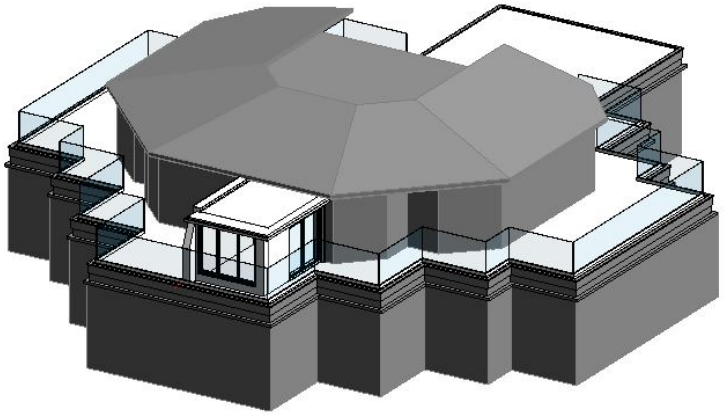
METHOD STATEMENT

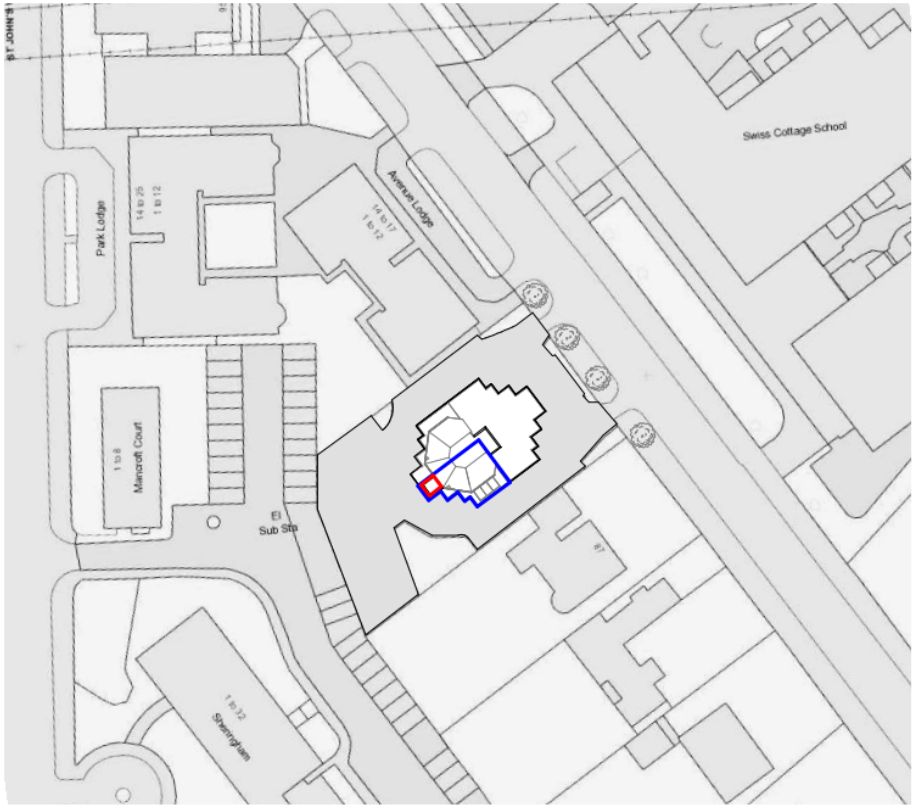
FLAT 17 – THE POLYGON, NW8 6JB, LONDON

PROJECT: GLASS WINTER GARDEN

CLIENT:

DATE: MAY 2022





Above: Site Location plan

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1.0 INTRODUCTION

The site is located on the top floor of the building known as The Polygon. Planning consent was approved for a single storey glass winter garden. During detailed design and tender stages, it was proposed that the structural glass frame and elements be lifted to the roof by crane. However, there are some challenges which result in the glass frame not being practical for this project.

2.0 CONSTRUCTION CHALLENGES

2.1 Large Glass Panels

There are issues with the manufacture and installation of the large 5x1.2m glass ceiling panels as indicated on the approved application

One of the challenges for the large glass panel is its weight and potential stress fracture. A crane will to be required at the site location to lift the glass panels to the flat. This will result in disruption to the neighbours and others that are living or travelling around the site. In turn extensive scaffolding and platform lifts are required which will result in access closure.

Additionally a crane would cause difficulty in its positioning. Lifting panels into place would cause significant risk to the other lessee's and tenants. There are multiple potential points for collision and a very large crane out be required to traverse over and above the main building.
Additionally there are issues with the positioning of the crane. Lifting panels into place would cause significant risk to the other lessees and tenants. There are multiple potential points for collision and a very large crane will be required to traverse over and above the main building.

This results in a difficult challenge in lifting the glass panel to the flat. As the flat is located on the top floor, it would require a heavier crane. This would be an oversized crane as the height from ground level to the roof is 24 metres and it would not practically fit in the forecourt. Additionally it would disrupt neighbouring amenity such as noise, impact on daylight and vehicle and pedestrian accessibility for its duration.

The lead time for the manufacture of the glass panels in 9no months. This and the cost of the panels mean the project is not financially viable.. The client would also need to arrange installation at height. After further inquiry the glass roof construction would also result in intolerable heat gains and need for solar shading. This will result in losing the open aesthetic.

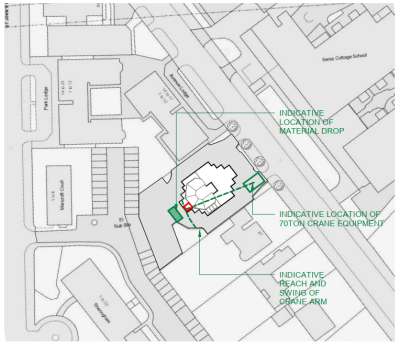
2.2 Scaffolding

Scaffolding will also be required at the site for health and safety reasons for the construction workers. This could mean more trucks would be required on-site to deliver the frames and other equipment for the scaffolding. This would also disrupt the neighbours and others.

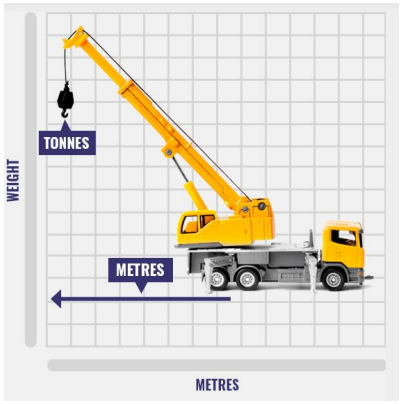
For compliance with health and safety legislation, there will be requirement for extensive scaffolding to be erected at the site during installation. This will inevitably result in more trucks being on-site to deliver the frames and other scaffolding equipment. Again, this will disrupt the neighbours' and others' amenity.

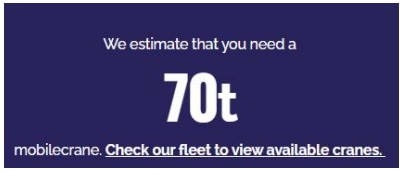
2.3 Alternative Construction Proposal

For the above reasons the attached proposal for a more standard form of construction using materials that can be hoisted or hand carried up the service core has been made. This will result in a more practical method of construction. Timbers, roof material and finishing would be in small form and result in mitigation of scaffolding apart from crash decks on the top floor. Furthermore, no crane would be required. Existing sliding Patio door set and a single window would be the extent of the glass work. The edge profile has also been made slimline to minimise feeling of impact on the top floor.



Above: Indicative crane arm reach and swing





Above: Crane Calculation