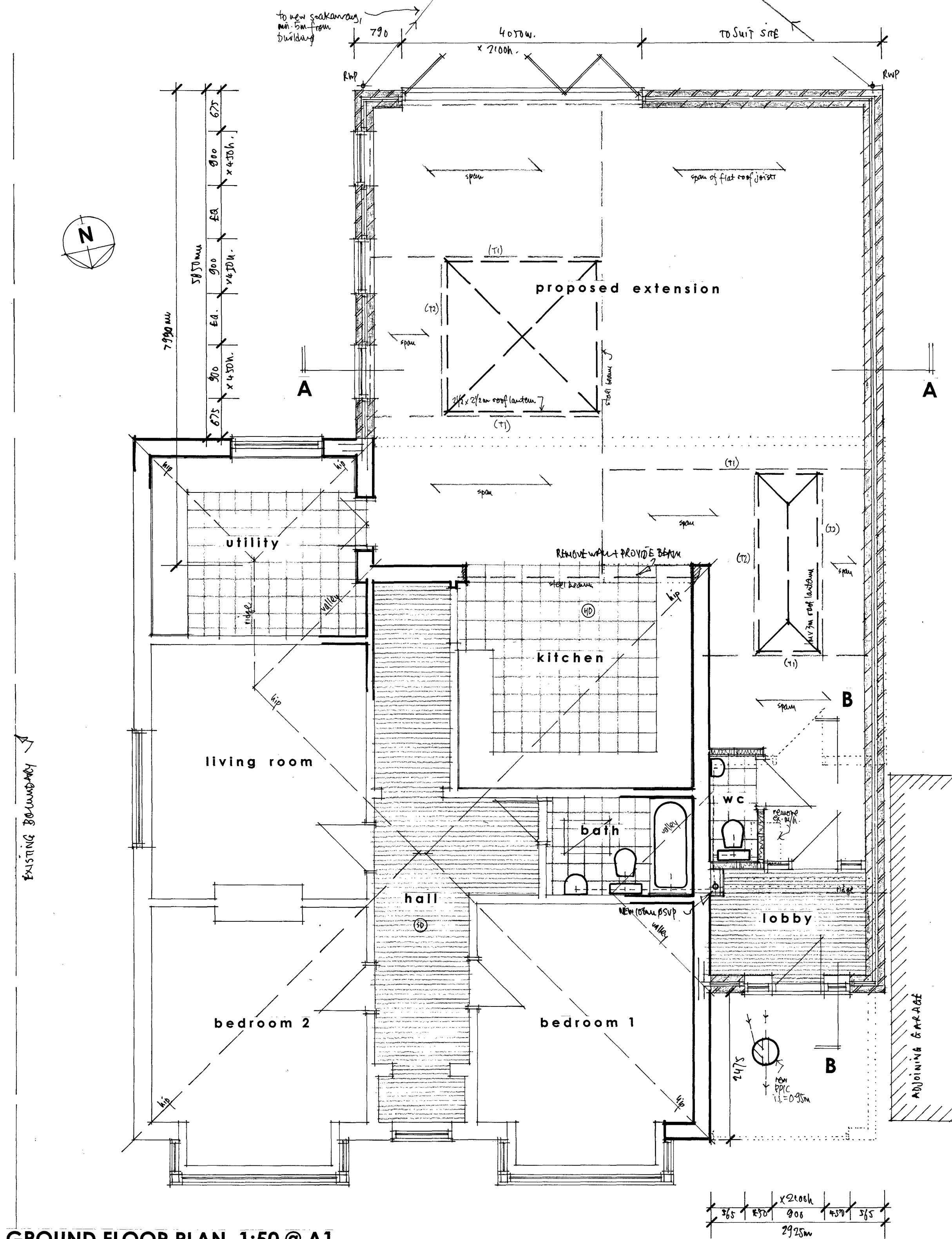
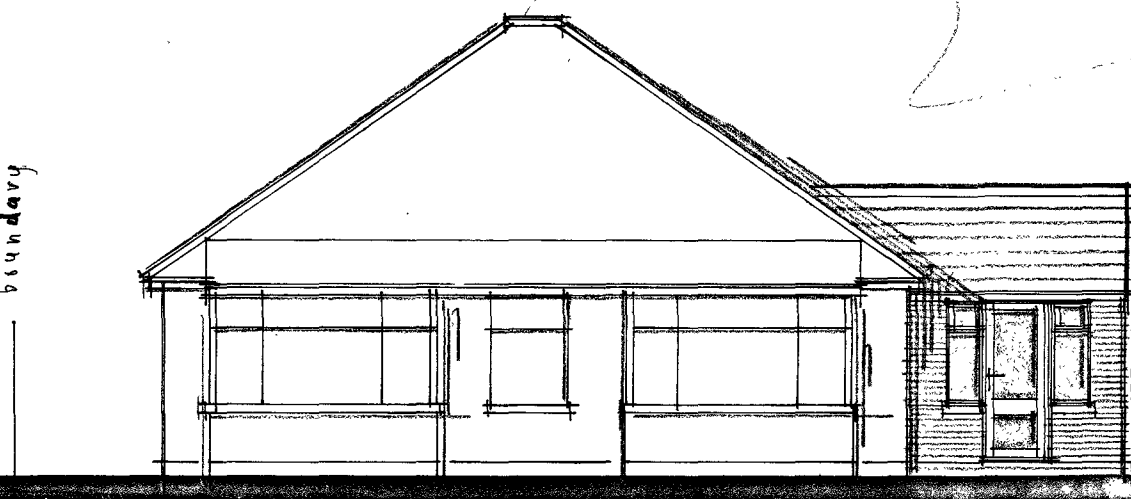




