SPECIFICATION

The following specification must be read in conjunction with the relevant clauses of the Building Regulations (as applicable whether specifically referred to or not). It is the responsibility of the contractor to ensure that all these work and all materials fully comply with requirements of the relevant Building Regulations and other statutes applicable.

MATERIALS
All materials are to be used and installed in accordance with the relevant manufacturer's instructions and recommendations. All timber and timber products shall not be lower than that defined by the relevant British Standard, or the material has been satisfactorily assessed by an appropriate independent authority.

TIMBER TREATMENT
All timber and joinery to be adequately treated to prevent infestation by the house longhorn beetle in accordance with current Building Regulations. All structural timbers, external joinery and timber in contact with the ground or in damp situations shall be treated to BS 5589 with a preservative of a type and to have stress grade mark.

EXISTING STRUCTURE
Existing foundations to be exposed together with any existing drains to the extent of the new work for inspection or site to assess their suitability for extra loadings. Extra works that may be necessary to be carried out in accordance with the Building Regulations. Ensure that the existing structure is temporarily supported during construction.

FOUNDATIONS
Mass concrete trench fill 600mm wide x 800mm deep. Depth and design to Local Authority Building Control Officers satisfaction. Concrete mix and foundations have been fully subject to Engineers design. Concrete for foundations to be grade C1 OP 16 (RS528 using OPC cement and 20mm aramid maximum size aggregate.
Excavate existing ground where the extent of the proposed building overlaps the existing to a depth of 1m below the existing footings prior to any further excavation being made. Method of disposal of any contaminated soil to be agreed with the Local Authority Building Control Officer. Trenches shall be clean and true and checked for soft areas, water etc. and left with compacted bottoms. Foundations to be designed in accordance with NHBC and local bearing interest data. All foundations shall be designed with due regard to subsoil conditions, water table, presence of trees and drainage. Foundations to be taken down to foundations to suit soil conditions, original and proposed ground levels, drainage trenches and proximity of trees/hedges.

BELOW GROUND DRAINAGE
All drains below the building to be bedded and surrounded in granular fill or concrete surround as appropriate. Where drains pass through external walls they are to be protected by a reinforced concrete lintol with a minimum clearance of 100mm and bedded, with 50mm clearance all round pipe and the opening is to be masked with rigid sheet material to prevent the ingress of vermin or fill.

HORIZONTAL/VERTICAL – DAMP PROOF COURSES
Damp proof course to be Hyload 2000 or equal and approved laid on a layer of 2000 gauge polythene damp course to BS 743/1970 adequately lapped at corners and joints, on a mortar bed horizontally at least 150mm above finished ground level. All joints to be lapped a minimum 100mm.

SOLID GROUND FLOOR CONSTRUCTION
Granular material, free from harmful matter, well graded and passing a 75mm BS sieve. Crushed hard rock or gravel passing a 75mm BS sieve. Crushed rock or slag or tiles free from soil plaster, average thickness of hardcore to be 150mm. Minimum thickness 100mm. Hardcore to be blinded with sand before concrete is placed. Hardcore to be thoroughly compacted in layers not exceeding 150mm thickness. To be formed with well consolidated blending of sand to the perimeter and provide a close smooth surface. 1200 gauge DPM to be laid on prepared hardcore bed on clean level ground prepared as the perimeter walls and turned under DPC to provide a complete water proof membrane. Concrete to be grade C1 OP 16 (RS528 using OPC cement and not 20mm aramid maximum size of aggregate. Thickness of concrete floor slab to be 100mm.

150mm thick Rockwool Rockfloor insulation slabs laid directly on additional 1200 gauge DPM on concrete ground floor slab. Insulation to be cut to fit around pipes etc. Insulation to be placed around perimeter of external walls, beneath skirting, to prevent cold bridging.
75mm thick floor screed consisting of 1:3 OPC cement and fine aggregate to grade 5mm to BS882 with light gauge wire mesh reinforcement in centre. Screed to be floated smooth to receive floor finish. Finishing floor finish unless stated otherwise on the drawings.

MOVEMENT JOINTS
Generally to be provided at not greater than 12 metre centres for brickwork and 6 metre centres for brickwork, blockwork and in long walls. Joints to be provided below rain water down pipes where possible and filled with proprietary polyurethane sealing strip, with flat ties between the two leaves of brickwork and concealed in the cavity and non-corrosive wall ties to external face of brickwork/render – colour to match. Note : provide cavity trays and stepped D.P.C. where roof falls to abut maximum vertical centres, either side of movement joints.

