

# The Glasshouse OmVed Gardens Construction Management Plan

For the proposed redevelopment of the Glasshouse at the OmVed Gardens



**Site Address:** OmVed Gardens, Townsend Yard, N6 5JF

Tom Robinson  
1/24/2024

## **Contents**

1. Overview
2. Proposed Development
3. Enabling Works / Formation of Site Perimeter
4. Proposed site hours, parking arrangements & storage of Plant & Materials
5. Management of vehicle access & egress including public protection on and off site
6. Demolition of existing building including Asbestos Refurbishment & Demolition Survey
7. Environmental Issues (Noise, Vibration, Dust, Mud, Lighting)
8. Excavations & ground works, Location of Services
9. Vehicle Movements
10. Waste recycling & removal
11. Ecology Issues (Tree Protection, Birds & Wildlife)

### **Appendices**

- A Proposed Site Welfare & Storage
- B Proposed Traffic Route
- C Tree Protection
- D Proposed Plan & Method of Works
- E Drawings

## 1. OVERVIEW

The purpose of the Construction Management Plan (CMP) is to address the detailed procedures, sequencing and construction methodology anticipated by the Project Management Team engaged in the planning, liaison, and construction of the project. The plan outlines proposals on traffic and environmental management measures to be adopted during construction and provides supplementary information to any potential construction related issues.

The proposed new building is a significant distance away from the nearest residential properties. However, we intend to mitigate any foreseen, likely impacts on outlook, privacy, access, and natural light issues on all neighbouring amenities.

It is also designed to be a live document which will eventually address how any planning conditions imposed on the project will be managed or discharged by the construction teams.

## 2. PROPOSED DEVELOPMENT

The site is located to the north of Highgate High Street and is accessible via the privately owned Townsend Yard.

There are several existing buildings on site:

“Whistlers Anew” a new dwelling recently completed.

The surrounding yard (The Yard) which is currently in the latter stages of redevelopment of 5 new multi – purpose timber framed buildings.

OmVed Gardens is home to a Glasshouse building which again is used for multi – purpose activities.

The proposed redevelopment involves the demolition of the existing Glasshouse and its concrete slab. The new building will cover the existing Glasshouse footprint and the design and construction techniques will ensure that there is minimal disruption to the surroundings.

There are several trees of differing species and maturity around the site. Some of them must be conserved and an arboricultural specialist has outlined tree protection zones.

## 3. ENABLING WORKS / FORMATION OF SITE PERIMETER

**3.1** Before any construction works begins the site perimeter must be established and secured.

The site will have a purpose built 2 metre high plywood hoarding to the perimeter, that will protect most of the site, this is supplemented by Heras Fencing panels to one side.

OmVed Gardens is to remain open to the public, and any additional measures would be put into place by the Principal Contractor to ensure that the construction part of the site is secure with appropriate signage displayed.

The building area will then be cleared, any protected trees will then be securely fenced off.

The ground will then be reinforced to withstand construction vehicle movement and to protect the retained tree's roots. **See Appendix A for proposed site set up.**

**3.2** The site has water, electricity, and sewage connections available.

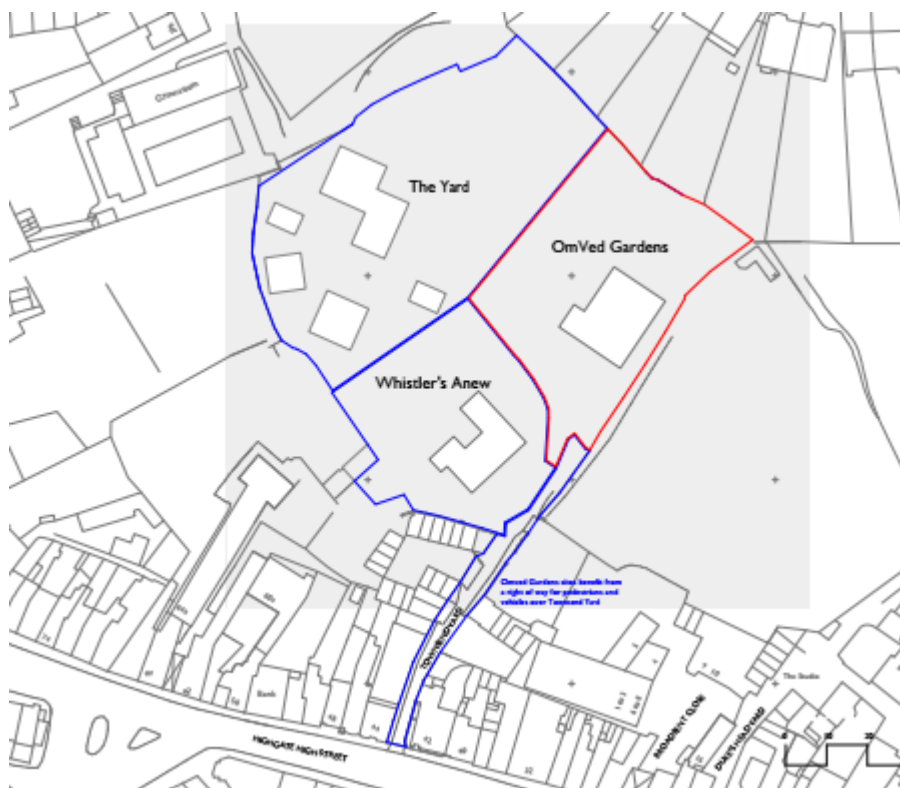
The site has to be kept separate from the rest of OmVed Gardens and The Yard.

**See Appendix A for proposed site set up.**

Fig 1 Ariel view of OmVed Gardens.



Fig 2 Site area



#### **4. SITE HOURS, PARKING ARRANGEMENTS & STORAGE OF PLANT & MATERIALS**

**4.1** There is limited space for vehicles within the vicinity and back end of the site. When it is intended for vehicles to enter from High Street, presence of other vehicles on site must be considered to ensure that there is sufficient space for the vehicle in question to enter the site. Construction operatives and on-site employees driving to the site either by private car or van will park within a designated area to be determined by the Principal Contractor. Site operative parking will be discouraged in the vicinity of the site.