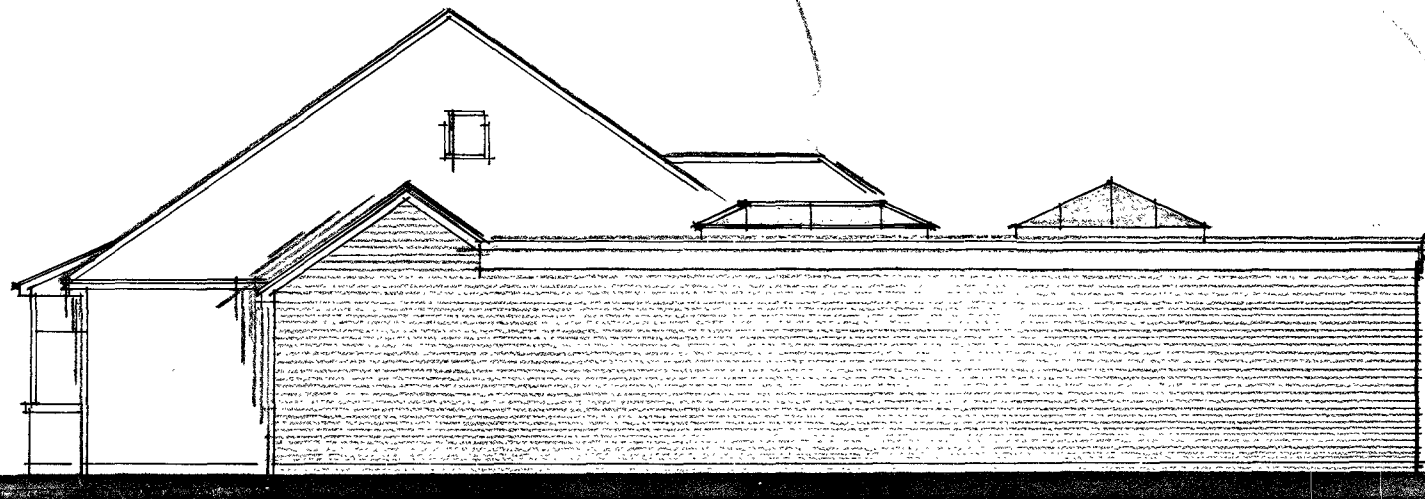
GROUND FLOOR PLAN 1:50 @ A1

THIS DRAWING TO BE READ IN CONJUNCTION WITH
STRUCTURAL ENGINEERS DETAILS & CALCULATIONS

PROPOSED ELEVATIONS 1:100



FRONT (n)



SIDE (w)

GENERAL SPECIFICATION NOTES - 159 WORTHING ROAD, RUSTINGTON

ALL WORKS ARE TO BE CARRIED OUT IN ACCORDANCE WITH RELEVANT PARTS OF THE BUILDING REGULATIONS 1985 AND SUBSEQUENT AMENDMENTS, STRUCTURAL ENGINEERS' DETAILS & CALCULATIONS (where applicable), CODES OF PRACTICE & MANUFACTURERS' RECOMMENDATIONS.

