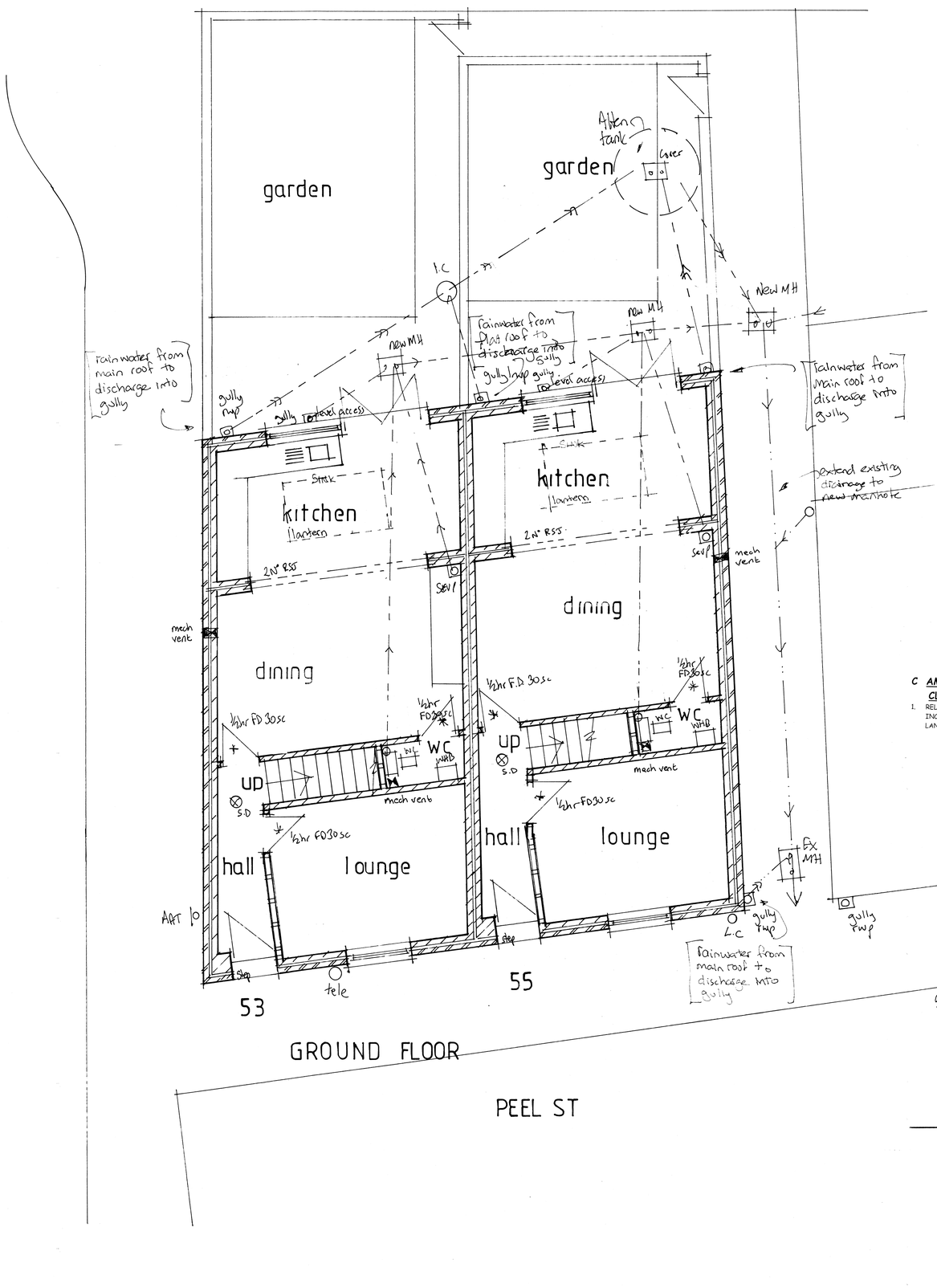


Foundations
Foundations to cavity walls to be constructed of concrete common brickwork up to 150 mm below ground level with Class B engineering brickwork from GL to DPC level externally and concrete block work internally. Walls built off 700 x 200 (C20 mix-20N/mm2) concrete strip foundations, at min depth of 1000mm, to suit local ground conditions. If the ground is found to clay the footings are to be in accordance with NHBC guide 'Building Near Trees' and to be in accordance with BS 8004, BS 5837 and to satisfaction of the Local Building Authority Inspector. Precast concrete lintels to be laid over all openings for drainage and service runs with minimum 150 mm end bearing onto adjacent brickwork.

