SUPERSEDED

FOUNDATIONS
Excavate internal to garage to depth of base of existing foundation. Assumed existing foundation thickness 225mm. Drill at centre into side of existing foundation to accept 12mm resin fixed dowels at 600mm ctrs. Form new 450mm wide foundation alongside and over existing to an overall depth of 450mm (Minimum 225mm concrete above existing foundation) to abut existing garage peripheral wall in C40 concrete. Link junctions of new garage foundations with main house foundations using 3 no. mild steel dowels.
Form new foundation for pier 700mm wide 225mm thick in C40 concrete to same depth as garage foundation and linked to existing foundation with 4 no. mild steel bars
After demolition of existing Conservatory excavate for new Garden Room cavity wall to sound undisturbed subsoil minimum 1200mm depth and form new foundation 650mm wide 225mm thick in C40 concrete. Link junctions of new foundations with existing using 3 no. mild steel bars.
All foundation sizes and depths to be agreed with the Local Authority Building Control Officer. Minimum foundation depth 1200mm below ground level.

MASONRY WALL CONSTRUCTION
Ground floor conversion of single brick/block garage walls cavity construction 290mm o/a thickness (excluding render)
Carefully remove up and over garage door, window and personnel door and reserve for reuse in existing positions relocated to suit cavity wall construction
Form new inner leaf **constructed fairface** in 100mm thick 7N dense concrete blockwork below d.p.c. and 100mm Tarmac Superbloc 3.6N/mm2 insulation blockwork above d.p.c..to ground floor plate level.
Cavity: 90mm wide use resin fixed wall ties to tie new inner leaf to existing at 750mm horizontal ctrs, 450mm vertical ctrs. (staggered) and 225mm ctrs. around all openings.
Build in new Catnic lintels above openings as shown on drawing no. 10:01/01C
New First Floor Construction
On removal of existing garage roof discard all disused s.w. plates/fixings and construct Cavity walls (90mm cavity) to South East gable and South West side above existing to plate level using Tarmac Superbloc 3.6N/mm2 to inner leaf of cavity wall and Tarmac Hemelite 3.6N/mm2 to outer leaf achieving a U value of 0.27w/m2k
Use stainless steel wall ties, to BS 1243, at 750mm horizontal ctrs, 450mm vertical ctrs (staggered) and 225mm ctrs around all openings.
To South East above garage door reduce existing parapet wall to level consistent with new first floor.
New Pier
Form new brick pier with 100mm thick 7N dense concrete blockwork to both leaves below ground level and in facing brickwork to match existing from ground level up to and including corbelled detail. **Note and copy** corbelled detail, above which both leaves should be constructed in 100mm thick Tarmac Hemelite as described above.
Use stainless steel wall ties 20 BS 1243 at 450 ctrs.
Garden Room (replacement of Conservatory)
Form new cavity wall (90m cavity) with 100mm thick dense concrete blockwork to d.p.c. level to inner leaf and to ground level to outer leaf. Raise outer leaf to d.p.c. level in facing bricks to match existing with 215 x 65 standard air bricks at 1200mm centres to both leaves. Construct cavity wall above d.p.c. to plate as described under first floor construction. Outer leaf (above d.p.c.) prepared for render.
Cavity wall achieving a U value of 0.27w/m2k
Generally
Provide damp proof courses in all new walls at a level to relate to/and lapped with existing min: 150mm above g. l. using R I W Sheetseal 226 or similar approved d.p.m.
Provide insulation to new cavity walls using 40mm thick Celotex CW4000 retained against outer surface of inner leaf with wall ties with retention clips as described above.
All blockwork to be rendered to be constructed with raked joints.
Provide 150mm wide vertical d.p.c.'s or Thermabate Cavity Closers with integral *d.p.m.'s of required thickness to suit cavity width to all openings in external cavity walls.*
Cavity Trays with stop ends to be provided above all openings in Cavity walls.
Weepholes (perpendicular vents) to be provided at 450mm ctrs. above cavity trays and 900mm ctrs. where cavity drainage is blocked.
Fill cavity to ground level with lean mix concrete with outward draining splayed top.
Seal cavities at head with 6mm non-degradable material
Inner leaf of cavity walls restrained to rafters see PITCHED ROOF CONSTRUCTION
Form soldier course projecting to depth of proposed render in facings to match existing facing brickwork above S. E. ground floor opening..

