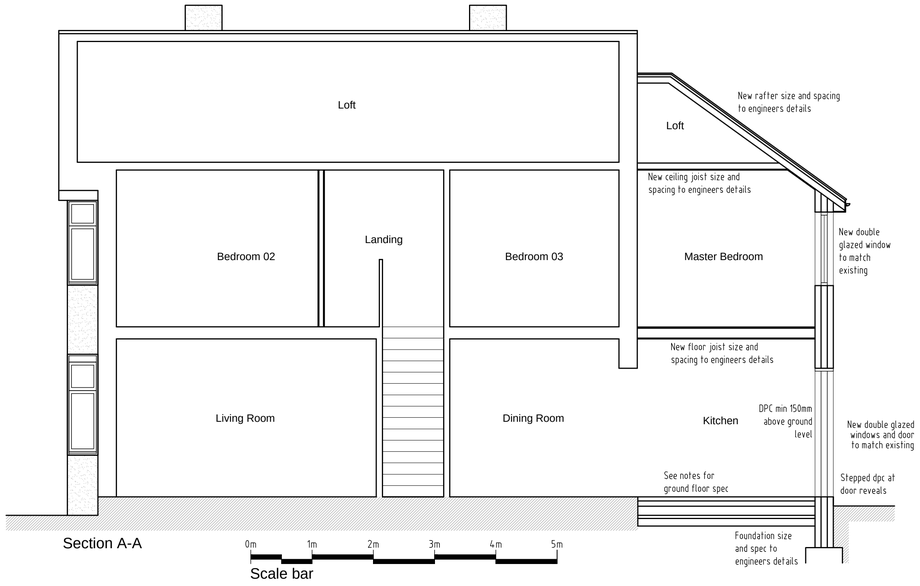
ALL DIMENSIONS TO BE VERIFIED BY THE CONTRACTOR ON SITE

Note:-

- All dimensions where indicated are approximate and are for guidance purposes only. Actual dimensions should be checked on site.
- For proposed floor plans see drawing 2021/082 - 004.
- For proposed elevations see drawing 2021/082 - 005.
- Contractor to assume design responsibility under CDM2015.
- Note, all structural information noted should be checked against detailed structural engineers information / calculation sheets.




Section A-A

## CONSTRUCTION NOTES

Existing Floor Construction
Contractor to expose existing floor construction before commencement of works on site. Should the existing floor be of timber construction, ventilators to be provided under the new construction works to the external air.

Where existing air bricks are located, these are to be ducted through new solid floor constructions to the outside air

Foundations
Foundations to be sized as per structural engineers information. Where note sized foundations to be a minimum on section of 1m deep, 600mm wide mass concrete. Foundation trench to be inspected by BCO prior to concrete pouring. Below ground brickwork with DPC lapped 150mm above ground level with inner DPC.

Ground Floor
65mm sand/cement screed on 500 gauge polythene separating layer over 85mm Thk Celotex FR4000 insulation. 1200 gauge polythene DPM lapped and sealed with existing DPM over a 150mm Thk concrete ground bearing slab. Slab laid on a nominal 50mm sand blinding on a 150mm layer of well compacted hardcore. Floor insulation to achieve a 'U' value of 0.22W/$m^2$k. Where the screed meets an external wall, a thin strip of insulation to be laid vertically to stop cold bridging.

Any existing sub floor ventilation covered by the new works to be adequately ducted to the external air.

D.P.C.
New dpc to be bitumen based or Hyload, or equal approved, to comply with BS6398:1983, BS743 and CP102 Part 2 1973. Horizontal dpc to be minimum 150mm above adjacent ground level and linked to existing dpc and with minimum 150mm laps.

Underground Drainage (where required)
Foul and surface water drainage to be 110mm uPVC drains to B.S. 4660:2000 laid in trenches to minimum depths and 1 in 40 falls with bedding for flexible pipes all as described in Diagram 10 of Approved Document Part H1 comprising 100mm bed of approved granular material to B.S.882 up to depth of pipe. 300mm min cover of selected fill, free from stones larger than 40mm.
Where drains pass through foundation walls lintel required, P.C. lintel or similar approved giving 50mm space all round pipe. Opening masked with rigid board to prevent entry of fill or vermin.