Cavity walls (Kingspan K108)
Cavity walls to be 300 mm overall construction to comprise of 102 mm outer skin of facing brickwork with inner skin of 100 mm Thermolite Sheild blockwork. Both skins laid on 1:6 mortor mix with plasticizer and bonded together with Ancon Staifix RT2 cavity wall ties, suitable for cavities up to 100 mm wide, staggered in alternate rows and spaced 750 mm horizontally and 450 mm vertically. All cavities closed at eaves, door and windows openings with Thermabate or similar insulated cavity closers. 100 mm cavity partially infilled with 50 mm Kingspan Kooltherm K108 Cavity Board with blockwork lined internally with 12.5 mm plasterboard on dabs to provide a maximum "U" value of0.28W/m2K. Plasterboard returned into all window and door openings and with continuous band of adhesive around all openings at base and heads of wall and at external corners, in accordance with Accredited Construction Details with details checked on site to maintain quality assurance. All new internal solid walls to comprise of 100 mm skins of dense concrete blockwork (7KN) with 12.5 mm Gyproc Wallboard on dabs with skim finish.

Info regarding foundations
During construction if ground conditions unsuitable for traditional foundations alternative methods to be used, piling of reinforced concrete slab to be constructed all to engineers instructions.

Dividing Wall
Construct new 100 mm thick 4 KN concrete block dividing wall keyed into new and existing walls all built off new 600 x 200 mm concrete foundation all to Reg A1 & 2

Cavity closer
Insert Isofoam XCC insulated cavity closer to all new openings all as document I 2013. Width and fixing to suit opening

Steel Beams and Brick Piers
The design has required the use of a number of steel beams and brick piers as designed by a Structural Engineer.
The method of carrying out the safe and secure temporary support, needling and propping of the existing building structure whilst this building work is being undertaken is the sole responsibility of the builder who is to ensure that NO settlement or disturbance/cracking of the fabric of the building takes place during the construction process.

Ground Floors.
Ground Floor to comprise of 75 mm sand cement screed, over 500 gauge polythene vapour control layer, over 80 mm Kingspan Kooltherm K3 phenolic board (thermal conductivity 0.020W/mk) or similar approved, to provide maximum U value of 0.22W/m2K based on a (P/A of 0.3), on polythene separating layer, on 150 mm thick reinforced with A194 mesh, concrete slab (C20 mix-20N/mm2) on 1200 gauge DPM, lapped minimum 100 mm with all DPC's, on 50 mm sand blinding, on 150 mm well compacted hardcore. 25 mm Kingspan Kooltherm K3 phenolic board to be lapped vertically up perimeter of screed to limit thermal bridging in accordance with Part L1A 2013 Edition, section 3.90 and Robustdtails 4.13 of Limiting Thermal Bridging and air leakage Robust Construction details for dwellings similar buildings amendments 1TSO 2002.

DPC's
Cavity wall and internal block work walls to incorporate PVC type dpc at ground floor finished level minimum 150 mm off external ground level. Polypropylene cavity trays to be installed in cavity walls above openings, single storey roofs, complete with weep-holes @ maximum 1000 mm centres to BS 5628 Part 3.