The site is accessible by a range of sustainable modes and all employees will be encouraged to travel in this way.

The nearest bus stop to the site is located along the B519 Highgate High Street approximately 50m away and services line 271 towards Archway station. Highgate Underground station is about 1km to the north.

**4.2** Dedicated weather protected storage points will be provided on-site to minimise damage, loss, and waste of materials. At present it is proposed to locate the storage to the west of the site on the fenced car parking area that belongs to the site.

All Plant, Equipment and Materials etc. are to be stored in on-site sheltered, secure locations and wherever possible away from on-site activities to avoid criminal damage to reduce the chance of the loss and waste of materials.

The site is protected by an on-site 24 hour security company.

**4.3** It is anticipated that the site hours will be 8am to 5.30pm Monday to Friday. This will be confirmed following the appointment of a main contractor. There will be no working on Sundays or Bank Holidays.

#### **5 MANAGEMENT OF VEHICLE ACCESS/EGRESS, DELIVERIES & PUBLIC PROTECTION**

**5.1** Access to the site is via a sharp turn from Highgate High Street into Townsend Yard. This access road measures 3.7m at its pinch point between restrictions (bollards/fences). These dimensions were taken from the digital survey data present at the time of writing. A swept path analysis undertaken as part of this CMP shows that the existing access is fit for purpose for the development, however it is understood that only limited sizes of vehicles and plant would be able to access the site.

It is assumed not to be necessary to apply for a licence to use the public highway for construction activity or for the storage of materials. It is expected that no part of the public footpath would need to be diverted during the works.

Prior to the start of construction, a traffic management plan and risk assessment will be completed by the Principal Contractor to assess and mitigate any potential risks associated with the access proposals for the construction period.

Construction vehicles will enter and exit the site in a forward motion, wherever possible. All traffic movements on and off site is to be controlled by the site Banksman, provided by the Principal Contractor.

**5.2** To reduce the likelihood of congestion during both the site clearance and the construction phases of the proposed development, suppliers will be requested to consolidate deliveries to single vehicles where multiple orders are placed. Deliveries will also be requested to arrive outside of the network peak hours (0800-0900 and 1700-1800).

To manage delivery vehicles entering and exiting from the single access point, strict monitoring and control will be implemented to ensure each vehicle has a pre-arranged delivery time.

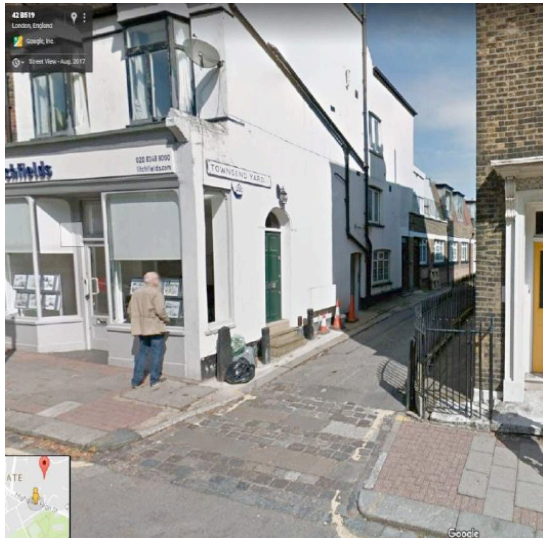
These would be undertaken by the Banksman who would agree times and the size/type of vehicles with all contractors to ensure vehicles are not kept waiting at the site entrance point on the Highgate High Street. In addition, the Banksman will be required to aid in the manoeuvring of the vehicles into

Prepared by: T. Robinson, on behalf of Johnson Friel Building Ltd, 300 Kings Road, Kingston upon Thames,

and out of the site to minimise the amount of traffic disruption. The Banksman will also assist whilst deliveries are taking place, to ensure the safety of any pedestrians and cyclists.

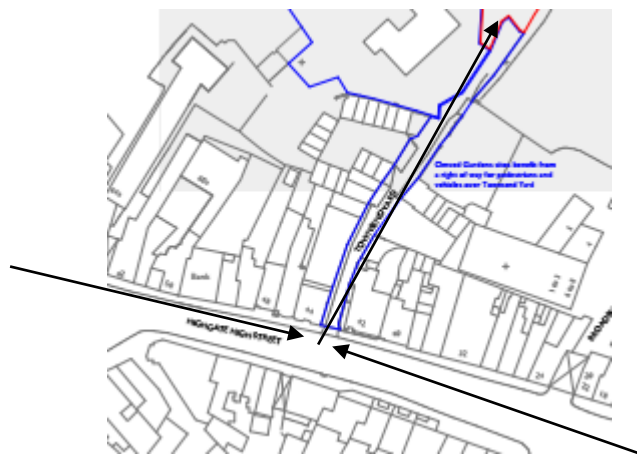
The effective management of vehicles on-site is an important part of the demolition and construction process to ensure the minimum impact on the surrounding highway network and local residents.

Deliveries and the routing of construction vehicles will be set out prior to works commencing and will be managed by the Principal Contractor to prevent congestion.



Site access from Highgate High Street

Site access and general logistics proposal





Proposed Traffic/Delivery Arrangements \* (note: Vehicle turning will take place close to the entrance gates to OmVed Gardens as Appendix A)

## 6. DEMOLITION including REFURBISHMENT & DEMOLITION ASBESTOS SURVEY

### Reason for Demolition

As a multi-purpose events space the technical shortcomings of the existing glasshouse structure have however become apparent and now threaten its long-term viability. The problems result in part from the fragile state of the forty year old structure that is at the end of its design life and the widely variable environmental conditions within the building that its thin single-glazed covering produces. Events in the building have regularly been interrupted by leaks through the glazing and damage caused during high winds. High heat gain when the sun shines and rapid temperature drops on cooler days also adversely affects events taking place and prevents many types of events that the building would ideally be able to host.

