

Our ref: 25017.RP.01

[REDACTED]
Hill House Interiors,
32 Baker Street,
Weybridge,
Surrey.
KT13 8AU.

10th of April 2025

[REDACTED]
10 Chester Terrace, NW1 - Lowering of Vault Slab

The existing structure has been fully appraised and the impact of the proposed interventions has been assessed and the negligible impact on structural stability is reported on below.

The overall stability of the vaults is derived from solid masonry brick arches supported off masonry walls which are distributed walls at right angles to one another. The whole vault structure is interlinked along the street. The existing slab consists of a mass concrete ground bearing slab with no steel reinforcement mesh contained within it.

The proposal involves simply carefully removing this existing mass concrete slab and installing a new ground bearing slab at a lower level as detail on Axiom Structures drawings 25017-ASL-DR-SK-01 and 25017-ASL-DR-SK-02. This will require mass concrete underpinning to the existing masonry walls to reach the proposed formation level for the new ground bearing slab. The underpinning will be installed in a hit and miss sequence as noted on Axiom Structures drawings. Once all the underpins have been completed the Contractor will be able to start the bulk dig down to the proposed formation level, this will require temporary shores installed above the proposed slab level until the new ground bearing slab has been installed and sufficiently cured.

The removal of the existing dividing wall between the two vaults will require a traditional steel picture frame to provide vertical and horizontal restraint to the remaining masonry walls and arched roof to the vault structure. The temporary works will involve traditional steel needles and braced acrow props until the permanent works steelwork is installed.

Based on the above, the proposed works can be undertaken by a competent and experienced Contractor without detriment to the existing vault structure.

I trust the above is clear, but should you have any questions please feel free to contact us.

[REDACTED]
Alan Bowling – Project Director
BEng (Hons) C Eng M.I.Struct.E
Axiom Structures Limited