Surface water to discharge into a soakaway minimum 5.00 meters away from all buildings. Soakaway to be constructed of stein brickwork, concrete rings or plastic cells wrapped in geo tech material.

Plumbing for new En-suite (where required)
New SVP in position shown on plan. Wash hand basin's with 75mm deep seal anti syphonic traps connected to SVP via 40mm Φ pipe. WC's connected to SVP as shown on plan via a 100mm manifold pipe. Shower connected to the new SVP via a low back anti syphonic trap to 50mmΦ waste pipe.

Kitchen sink drainage
Sink connected to anti syphonic trap to 50mm pipework connected to existing drainage runs.

Internal plumbing.
All appliances to be fitted with a trap, size specified below. Traps to be removable for cleaning.
Where branch pipes of 65mm dia or less are connected opposite each other to the stack the offset between them to be min 110mm. Where the WC is connected to stack, other pipes to be offset min 200mm via an angled connection or 50mm dia parallel junction. Lowest connection to stack to be min 450mm above invert of drain.
Maximum length of 40mmΦ branch pipe for Sinks, washbasins and baths to be 3m max. Max length for a 50mmΦ branch pipe for sinks and baths is 4m max. Max length of pipe for a single WC is 6m max.
Soil and vent pipes to terminate min 900mm above any opening to the building which is within 3m horizontally. SVP to be fitted with perforated cover.
Internal ventilated stub stacks to be fitted with an automatic air admittance valve (Durgo) which complies with prEN 12380. Stub stacks to be boxed in with removable top cover to allow access for clearing blockages.
Rodding points to be incorporated in the ventilated stack to allow access to all pipework for clearance of blockages.

Electrical
Installations to be undertaken by a competent person and must issue the appropriate BS 7671 Electrical installation certificate and self certify compliance with the building regulations part P1 to the council. All electrical equipment must be inspected and tested on completion of the works and shall be installed and weathered in strict accordance with the manufactures recommendations.

75% of all new light fittings to only accept low energy efficient light bulbs. Wall mounted sockets, telephone and TV points to be mounted between 400mm and 1000mm above floor level and at least 350mm from corners.

No recessed lights to be fitted within the pitch roof construction.

Lintels
All lintels to be Catnic manufacture or equal and approved with min 150mm end bearings. All lintels over external openings to have voids filled with insulation to avoid cold bridging.

Internal walls
100mm wide internal timber partitions consisting of 75x50mm studs and noggins @ max 600mm C/C with 13mm plasterboard both sides and rockwool acoustic slab or equal approved between to achieve at least 40dB airborne sound insulation. Plasterboard to achieve a mass requirement of use 10 kg.sq.m (Wallboard Ten or equal). Studs to be covered with 9mm WBP ply where extra fixing strength is required on bathroom partitions.

First Floor Construction
22mm Thk flooring grade T and G chipboard jointed, with min mass per unit area of 15kg/$m^2$ on floor joists (size and spacing to engineers details) on joist hangers doubled up under first floor partitions. 100mm Rockwool RW2 insulation slabs with min density of 10kg/m3 laid between joists.
15mm plasterboard with min mass per unit area of 10kg/$m^2$ and skim finish ceiling fixed to underside of joists. Lateral restraint strutting consisting of solid timbers size to engineers details required at mid span for floor joists.
Chipboard to bathroom / ensuite floors where required is to be moisture resistant.
Where ceiling to garage required 30mins fire resistance is to be provided and insulation within floor void to achieve 0.22w/$m^2$k u-value

Cavity wall construction (Ground Floor)
External leaf either render on 100mm block or 102.5mm facing brick.
100mm cavity fully filled with 100mm Rockwool Cavity wall Batts installed as work proceeds. 100mm internal block skin to be Celcon standard block or equal approved with Compressive strength of 3.5N/$mm^2$ and thermal conductivity of 0.15W/mK. Internal finish to be 13mm plaster. Tie cavity leaves using stainless steel twist type ties spaced at 750 mm horizontally, 450mm vertically staggered ctrs, and 225mm centres around openings. Close cavity using proprietary insulated cavity closer Thermabate 90 or similar at door and window openings. Weepholes to be provided at 450mm ctrs, min. 2 no. per opening. Insulation achieves a 'U' value of 0.27W/$m^2$K through walls.