First Floor and Loft Floors
22 mm moisture resistant tongue and groove chipboard flooring (minimum mass per unit area 15Kg/m2), on 75 x 200 mm C16 tanalised softwood joists at 400 mm centres, to first and second floor levels of house, joists doubled up and spiked together beneath all first floor partitions'. Joists built into external walls and packed as necessary. Lateral restraint provided by 30 mm x 5 mm galvanized mild steel straps at maximum 2000 mm centres, in accordance with Building Regulations, Catnic Herringbone joist struts at mid span between 2.5 m and 4.5 m and one third span greater than 4.5 m. Floor void between joists to incorporate minimum 100 mm of Rookwool Flexi quilt (minimum density 10Kg/m3). Joists to be underlined with 12.5 mm Gyproc Wallboard TEN complete with skim finish to form ceiling.

Dpc
External leaf min 150 mm above ground level with internal dpc at slab or floor level

Overlap
Dpc and dpm to perimeter to overlap by 50 mm

Ceilings
To be 150 x 50 mm sw ceiling joists at 400 mm centres under drawn with 12.7 mm foil-backed plasterboard and skim finish

Roof void Insulation
To be 100 mm thick rock wool laid between joists and cross-laid with 200 mm Rock wool to give total thickness of 300 mm and a U value of 0.16W/m2K

Roof
Roof structure to comprise 50 mm x 150 mm C24 softwood rafters (pitch 33 degrees) @ 400 mm centres. Rafters supported off, birds mouthed over and nailed to 100 mm x 75 mm wall plate bolted @ max 600 mm centres to universal beam as ridge purlin. Rafters to be doubled up around roof lights. Rafter feet nailed to 100 mm x 75 mm softwood wall plate provided to external walls, with wall plate strapped to block work with galvanized straps at maximum 2 m centres. Lateral restraint to rafters parallel to gable wall by 30 x 5 mm galvanized MS straps to first three timber parallel to wall screw fixed @ 2 m centres fixed to inner leaf of cavity wall. Roof construction to comprise of 2 layers of 60 mm Kingspan Kooltherm K7 phenolic insulation between rafters, positioned level with base of rafter to allow sag of breather membrane. Rafters to be underlined with 37.5 mm Kingspan Kooltherm K18 to provide a maximum "U" value of 0.18W/m2K, all fixed in accordance with manufactures instructions. Rafters overlaid with Tyvec SUPRO breather membrane with joints lapped and taped and roof to be finally covered with with Marley Grey roofing tiles laid on 50 mm x 25 mm tanalised softwood battens.

Flat roof
To be 3 layers of felt top layer 350 ht finish. 10 mm limestone chippings bottom based on 19 mm exterior grade plywood decking with sw firings to give fall of 1:60. Provide 200 x 75 mm sw flat roof joists at max 400 mm centres, trim out with double joists around any roof openings.

Insulation to flat roof
Provide 150mm thick Kingspan Kooltherm K7 insulation between roof joists leaving min. 50mm air gap between top of insulation and top of joists. Provide 32.5mm Kingspan Kooltherm K18 insulated plasterboard ceilings with skim finish to underside of flat roof joists to give a 'U' value of 0.18W/m2K.

Straps
Strap down all roof timbers i.e. Wall plate rafters ceiling joists etc with galvanized mild steel gang nail straps at max 2m centres and at first floor level across first two joists giving lateral restraint to walls

Valley roof
19 mm exterior grade plywood 300 mm either side. Insert no.4 lead in valley over felt 300 mm either side. Form saddle in lead

Continuous Ventilated Ridge
Provide new continuous ventilated ridge to be mechanically fixed and bedded in sand/cement mortar, or dry fixed system in accordance with BS 5534 2014

Staircase ground to first and first to second flooor
New staircase to be 225 x 32 mm sw strings 25 mm sw treads, 19 mm sw risers with sw blocks and wedges 213 mm rise 250 mm going 12 no. Treads. 850 mm wide. 2000 mm headroom. 950 mm high handrail mop stick type, min 50 mm tread on winders at newel post.

