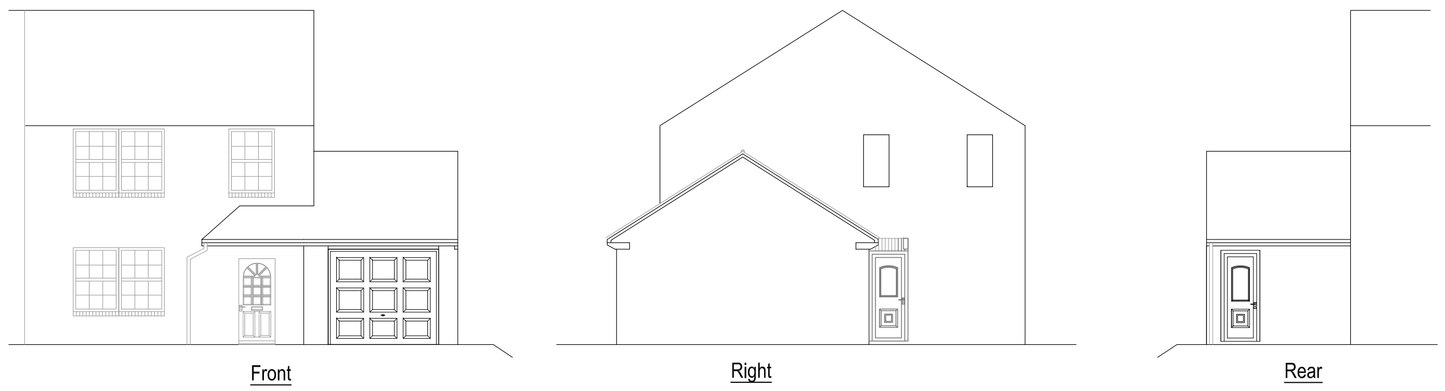
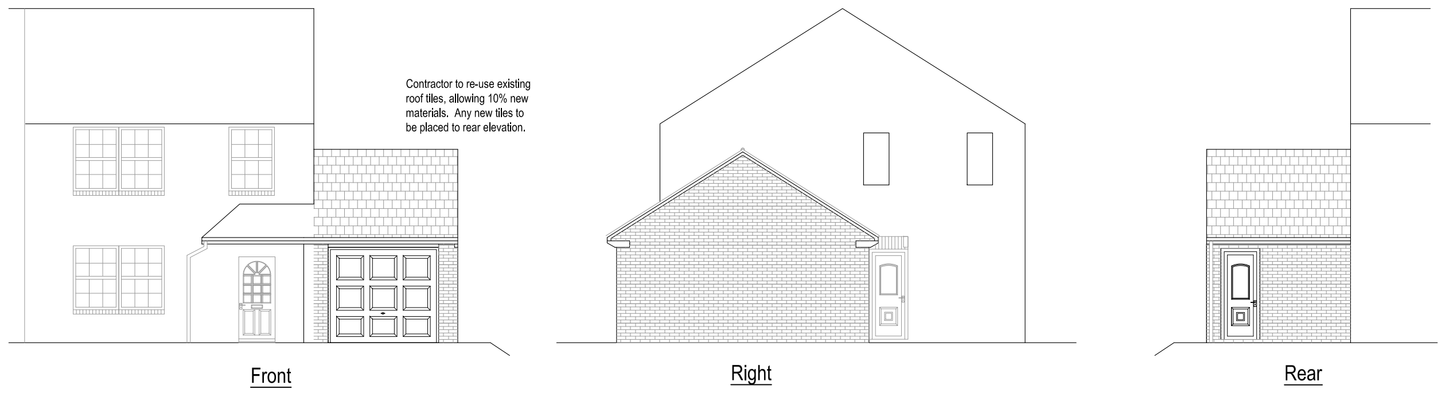
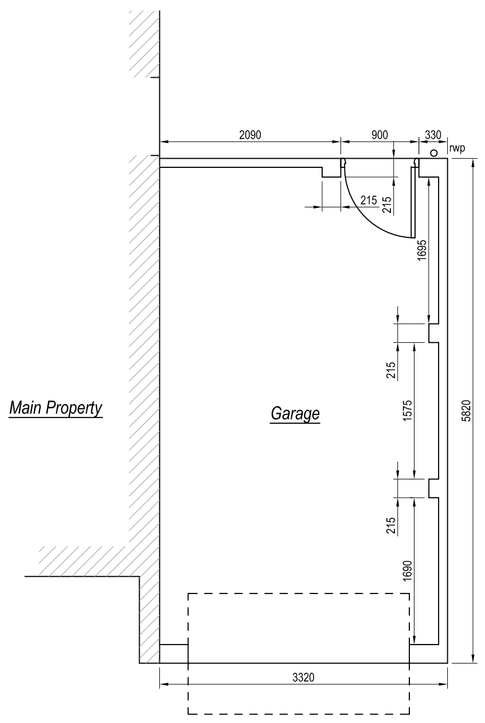