The building fabric should be constructed so that there are no reasonably avoidable thermal bridges in the insulation layers caused by gaps within the various elements, at the joints between elements and at the edges of elements such as those around windows and door openings. Reasonable provision should also be made to reduce unwanted air leakage through the new envelope parts.

FOUNDATIONS

The building area is to be stripped of all vegetable soil and rubbish, minimum 150mm deep. Generally concrete trench fill foundations, minimum depth of 1.0m or to suit local ground conditions. Foundation width to external walls to be 450mm wide for single storey, concrete to be grade GEN1. There appears to be no trees in the vicinity of the proposed extension which should affect the foundation depth or ground slab design however the contractor is to make his own site investigations and liaise with building control in due course

WALLS BELOW DPC

All blockwork to be high density block otherwise skin formed in brickwork. Bitumen polythene dpc to BS743, to external walls and at cills of openings, to tie-in with the existing dpc and be a minimum of 150mm above finished ground level. Damp proof course to be continuous with dpm. Cavities to be filled up to within 75mm of the ground level (225mm of dpc) with fine concrete and weepholes left. Reinstate ground around the new building where excavated for foundations.

EXTERNAL WALLS

To be of cavity construction 300mm thick, comprising of 100mm brick outer skin, 50mm clear cavity, 50mm Celotex CW4000 partial fill cavity insulation, 100mm Toplite GTI thermal block finished with 12mm lightweight plaster. All to achieve a 'U' value of 0.28 W/m² K. To be bonded to existing house by means of mild steel galvanised 'Crocodile' profiles, insert a vertical dpc at the junction, disk cut brickwork to form continual cavity between the new and existing building (alternatively tooth and bond brickwork into existing walls and maintain cavity throughout). Head of cavity closed with a slate/supalux board or similar material, cavities closed at jamb with proprietary cavity closure product such as Thermabate or similar approved. Both skins to be tied together @ 750mm c/c horizontally and 450mm c/c vertically, by vertical twist stainless steel wall ties to BS1243, doubled up at reveals. Cavity trays to BS743, with weepholes to be formed over all new external openings. Movement and bed reinforcement joints are required in accordance with individual manufacturers recommendations. Generally movement joints to be within 3m of a corner and then after every 6m on a straight run. In addition bed re-enforcement is required to 2 courses above and below any openings both methods are recommended regardless of overall length of walling. However to be verified with manufacturers.

GROUND FLOOR CONSTRUCTION

Minimum 65mm thick 1:3 sand/cement screed laid in accordance with CP204, on 125mm grade 20 concrete oversite slab with A142 mesh on 500 gauge polythene on 80mm Celotex GA4000 insulation (P/A=0.38) with strips of boards cut to fit around the perimeter to prevent horizontal thermal bridging, on 1200 gauge polythene dpm dressed up at perimeter walls so as continuous with dpc, on sand blinding on minimum 150mm well compacted hardcore/granular fill. DPM to be dressed under dpc. All to achieve a 'U' value of 0.22 W/m² K. If applicable, maintain ventilation to the existing suspended timber floor by means of 100mm diameter upvc ducts laid under the new floor. No radon measures necessary.

Note - If foundation depths exceed 1.5m deep it may be necessary to amend the construction method to a suspended floor, refer back to architect for details.