Several technical studies have been undertaken to explore ways of mitigating these issues but ultimately the fragile nature of the structure rules out any options to re-glaze or otherwise cover the roof and walls of the building. Without being able to physically secure the external envelope of the building and significantly upgrade its thermal performance, introducing heating, cooling, and ventilation equipment to temper the internal conditions is neither economic nor environmentally sustainable. As a result, the only viable strategy is to demolish the existing glasshouse structure and replace it with a new structure of the appropriate standard to support the activities within.

**6.1** The original Glasshouse was built in 1982 and renovated in 2018 to incorporate its change of use, much of the original structural elements still remain. Chrysotile Asbestos was in use until the  
Prepared by: T. Robinson, on behalf of Johnson Friel Building Ltd, 300 Kings Road, Kingston upon Thames,

outright ban in 1999 and as such the building may require an Asbestos Refurbishment and Demolition Survey to be carried out before works can be undertaken.

This would need to be an intrusive survey where walls, support beams, joists etc. would have to be exposed to ascertain as to where and what type of Asbestos exists within the building.

All asbestos identified within this report would have to be removed by licensed contractors before demolition begins and removed from site.

**6.2** The demolition company appointed will need to submit a demolition plan to the local authority before works can begin, this will involve the method of demolition, the equipment required, the environmental issues expected, public protection and security issues and the waste removal strategy, the Demolition contractor will make sure that an adequate traffic management plan is in place prior to this.

## **7. ENVIRONMENTAL ISSUES**

### **7.1 Control of Dust**

Construction plant can be a significant source of emissions causing an environmental nuisance and safety problems. The following controls can be implemented where practical to minimise any adverse impacts because of the works:-

- Site Plant and equipment will be kept in good repair and maintained;
- Plant will not be left running when not in use; and
- Plant dust arrestment equipment will be used.

Vehicle movements may result in dust emissions (by re-suspending dust from the road or spilling from dusty loads) and exhaust emissions. The following control measures can be adopted to minimise such emissions where practical:

- Wheel washing facilities will be available at the site compound (Pressure Washer unit) to minimise mud being transported on to adjacent roads.
- Run off from the proposed wheel washing facility will be contained on site, no run-off will be allowed to drain onto or over the adopted public highway.
- Regular cleaning of hard surfaced site entrance roads;
- Hoarding and gates to prevent dust breakout where required;

and ensuring that dusty materials are transported appropriately (e.g. sheeting of vehicles carrying spoil and other dusty materials).

Basic precautions will be taken to minimise dust generated on the site which include covering waste skips, water suppression, segregation and exclusion using impermeable barriers, ensuring all equipment is not allowed to run dry whilst engaged in operation.

Materials will be stored on site.

Dust suppression can be implemented on small plant when operations are being carried out adjacent to existing properties. Cutting and grinding on site should be kept to a minimum but where necessary; it should be carried using equipment fitted with silencers and water suppression devices.

There will be NO waste burnt on site. All waste must be disposed of in skips.

Prepared by: T. Robinson, on behalf of Johnson Friel Building Ltd, 300 Kings Road, Kingston upon Thames,

Surrey, KT12 5JL.

All vehicles will be expected to enter and exit through the specified site access throughout the contract, and this will be monitored.

We will minimise creation of dust by Elimination – Substitution – Isolation – Control measures.

This will be done by shutting plant down when not in use to eliminate the problem. If excessive dust continues to be a problem, then the source will be isolated by moving plant to another area of site to isolate the problem away from neighbours. If the plant cannot be moved anywhere else, it will then control by erecting screens or enclosures.

## **7.2 Noise**

Noise levels will be controlled as set out below to ensure that the works are undertaken in a way that minimises detrimental impact to adjoining owners and residents.

Prior to starting any works which might create excessive noise; site management will notify those who could be affected and outline all works to be carried out and durations for each activity.

Exceptionally noisy activities will be scheduled to take place outside of particularly sensitive times of the day/week.

Basic precautions will be taken to minimise noise generated on the site, these include silenced plant, segregation, and exclusion through screening if operations are excessive, avoidance of leaving equipment running whilst not immediately engaged in operation.

## **7.3 Vibrations**

Prior to starting any works which might create excessive vibration; site management will notify those who could be affected and outline all works to be carried out and durations for each activity.

Generally, there shouldn't be any operations that create excessive vibration.

## **7.4 Lighting**

Any artificial lighting required on site for operational matters or security issues will be sympathetically placed to cause as little disruption to neighbours and adjacent properties so far as is reasonably practicable.

It is anticipated that the choice of construction methods, ground works and piling methods etc. will minimise any environmental issues.

# **8. EXCAVATIONS & GROUND WORKS, LOCATION OF SERVICES**

## **8.1 Location of underground services**

Prior to excavation the site area will be checked for overhead and underground services.

Service plans will be obtained from the utility providers and the site area checked using propriety locating equipment.

Once identified all service routes will be clearly marked and maintained throughout the duration of the works

All works will be undertaken in accordance with the HSE Guidance Document HSG 45 "Avoiding danger from underground services"

## **8.2 Excavations**

Excavations will be required for connections to the original services on site. These are expected to be shallow, in the unlikely event an excavation with a depth exceeding 1m is required this will either be battered back or supported using propriety supporting equipment and maintained.

Excavations must be inspected at the start of every shift and excess ground water pumped out regularly during inclement weather.

The construction systems and method of working have been chosen to avoid the need for any mechanical plant to be sited beyond the line of the footprint of the existing building thereby avoiding interfering with the existing landscaping around

All excavations will be protected and covered at the end of the working day.

Helical screw piling methods will be used on the project.

To carry out works with consideration in the tree protection zones a helical screw pile system is proposed for the suspended ground floor slab zone.

