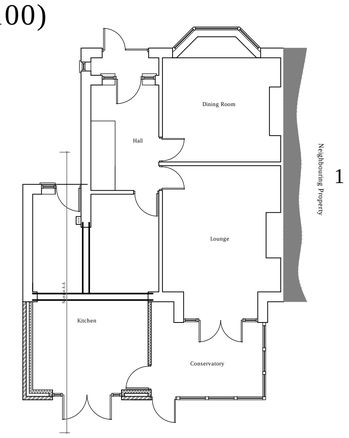
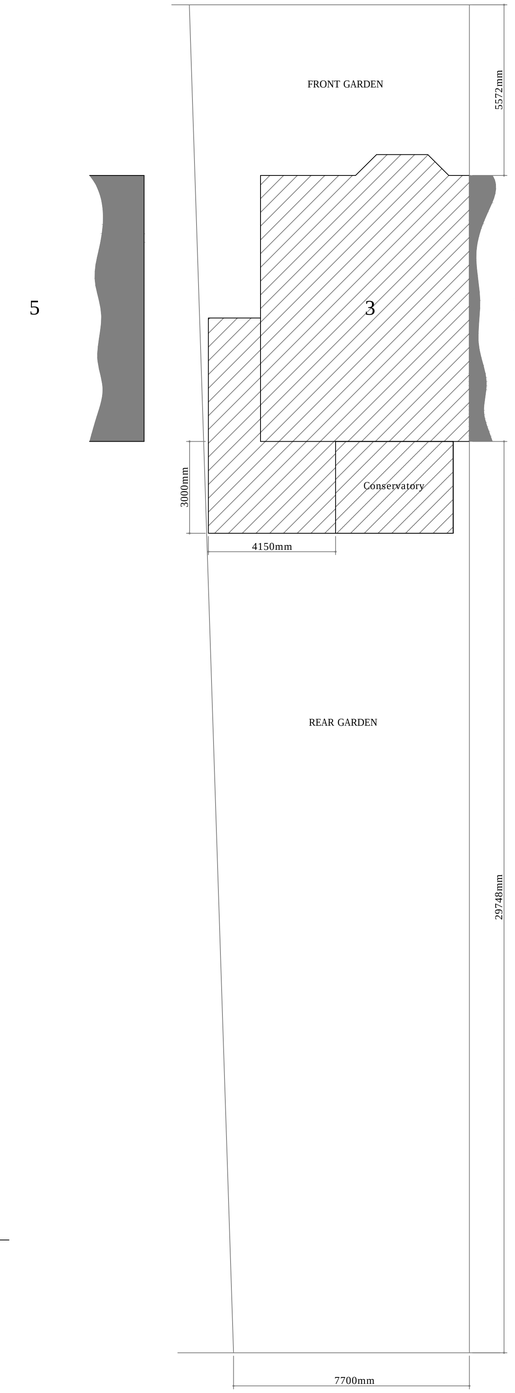
## SECTION LOCATION
(Scale 1:100)



