

Foundations:
600 x 300mm concrete trench fill taken down to firm bearing strata at min 900mm below ground level. Foundations to be taken down to invert of any drain within 1000mm of excavation.

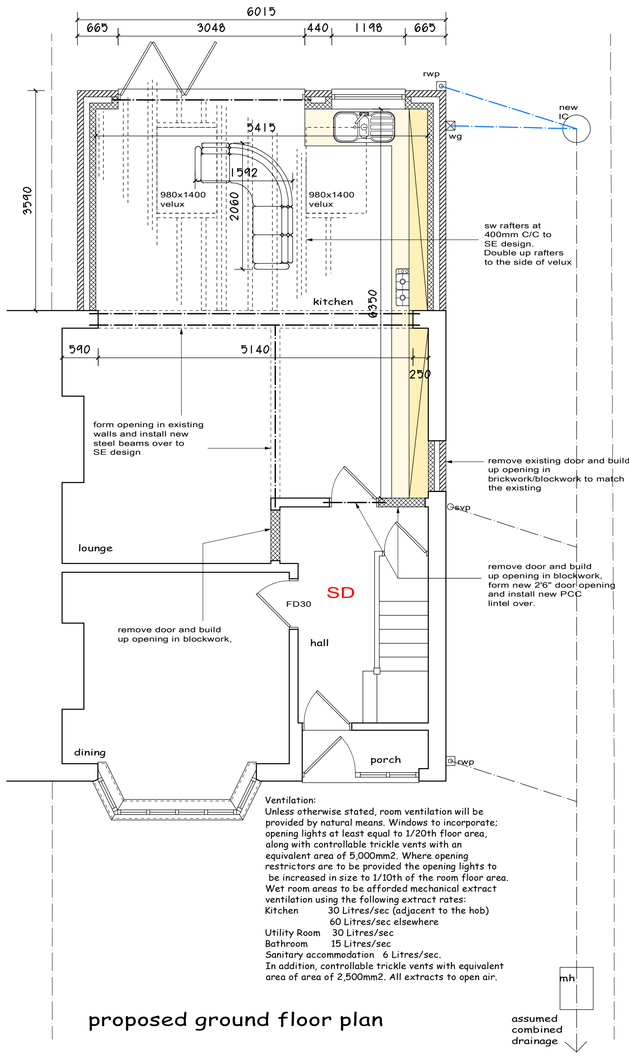
Drainage:
New drains bridged where passing through footings. Drains passing under building to be encased in 150mm concrete. All new drainage to be 100mm diameter Polypipe Underground or similar drainage system. Pipes laid to self cleansing fall on 150 bed pea shingle. New gullys to be roddable NB Drainage systems to be checked on site to determine - combined or separate systems - if separate ensure foul and surface water are connected to correct drainage system.

Ground Floor Construction Main:
floated finish 150mm concrete slab on visqueen on 110mm Celotex XR4000 or equivalent floor insulation on 1200 gauge DPM lapped into DPC on 25mm sand blinding on consolidated hardcore. Provide 25mm ridged insulation to the edge of slab. Provide 100mm dia duct pipe through to air bricks with cavity trays over to vent any exg air bricks.

External Walls traditional:
100mm brickwork outer leaf to match existing 100mm cavity with cavity wall batts - 100mm thermolite block inner leaf dry lined in 12.5mm plasterboard and skim on Drywall dabs. Stainless steel double triangle wall ties (min 59mm embedment) 750mm horizontal c/c & 450 vertical c/c staggered and doubled up at all window and door reveals. Cavities to be closed at all reveals and at eaves - using Thermabate insulated cavity closers. NB all masonry below ground level to be in concrete common brick. DPC to be fixed at min 150mm above ground level. Provide cavity fill to 225mm below damp proof course.

En Suite Plumbing:
WC to have 100mm connection to exg SVP. shower to have 75mm deep seal anti vac traps with 38mm diameter wastes. Basin to have 75mm deep seal anti vac trap with 32mm diameter waste. All wastes bossed bossed in to existing soil pipe.