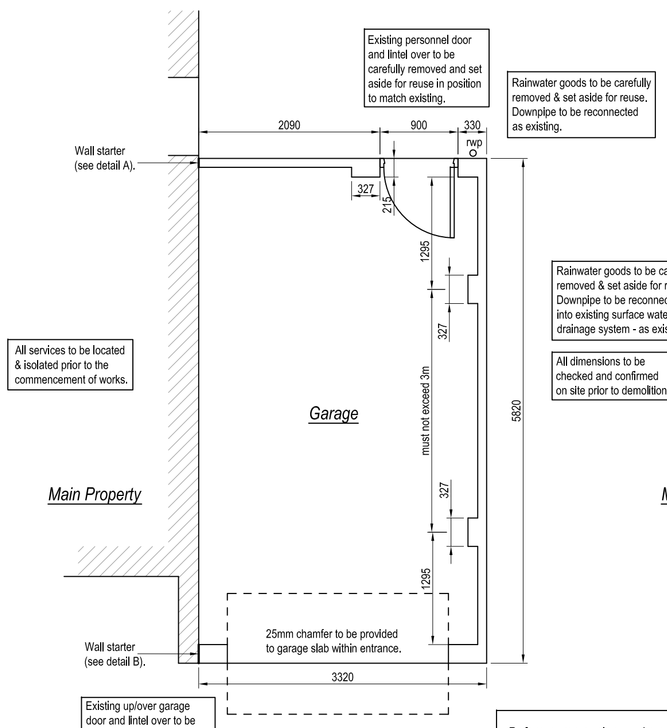
Original Elevations
Scale 1:100



Proposed Elevations
Scale 1:100



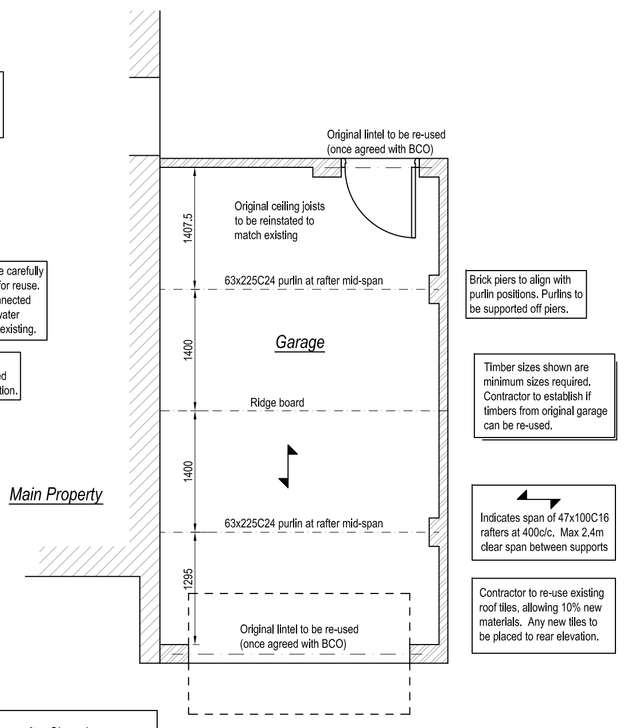
Original Plan
Scale 1:50



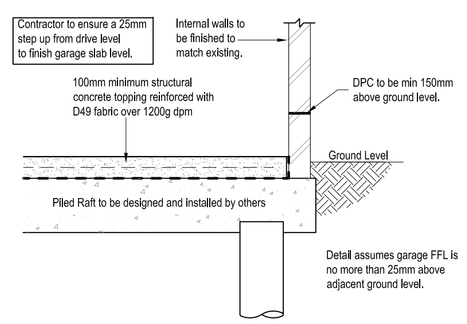
Reconstruction Plan
Scale 1:50

Before commencing works on site, CL and contractor to ensure that there are no adopted lateral drains or sewers within 3m of the proposed works.