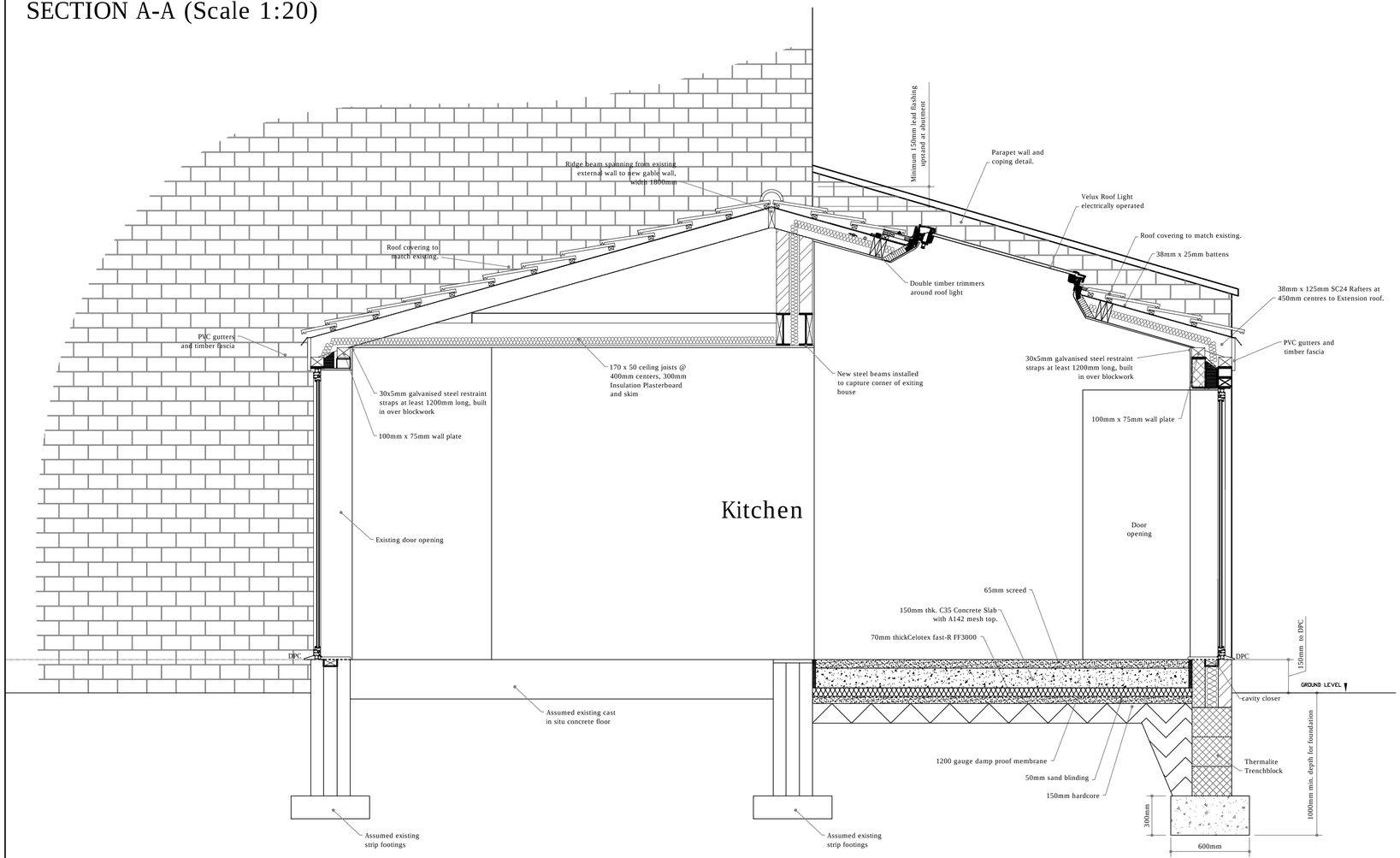

## PROPOSED 3D IMAGE



## PROPOSED LOCATION
## P L A N (1:100)




## SECTION A-A (Scale 1:20)




## NOTES

Do not Scale; it is essential that this drawing is read in conjunction with the specification and that all works are included for.

The Contractor must visit site, so as to satisfy himself as to the local conditions, access, etc. and to include for these in his costs for the works.

The Contractor is responsible for the verification of all dimensions, levels etc., on site.

FOUNDATIONS - - Foundations to be conc. strip min. 600mm x 300mm thk. C25 conc. mix. Foundations are to be a min. depth of 1000mm in clay sub-soil to provide adequate frost protection in accordance with the British Standards. All foundations are to comply with the Approved Document A1 & A2 of the Building Regulations. Ground conditions must be examined by building control for adequacy of substrate prior to casting foundations.