STUDYWORK PARTITIONS

Overall thickness = 105mm. 75x38mm timber studs @ 600mm c/c horizontally with cross noggin @ 450mm c/c staggered vertically, framed up on a head & sole plate. Line with no. 1 layer of 15mm Soundbloc board to either side (plasterboard having a density of minimum 10kg/m³), tape all joints and finish with plaster skim coat. Insert 25mm Isovol APR 1200 insulation. Walls to be finished with s/w timber skirting boards to match the existing. Airborne sound reduction = 43dB.

INTERNAL DOORS

Supply and fit new 38x100mm s/w timber door linings to door opening positions and new internal flush doors as directed by client. Finish door lining with new s/w timber architrave to match the existing.

NEW STEEL BEAMS

Where applicable all new steel beams, columns, posts, padstones etc. are to be provided in accordance with the structural engineers details and calculations, see separate cover. Any new steel beams are to be clad in Zn. layers of 12.5mm plasterboard or similar equivalent to achieve 1/2 hour fire resistance.

LINTELS

Galvanised steel lintels by Caradon Catnic to BS5950 with minimum 150mm end bearings, to all new openings or unless superseded by the structural engineers details and calculations. Catnic lintel reference CG(E)90/100. Provide with proprietary cavity tray over complete with stop ends.

WINDOWS/EXTERNAL DOORS/ROOF LANTERN

To be grey powdercoated aluminium or white upvc and double glazed to match the existing house. To provide ventilation of minimum 1/20th of the room floor area, plus background ventilation of not less than 4000 sq mm to kitchen or bathroom and 8000sq mm to a habitable room by means of a trickle ventilator. Security for doors and windows to comply with BS EN 356, BS 3621, BS 8621 & BS 10621. Glazing to comply with BS6206 for safe breakage and to be clearly marked as such and shall be marked in 24mm diameter comprising 4mm outer, 16mm or 20mm filled cavity, 4mm inner pane, glass to be soft coat low-E Pilkington K ('U' value = 1.60W/m²K). Ensure a minimum 30mm overlap of window frame with the cavity closer, fitted in accordance with manufacturers recommendations. Client to advise of exact specification requirements and overall design with the contractor verifying all sizes with client prior to manufacture. Finish internal cill of window with 18mm thick, white MDF window board. All new windows to be manufactured and installed by a FENSA approved contractor.

Window/rooftlight schedule

a. Lobby : 900w x 2100 door

- b. Extension : 450w x 1350d window with top lantern (x2)
- : 4050w x 2100h bi-fold doors
- : 900w x 450d window with top lantern (x3)
- : 2500 x 2500 roof lantern
- : 1000 x 3000 roof lantern
- : 675w x 1200d windows (x2) with top lantern

All window sizes to be verified with client prior to manufacture.

FLAT ROOF CONSTRUCTION

To be of warm deck construction, either composite GRP with an AA, AB or AC fire rating to the flat roof where closer than 6m to the boundary or Zn. layers of high performance roofing felt to BS747 with stone chippings bedded in bitumen as a finish, on composite insulation/plywood decking (126mm thick Celotex TD4000) on timber firings laid to falls on new 50x220mm s/w C16 joists @ 400mm centres spiked to timber wallplate and hung in new joist hangers/steel beam. Fix solid timber strutting minimum 38mm thick, positioned at the mid-span point between the joists. Timber wallplate secured to perimeter wall with mild steel galvanised straps at maximum 1.2m centres. Finish underside of joists with 12.5mm plasterboard and a plaster skim coat. Roof insulation to achieve a 'U' value of 0.18 W/m² K. Flat roof to be dressed up and over a tilting fillet/under the roof tiles a minimum of 450mm at the junction with the existing pitched roof. Provide white plastic fascia boards, by swish celuka or similar approved, to the joist ends to finish. No ventilation required. Note - a vapour control layer of minimum 500 gauge polythene or similar to be provided beneath the warm deck roof insulation.

FALSE PITCHED ROOF CANOPY

Construction : erect new 50x100mm C16 rafters @ maximum 400mm centres, birdsmouthed on 75x100mm s/w timber wallplate held down with 900x30x5mm mild steel galvanised straps fixed to wall @ maximum 2m centres. Ceiling joists same as flat roof joists.