Self-contained mains powered smoke detectors (rechargeable battery backed up) in accordance with BS5839-6: 2004 - Grade D - category LD3 standard to be provided to each level as indicated by 'SD' on floor plans. All alarms to be interlinked and wired to separate sub circuit on mains d istribution board. Smoke alarms to be situated within 3.0m of bedroom doors and 7.5m of all other habitable rooms. NOTE - all smoke detectors are to be positioned so that they can be reached for maintenance and testing i.e. not over stairs etc.



proposed ground floor plan

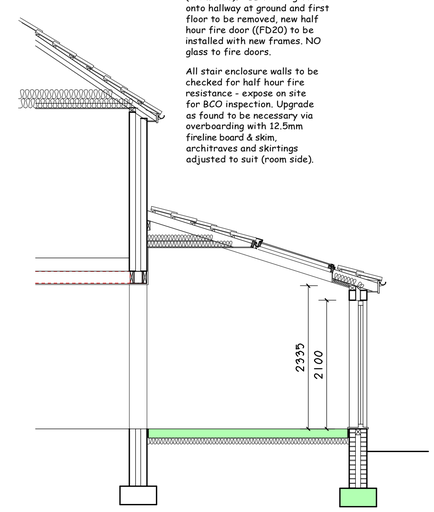
Ventilation:
Unless otherwise stated, room ventilation will be provided by natural means. Windows to incorporate; opening lights at least equal to 1/20th floor area, along with controllable trickle vents with an equivalent area of 5,000mm2. Where opening restrictors are to be provided the opening lights to be increased in size to 1/10th of the room floor area. Wet room areas to be afforded mechanical extract ventilation using the following extract rates:
Kitchen 30 Litres/sec (adjacent to the hob)
60 Litres/sec elsewhere
Utility Room 30 Litres/sec
Bathroom 15 Litres/sec
Sanitary accommodation 6 Litres/sec.
In addition, controllable trickle vents with equivalent area of area of 2,500mm2. All extracts to open air.

Doors and Windows:
All new windows to be double glazed and have trickle vents not less than 8000mm2. All windows ajoining a door or a glazed door or less than 800mm above floor to be in toughened glass to BS6206 or EN12150. New and replacement windows and roof lights fully draught proofed & double glazed in Optiwhite (outer pane) 16mm argon filled air space with aluminium spacer bar with an inner pane of low emissity 'k' glass to give a 'U' value of 1.6w/m²k or window energy rating band C certificates of compliance to be provided to building control on completion, New windows to habitable rooms without alternative at least 1no opening light with a clear opening of 450 x 750mm. Top hung Windows to have assist arms and stays to keep up

Pitched Roof Construction rear extension:
Unvented Cold Roof Concrete roof tiles on 38 x 25mm tanalised battens on Du Pont Tyvek breathable roof membrane on 150 x 75 rafters @ 400 centres. TBC by SE 100x50mm sw ceiling joists @ 400mm c/c. 12.5mm plasterboard and skim finish to underside. provide 300mm quilt insulation between between and above ceiling joists.
Vaulted section Fix 100mm Celotex tuff R insulation tight between rafters ensuring 50mm air space is maintained over insulation. Fix 50mm Celotex insulation across rafters to eliminate cold bridging - 500 gauge visqueen vapour barrier over insulation - fix 12.5mm plasterboard with 3mm plaster skim.

Check existing floors where under the stair escape routes. Upgrade as found to be necessary via overboarding with 12.5mm fireline board & skim, architraves and skirtings adjusted to suit (room side). ALL existing doors onto hallway at ground and first floor to be removed, new half hour fire door ((FD20) to be installed with new frames. NO glass to fire doors.

All stair enclosure walls to be checked for half hour fire resistance - expose on site for BCO inspection. Upgrade as found to be necessary via overboarding with 12.5mm fireline board & skim, architraves and skirtings adjusted to suit (room side).



section through extension

rwp

APPROVED DOCUMENT L1 (2005)
From the 1st April 2005. All new and replacement natural gas and LPG boilers are required to have a minimum SEDBUK (Seasonal Efficiency of Domestic Boilers in the UK) rating of 86% From the 1st April 2005 Oil fired boilers must have a minimum SEDBUK rating of 86%. Exceptional Circumstances permitting the installation of a Non-Condensing boiler. The installer must complete an 'Assessment form' using the procedure described in the document 'Guide to the Condensing Boiler Installation Procedure for dwellings' (ODPM 2005)
The declaration should be retained by the householder as it may be needed when the property is offered for sale. 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. Prior to completion the Local Authority must be satisfied by either:- An electrical installation certificate issued under a Competent Person Scheme has been issued; or Appropriate certificates and forms defined in BS 7671
(as amended) have been submitted that confirm the work has been inspected and tested by a competent person. A competent person will have a sound knowledge and experience relevant to the nature of the work undertaken and to technical standards set down in BS 7671, be fully versed in the inspection and testing procedures cantained in the regulations and employ adequate testing equipment.