Soil and vent pipe
100 mm diameter upvc with airtight rodding access above floor level and sealed into Hepworth 'Hepseal' drain connector at floor level. Stack taken up and terminated 450 mm above springing level with pvc bird cage (900 mm above any opening lights)

Kitchen sink
To have 75 mm deep seal trap into 42 mm diameter upvc waste into back inlet gully

Lead collar
Min up-stand 150 mm to new s & vp

Sanitary fittings to WC
W.C. To have dual flushing action to NWWA regulations and to have 25 mm overflow direct to external air. Connect with 'p' trap and 100 mm diameter upvc soil branch pipe to new 100 mm diameter upvc s & vp. Lavatory basin to have 75 mm deep seal anti vac trap and 38 mm diameter upvc waste connected to 50 mm diameter combined upvc waste connected to s & vp. Connect all fittings to new hot and cold system. Provide one way valve for new soil and vent pipe. Dirgo or similar.

Non-loadbearing Walls.
All non-loading partitions to comprise of 75x50 mm softwood studs@ 450 mm centres, and 75 mm softwood naggins @900 mm centres, with continuous header and sole plates, and with 15 mm Gyproc Wallboard (minimum mass per unit area 10Kg/m2) and 15 mm Gyproc moisture resistant board to bathroom, en:suite and WC, joints sealed complete with skim finish to both sides. All stud partitions to have 60 mm thick Rockwool Flexi insulation quilt between studs (minimum density 10Kg/m3).

Sanitary fittings to new bathroom
W.C. To have dual flushing action to NWWA regulations and to have 25 mm overflow direct to external air. Connect with 'p' trap to 100 mm diameter upvc soil branch pipe connected to new 100 mm diameter upvc s & vp. Lavatory basin to have 75 mm deep seal trap and 38 mm diameter upvc waste connected to 50 mm diameter combined upvc waste connected to new 100 mm diameter upvc s & vp. Connect all fittings to new hot and cold system All sanitary pipe work to be carried out in accordance with BS 5572:1978.

Gutters and fascia
100 mm upvc gutter connected to existing falls to outlet. Fixed to 19 mm exterior grade plywood fascia boards. Provide 12 mm exterior grade plywood soffits fixed directly to underside rafters with continuous upvc soffit ventilators to vent roof space to BS 5250.

Heating
To be supplied by balanced flue gas boiler condensing type, radiators and cylinder min Sedbuck efficiency rating of 88%

Radiators
Provide and fit thermostatic control valves to radiators.

Timber
All new timber to be tanalized and stress graded 4
BS:4471 Part 1 (1978) Dimensions for softwood
BS:5268: Part 5 Preservatives Treatment for Structural Timber

Skirting
120 x20 mm half round skirting primed and painted three coats (1 gloss) to new dwelling

Drains
100 mm drains min fall 1:40 all to comply with BS en 295

Drain Testing
The whole of the drainage system shall be tested when laid and again on completion to the satisfaction of the approved inspector.

Drainage bedding and backfilling
New drains to be bedded on min. 100mm deep granular bed. Provide granular sidefill 150mm wide to each side of drainage pipes up to crown of pipes and then provide min. 100mm deep granular fill over top of drains for at least 100mm over crown of pipes. Provide 'as dug' backfill from this level up to ground level, free of stones in excess of 40mm. Granular material to be 10mm single size pea gravel to BS 882. New drainage to comply with protection from settlement paragraphs 2.23 - 2.26 and bedding and backfilling paragraphs 2.41 - 2.45.

Foul / surface drains
Separate surface water and foul drainage system to be provided, terminating in inspection chamber prior to connection into existing combined sewer

Attenuation Tank
Provide attenuation tank to rear of property connected to surface water only before connection into main drain.

Manholes
150 mm concrete base, 215 mm eng brick. Bench up in concrete to form channels. Medium duty cover and frame