## **9 VEHICLE MOVEMENTS**

Appendix B shows the main roads that are close to the site.

All construction vehicles will be expected to make use, where possible, of the main TFL road network to always avoid residential streets. Possible routes to the site from different parts of London are explored in the mentioned drawing above. These will be confirmed by the main contractor following their appointment.

It is assumed that construction traffic from the northwest will travel down the A1 towards Archway Station and then up on Highgate Hill to reach the site. This to prevent the quiet and traffic calm area with roundabouts next to Highgate School.

Construction traffic from the north is sought to come down the A10 and further A503 Seven Sisters Road being split at Tollington Rd. to then enter Holloway Road and travel further north to site.

A feasible route coming from the south can lead along the A1 from Highbury and Islington and then travel up Holloway Road and further as mentioned above.

## **10 WASTE REMOVAL & RECYCLING**

### **10.1 Demolition Waste**

The Principal Contractor will be responsible for identifying and segregating waste on site

All waste resulting from the works will be segregated on site before removal.

Any resultant hard core will be used where ever possible in the sub-structure works.

Re-usable materials will be removed for storage and resale.

Recycling materials will be removed from site and sent for processing in licensed facilities.

Any hazardous waste discovered after either the demolition process or at the groundworks stage will be removed by specialist contractors.

### **10.2 Excavation Waste**

It is planned to use all excess spoil from the excavations in the re-landscaping project after construction has been completed.

This will be stored on site.

## **11. ECOLOGY ISSUES**

### **11.1 Protection of trees**

One tree is to be removed and three others relocated to allow the development of the entrance to the Gardens, works are to include a new sub-station and gatehouse.

It is anticipated that as the footing of the new structure are not any more extensive than the existing, there will be no impact on the root systems of the trees within the vicinity.

Despite this, tree protection methods will be implemented for nearby trees during the construction process to ensure that none of the trees incur any damage.

Protection for any at risk trees in the construction area will be provided in accordance with BS5837-2012. Heras fencing will be sited around the trees to prevent any site operations affecting root growth etc. (see appendix D)

An Arboricultural Impact Assessment have been carried out and is available on request.

It is also the intention not to disrupt any bird nesting/breeding during the tree/vegetation removal.