EXTERNAL RENDERING
BEFORE applying render mount 15mm treated s.w. back plate (ground) at a size to match vertical back of gallows bracket on wall in position of gallows bracket. Gallows bracket to be mounted after completion of rendering.
Rendering is to comply with BS5262: 1976
Apply cement sand render (sand to comply with BS1199) in two coats to areas of new masonry and blockwork shown on drawings. Ensure that joints in brickwork and blockwork are raked minimum 13mm and that the surface is clean, dry and free from loose matter. Fix Expamet galvanised metal drip at lower termination/top of corbel detail for garage pier and above d.p.c. For Garden Room. First coat (undercoat) to be 8mm – 16mm thick and second coat should be thinner and of a weeker mix. The Garden Room is to be smooth textured finish to match the Utility and making good around the Garage is to be pebble dash to match existing. If it is deemed necessary to vary from these thicknesses ensure that the undercoat is no thicker than 16mm and the top coat does not exceed the thickness of the undercoat. Allow for adequate curing (min: 3 days) and prepare for decoration

CONCRETE FLOOR CONSTRUCTION (GARAGE)
Make good to garage floor with a minimum of 150mm thick C30 concrete (trowel finish) with A252 reinforcement mesh 50mm from base on 1200 gauge polythene d.p.m. carried up periphery walls to d.p.c level on sand blinded well compacted Type 1 hardcore minimum 150mm thick as necessary.

CONCRETE OVERSITE
Form oversite concrete to area of Garden Room with a minimum of 100mmconcrete on 150mm sand blinded well compacted Type 1 hardcore.

VERTICAL TILE HANGING
Hang Concrete Plain Tiles to match existing on treated s.w. battens on untearable waterproof sarking felt all in accordance with manufacturers specification to outer leaf of cavity wall to areas shown on Elevation drawing number 10:01/02.
Dormers
Hang concrete plain tiles on treated s.w. battens and vertical counter battens on breather membrane on Celotex GA 3060 – 60mm thick insulation boards on 15mm external quality ply on studwork as described under INTERNAL STUDWORK PARTITIONS AND DORMERS.

WINDOWS
Windows references W1, W2, W3, W4, W5, W6, and W7.
Door reference D1
For sizes refer to drawing number 10:01/02C
Provide and fix white PVCu double glazed Windows and Doors
All new windows to be glazed with 24mm Low-E insulating glass to achieve a U-value not exceeding 1.8 W/m2K
Trickle ventilators providing the equivalent of 2747mm2 ventilation fitted integral to windows 1 no. to windows less than 914mm wide 2 No. to windows 915mm wide and above
The external perimeter of all new windows and reused windows and doors at abutment with external wall fabrics is to be sealed with an approved silicon sealant to prevent air leakage.
Key lockable casement fasteners to be fitted to new PVCu windows.
All Windows to accord with Approved Documents L1b and F 2006 editions