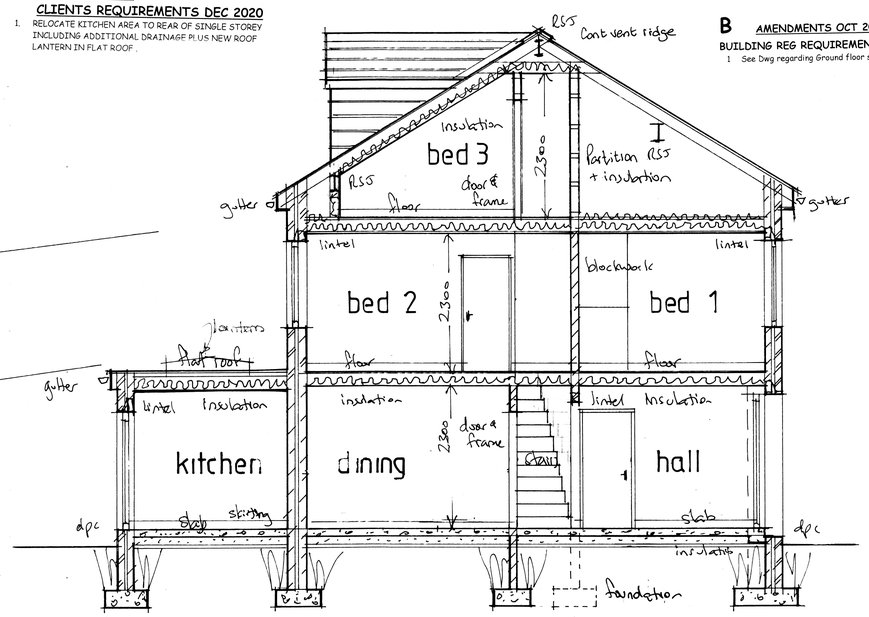
Existing manhole
Connect new drainage system into existing manhole. Bench up in concrete to form channel

Inspection chamber
Provide 450 mm diameter polypropylene inspection chamber positioned over existing drain. Break open existing drain within chamber to form channel and make good. Cut down height of chamber to suit ground level and finish with cast iron cover and frame

New Windows
To be grey upvc double glazed opening light to equal 1/20th of floor area of room affected double glazing with 16 mm Argon filled air gap optitherm glass and soft low e coating u value to be 1.6W/m2K Built in trickle vents 2500 mm2 equivalent area to shower room and kitchen areas and 5000 mm2 to bedroom areas. Glazing will conform to BS 6206:1981 ir respect of Kite marked safety glass.

Escape windows
Opening lights suitable for rescue / means of escape are required to be min 0.33 sq m with min dimension of 450 mm wide x 740 mm high max 1100 mm above floor level (clear opening when in the open position)

C AMENDMENTS
CLIENTS REQUIREMENTS DEC 2020
1. RELOCATE KITCHEN AREA TO REAR OF SINGLE STOREY INCLUDING ADDITIONAL DRAINAGE PLUS NEW ROOF LANTERN IN FLAT ROOF.



SECTION

B AMENDMENTS OCT 2020
BUILDING REG REQUIREMENTS.
1 See Dwg regarding Ground floor slab construction alterations.

1:100 0 1m 2m 3m 4m 5m 6m
1:50 0 0.5m 1m 1.5m 2m 2.5m 3m
Scale Bar

A
Building Reg Amendments Aug 2020.
Attenuation tank repositioned to allow surface water gully connections. Rainwater from rear main roof to discharge into two rainwater pipes connected into two number separate gullies.

Gutter Flow
Half round 112mm gives
(1.3 litres/sec)
Gutter fixed at 1:1350
Caters for a roof area of 62 sq metres.

Downpipe
Round 82mm gives
(2.5 litres/sec)
Caters for a roof area of 120 sq metres.

Development roof one side 54 sq metres.
Water from rear main roof to discharge into atteruation tank via separate gullies.
Water from rear flat roof to discharge into attenuation tank via separate gully
Water from front main roof to discharge into existing manhole side of development.
Note foul drainage to discharge into foul system into manhole side of development.

PROJECT
PROPOSED NEW DEVELOPMENT.
DRAWING TITLE
PROPOSED GROUND FLOOR LAYOUTS AND SECTION.
CLIENT
IMPERIAL PROPERTY DEVELOPERS.
ADDRESS
53-55, PEEL STREET, ROCHDALE.
SCALE
SCALE 1:50@A1
DATE
MAR 2019.
DRAWING No
RC 03195436/1. A, B, **C**