#### Access to the Gardens

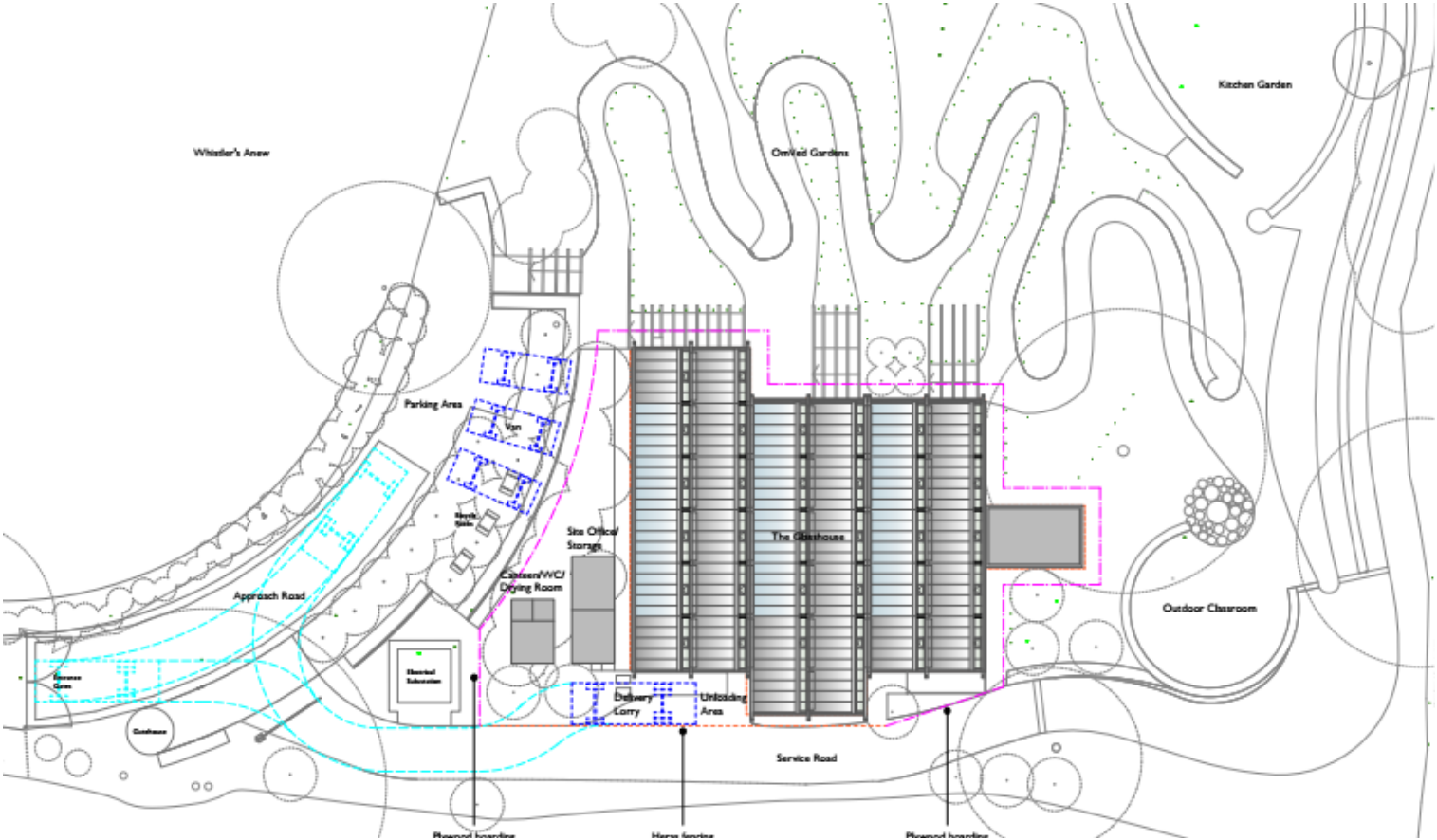


#### Proposed site entrance including Substation & Gatehouse



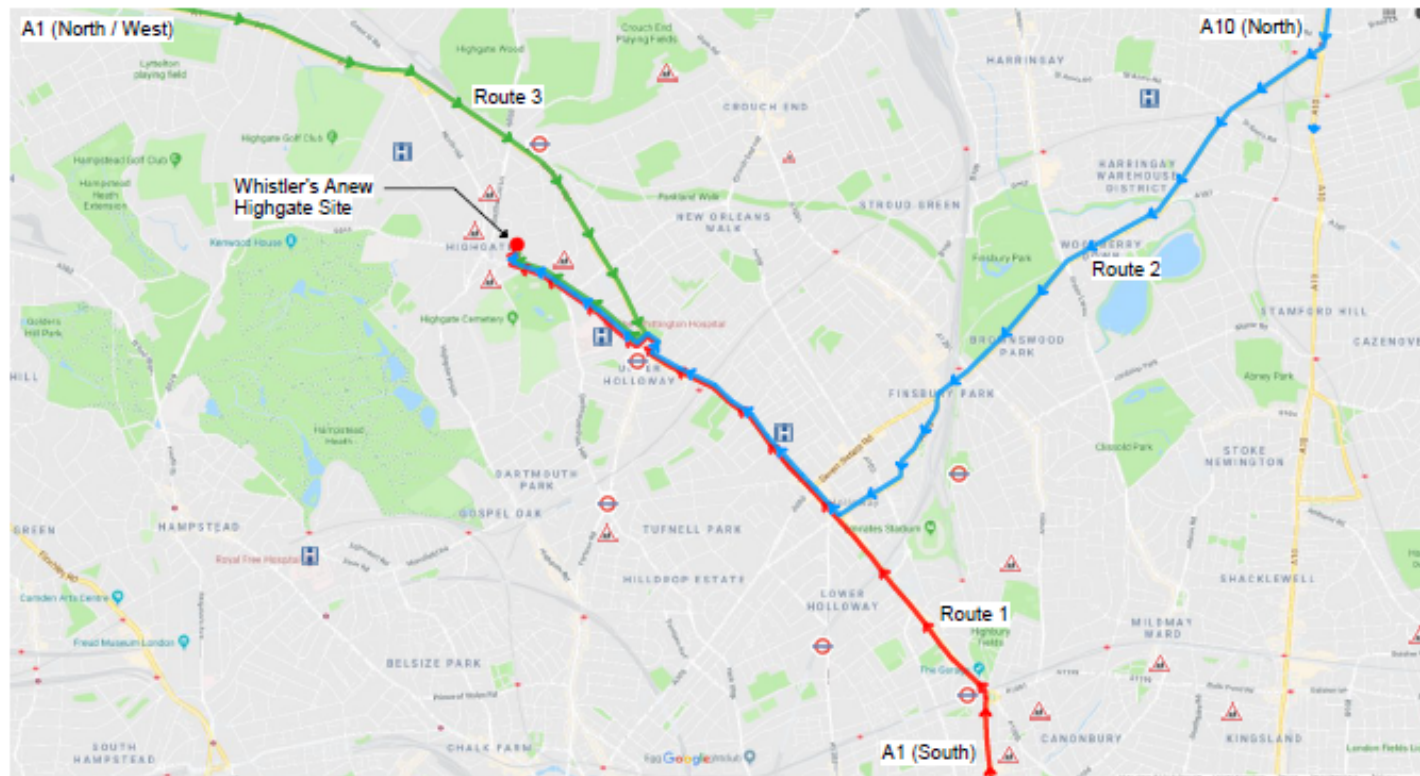
Appendix A

Proposed Site Welfare / Storage Arrangements / Vehicle Access



## Appendix B

## Proposed Traffic Route



Prepared by: T. Robinson, on behalf of Johnson Friel Building Ltd, 300 Kings Road, Kingston upon Thames,  
Surrey, KT12 5JL.