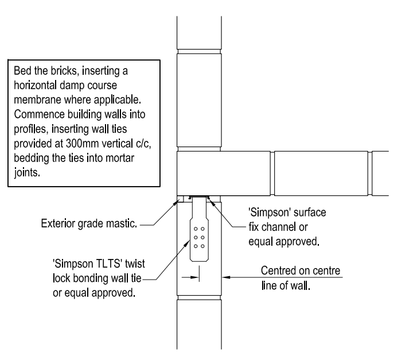
If any are found, CL to advise the Design Engineer immediately as a Building Over agreement will be required with the Local Water Authority and approval must be obtained before the works are started.



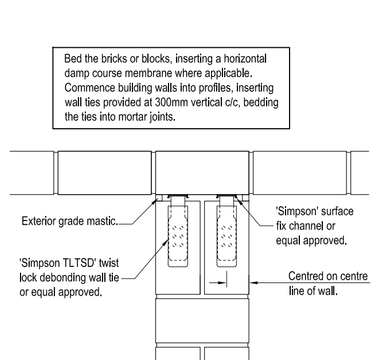
Roof Plan
Scale 1:50



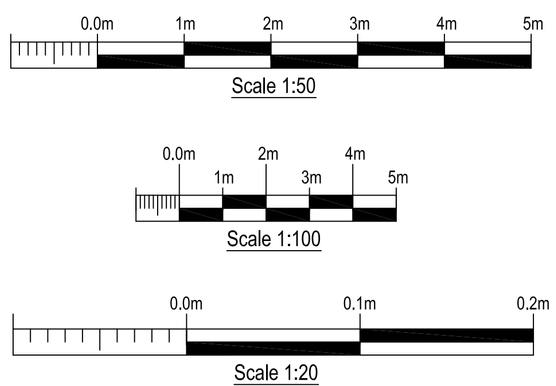
Typical Foundation Section
Scale 1:20



Wall Starter Detail A
Scale 1:10



Wall Starter Detail B
Scale 1:10



Doors, Windows & Glazing

Windows and doors to be by proprietary manufacturer approved by BCO, and to be installed in accordance with the manufacturers recommendations.

Glazing up to 800mm above internal finished floor level to be safety glazing.

Glazing to doors to be in safety glazing up to 1500mm above internal finished floor level.

Side panels within 300mm of doors to be safety glazed up to 1500mm above internal finished floor level.

External timber doors shall not be less than 44mm thick (nominal).

Cavity trays to be provided above all openings and where the cavity is bridged by air bricks, meter boxes etc. They shall extend a minimum of 150mm beyond the ends of the bridging. In areas of very severe exposure to driving rain a vertical dpm shall be provided behind meter boxes. Above window and door openings the trays shall be provided with stop ends. Cavity trays are also to be provided where a roof abuts a cavity wall.

Vertical dpc's at opening reveals should be correctly installed and should extend at least 25mm into the cavity.

Timber

Structural timber to be in accordance with BS 5268, to grade or strength class shown on the drawing. All timber sizes, spacings and grades quoted are minimum to be used. Any variation to be agreed with the Engineer prior to installation. Unless noted otherwise on the drawing all fixing and connection details to be agreed with the Contact Administrator and Design Engineer prior to installation. Any fixing and connection details that are shown on the drawings are to be adhered to unless agreed otherwise with the Engineer. A clearance of 25-75mm between the first joist and the face of the wall should be allowed.

All new timber to be stopped, knotted and treated. All structural softwood timber to be treated with CCA type preservatives applied by vacuum pressure process in accordance with Table 4 of BS5268:Part 5.

