

FLOOD RISK ASSESSMENT SUPPORTING INFORMATION

**PROPOSED DEMOLITION AND RECONSTRUCTION OF
SINGLE STOREY DETACHED GARAGE**

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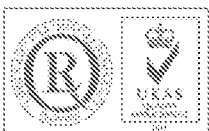
**21 SUNNINGDALE GARDENS
BOGNOR REGIS
WEST SUSSEX
PO22 9LE**

Arun District Council Ref: BE/94/14/HH

Our Ref: 14H2792



INVESTOR IN PEOPLE



ARUN DISTRICT COUNCIL BE/94/14/HH

As



1. PROPOSAL OF WORKS

The detached single storey garage of 21 Sunningdale Gardens, Bognor Regis, has suffered from significant subsidence and foundation related movement. Works are now proposed to demolish and reconstruct the detached garage on a new helical piled raft foundation.

2. DESIGN PRINCIPLES

As the project is being funded by Building Insurers, the reinstatement and design of the garage is on an exact “like for like” basis save for the new piled foundation.

Whilst the Communities and Local Government documentation principally relates to domestic dwellings of cavity or solid 9” construction, the general principles have been applied where appropriate to the single storey half brick thick detached garage structure.

3. FOUNDATIONS

New Helical piled foundations are being installed due to inherently poor ground conditions. Due to the nature of the founding subsoils, pile depths are anticipated to extend approximately to 4 m below external ground level. A proprietary ‘QuickBase’ foundation is to be constructed over the piles. It will in turn support a 100 mm thick reinforced concrete slab.

The final slab level will be matching that of the existing original garage.

4. FLOORS

The garage floor will effectively be a suspended reinforced concrete floor slab constructed on top of the ‘QuickBase’ foundation (in turn supported on helical piles).

The final finished floor level will be matching that “as existing” and there are no proposed alterations to change the finished floor level from the original. A minimal 25 mm of cover is to be provided to the A393 mesh reinforcement placed within the reinforced concrete floor slab.

No insulation is provided to the floor as it is an external detached outbuilding.



5. WALLS

The original garage structure comprises of half brick (100 mm) thick masonry walls set within a cement based mortar.

Rebuilding will be completed using bricks to match existing in all aspects, set within a similar cement based mortar. Mortar joints are to be thoroughly filled to reduce the risk of water penetration.

A physical damp-proof course will be employed on the external walls around the perimeter of the building at low level.

No external or internal render is proposed to the garage.

6. DOORS AND WINDOWS

The existing up and over door comprising of an external timber frame and painted metal up and over door is to be taken out and refitted as part of the programmed works.

Nathan Tilford
On Behalf of Smithers Purslow