Existing roof : is to be stripped back of its tiles, batten and felt with the existing rafters to be removed as necessary to enable the new roof design to be configured, see drawing and engineers details.

Roof finish : to comprise of Eternit manmade slate to match the existing roof, sample to be submitted to client for approval, laid in accordance with manufacturers recommendations including for matching half round ridge tiles bedded in 1:3 sharp sand mortar butt jointed together to the ridge. Roof tiling to be fixed to 22x38mm treated timber battens (gauge and lap to be determined on site) with galvanised nails. All battens fixed to unalterable roofing felt, type IF, with minimum 100mm laps at all joints and laid parallel to the eaves. Ridge and valley details to have 1m wide strip laid over underlay. Valley to be finished in Code 5 leadwork. An eaves carrier will be provided, draped into the gutter as recommended by the manufacturer of breathable membrane.

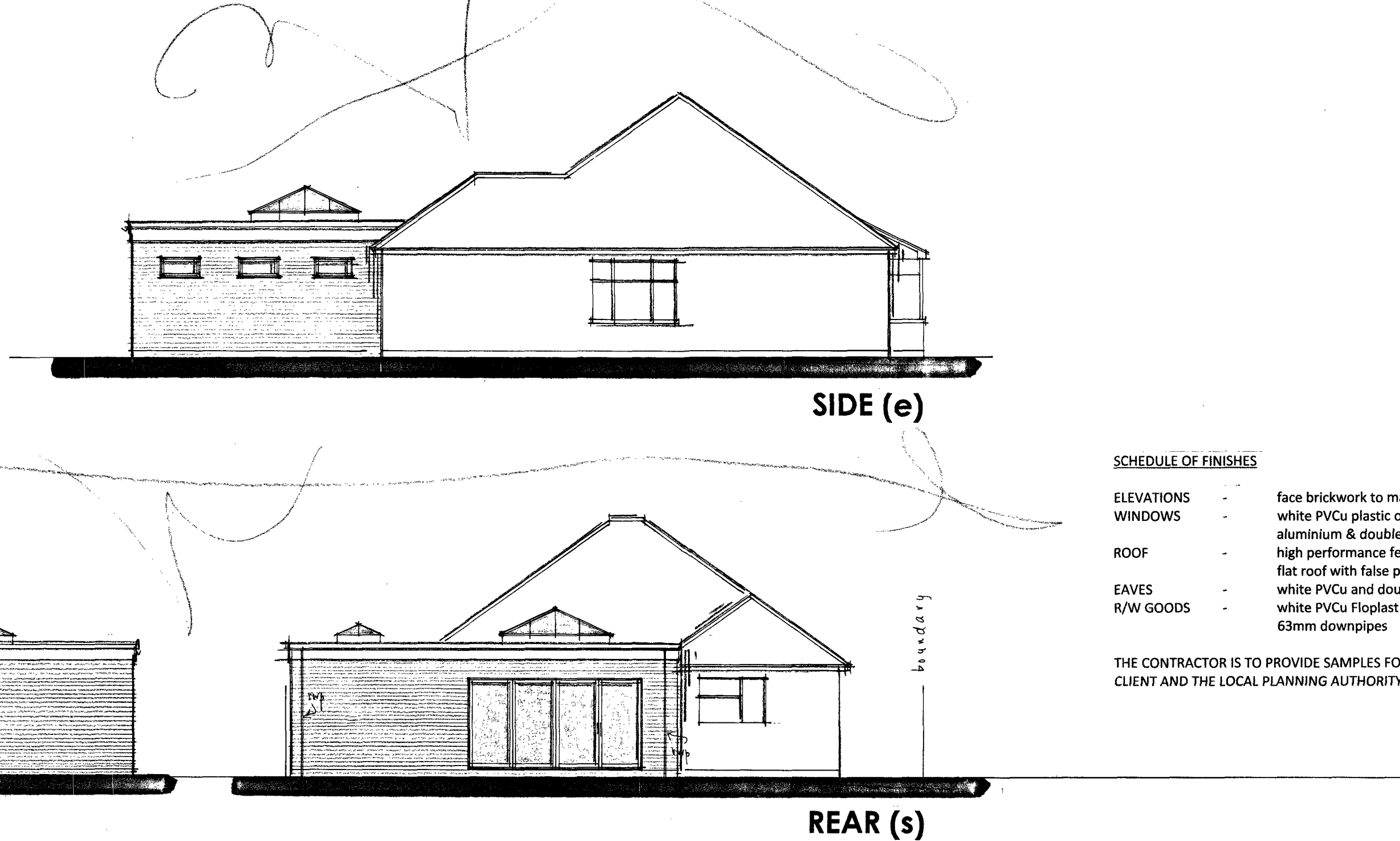
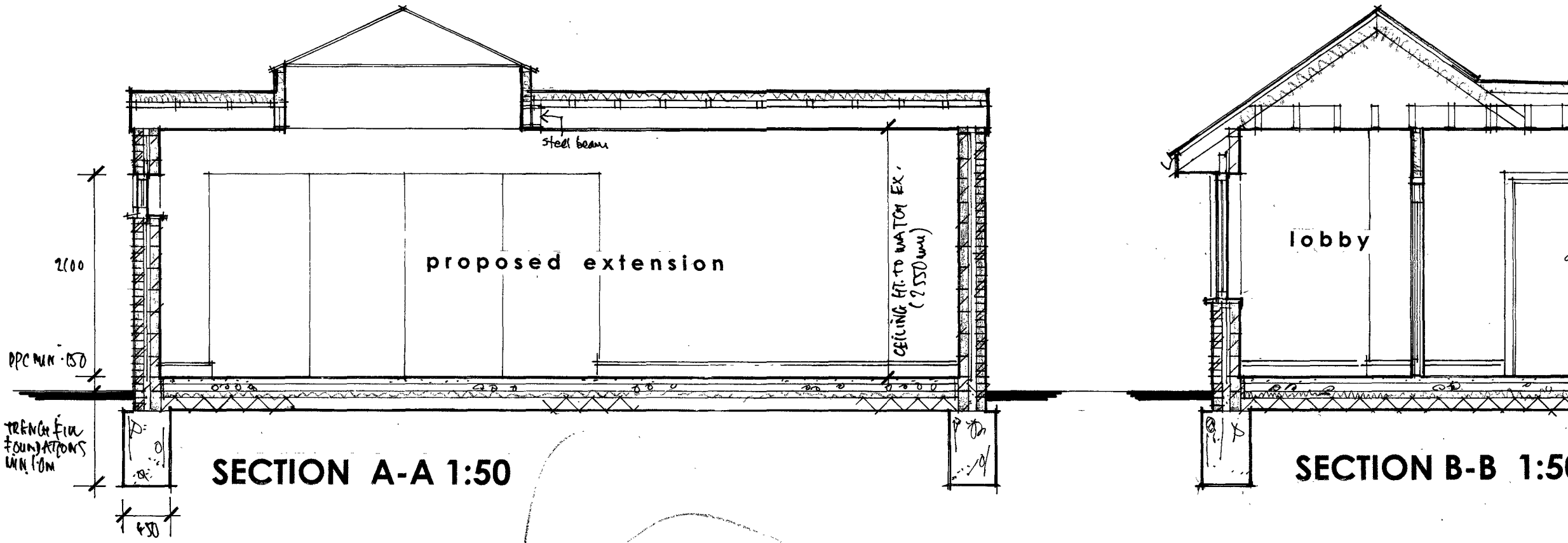
Insulation & ventilation : as before noted for flat roof.

RAINWATER GOODS (effective roof area to be drained = 92m²)

To be finished in white upvc. Generally to be 100mm Floplast square gutters draining into 63mm downpipes as shown and discharging into new soakaway minimum 5m from any building. Underground pipes to be 100mm diameter upvc laid in pea shingle bedding. Soakaway generally to be a Sustainable Urban Drainage System (SUDS) using a modular storage/soakaway cell system such as Waving 'Aquecell' or similar equivalent based on hold 5m³. On the basis a typical cell of 1.0x0.5x0.4m will provide 0.25m³ of water storage provision should be made for 18 crates, 2m long x 2.5m wide x 0.8m deep. The final shape and depth of the soakaway shall be determined depending if there is a high water table discovered, i.e. the footprint size of the soakaway shall be greater and its depth more shallow. To be installed in accordance with manufacturers recommendations. If the new soakaway is serving any existing downpipes from the original house, the capacity of the soakaway should be increased 1m² per 20m² of roof area served.