ROOFING IN GENERAL
Note Structural Engineers Sheet number 2 for fixing detail of all rafter/ceiling ties connections.
Treated timber is to be used for all new roof construction.
Use approved m.s. timber connectors at all junctions of timber with timber in construction of roofs
On construction of new roof and dormers carefully remove tiles from existing roofs at junction of new works and retain for reuse on North East elevation of new work.
Replace sections of wall/pole plates (to match existing dimensions) where existing are disturbed by new works.
Provide new s.w. wall plates to cap inner leaves of cavity wall and blockwork above garage door.
All rafters to be standard birdmouthed to plates.
Provide and fix Celuform or similar approved white Upvc fascia boards and barge boards with white Upvc soffit claddings on treated s.w. rafter feet and battens as required throughout
Bed verges on minimum 6mm non-asbestos undercloak.
Build in Velux Centre Pivot opening Roof Windows to references shown on drawings properly weatherproof with Velux proprietor y roof flashings to suit condition.
Provide and fix half round ridge tiles colour to match existing bedded and pointed.
Provide and install Redland Ventilation Tiles or similar approved complete with Underlay Seal and Flexible pipe connection to 2 No. 110mm S. & V. P. stacks and 3 no. mech. vent ducts.
All roof tiling is to be carried out in accordance with the manufacturer's specification.
Insulation
To new Garden Room roof and Dormer roofs provide and fix 50mm x 25mm s.w. battens to inside face of rafters with bottom of battens 50mm below top of rafter and cut and tightly fit Celotex GA 4000 - 75mm insulation boards between rafters maintaining 50mm air gap over and line internally with Celotex GA4000 - 50mm insulation boards achieving a U of 0.2w/m2k.
To all other roofs with rafters forming sloping ceilings provide and fix 25mm x 25mm s.w. Battens with base 25mm below top of rafter (underside of breathable membrane) and cut and tightly fit Celotex 75mm insulation boards (as above) between rafters maintaining 25mm air gap over and line internally with Celotex GA4000 – 50mm insulation boards achieving a U value of 0.2w/m2k.
To flat bed ceilings provide and lay 250mm thick Rockwool insulation laid on collars/ceiling joists.
Clad all flat and sloping ceilings with 12.5mm foil backed Gypsum wallboard plaster skim finish.
Remove present ridge tiles throughout and replace with Redland Dryvent Ridge System or similar approved continuous weathertight ridge ventilation.
Provide and fix Redland Top Edge Abutment Ventilation System at abutment of new Garden Room roof with vertical face of new dormers over.
Provide and fix continuous eaves ventilation systems at all new eaves to suit requirements to vent beneath boarding to 17.5 degree and 20 degree pitched roofs or above breathable membrane to 37.5 degree roof.
The contractor is to ensure a unhindered ventilation from eaves to ridge.

PITCHED ROOF CONSTRUCTION
Main roof 37.5 degree pitch.
Construct new pitched roof with Plain roofing tiles (reuse existing and second hand tiles to match existing) on s.w. battens, size and gauge to match existing on Tyvek breathable membrane or similar approved on 47mm x 100mm C24 grade s.w. rafters at 400mm ctrs. Refer to sectional details for sizes ceiling rafters/collars etc.. Provide double rafters to each side of new Velux windows
All rafters to birdsmouthed over purlins (integral to internal partitions), wall plates and over pole plate at eaves. Pole plates to be aligned with inner leaf and anchored to top of floor joists with approved m.s. straps
All rafters to be fixed to floor joists with approved m.s. straps
Wall plates anchored to inner leaf with 1200mm x 30mm x 3mm galvanised m.s. straps at 1200mm ctrs.
Rafters anchored to inner leaf of gables with M30 x 5mm thick galvanised m.s. restraint straps bridging a minimum of 3 no. rafters at 1200 ctrs.

PITCHED ROOF CONSTRUCTION
Dormer Roofs 17.5 degree pitch
Construct new roofs with plain roofing tiles to match existing on treated s.w. battens size and gauge to suit roof pitch on 15mm x 38mm treated s.w. counter battens on two layers bituminous roofing felt to BS 747 on 12mm waterproof ply on 47mm x 122mm C24 grade treated s.w. rafters at 400mm ctrs. Note waterproof mastic sealant to be applied to underside (face adjoining felt roofing) of counter battens as work proceeds. Roofing felt at head to be lapped with existing and properly housed to ridge vents. Roofing felt at eaves to be properly housed to eaves vents.
Birdsmouth rafters over 2 no. 150mm x 50mm s.w. joists spiked together at head of dormer wall and connected to new 47 x 122 C24 ceiling joists/collars at head with 2 no. M12 bolts and double sided tooth plate connectors see Structural Engineer's sheet no. 2

PITCHED ROOF CONSTRUCTION
New roof over Garden room approximately 20 degree pitch
Tiles battens, counter-battens, roofing felt and waterproof ply all as for Dormer roofs (above) on 47mm x 125mm C24 grade s.w. rafters at 400 ctrs. Roofing felt at head abutment to be properly housed to top edge abutment ventilation system and at eaves to eaves vent.