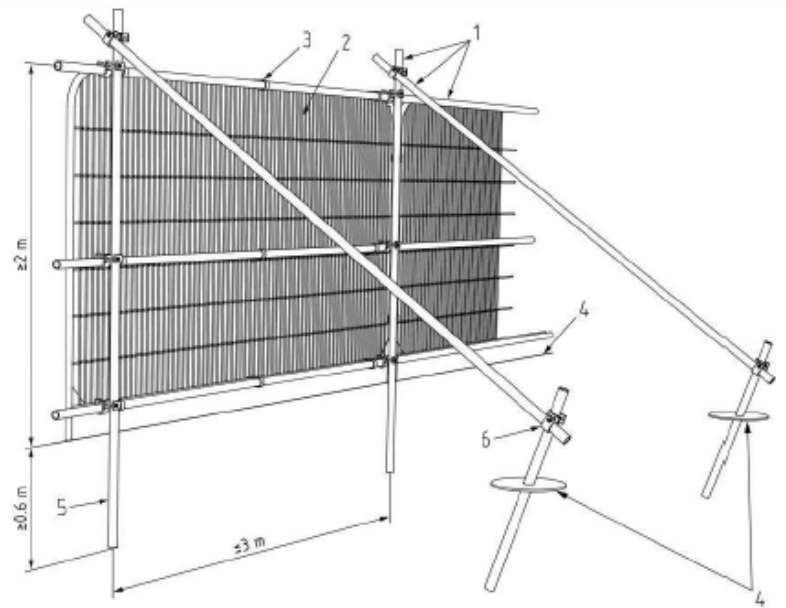
## Appendix C

## Tree Protection



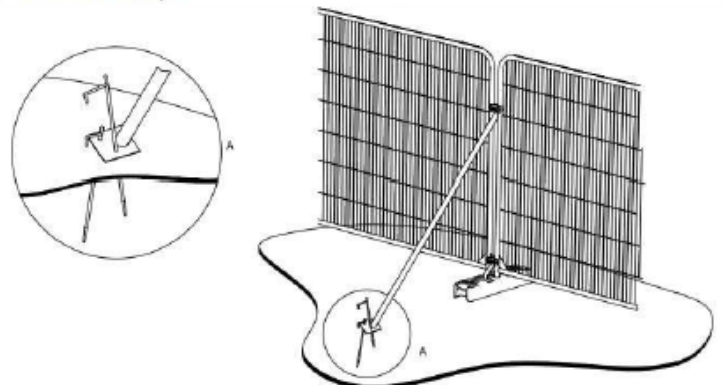
Prepared by: T. Robinson, on behalf of Johnson Friel Building Ltd, 300 Kings Road, Kingston upon Thames,

Surrey, KT12 5JL.

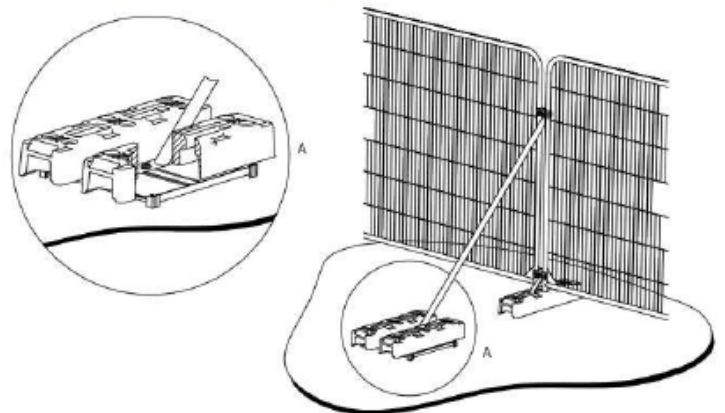


**Key**

- 1 Standard scaffold poles
- 2 Heavy gauge 2 m tall galvanized tube and welded mesh infill panels
- 3 Panels secured to uprights and cross-members with wire ties
- 4 Ground level
- 5 Uprights driven into the ground until secure (minimum depth 0.6 m)
- 6 Standard scaffold clamps



a) Stabilizer strut with base plate secured with ground pins



b) Stabilizer strut mounted on block tray

## Appendix D

## Proposed plan & method of works

### Construction Method statement

The proposed new glasshouse remains a single-storey structure like the existing building set at approximately the same levels on the site thereby enabling the existing garden landscaping around to remain unaffected. The construction systems and method of working have been chosen to avoid the need for any mechanical plant to be sited beyond the line of the footprint of the existing building thereby avoiding interfering with the existing landscaping around.

10. Install tree protection zones in line with arboricultural specialist details and BS5837:2012-*Trees in Relation to Construction*. Fell designated tree and relocate the others as per the Clients instructions and clear site from overgrown plants.

2. Demolish the existing Glasshouse top to bottom ensuring that dust and vibration is always controlled.

3. Prepare formation level and piling mat on ground level within inner perimeter of the original foundation slab to prevent over passing tree protection and public sewer zones, and services.

4. Install helical screw piles with designated equipment and prepare pile heads for load distribution (end plates) to the slab. (Helical steel needle piles will be used to support the new concrete ground floor slab that are inserted by a machine sited within the footprint of the building with an articulated arm able to reach the required position for the piles).

5. Carry out pile cut offs and cast capping beam along boundary if needed for slab edge detail. Where walls are needed to retain the ground around these will be constructed from reinforced concrete with a fairfaced finish as will the walls at the northern end of the building where the surrounding ground level drops away.

6. Install drainage or reconnect runs as required to the new slab and heave protection materials if deemed to be needed.

7. Installation of the pre-manufactured timber framing, a mobile crane will be installed on site with an appropriately designed crane mat, this will be positioned to be able to reach its furthest lifting point without compromising the protected elements of the site.

8. The roofs and walls will be clad with a mixture of translucent and obscured multi-wall polycarbonate panels and clear double-glazed units depending on their orientation.