All timber connections to utilise suitable connectors by 'Simpson' Strong Tie or similar proprietary connectors approved by the Design Engineer.

Where restraint type joist hangers are specified do not use alternatives without written approval from the Design Engineer.

Floor joists, flat roof joists and floor tie members of attic trusses should be strutted by one or more rows of solid blocking or herringbone strutting in accordance with table below. At the end of each run of strutting the last joist should be firmly blocked to the wall.

Joist span less than 2.5m	=	None required
Joist span 2.5 - 4.5m	=	1 row at mid-span
Joist span more than 4.5m	=	2 rows at one third span positions

Solid blocking should be at least 38mm wide extending at least 0.75 times the depth of the joists, fixed in line and staggered by the width of the blocking. Herringbone strutting should be of at least 38x38 timber section, fixed in line and staggered by the width of the struts. Herringbone strutting should not be used where the distance between the joists is greater than 3 times the depth of the joists. Solid blocking or herringbone strutting should be provided at joist ends supported by hangers and where they are notched into supporting steel beams.

All holes and notches in timber members shall be comply with BS 8103 Part 3 and NHBC Standard 6.4

All trimmers to be bolted together using M10 bolts to BS 916, placed through close tolerance predrilled holes at approximately 500mm c/c, with a minimum of 3 bolts per trimmer. The first bolt is to be at approximately 150mm from each end and the bolt spacings are to be approximately equal. No load shall be applied until all the bolts have been fully installed.

Concrete Topping Specification

Concrete mix specification for insitu reinforced concrete topping
Minimum thickness of topping 65mm
Compressive Strength Class of Concrete C25 / 30
Minimum cement content :- 260 kg/m3
Maximum free water / cement ratio 0.65
Maximum aggregate size :- 10mm
Chloride content class :- C0,20
Consistence Class :- S2
Class of Cement :- CEM I 42,5R
Admixture :- (see Engineers Specification) None
Min. / Max temperature of fresh Concrete :- 5 / 30
Intended Working Life of Structure :- 50 years
Nominal Cover to all reinforcement :- 25mm
Exposure Class :- XC1

Reinforcement
A142 steel mesh Grade B500B conforming to BS 4449:2005 placed centrally within thickness of topping, if less than 90mm topping used, or with 50mm top cover if topping is more than 90mm thick.

Alternative use of polypropylene fibres at a density of 0.91kg/cub.m of concrete
Instead of the A142 steel mesh.

Surface Finish of topping
The required finish of the top surface of the topping can be achieved by trowelling to an even texture with no ridges or steps. Sudden irregularities of levels is not permitted and a maximum deviation of level of 5mm over a 3m straight edge is to be achieved.

The topping should be cured in accordance with the recommendations of BS8110 part 1:1997 cl. 6.2.3.

On completion of placing the topping, curing and protection of the finished top surface has to be allowed to take place before any construction loads are placed on the floor or the floor is used as a working surface.

On average 4 days should be allowed for curing of the topping, depending on a surface temperature being maintained between 5 and 10 degrees C.

Protection to the surface of the topping during this curing time can be by an impermeable membrane (Polythene) or spraying the surface with an efficient curing membrane or a damp absorbent material (hessian or similar).

Lintels

Unless noted otherwise on the drawing, Catnic CCS lintels (or equal approved by the Design Engineer) to be used over all external structural openings up to 2.1m clear, with minimum 150mm end bearings. All external wall lintels to be fitted with lintel soffit cladding to provide extra protection against exceptional weather conditions.

Drainage

Rainwater goods to be carefully removed and set aside for re-use in positions to match existing. Downpipes to be re-connected as existing.

General

This drawing is to be read in conjunction with Cunningham Lindsey / Oriel standard contract documentation and all other relevant documents, unless alternative arrangements have been agreed with the Contract Administrator.

Do not scale this drawing, except for Planning purposes. The Contractor shall check all dimensions and levels on site prior to demolition of the existing structure. Any discrepancies shall be notified Immediately to the Contract Administrator and the Design Engineer. All dimensions shown include finishes.

Layout of the works is to remain unaltered unless otherwise agreed with the Contract Administrator and the Design Engineer.

Contractor shall locate all services (including overhead) prior to commencement of any works on site and liaise with the Contract Administrator.

