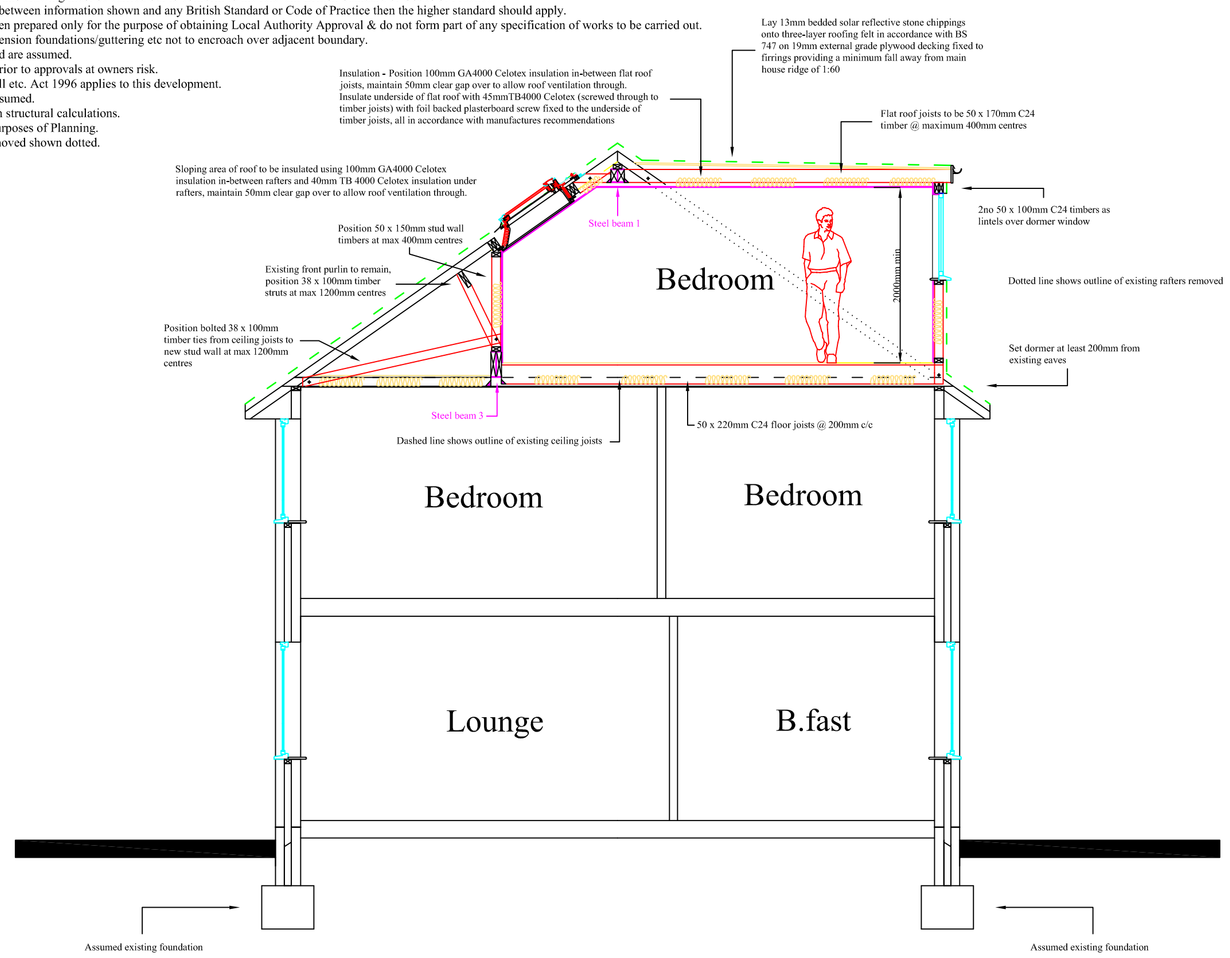
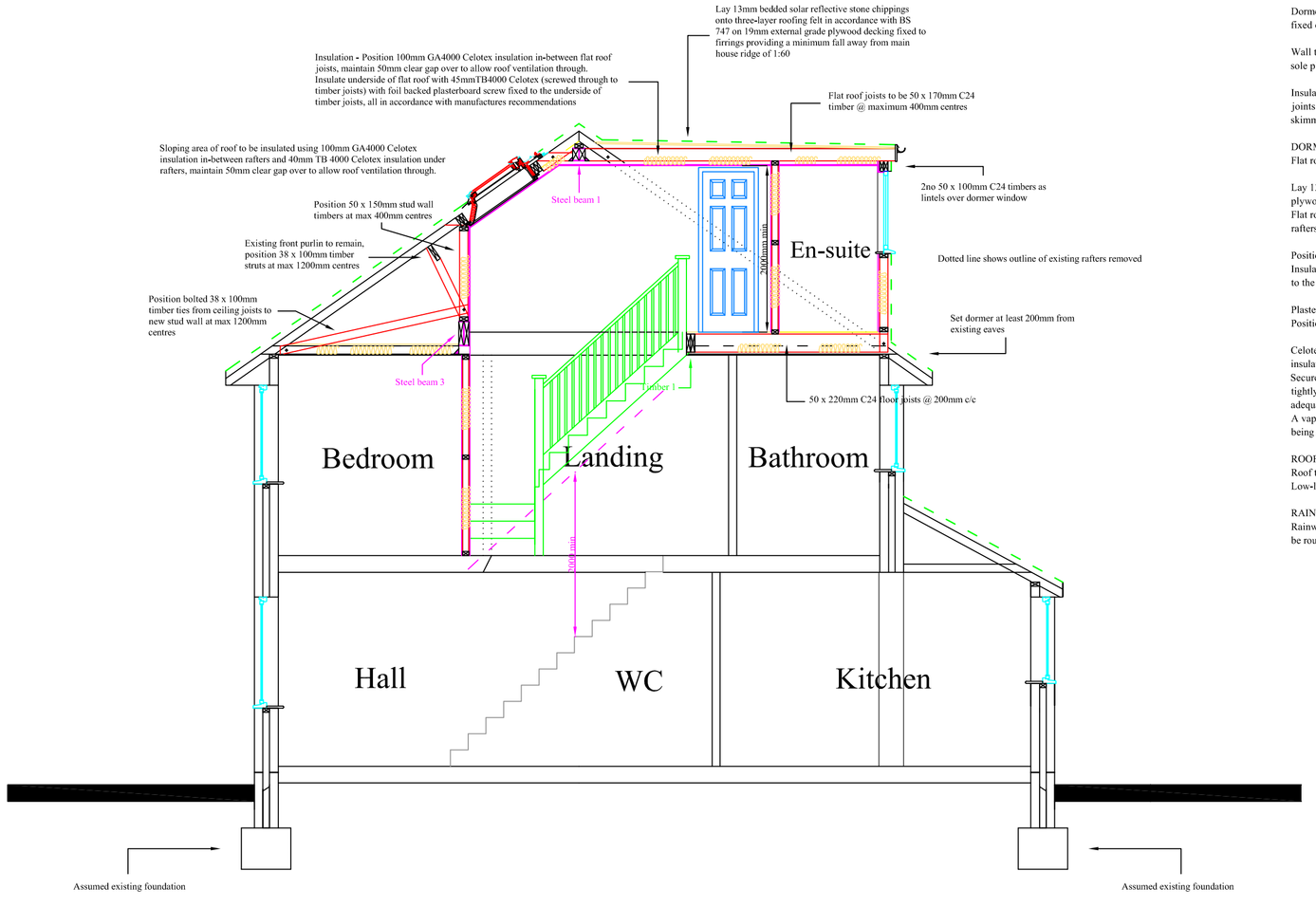
The contractor is responsible for checking, prior to commencement, all figured and scaled dimensions on drawings against actual dimensions on site.
Dimensions for fixed in items are to be taken from site.
This drawing is the copyright of SMN and must not be amended or reproduced without first seeking permission.
All works shown on this drawing must be carried out to conform to the relevant British Standard or Codes of Practice.
If there is a conflict between information shown and any British Standard or Code of Practice then the higher standard should apply.