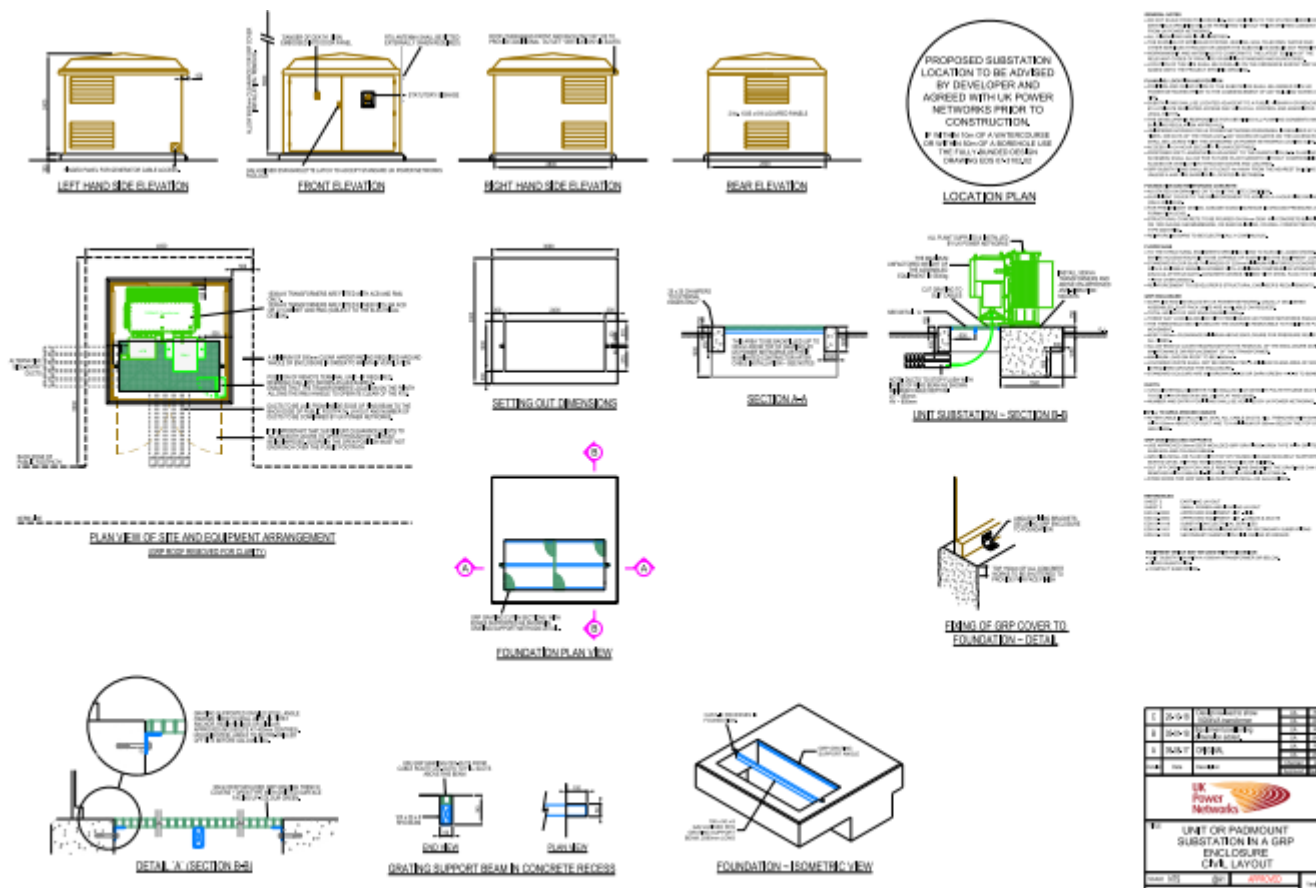
9. Internally floor areas will have a polished concrete finish.

10. Although the proposed new glasshouse will replicate the current footprint of the building thereby enabling the existing garden landscaping around to remain unaffected, the original entrance gates and small security hut are to be replaced as part of the proposals which also include a small electrical sub-station required by UK Power Networks to provide power for the site and surrounding area.