TIMBER FLOOR CONSTRUCTION
Construct Garden Room floor with 25mm flooring grade chipboard on 47mm x 150mm C24 grade s.w. Joists at 400 ctrs supported at each end in galvanised m.s. shoes.
Insulate between joists with Celotex GA4100 – 100mm thick insulation boards supported by Celotex insulation clips
Construct new first floor with 25mm flooring grade chipboard (waterproof grade to bathrooms) on 47mm x 170mm C24 grade grade treated s.w. joists at 400 ctrs with double joists beneath all studwork running parallel.
Form steps over existing flitch beams (indicated on drawing number 10:01/01 assumed height above existing first floor level 125mm) using 25mm flooring grade chipboard as above on 47mm x 125mm s.w. joists at 500mm ctrs. and with 75mm x 25mm hardwood nosings to edge of tread.
Provide s.w. herringbone strutting between joists as required and insulate as follows:-
Insulate between joists above garage with 2no. layers Celotex GA insulating boarding consisting 1 no. layer 90mm thick and 1 no. layer 30mm thick on Celotex joist saddle clips retaining minimum 50mm air gap below floor
Insulate beneath habitable areas of ground and first floor with 100mm Rockwool insulation quilt.
Insulate between first floor joists beneath roof voids with 250mm Rockwool quilt insulation

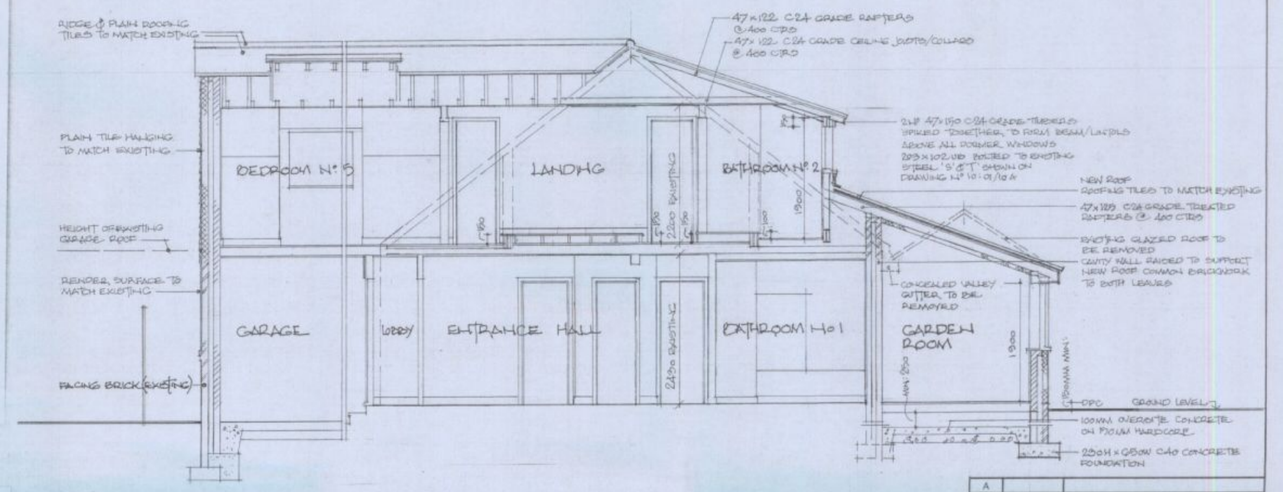
INTERNAL STUDWORK PARTITIONS AND DORMERS
Form internal studwork partitions and dormer enclosures with 50mm x 100mm head and sole plates, 50mm x 100mm vertical studs at 400 ctrs and 50mm x 100mm horizontal studs at 600mm ctrs., staggered.
Form 'structural studwork' identified on drawings as circled ST as above but vertical members at 400mm ctrs.
Head plate of all Dormer structures above windows to consist 2 no. 50mm x 150mm treated s.w. joists bolted together.
Build in and properly brace 100 x 100 structural posts as work proceeds.
To partitions separating habitable areas infill between stud members with 100mm Rockwool insulation quilt and clad both sides with 12.5mm Gyproc Wallboard, moisture resistant to Bathroom areas.
To partitions separating habitable areas from roof voids cut and tightly fit 100mm thick Kingspan TP10 insulation between members and clad internally with Gyproc 28mm thick Thermaline Platinum VC combined Plasterboard/insulation.
To exposed dormer enclosures clad internally with Gyproc 28mm thick Thermaline Platinum VC combined plasterboard/insulation on 1000 gauge polythene vapour control layer .