Windows are to provide minimum opening lights equal to 1/20 (5%) of the floor area of the room served and provide minimum background ventilation as controlled by Building Regulations. Windows to bedrooms, living rooms, bathroom, cloakroom and utility room windows and 800 sq mm to all other habitable rooms.
Double glazed units to be sealed units 24mm (4-16-4) sealed double glazed (Low-E, energy(s) units with a minimum 11 value of 2.0 Wm sq K. All glass shall be in accordance with BS 6262 and Approved Document N. Glazing in doors, bathrooms and cloakrooms, all windows and doors are to be weather stripped.
Safety glass in accordance with B.S 6206:1981 shall be fitted to the following critical locations:
(i) All Glazed doors
(ii) Glass in low level sidelights
(iii) Any window within 800mm from a door opening up to a height of 1500mm.
(iv) Any window between finished floor level and 800mm above that level.
Note: all windows provided for emergency egress should have an unobstructed opening area of minimum 0.33m sq with a unobstructed dimension of at least 450x450mm. The bottom of the openable area should not be more than 1100mm above floor level.
Windows should have a u value of 1.8w/m²k or 1.4w/m²k for doors.

General Notes:
1. Do not scale from the drawings.
2. Dimensions are to be checked on site.
3. All work to comply with the current Building Regulations
4. All works may be subject to revision on site

FLAT ROOF CONSTRUCTION
200x50mm softwood flat roof joists at 400mm centres max. span 3.6m. Joists to be supported on 200x50mm wall plate on external wall and lead down with 200x5mm mild steel straps @ 1.2m ctrs (1.2m long), bent at right angles to give a 150mm bearing on wall and fixed to joists with 4 no. 3.35mm galvanised steel straps formed from 150mm minimum wire external wall and fixed, to a minimum of three joists.

Roof to be covered to three layer mineral felt with stone chippings or 25mm thick exterior quality plywood or 50mm thick WBP plywood with felt to BS 747 Type 3G and fixed to gutter or 50x25mm softwood counter battens (for cross ventilation)at
Roof joist battens spiked on top of flat roof joists. All battens to be spiked together.
The roof is to be vented to proprietary flat roof eaves ventilators to provide a continuous 10mm minimum gap within eaves. Provide cross ventilation to the roof with slide mesh vents.
Fascia to be 25mm thick PAR softwood to west weather complete with an 12.5mm thick exterior quality plywood soffits fixed to beads and to wall with softwood battens. Clipped verge detail at gables.

CEILING to be 12.5mm fall backed plasterboard with joints taped and filled to receive a skim coat finish. All timbers coupled to provide support in joints, edges and light.

ROOF INSULATION / CONSTRUCTION – FLAT ROOFS
150mm x 75mm 5# rafters at 400mm centres on 100mm x 50mm wall plate on external wall and lead down to 2000mm centres with minimum 6mm x 150mm mild steel straps, under-driven with 12mm flat backed plasterboard fixed with plasterboard nails and skim finish to ceiling. Insulation between the rafters and a further 25mm to the underside of the rafters to maintain a 50mm air gap (continuous) to achieve 0.19W/m2K.

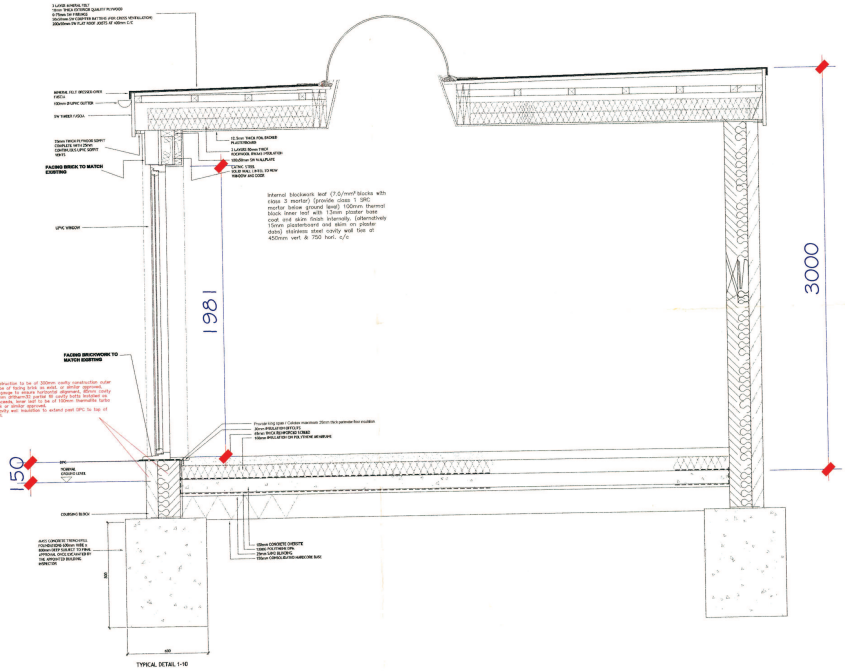
RAINWATER GOODS
150mm wide PVCu semi circular section gutters laid to falls to discharge into 65mm diameter round rainwater downpipes. Provide gutter stops at ends of gutter runs minimum 500mm from any structure. Rainwater shoe fixed.