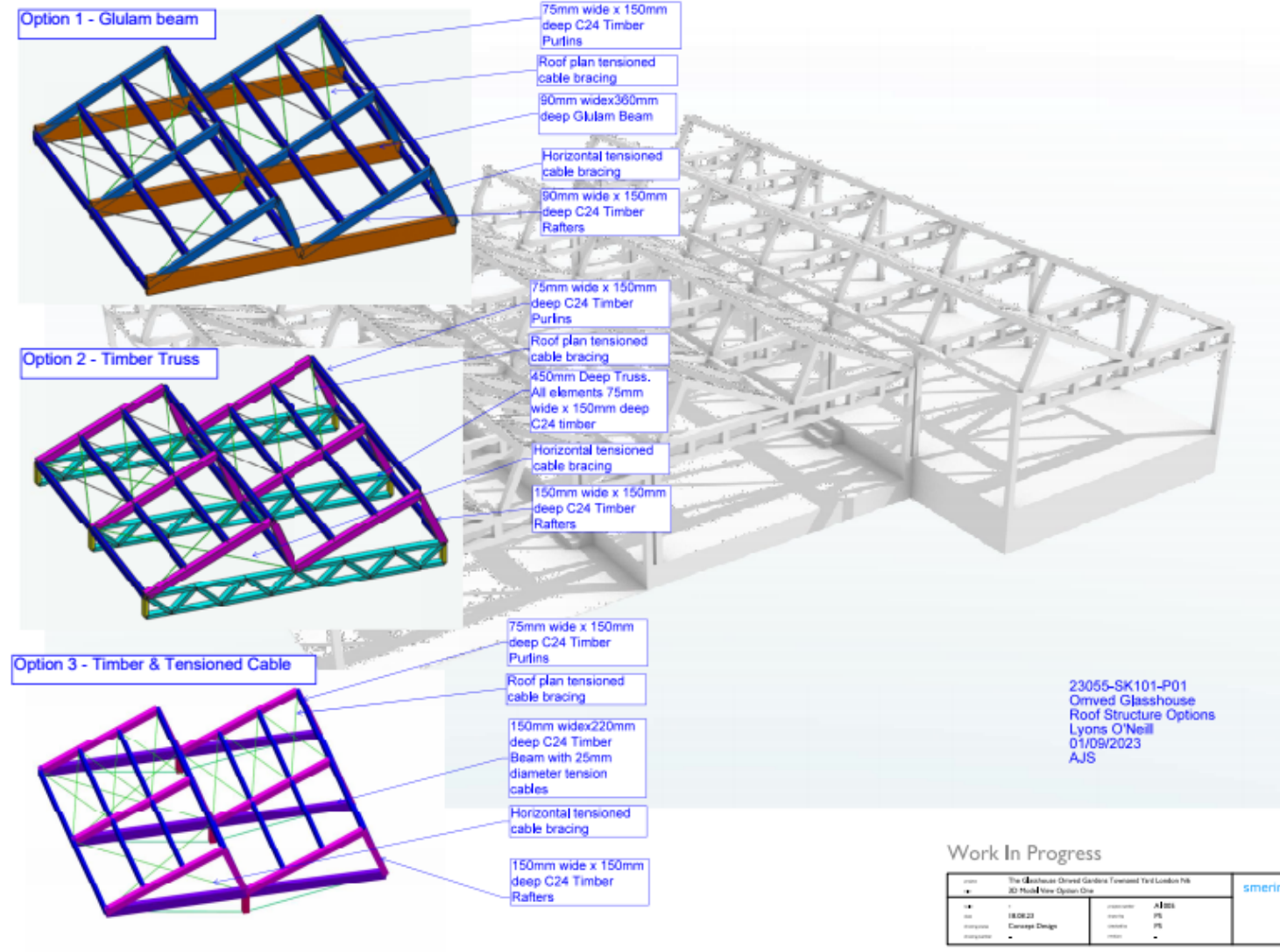
## Appendix E

## Drawings

### Substation Detail



## Roof Detail

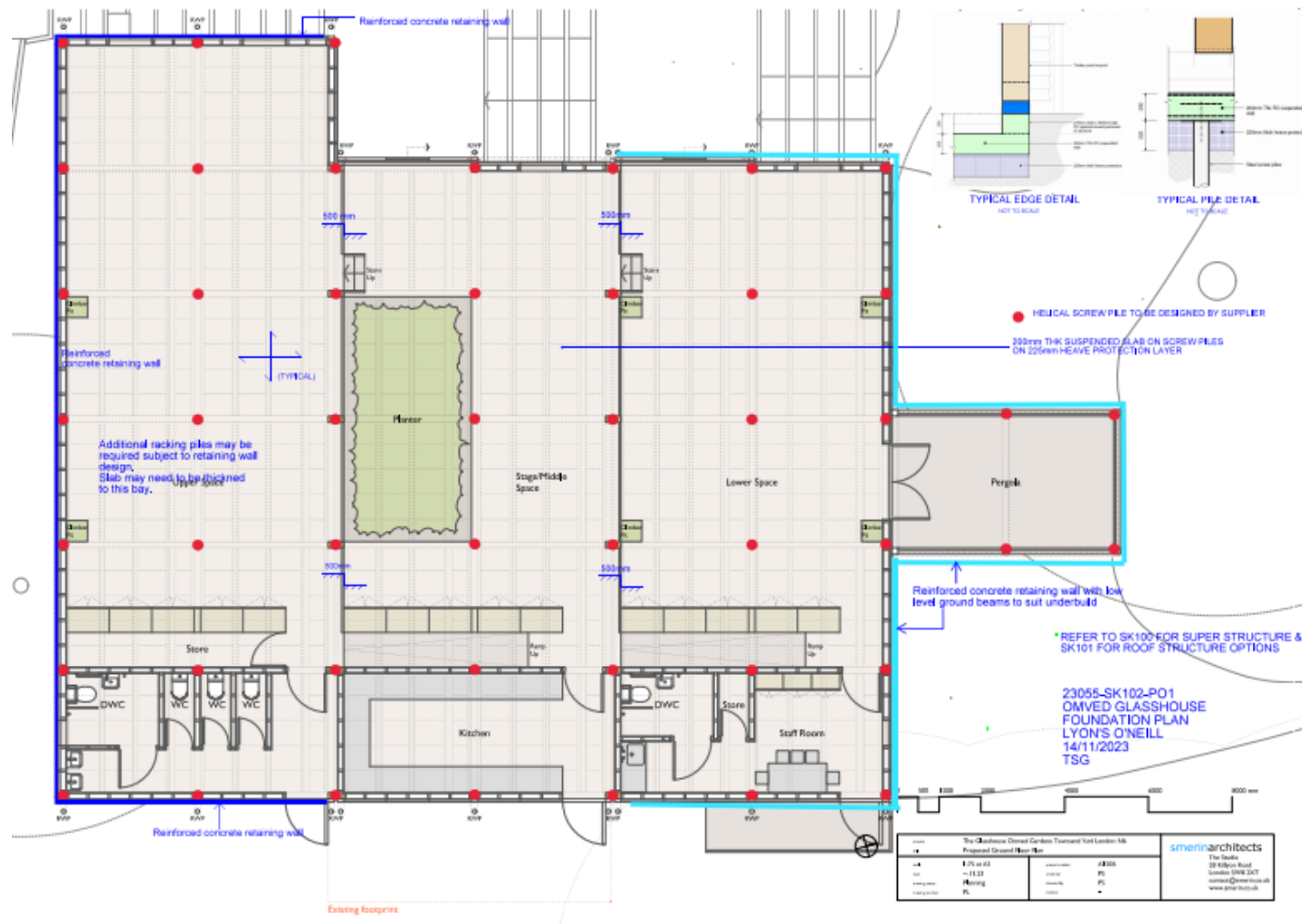


Work In Progress

|                                                                                                      |                                                                         |                                                                          |                                                                          |                                                                                                                                                  |                                                                          |
|------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|--------------------------------------------------------------------------|--------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|
| <p>Project: The Glasshouse Omved Gardens Townsend Yard London N16</p> <p>20 Road View Option One</p> |                                                                         |                                                                          |                                                                          | <p><b>smerinarchitects</b></p> <p>The Studio</p> <p>28 Kilgus Road</p> <p>London SW8 5ET</p> <p>contact@smerin.co.uk</p> <p>www.smerin.co.uk</p> |                                                                          |
| <p>Architect:</p> <p>Date: 18.08.23</p> <p>Project:</p> <p>Stage:</p>                                | <p>Client:</p> <p>Design:</p> <p>Drawn:</p> <p>Check:</p> <p>Scale:</p> | <p>Project:</p> <p>Design:</p> <p>Drawn:</p> <p>Check:</p> <p>Scale:</p> | <p>Project:</p> <p>Design:</p> <p>Drawn:</p> <p>Check:</p> <p>Scale:</p> | <p>Project:</p> <p>Design:</p> <p>Drawn:</p> <p>Check:</p> <p>Scale:</p>                                                                         | <p>Project:</p> <p>Design:</p> <p>Drawn:</p> <p>Check:</p> <p>Scale:</p> |

January 24, 2024

### Ground Floor Detail



Prepared by: T. Robinson, on behalf of Johnson Friel Building Ltd, 300 Kings Road, Kingston upon Thames,

Surrey, KT12 5JL.