The total extent of unprotected area to the flank wall must not exceed 1.0 square metre.

A tray DPC should also be provided where first floor cavity construction is positioned over solid brick/block walls at ground floor level

Timber Frame Construction (First Floor)
Through colour render finish over render base coat on 9mm render board over 50x50 treated timber battens. Voids to base and head of battens to be filled with insect mesh. Breather membrane over 18mm OSB Sheathing board on timber frame (sized to structural engineers details).
Frame fully filled with Insulation to achieve a 'U' value of 0.27W/$m^2$K through walls. Frame internally lined with 18mm plywood and 12.5mm plasterboard with skim coat finish.

Wall Between Garage / Habitable Rooms (where required)
1hr fire resisting wall construction with 30min self closing, fire resisting door with smoke seals between garage and habitable rooms. 100mm min step to also be provided in floor levels.

Glazing
All window glazing between the floor level and 800mm high, and door glazing between the floor level and 1500mm high including side glazed panels within 300mm from the door, to have toughened inner and outer panes and designed as safe breakage as defined in BS 6206: 1981.

The maximum height from floor level to the opening part of the egress window in the bedroom is to be no more than 1100mm.

Windows and doors
New specialist uPVC double glazed windows to match existing and achieve a 'U' value of 1.6W/$m^2$K, doors where 50% glass to achieve a 'U' value of 2.2W/$m^2$K, with bi-fold doors achieving a 'U' value of 1.8W/$m^2$K, all with background ventilation in heads provided by trickle ventilators to be controllable and secure. Window specification to be 24mm double glazed sealed units, (4,16,4) inner pane to be Pilkington K (low E) glass or similar with Argon gas filled cavity. Window to new bedroom's to be designed as escape windows with 90° hinges to provide a clear opening width and height of minimum 450mm and minimum area of 0.33$m^2$.

Surface Water Drainage
Rainwater from the proposed extension is to be taken to a soakaway 5.00 metres from all buildings constructed of stein brickwork, concrete rings or plastic cells wrapped in geo tech material.

Rainwater goods
Gutters to be marley or equal with 68mm circular downpipes, colour / diameter match existing.

Eaves system
Consisting of external timber or upvc fascia and soffit to match the existing house.

Ventilation
Openable windows to all habitable rooms providing rapid ventilation of 1/20 total floor area. In addition background ventilation to habitable rooms of 8000mm sq to be provided by trickle ventilators in window heads, to be controllable and secure.
-Kitchen to have opening window and background ventilation of 4,000mm sq provided by trickle ventilators in window heads, to be controllable and secure. Extractor to be provided extracting at a rate of 30 litres/second adjacent to a hob or 60 litres/second elsewhere.
All background ventilation installed will be to comply with building regulations F.1.
-Utility area to have an extractor providing extracting at a rate of 30 litres/second.
-Ensuites / Bathrooms to have an extractor providing extracting at a rate of 15 litres/second.
- All rooms without windows to have minimum 15mins overrun

Main Roof
New roof to have pitch to match the existing house. Roof covering to be tiles to match existing, on 38mm x 25mm treated s/w battens set at gauge to suit tiles, on,Tyvek vapour permeable roof tile underlay (suitable for use as a non-ventilated cold roof system), draped over rafters and laid parallel to eaves, fittings and overlaps to be as manufacturer's details and specification and BS 5534-1:1997 & BS 8000-6:1990, rafters and ceiling joists as per structural engineers details. Rafters fixed to 100mm x 50mm softwood wall plate bedded and half lapped or cleated where joining strapped to inner face of wall with 30mm x 5mm x 1m long galvanized mild steel anchor straps at 1800mm ctrs. A Tyvek or equal vapour barrier is to be used at the ceiling level.