DRAINAGE

All works to be carried out in accordance with BS EN 752 (formerly BS8301). All plastic pipework to be by Hepworth or similar approved. 100mm diameter pipes to be laid at minimum 1:40 gradients and laid in pea shingle bedding. Polypropylene inspection chambers (PPIC) to be provided at all changes in flow direction or gradients, 475mm diameter up to invert 1.0m deep. 1050mm diameter for inverts in excess of 1.0m deep. Any internal manholes to be fitted with a double sealed screw down cover. Drains passing through walls to have concrete plank lintel to opening to give 50mm space all round pipework. Where a drain passes beneath a building it is to be encased in 100mm concrete surround or bedded and covered in flexible fill and protected by a 450mm wide A142 wire mesh provided with the concrete oversite to floor slab on the line of the drain run. Any redundant drains to be grubbed up or sealed. Existing manhole to side of property to be located outside of extension.



PLUMBING

- All to comply with BS EN 12056 (formerly BS5722).
- i). Confirmation a supply of wholesome water (mains supply or equivalent complying with Section 67 of the Water Industry Act 1991) to the following locations;
 - a. any place where drinking water is drawn off,
 - b. wash hand basins, bidets, baths, showers and sinks,
 - c. sanitary appliances although it is noted alternative supplies to sanitary appliances may be considered (i.e. rainwater harvesting).
- ii). Confirmation heated (including softened) wholesome water will be supplied to the following locations;
 - a. wash hand basins, bidets, baths, showers and sinks (in areas where food is prepared),
 - b. wash hand basins, bidets, baths, showers and sinks (in areas where food is prepared),
 - c. sanitary appliances although it is noted alternative supplies to sanitary appliances may be considered (i.e. rainwater harvesting).
- iii). Hot water storage systems (where applicable) should be designed and installed in accordance with BS6700:2006+A1:2009. Indirectly heated unvented (closed) storage water heater should comply with BS EN 12897:2006.
- iv). The hot water supply to any bath should resist temperatures and pressures should the safety controls fail. A tamper proof blending valve is to be fitted to any bath so that water does not exceed 48 degrees Centigrade. Water to the distribution system should not exceed 60 degrees Celsius.
- v). The hot water storage and supply system installed is required to be commissioned in accordance with the procedures set out in the Domestic Heating Compliance Guide. Commissioning documentation to be provided at completion.

Extend the existing hot and cold water feed pipework to the new sanitary fitting positions. All sanitary appliances to be fitted with minimum 75mm sealed traps. Provide rodding eyes to all dead-end runs, with plumbing branch lengths and diameters as follows;

- * Washbasin : max. 1.7m for 32mm pipe, max. 3m for 40mm
- * Bath/shower : max. 3m for 40mm, max. 4m for 50mm
- * Sink : max. 3m for 40mm, max. 4m for 50mm
- * WC : max. 6m for 100mm

New WC cloakroom and existing bathroom appliances are to connect into the new 100mm diameter soil and vent pipe which shall terminate with ballcock perforated cage minimum 900mm above openable window if within 3m of the same. Any internal stack passing through habitable rooms to be surrounded in 25mm ROCKWOOL glass fibre quilt and Zn. layers of 12.5mm plasterboard on timber framing, complete with access panel. Ensure the soil and vent pipe

ELECTRICAL WORKS

The existing installation is to be extended to the new areas. All electrical work required to meet the requirements of Part P (Electrical Safety) will be designed, installed, inspected and tested by a person competent to do so. A copy of a certificate in accordance with BS7671 provided by a person competent to do so to be given to the local authority. Carry out the alterations to the existing installation to suit the new proposals. Exact specification requirements to be verified in due course with client. At least three quarters of all new rooms shall be fitted with energy efficiency light fittings (only capable of accepting lamps having a luminous efficacy greater than 45 lumens per circuit-watt). These fittings to be positioned in rooms or circulation areas most frequently used, the number not less than 3 per 4 fixed lighting fittings. Be advised that problems have recently arisen due to the current trend for fitting electrical down lighters. The areas of concern relate to fire prevention, sound insulation and thermal insulation. If the client intends to install down lighters in this proposal please advise them that they, or the contractor, should discuss the matter with Building Control. Incorrect installation will prevent the completion certificate being issued.

