per day when concrete is being poured.

Phase 3 (Superstructure Construction)

3.2.8 The building will be of a traditional construction, so there will be a number of delivers during this phase of brick/blocks, sand, cement, timber etc. On the completion of the basement the walls of the building will erected, with floors and internal partitions install as the building progresses. Six months have been allowed to complete this phase, the number of deliveries will vary depending on the stage of works. The busiest period is likely to be when the walls are being constructed and this could involve one or two deliveries of bricks etc.to the site per week. A number of smaller deliveries will also be required for other materials, but these are unlikely to exceed 2 deliveries per day.

3.2.9 The biggest delivery of material during this phase will be the roof trusses, these will come on HGVs and will likely be lifted straight into place, it is anticipated that 3-4 deliveries will be required but this will over a period of 2-3 days.

3.2.10 The 1st lift scaffold and then 2nd will also be undertaken during this phase. All equipment required for the scaffolding etc will be transported by a van into the site over the course of one day.

Phase 4 (internal fit-out)

3.2.11 This phase will involve the insulation of new partitions, lining celling's etc. This involve bringing timber and plasterboard etc to site. The first fix of services such as plumbing, carpentry, electrical and coms will take place. This will not generate many vehicle movements. The initial delivery of materials will arrive on one or two large rigid vehicles over the period of a couple of weeks. The majority of materials for the first fix will come via small 7.5 ton vehicles, over the 3 months of this phase it is expected there will be 12-15 deliveries, but it is unlikely there will be more that 3-4 per week at its peak.

Phase 5 (Finishing and External Works)

3.2.12 The final phase will consist of final fix of services (i.e. plumbing, carpentry etc) as well as the installation of kitchens. The external hardstanding and landscaping will also take place during this phase, these works could involve deliveries of material by 1 or 2 rigid. Other deliveries during this 3 month period are likely to be small transit type vans.

3.3 Hoarding Requirements

3.3.1 The building will be fenced off which is likely to remain for the duration of the works within which will be a safe loading and unloading area. Banksmen will be responsible to deliveries entering and leaving the site.

3.4 Parking Suspension

3.4.1 There will be no requirements for parking suspensions on the public highway as the access to the site is available for parking and delivery vehicles and loading and unloading goods on site will be undertaken from the loading area.

3.5 Management of Access Routes

3.5.1 Defined traffic management procedures will be implemented for the efficient handling of materials and waste for the project, but also to ensure effective management of vehicles, passing traffic and pedestrians. Where practicable, the appointed contractor/sub-contractors will source items locally, and where possible amalgamate deliveries in order to reduce the overall number of vehicle movements taking place.

3.5.2 The traffic management plan will be controlled by a Project Manager and reviewed regularly. The material deliveries and waste collections will be undertaken from within the site. drivers will be instructed to turn off vehicles engines when delivering.

3.5.3 The Project Manager will manage the traffic and working within the unloading point on the road, all deliveries will be booked electronically in advance to ensure single delivery accommodation and co-ordination with waste removal.

3.5.4 Sizes of deliveries will be restricted and kept to a 'just in time'. All suppliers and contractors will be given prior instruction for the route and procedure for deliveries and vehicle details. All materials will be delivered and offloaded into the building or to the identified storage area.

3.5.5 Delivery timing of materials and waste collections will be out of the peak rush hour periods. Every effort will be made to ensure the deliveries occur during the periods set out below, however it may not be possible to always achieve this.

Deliver Hours

Delivery hours:	Mon-Fri 9.30am to 3.30pm
	Sat 8.00am to 1.00pm

3.6 Access Routes

3.6.1 Delivery routes to and from the site will use the strategic road network in the area. Deliveries will not be allowed to use local residential roads when accessing the site and will be directed to use the major strategic routes in the area.

Deliver Routes

It is expected that the vast majority of construction-related traffic will route to the site via the A404 Rickmansworth Road, onto B469 Green Lane and then left into the site. The route for construction traffic will be clearly communicated to all the company's delivery drivers and suppliers. Deliveries from the west will use A404 to its junction with the B469 and will then proceed down the B469 to the site. Deliveries from the east will use the A4125 and then proceed south to the B469 to the site.

Delivery drivers will not be allowed to use the local residential streets as a means of access to get to the site. Signage will be installed around the site to inform drivers that residential roads are not to be used, the allowed routes of access to the site will be clearly displayed on site and the welfare facilities showing the suitable routes of access to and from the site.

The acceptable routes to be used to access the site are highlight on the map below.

3.7 Pedestrian Safety Routes

3.7.1 Safe access routes for pedestrians will be maintained along Green Lane at all times, the works will not affect Green Lane so a safe route for pedestrians will be available. The site access route off Green Lane will be maintained at all times. The route will be maintained free of all obstructions and cleaned regularly to ensure a safe access is provided for pedestrians at all times.

3.8 Management of Traffic

3.8.1 The entrance to the site is currently served by a dropped kerb and is used as a shared access, this will serve the site and will be replaced with a bellmouth. A banksman will be on site to ensure this access is not obstructed by the construction vehicles servicing the site. This will be expanded further in the CMP in due course.