Where cross ventilation required at pitches of 15° or less use eaves vents or low level tile vents providing 25mm air gap. For pitches of greater than 15° use eaves vents or low level tile vents providing 10mm air gap with the addition of ridge vents or high level tile vents providing 5mm air gap. 100mm Rockwool roll batt or equal Insulation laid between 170mm over rafters to achieve 'U' value of 0.16W/$m^2$K.

Where new roofs abut existing walls cavity tray dpc to be provided.

Where breathable felt is used between new and existing roof constructions, new roof to be separated from existing by vapour impermeable construction.

Roof insulation to skeilings (where required)
100mm Thk Celotex FR4000 insulation laid between rafters to achieve a 'U' value of 0.18W/$m^2$K. Maintain min 50mm air gap above insulation to drape breathable membrane over.
52.5mm Thk Celotex PL4000 insulation with integral 12.5mm plasterboard fix to underside of rafters with board joints sealed to act as a vapour control layer with plaster skim finish.

Flat Roof Construction (where required)
Single ply built up flat roof membrane on 120mm kingspan or equal insulation to achieve a "U" value of 0.18W/$m^2$k. Insulation laid over 18mm WBP plywood deck with vapour control layer. Firrings with a 1:60 fall to the gutter fixed over timber joists, size and spacing to engineers details with 2no layers of 12.5mm plasterboard to achieve 30mins fire resistance. No recessed lighting through construction.Vertical strapping to be provided to the proposed roof construction at centers not exceeding 2m, using galvanized mild steel or other durable metal strap with a minimum cross section area of 30mmx5mm. Lateral restraint is required to the walls at roof level.

General Notes:-

- Sizing of all structural elements indicated is as per structural engineers details / calculation sheets and drawings. All detail and calculation sheets to be used as reference for all sizing of steels and timbers.
- All beams to be covered with 15mm Fireline board to achieve a minimum of 30 mins fire resistance.
- SVP's and plumbing to be boxed using 15mm Gyproc wallboard on s/w framing to provide 30mins fire resistance.
- Where a new boiler is to be provided, the position is to be agreed on site with the building control survey and the position identified.
- The hot water supply to a fixed bath is to be limited to 48 degrees C by use of an in line blending value or appropriate means.
- All new roof tiles and roof windows (where applicable) to be weathered and laid in strict accordance with manufactures details and recommendations.
- Any notifiable electrical works or works including gas appliances (boilers, cookers, gas fires etc.) MUST be carried out by a member of a Competent Persons Scheme, (NICEIC, ELECSA, NAPIT, STROMA etc. for electrical work and GAS SAFE for gas works) the client is responsible for ensuring this certificate is received within 30 days of the work being completed. Electrical and Gas Works are specifically excluded from this Initial Notice Application.

HD — Indicates a heat detector fitted within the Kitchen area and linked to same circuit as smoke detectors.

SD — Indicates smoke detector to conform to BS5446 and mains operated with a secondary power supply such as a rechargeable battery. Smoke alarm to be positioned in circulation space within 7.5 metres of the doors to habitable rooms and at each floor level. Instillation and commissioning certificate is also required on completion of works.

| REV | DESCRIPTION | DATE | INIT | CHKD |
|---|---|---|---|---|
| STATUS | FOR INFORMATION | | | |

Client
Mr & Mrs Lobegeiger

Project
2 Chatswroth Avenue, Sidcup, Kent. DA15 9BS

Title
Proposed Section

| Scale | Date | Drawn | Checked |
|---|---|---|---|
| 1:50@A1 | 05.09.21 | N/A | N/A |

| Project No: | Drawing No. | Revision |
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| 2021/082 | 006 | ~ |