

Project: 75 Lawn Road, NW3 2XB		Author:	Diwash Gurung
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		Purpose of Statement	Planning only
Job No:	J001830	Issued to :	Nash Baker Architects

#### **Description of Works: Carbon valuation based on approved extent of demolition (GSE Scheme B)**

The following content should be read in conjunction with GSE's Temporary Works Design issue –Scheme B. Scheme B has been developed in accordance with the approved demolition drawings indicating the extent of demolition permitted by the LA. In order to develop a working design in accordance with the approved demolition drawings the efficiency of the overall scheme has been compromised due to the holistic rise in Embodied Carbon, Potential Hazards/Risk and Logistical Complications.

#### **Embodied Carbon**

Based on a non-technical assessment of the embodied carbon within the construction sequence developed in accordance with approved demolition drawings, GSE believe that due to the following factors any Carbon reductions made in retention of existing fabric will be negligible upon handover and structure completion;

- Additional Labour
- Increased frequency of Concrete Pour over duration of construction
- Additional temporary steelwork for support of existing masonry at higher level
- Additional framework to ensure Façade Retention
- Sacrificial Underpinning
- Packing of existing openings within external load bearing walls to restore in plane stiffness
- Additional Reinforcement in Piles (Net increase in applied load at head of piles)
- Remediation to existing structure to be retained

#### **Hazards /Risks**

Upon reflection of the approved demolition drawings and the respective temporary works design produced the scheme also gives rise to a series of potential risks that would require additional measures to Manage and Eliminate;

- Welfare - Material Falling from height
- Welfare - Working in an excavation for the construction of sacrificial underpin
- Welfare - Placing of in-situ concrete
- Material - Damage incurred to existing structure to be retained

#### **Logistical Complications**

The overall sequence has been developed such that upon installation of the façade retention framework that careful demolition will proceed in a top down fashion in accordance with the approved demolition drawings. Upon completion of part demolition, underpinning will commence and the basement extension will be complete. Upon completion that structural stability and stiffness will be restored storey at a time and respective retention will be removed. Due to the required retention of certain panels of wall the overall sequence has meant that the contractor would need to phase the integration of temporary and permanent structure much earlier into the sequence to enable sufficient support to the structure and ensure site welfare.

This in turn will potentially lead to logistical complications for the contractor that are foreseeable and can be eliminated.

**The above statement should be read in conjunction with the following;**

J001830-75 LAWN ROAD (SCHEME B) TWs TENDER DESIGN ISSUE