Structural Steel:
All structural steel to be encased in a minimum 18mm Gypsum plaster to give minimum half hour fire protection.

Heating:
Mode of heating to extension as yet unknown if a new boiler to be fitted this is to have a Class A SEDBUK energy efficiency rating. NB All plumbing work to be carried out by GAS SAFE registered installer Hot water & heating systems to comply with Domestic Heating Compliance guide.

Flashings:
Code 4 lead stepped and straight flashings with DPC cavity trays over at all abuttments.

Lighting:
One third of the primary light fittings in the proposed extension (minimum one) to be of a type which will only receive high efficiency lamps.

New main roof Construction: Remove existing section of roof structure back to where hips meet the ridge. Provide new ridge board. Install new 150x50mm sw rafters to new gable wall supported at mid span with new steel purlin design by SE. Roof tiles to match the existing on 38 x 25mm tanalised battens on Du Pont Tyvek breathable roof membrane (ensure breathable felt system is installed & vented in strick accordance with manufacturers recommendations) Vaulted Section Provide 100mm Cellotex rigid board insulation tight between rafters and rafters underdrawn in 45mm Celotex T-breakTB3045 across rafters. 12.5mm plasterboard fixed through insulation and finished with 3mm plaster skim.

New Staircase risers at max 220mm - goings in straight flight min 220mm. Maximum pitch 42deg with minimum head height of 2000mm measured vertically off pitch line. Handrails fixed at 900mm off pitch line throughout flight. Balustrading to be fixed around stairwell @ loft floor level @ 900mm above floor - vertical spindles @ max 100mm centres. Stairs to be underdrawn in 12.5mm plasterboard and skim.

Existing Rafter Treatment (to be checked and upgraded if required):
Batten out existing rafters to 150mm deep. - fix 100mm Celotex insulation tight between rafters ensuring 50mm air space is maintained over insulation. Fix 45mm Celotex T-breakTB3045 insulation across rafters to eliminate cold bridging - 500 gauge visqueen vapour barrier over insulation - fix 12.5mm plasterboard through insulation to rafters using galvanized nails and finish with 3mm plaster skim. NB Existing purlins to be replaced.

Low Walls: Low walls below purlin formed in 100 x 50mm studding at 400 centres - 65mm Celotex tuff-R GA3065 insulation between studs flush with back of studs, fix celotex T-break TB3012 over the inside face of studs. The joints of the insulation are then taped using a self adhesive aluminium foil tape and the perimeter sealed with mastic to provide a vapour control layer. Fix 12.5mm plasterboard and skim finish.

Partitions: Partitions at loft floor level formed in 75 x 50mm studding at 400 centres with 12.5mm plasterboard and skim finish both sides. Double joists under all partitions running in direction of joists. All walls between WC & bedrooms to have 50mm sound deadening insulation between.

Loft Floor: exg ceiling to remain. New floor 22mm tongue and grooved floor decking to be laid over new sw floor joists. Floor joists supported on Steel beams designed by SE. Joists on floor trimmers fixed using timber to timber joist hangers - fully nailed. Joists to be doubled up under all internal partition walls. 100mm Rockwool quilt laid between joists Provide herringbone strutting at mid span of floor joists. floor joists to site 25mm above existing plaster,

Any new gas boiler to be min 90% SEDBUK condensing wall mounted with balanced flue/stainless steel guard to outlet. Flues discharge in accordance with manufacturers instructions & to Building Regulations ADJ. Copy of the Building Regulations Compliance Certificate from your GAS SAFE installer to be provided. All new radiators to be provided with thermostatic valves.

This drawing has been prepared for the sole purpose of obtaining Planning Permission and Building Regulation Approval ONLY. All structural calculations are to be checked by structural engineer prior to construction.

All dimensions & details are to be check on site prior to construction, any discrepancies reported to ExtensionsNW prior to any work undertaken. Any work undertaken prior to full planning & building regulation approval is at the builders own risk. ExtensionsNW will not be held responsible for any problems arising.

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Plotted on 14/02/2021
ExtensionsNW reserve the right to modify and make necessary alterations dependent on site conditions.

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	DATE	

SCALE	1:50	DATE	March 2020
DRAWN	JDJ	P.P	B.R

CUSTOMER
Mr & Mrs Brown

PROJECT
Loft conversion and single storey extension

LOCATION
18 Worcester Road, Middleton

LOCAL AUTHORITY
Project

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JOB No.	REV.
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