3.8.2 The contractor will highlight the appropriate controls that will be put in place when vehicle loading/unloading is taking place, they will set out the circumstances and process of how the banksmen will control traffic flows if/when a vehicle is required to reverse to/from the development site off Green Lane. Such controls will include information relating to hoarding locations, the safe movement of pedestrians and the use of marshals/banksmen to direct vehicles in and out of the site and on to the public highway.

3.8.3 Green Lane lies to the south of the site so has to be utilised for all vehicles/construction vehicles servicing the site. Construction traffic delivering to the site will park beside the site compound and offload all materials to the storage compound area. Once unloaded the larger delivery vehicles will be reversed under the supervision of a banksman out on to Green Lane. Vehicles will only be allowed to reverse under the control of the banksman in charge of the unloading process. The construction logistics plan included in Appendix A identifies the compound area etc to be used during construction.

3.8.4 The roads in the area will be monitored for any misuse and corrective action will be taken if suppliers etc. are not complying with the agreed traffic management plan. There shouldn't be any debris carried from the site on to the surrounding roads but a regular plan for sweeping the access will be in force and if is it identified during the course of the works that mud is being carried out onto the roads additional visits will be instructed for road sweepers to make sure the roads are clean at all times.

4 MONITORING AND REVIEW

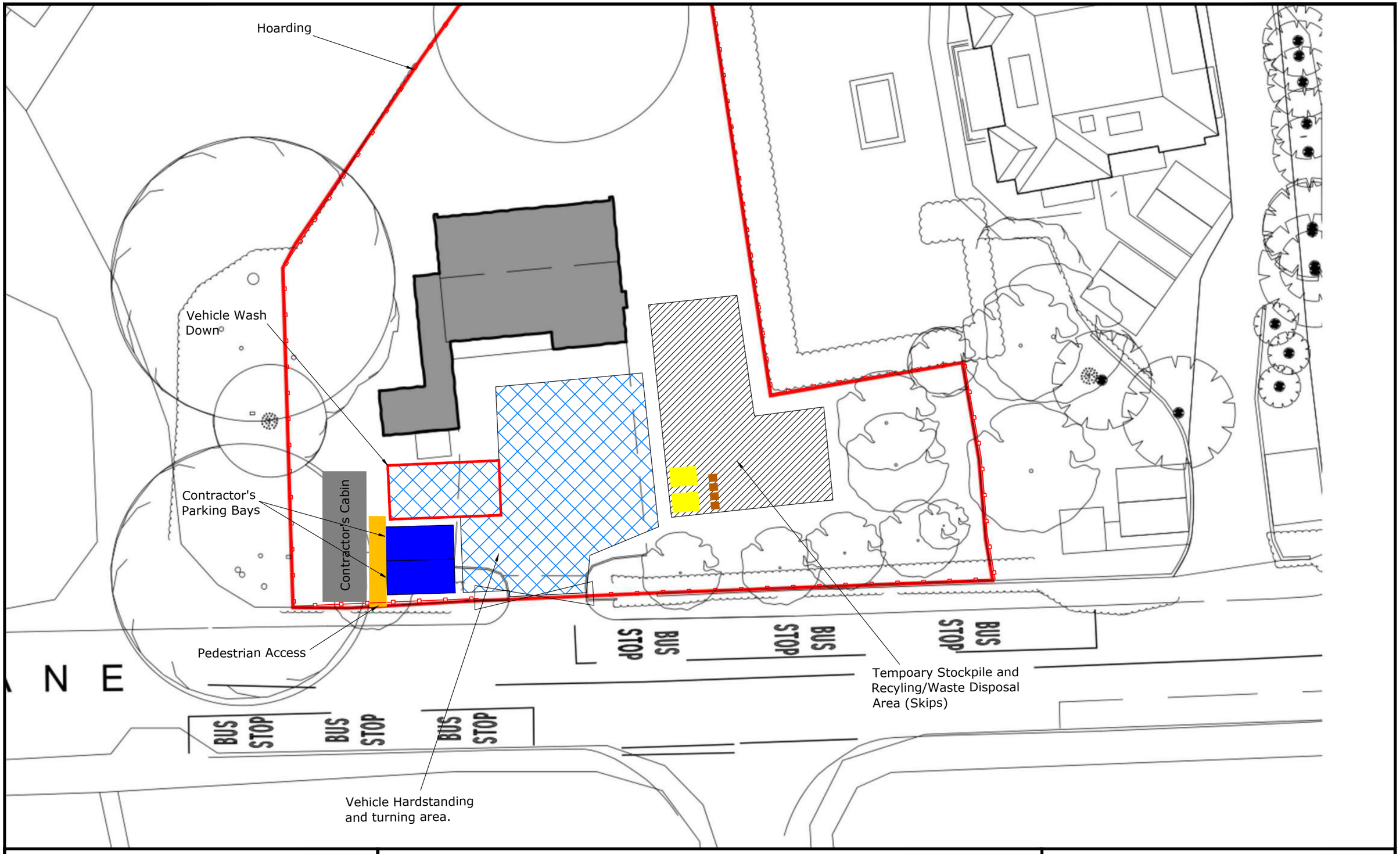
4.1.1 As a live document, the CLP would be reviewed and updated by the CLP Coordinator on a regular basis. The CLP Coordinator will be the first point of contact regarding the CLP and its implementation on site.

