

## 5 – 6 Cliff Villas

### Structural Engineer's Report (Demolition)



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## 1 Introduction

The aim of this report is to assess what temporary works, if any, will be required during demolition of the existing buildings on site to ensure that the integrity of the neighbouring structures are not compromised. A site walkover and external visual inspection of the neighbouring properties was carried out on the 25<sup>th</sup> of March 2014.

## 2 The Site and Existing Building

### The Site

The site is situated on Cliff Villas (see Figure 1), which is located within the London Borough of Camden. It fronts onto Cliff Villas towards the west and is bordered by a storage building (ABC Self Storage) to the north, Brecknock Primary School to the south and houses to the east. The buildings on site are not listed.

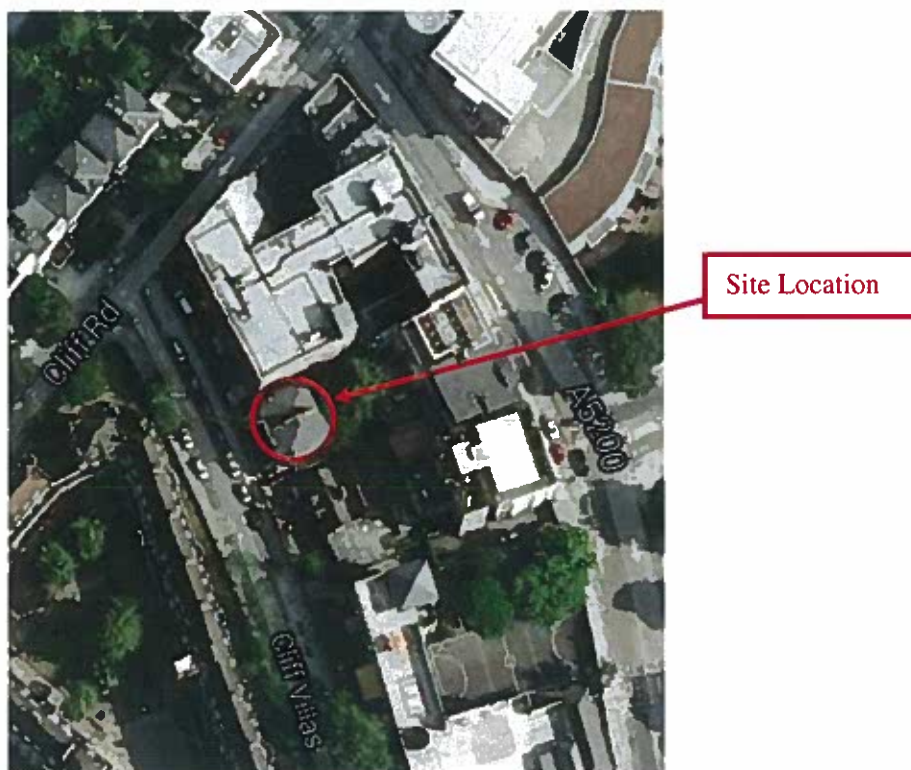


Figure 1 - Site Location

### Existing Buildings and Boundary Conditions

No. 5 and No. 6 Cliff Villas are adjoining semi-detached residential properties. Both properties are three storey structures with lower ground floors (half basements) and rear gardens towards the east boundary. Both No. 5 and No. 6 have two-storey side extensions at lower ground and ground floor levels that meet the north and south boundaries respectively.

On the north side, the extension to No. 5 Cliff Villas abuts the flank wall of the storage building. The boundary line has been assumed to be between the two and it is assumed the extension encloses against the flank wall (see Figures 2 and 3). The storage building appears to be in good

structural condition. An external visual inspection indicates that the storage building does not have a basement.



Figure 2 - North boundary of property where side extension of No. 5 Cliff Villas adjoins storage building

Figure 3 - View of north boundary of the property from the east (rear garden side)

On the south side, the side extension to No. 6 Cliff Villas abuts the boundary wall to the school and extends over the wall, with the adjacent piers extended to match the additional height of the wall (see Figures 4 and 5).

It is thought that both side extensions are later additions to No. 5 and 6 Cliff Villas and certainly constructed after the adjacent properties. In constructing the extensions, the ground has been locally lowered to lower ground floor level, and therefore the adjacent walls (flank wall of storage building and boundary wall of school) may have been underpinned. In any event, the adjacent walls will be retaining ground due to the level difference. Hence, care must be taken to stabilise these adjacent walls during demolition of the existing buildings.



Figure 4 - South boundary of property where flank wall of No. 6 side extension appears to be on school land

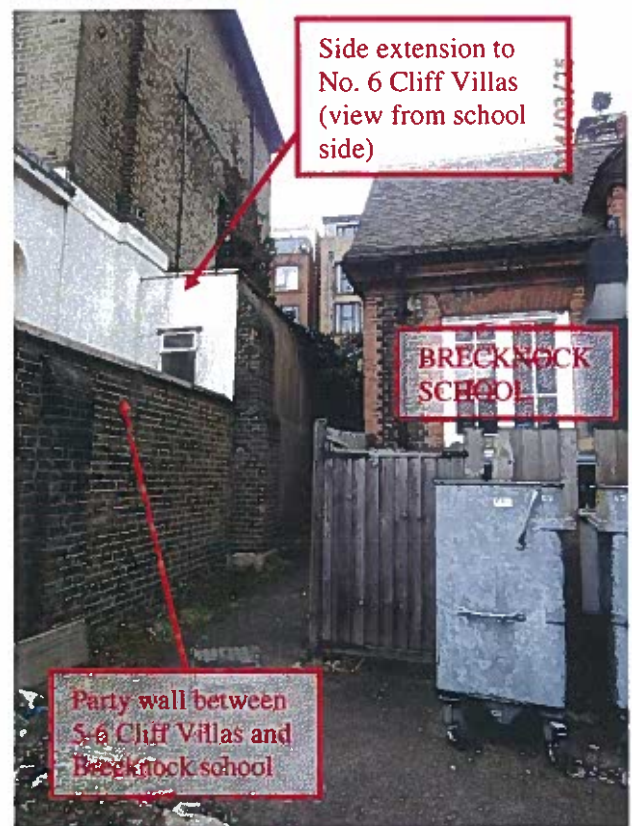


Figure 5 - View of No. 6 side extension from the school side

### 3 Proposed Temporary Works during Demolition

No. 5 – 6 Cliff Villas is to be demolished down to lower ground floor level. The retaining walls, and its foundations, at the front and rear of the property supporting the change in level to both the front and rear gardens respectively should be preserved. Side walls forming the front steps to the property should be retained to help brace the front retaining wall.

Temporary props will be required along the north and south boundaries at existing ground floor level, where the side extensions to No. 5 – 6 Cliff Villas meet the adjacent walls. These could be in the form of raking props, positioned to stabilise the adjacent walls that are retaining ground on the adjoining owner's side. These props must be installed prior to demolition of the existing ground floor.

The flank wall of the side extension to No. 6 Cliff Villas should be reduced in height to the original level and thus match in with the remainder of the wall. Whilst doing this, we would recommend that the top three courses of the remaining wall are re-built. This should repair the cracked section of wall in this area. New coping stones should be installed to match the existing.

All private services running through the property should be disconnected and capped off at the front and back retaining wall positions.

Refer to Appendix A for sketches showing the suggested demolition and temporary works scheme, and photos of the flank wall to be retained.

Appendices

Appendix A: Sketches

REPORT

## Appendix A

### Sketches