EXTERNAL WALL CONSTRUCTION - New external cavity wall to be constructed of 102mm matching face brickwork, 75mm full fill retro fit blown in cavity insulation, installed through internal block prior to plastering. Thermalite Turbo insulation block with 13mm thk. lightweight plaster finish & skim, so as to give min. 'U' value of 0.27/w/m²/K. Only use wall ties designed for use with partial-fill insulation, i.e. double triangle, vertical twist or DD140 type, DON'T USE BUTTERFLY WALL TIES. Partial-fill insulation to be installed all as per manufacturers instructions. Wall ties to be spaced 900mm horizontally & 450mm vertically to comply with BS 1243 (1978). Cavity to be closed along eaves & around all openings with Catnic CC50 insulated cavity closers positioned horizontally & vertically to all openings. All openings are to be provided with Catnic lintels with a min. end bearing of 150mm at both ends. Brickwork used below DPC to be constructed in Class B engineering or trench block may be used. All new cavity walls are to be cut through to existing cavities & be continuous.

INTERNAL WALL CONSTRUCTION - 100 x 50mm soft wood timber stud with head and sole plates and intermediate noggins fixed at 600mm with a minimum of 25 mm of 10Kg/m3 proprietary sound insulation quilt suspended in the stud and finished with 15 mm plasterboard and skim both sides.

DAMP PROOF COURSE - A DPC is to be provided in both inner & outer leaf of Brick/blockwork, the outer leaf DPC must be at least 150mm above the finished ground level.

GROUND FLOOR CONSTRUCTION (SOLID) - New ground floor to be constructed with a 65mm screed on 500 gauge separating layer on 70mm Celotex fast-R FF3000 insulation. Laid over 1200 gauge polythene DPM (to be turned up at the edges & linked in to the DPC). DPM to be laid on sand blinding on 100mm thick oversite concrete slab on min 150mm thick sand blinded hardcore. sand blinding to be well compacted on clean compacted hardcore forming levels. A142 anti clacking steel reinforcement to be placed 50mm from the top of the slab. A 25mm insulated upstand to the full perimeter of the concrete slab is required.

UPPER FLOOR CONSTRUCTION (SUSPENDED TIMBER) - New upper floor to be constructed with 195x50mm C24 floor joists at 400mm centers supported by heavy-duty proprietary galvanized metal restraint joist hangers built into walls. Joists are to be doubled up and bolted together for trimmers, under partitions and baths. Floor void between joists to be insulated with a minimum thickness of 100 mm of 10Kg/m³ proprietary sound insulation quilt, ceiling to be a minimum 15mm plasterboard and skim and floor joist covering to be a minimum of 20mm softwood tongue and groove softwood boards or moisture resistant particle/chipboard to give overall 30 minutes fire resistance. Floor joists to be provided with 1 row of 38 x ⅝ depth solid strutting at ends between joist hangers or proprietary galvanized struts to BS EN 10327 fixed as manufacturers details, at mid span for 2.5 - 4.5m spans and 2 rows at ⅓ points for spans over 4.5m.

ROOF CONSTRUCTION - Redland Regent concrete roof tiles (or similar approved) laid on 25 x 50mm s.w battens on sarking felt over 150mm x 50mm s.w rafters (class SC24) at 400mm ctrs, pitch to match exsg. Hip rafters and ridge to be 300mm x 50mm (class SC24) all tied together with 100mm x 75mm angle ties & 150mm x 75mm dragon ties. Rafters to be bird mouthed over 75mm x 100mm s.w wallplate & strapped to blockwork with galvanised steel vertical restraint straps at least 1200mm in length at 2m ctrs. Roof space to be ventilated at eaves & at abutment. Ceiling joists to be 170mm x 50mm s.w (class SC24) at 400mm ctrs spiked to side of rafters. Valley gutters to have 25x225mm valley board and gutter lining to be minimum code 4 lead not exceeding 1500mm lengths. A lead saddle is to be installed at all ridge and abutments.

INSULATION - Insulation of the Main roof space is to be 300mm thk. First layer of insulation to be 100mm Rockwool mineral wool roll bats laid between ceiling joists over 15mm foil backed plasterboard. Second layer of 170mm rockwool is to be cross-layered to cover first layer. The insulation is to be extended over the timber wall plates off the internal wall maintaining a min. 50mm air gap between the insulation & the sarking felt to ensure through ventilation of the roof space.