4.1.2 The CLP coordinator shall ensure that recommendations for the monitoring by the arboricultural consultant are implemented and reported back to the Local Planning Authority.

4.1.3 The CLP Coordinator will liaise with local business occupants and the Council officers and any other affected parties where appropriate, in order to provide regular updates on the proposed works, updates on the construction programme and the effectiveness of the CLP.

APPENDIX A

Proposed Logistics Management Plan



Wetherby House, Green Lane
Northwood

Construction Demolishing Strategy

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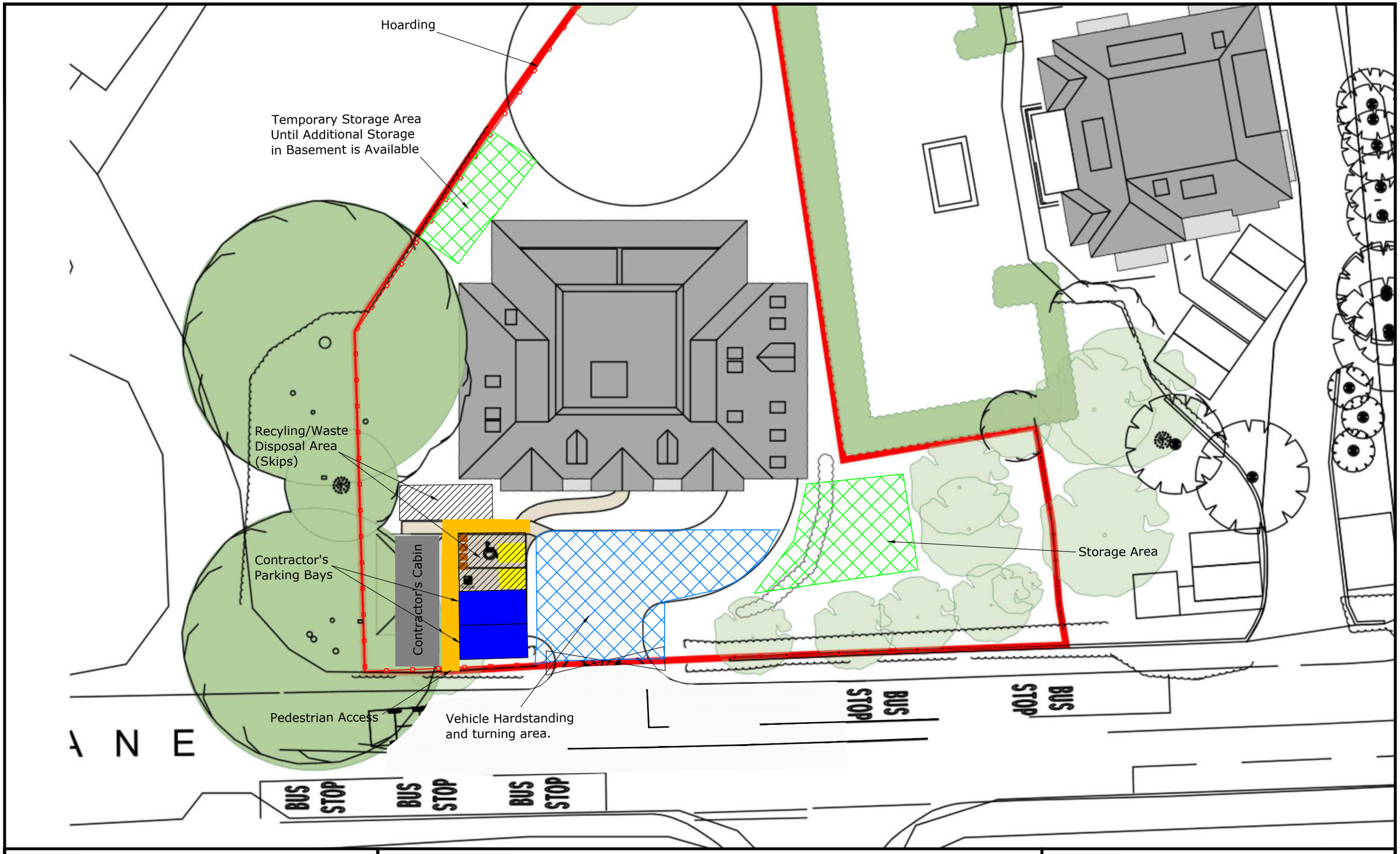

Wetherby House, Green Lane
Northwood

Construction Logistics
Strategy Plan

SCALE	DRAWN BY	PRJ No.	DWG No.
1:250	MK	211454	211454/CMP/02

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