CARPENTRY AND JOINERY
Refer also to PITCHED ROOF CONSTRUCTION for roof construction
Doors/Linings/Architraves all to match existing. Architraves are to be located in such a manner that the full width architrave is maintained.
Provide and fix new 32mm s.w. linings with s.w. stops to all door openings to full width of reveals including plasterboard/plaster cladding.
Provide and fix pre-primed m.d.f. 19mm x 100mm skirtings and 19mm x 75mm architraves throughout area of new works.
Provide and fix pre-primed m.d.f. 25mm thick window boards to all new windows with exception of W4, W5, and W6.
Bed a water impervious cladding slate or other approved to provide base for internal tile window cills to W4, W5 and W6.
All new doors are to match existing.
NOTE: All new internal doors are to be undercut a minimum of 7600mm2 to ensure a good transfer of air
Internal doors D1 through D6
D1 and D2 1981mm x 762mm
D3, D4, & D5 1981mm x 686mm
D6 2 no. pairs sliding folding doors consisting 4 no. 1981mm x 310mm panels
Hang all internal doors on steel washered brass butt hinges (three per door)
Door Furniture
Provide and fix door furniture to match existing .
D1 and D2 Lever latch
D3, D4 and D5 Lever latch with Locking snib/privacy system
D6. Sliding/folding door gear and 2 no. knobs to Client's choice.
Allow for providing shelving and hanging rails to Client's specification within Landing cupboard.
Allow for making good all skirtings, lining sand architraves disturbed by new works
Allow for purpose made treated s.w. Gallows Bracket (as detailed) to be fixed on s.w. ground using proprietory masonry bolts. Refer also EXTERNAL RENDERING
Provide and fix Glidevale Loft Access Trap ref: LA2 (hinge down trap) injection moulded polypropylene with rigid insulation size 680mm x 520mm in location shown.
Provide 2 no. roof access hatches in s.w. within Bedroom no. 5 opening size 750mm wide x 600mm wide consisting 32mm linings, 18mm thick m.d.f. doors and architraves as above. Doors hung one pair of cupboard hinges and fitted with 'touch' catches.
Provide high level access to horizontal to vertical soil pipe junction behind basin in Bathroom 2 from Garden Room 450mm wide x 300mm high constructed as above.

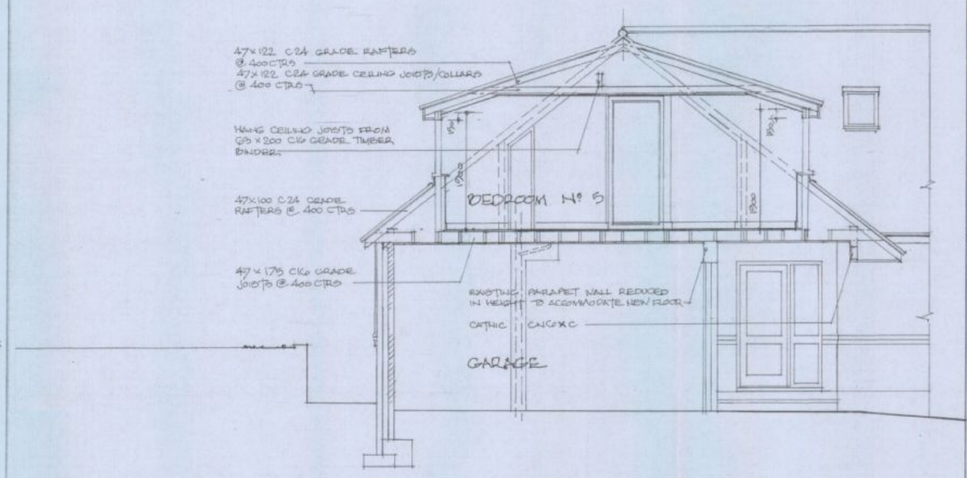
ABOVE GROUND DRAINAGE
Waste pipes to BS 5254: Polypropylene
32mm dia. 75mm deep seal trapped wastes to Basins within Bathrooms numbered 1 and 2 and Lavatory
40mm dia shallow bath trap to Shower within Bathroom no. 1
40mm dia deep seal trap to shower within Bathroom no. 2. NOTE access available via garage ceiling below.
PROVIDE proprietory approved fire stopping to pipes passing through garage ceiling
Extend existing 110mm dia. retained waste to traverse above first floor joists within roof void to roof vent terminal terminal. To collect 2 no. w.c. discharges, 2 no. basin wastes and 1 no. shower waste.
Provide new 110mm dia S. & V.P. to Bathroom no. 2 rising from connection with new 110mm below ground drain in garage to terminate with roof terminal complete with spigots and branches to collect 1 no. shower waste, 1 no. basin waste and 1 no. W.C discharge outlet.
Provide rodding access to all 110mm dia soil pipes at first floor level where change of direction in flow is required.
S. & V. P.s fitted with Redland Ventilation Tiles if compliant with 900mm above any opening ' rule otherwise to rise a minimum of 900mm(above window heads) and fitted with approved vent terminal