HEATING INSTALLATION

Carry out installation of new 'wet' underfloor heating system running off the existing gas boiler, exact details to be agreed in due course. The existing boiler is to be verified to ensure whether it is capable of serving additional radiators to the system. All works to be carried out by a suitably qualified Gas Safe Registered engineer.

MECHANICAL VENTILATION

Provide mechanical extract fans to the following areas to meet the required performance.

- * Bathroom : 15 litres/second and fitted with a humidistat.
- * Utility room : 30 litres/second.
- * WC cloakroom : 6 litres/second.
- * Kitchen : 30 litres/second by means of a cooker hood.

* ensure there is a 10mm air inlet gap at the base of the door for any room with no window.

All mechanical vents to be of Vent Axia or similar approved and to be of 'thru-wall' design unless otherwise specified. All fans are to terminate direct to fresh air with exact positions being determined on site with client.

FIRE DETECTION

Carry out the installation of mains operated fire detection system to BS5446 : Part 1, with interconnected smoke detectors being provided in ground floor hallway and a heat detector in the kitchen.

Note - as bedroom 1 & 2 and living room are inner rooms form a means of escape perspective, it is to be confirmed the windows serving those rooms are adequate for means of escape purposes being and have a minimum unobstructed opening of 0.33m² of at least 450mm wide x 750mm high with the bottom of the opening cill positioned at a height of not more 1100mm above the finished floor level.

FINISHES

Exact requirements in terms of internal decorations or external landscaping works, if any, to be advised by client.

ANY DEVIATIONS FROM THE APPROVED DRAWINGS ARE CARRIED OUT ENTIRELY AT THE RISK OF THE CLIENT/CONTRACTOR.

THIS SPECIFICATION DOES NOT PURPORT TO COVER EACH AND EVERY ITEM REQUIRED TO COMPLETE THE PROJECT HOWEVER THE CONTRACTOR IS ADVISED TO VERIFY THE FULL EXTENT OF THE WORKS WITH THE CLIENT.

ONLY WRITTEN DIMENSIONS ARE TO BE USED & THE DRAWING MUST NOT BE SCALED - IF UNCLEAR REFER BACK FOR CLARIFICATION. IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL DIMENSIONS ON SITE PRIOR TO ANY MANUFACTURING PROCESSES.

THE CLIENT IS ADVISED OF HIS OBLIGATIONS UNDER THE CONSTRUCTION (DESIGN & MANAGEMENT) REGULATIONS 2015 AMENDMENTS AND THE NEED TO MANAGE THE HEALTH AND SAFETY ISSUES ASSOCIATED WITH THE MANAGEMENT OF THE PROJECT.

THE CONTRACTOR IS TO ENSURE ADEQUATE PRECAUTIONS ARE TAKEN IN RESPECT OF HEALTH AND SAFETY LEGISLATION THROUGHOUT THE DURATION OF THE WORKS.

THE CLIENT IS ADVISED OF HIS OBLIGATIONS UNDER THE PARTY WALL ACT ETC. 1996 AND THE NEED TO SERVE NOTICE ON ADJOINING PROPERTIES WHERE REQUIRED UNDER THIS LEGISLATION.

Figured dimensions to take precedence over scaled dimensions. The contractor is to verify all dimensions on site before commencing any works.

Any discrepancies whatsoever to be brought to the attention of the client immediately.

The copyright of this drawing is reserved and the drawing must not be disclosed without authority.

Project
159 WORTHING ROAD, RUSTINGTON

Proposed side/rear extension

Client
Mr Collins

Drawing no. RT/WR/03

Scale AS SHOWN Date Sept 2019

Drawn By WG

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