PLUMBING INSTALLATION
Complete installation to be subject to and capable of withstanding testing in accordance with BS 5572:1978, whitewashing testing in accordance with BS 5572:1978, all new ground drainage and soil and vent shall be PVC-u to BS 4514.
Pipe work must be designed in accordance with BS 5572 and Building Regs.
Pipe work to be arranged to drain efficiently without creating pressure, back siphonage or blockage. No air from the drainage system shall enter the building. Provide adequate support to pipework. Pipework to be fixed to walls with pipe clips. No branch connection to be within 450 mm above foot of soil pipe. All PVC-u pipe work to be to BS 4514. Pipework to be jointed in accordance with BS 5572. Minimum 110 mm dia. soil, vent pipe.
90 mm dia.soil, vent
Bath, shower 40 mm dia. trap, 40mm dia. waste pipe
Shower 50mm dia. waste, size
Overflow 19 mm dia. trade, size

All fittings are to have 75mm deep seal traps. Provide access to all traps and connections. Flexible joints acceptable.
All waste pipes shall be laid to falls (25mm per metre run).
All plumbing shall be installed in accordance with Approved Document G3.
The maximum lengths of waste pipes shall be as follows:
32mm pipe 1.7m maximum length, 40mm pipe 3.0m maximum length
50mm pipe 4.5m maximum length 100mm pipe 6.0m maximum length

UNDERGROUND DRAINAGE – ACCESS POINTS
Access points in the form of rodding eyes, access fittings, inspection chambers or manholes to be provided at the following points.
(a) On or near the head of each drain run
(b) At a point where there is a change of gradient
(c) At a change of pipe size
(d) At a junction unless each run can be cleared from an access point
400mm diameter plastic inspection chamber on a 100mm thick concrete base and surrounded with 150mm of concrete to a depth of 450mm from the base.
Traditional brick built inspection/300mm internal sizes with a 600x600mm cover from invert levels upto 2700mm deep. Brickwork in English bond in cement mortar (1:3) walls 215mm thick concrete base. Half round vitrified duty channels and swept branches to discharge in the direction of flow. Where the channel changes in the size of the outgoing pipe and at a slope of 1 in 12. Benching should be chamfered at top of channel with a radius of at least 75mm. Provide galvanised step irons or vertical ladder for depths exceeding 1000mm.
Manhole and/or inspection chambers should have removable cast iron cover and frame to suit location, bedded in cement mortar and be of suitable strength. Covers inside buildings shall have mechanically sealed airtight covers.

UNDERGROUND DRAINAGE – DRAIN RUNS
Drains laying under a building to be surrounded in 100mm thick concrete (1:3:6) and reinforced where necessary. Where possible additional flexible joints should be provided. Where the top of the pipe is within 300mm of the underside of the concrete bed, the concrete shall be taken up to the top of the pipe to form a concrete encasement.
Where a drain passes through a wall or foundation provide a length of pipe (as short as possible) built with its joints as close a possible to the wall / foundation faces. Make good the wall / foundation over the pipe with a rich cement mortar (1:3) and bed the pipe with a length of at least 600mm and flexible joints.



TYPICAL DETAIL 1-10

All dimensions are to be checked on site. This drawing shall not be scaled to ascertain dimensions.

PLANNING & BUILDING CONTROL
2 0 MAY 2013

Rev	Date	Description
Issued For :	INFORMATION PURPOSES ONLY	

Client:
Miss. Penny Bailey

Project:
Proposed detached office / sun-room
5 Holme Rd, Didsbury, M20 2TX

Scheme - Drawing Title:
Proposed section

03	-	Date	9.10.13
Drawing No.	Revision	Scale	NTS @A1