BELOW GROUND SOIL AND STORM WATER DRAINAGE
Drawing number 10:01.01C indicates positions of new and existing soil drains.
New and replacement below ground drainage is to comply with Building Regulations Document H.
All drains adjoining foundations to comply with Blg. Regs. H1 Section 2 Part 2.7
Installation to comply with pipework manufacturer's specification and to BS 8301: 1985
Marley solid wall soil pipes and fittings to BS EN 1401 and BS 4660: 2000: PVCu 110mm dia. The new drains are to be laid to falls (not less than 1 in 60)
All drainage passing under new buildings is to be surrounded with a minimum 150mm granular material.
On exposure of existing drainage beneath demolished Conservatory ensure drainage materials are sound and surround with minimum 150mm granular material.
Drains passing through walls to be bridged with r.c. lintels.
SOIL DRAINAGE
Construct new Inspection chamber nos. 1 and 2 in positions shown with 450mm dia black polypropylene chamber risers Marley ref. UCR2 and base ref. UCC3. Base seated on and chamber surrounded with 150mm lean mix concrete.
Bed and point Marley UCL 15 cast iron cover and frame to BS EN 124 Class A15 to seal top of chambers
Properly lay 110mm dia. main drain run to falls ensuring new drains and entries and discharges are properly housed to new and existing chambers.

RAINWATER DRAINAGE
All new rainwater goods are to match the existing complete with all ancillary fittings installed in accordance with the manufacturer's specification.
Extend present r.w. gutters to each side of garage to collect new main roofs to discharge via existing r.w.p.s..
Provide r. w. gutters with 65mm sq. downpipe and fittings to discharge onto main roof to all Dormers. NOTE Downpipe to be installed at North West end of Dormer above Garden Room.



SECTION B–B



SECTION A–A

Notes:
All dimensions must be checked on site and not scaled from this drawing.

AMENDMENTS
A MAY 2013
CONSERVATORY ROOF REPLACED
B JUNE 2013
STRUCTURAL NOTES ADDED
SPECIFICATION NOTES ADDED
C JULY 2013
CONSERVATORY REPLACED WITH GARDEN ROOM
SPECIFICATION NOTES ALTERED

ROOF PITCHES
MAIN ROOF 37.5°
NEW MAIN ROOF 37.5°
NEW DORMER ROOFS 17.5°
EXISTING UTILITY ROOF TO BE EXTENDED
ABOVE. CONSERVATORY APPROX 20°

A		
	Date	Revisions

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Client
MR K & MRS L GODLE

Job Title
PROPOSED ALTERATIONS
31 LONE VALLEY
WIDLEY WATERLOOVILLE
PO7 5ED

Drawing Title
SECTION A-A & B-B

HAVANT BOROUGH COUNCIL
14 OCT 2013
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Date
MAY 2013

Drawn by

Drg. No.
10:01/03C

Rev.

REPROPOINT 2408

594 x 841mm A1