DRAINAGE - All new gutters are to be discharged into newly positioned gully. Any drains passing under the building are to be protected/surrounded with 100mm (min.) granular material & where passing through a wall a suitably sized lintel is to be provided over the opening ensuring that a 50mm space is maintained around the pipe. Openings must be masked to prevent fill. All underground drainage to comply with BS 8301 (1985). All drainage to be constructed with flexible joints. Minimum gradients for 100mm pipes, 1 in 80. Ventilating pipe provided at or near the head of each main drain and any branch longer than 6m for single appliances and 12m for groups, terminating 900mm above openings nearer than 3m. New gullies to be provided with rodding access, separate drainage systems are to be combined at the last manhole depending on existing drainage systems.

RAIN WATER GOODS - Existing PVC-U gutters to be extended to new extension & are to be fixed to falls on fascia boards. All pipes are to be secured with proprietary brackets & fixed with brass screws.

WASTE PIPES - All waste pipes are to be a min. of 50mm dia. to wash hand basins & sinks, pipes are to be fitted with 75mm deep seal traps or anti-vac traps if connected directly to a soil & vent pipe. All installations are to comply with the Approved Document Part H & BS 5572 (1978).

WINDOWS - PVC-U window frames to be 1/10th of the floor area & have 1/20th opening lights. All windows to have trickle ventilators incorporated in the frames to achieve min. 4000mm² free air flow, windows are to be fitted with double glazed units having a min. 16mm air gap with & a soft Low E coating. All new windows not to exceed 1.6 W/m ²/K U value. All frames are to have vertical & horizontal DPC's to all openings. Seal-a-mastic seals are to be provided around all window & door frames to provide a watertight seal. All glazing must be carried out in accordance with BS 6262. See notes on glazing in critical locations i.e. safety glazing. Patio doors and flag framed windows to have either toughened or laminated glass installed. Bedroom window 3 to be identified as an escape window in the case of fire. The window therefore is to have a min. openable area of 0.33m², with a min. width of 450mm, the cill heights are to be between 800mm & 1100mm above FFL & comply with approved Document B1.

VENTILATION - Mechanical ventilation fans are required to be fixed to kitchen area. The kitchen fans are to extract 60L/sec or if incorporated within cooker hood 30L/sec will be required. Mechanical ventilation is required to the bathroom to provide three air changes per hour with a 15 minute over run discharging to external air & controlled by the light switch or detecting sensor. An air inlet to the room should be provided i.e. a 10mm gap under the door.

CAVITY TRAYS - A cavity tray must be provided above any lintel or ground floor roof, the tray must be fixed in to the wall, all cavity tray membranes must be installed directly above the lead flashings & also be provided with weep holes in at least two vertical joints.

CLOSING OF CAVITIES AROUND OPENINGS IN EXTERNAL WALLS - All cavities to be closed at window/door openings in external walls with 'Thermabate' Insulated Cavity closer or equally approved.

STEELWORK - All steelwork must comply with the relevant structural calculations & be supported on pad stones or spreader plates, sizes to be provided within the calculations. All steelwork must have a min. of 30 min. fire resistance provided by 12mm fireline plasterboard & skim. Steelwork used in external openings must be provided with a cavity tray.

ELECTRICITY - All electrical works will meet the requirements of Part P (electrical safety) and be designed, inspected and tested by a person competent to do so. Registered with 'NICEIC' or 'ECA'. If this is not the case the electrician must be a member of one of the following NICEIC Certification Ltd/BRE Certification Ltd/BSI/ELECSA Ltd or NAPIT. New Lighting outlets will only be fitted with lamps having a luminous efficiency greater than 40 lumens per circuit watt

HEATING - The existing dwellings central heating system will be extended to provide heating to new radiators located throughout the proposed extension.

FIRE DETECTION AND EARLY WARNING - Interlinked smoke detection, hardwired and with battery backup must be provided to all landings, including those situated within the existing dwelling.

| Revisions | Notes | Dates |
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Client
3 Chauncey Road, New Moston, Manchester

Project title
Single Storey Extension to Side and Rear Elevation

Drawing title
Proposed Section A-A

| Date | Scale | Job No. |
|---|---|---|
| 22/04/13 | Various on drawing | 010 |
| Drawn | | Dwg. No. 03 |