All temporary works are to be designed and detailed by the Contractor, including the provision for pumping, shoring & propping. Design to be undertaken by a suitably qualified professional.

All excavations and exposed foundations are to be adequately supported and protected by the Contractor at all times in accordance with Health & Safety requirements.

All materials to be fit for purpose and all works, whether specified or implied, to be in accordance with current Building Regulations, British Standards, Codes of Practice and accepted good building practice.

All proprietary products are to be installed strictly in accordance with the manufacturers recommendations.

On completion of the works the Contractor shall be responsible for reinstating the surrounding ground finished surfaces to their original state.

The structural design has been prepared in accordance with the CDM Regulations. In addition to the usual risks associated with building works and materials the Contractor should also ensure:

- that demolition, excavation, drilling, cutting etc into existing structures or materials be carried out carefully in case there are any hidden services
- that all items to be demolished or removed, eg walls, beams, slabs etc, are assessed for any loadbearing or stability function and temporary propping provided as necessary
- that any existing structure or materials to be drilled, cut, or otherwise disturbed, be checked for asbestos content and appropriate action taken

Electrical System

To be designed and Installed by a suitably qualified Electrical Engineer. Design and installation shall comply with Building Regulations Part P, and BS 7671.

Proper design, installation, inspection and testing of electrical installations is required to protect persons from fire or injury.

Electrical installations to be Inspected and tested during and at the end of installation, before they are taken into service. Test certificate to be issued to Building Control on completion of the works.

All sockets and switches are to be situated at appropriate heights between 450mm and 1200mm above finished floor level. Socket and switch boxes are not to be situated back-to-back.

Public Sewers

Before commencing works on site, CL and contractor to ensure that there are no adopted lateral drains or sewers within 3m of the proposed works.

If any are found, CL to advise the Design Engineer immediately as a Building Over agreement will be required with the Local Water Authority and approval must be obtained before the works are started.

Walls

External leaf: 102.5mm facing brickwork to match existing laid in M4 (iii) mortar.

Where a new wall abuts an existing wall, a wall starter profile is to be provided in accordance with manufacturers recommendations (refer to detail for further information). A vertical dpc is to be inserted at the junction of new and existing cavity walls where the existing runs through the cavity (see detail).

Unless noted otherwise on the drawing masonry construction locally below lintel bearings to be minimum of 35 N/mm² bricks or 10,4 N/mm² blocks laid in class M4 (iii) mortar in accordance with BS 5628.

All masonry below ground level to be suitable for purpose, as designated by brick/block manufacturer, laid in class M6 (iii) mortar. Concrete blocks should not be used below dpc level where there are sulphates in the ground, unless suitability is confirmed by the block manufacturer. Where sulphate levels are class 3 or higher Sulphate Resisting Portland Cement (SRPC) to be used for the mortar.

All brick piers to be fully bonded to the main walls using header bricks. Under no circumstances should piers be constructed separately and tied to the main walls with wall ties.

Brickwork bond/thickness shown on details are for illustration purposes only - refer to plans and Masonry specification for clarification of wall construction.

Lead Work

All lead work to be in accordance with all LSA requirements current at time of installation.

REV	DRAWN	DATE	DESCRIPTION
A	MS	10.01.14	Drawing amended & approved

SUBJECT TO LOCAL PLANNING AUTHORITY APPROVAL NOT FOR CONSTRUCTION

SUBJECT TO LOCAL AUTHORITY APPROVAL CONTRACTOR TO SUBMIT A BUILDING NOTICE

THIS DRAWING WAS PRODUCED AT A1

Oriel
1st Floor Design Office, Solent House,
Solent Business Park, Whiteley,
FAREHAM, Hampshire PO15 7AF

JOB ID
Equity Housing Group

SITE ADDRESS
19 Butterton Close
Mapplewell
Barnsley
S75 6JE

PROJECT
Demolition and reconstruction of right hand attached garage

DRAWING TITLE
Layout Plans and Elevations

INITIAL DRG DATE	DRAWN BY
January 2014	MS
SCALE	CHECKED BY
As Shown	.

REFERENCE	DRG No.	Rev.
7035612	101	A