These plans have been prepared only for the purpose of obtaining Local Authority Approval & do not form part of any specification of works to be carried out.
Extension walls, extension foundations/guttering etc not to encroach over adjacent boundary.
Boundaries indicated are assumed.
Works carried out prior to approvals at owners risk.
Note: The Party Wall etc. Act 1996 applies to this development.
Drains shown are assumed.
Plans to be read with structural calculations.
Scale only for the purposes of Planning.
Walls and doors removed shown dotted.



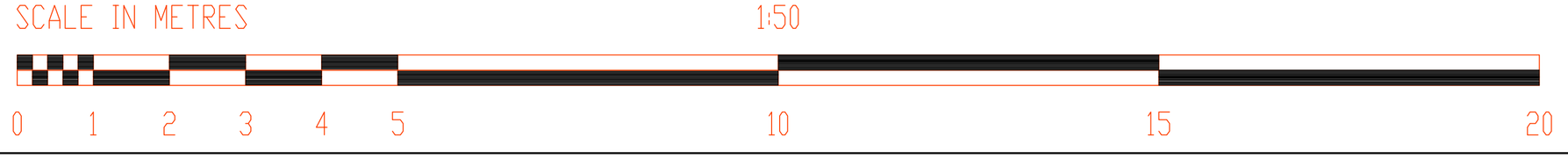
Indicative Section B-B

Scale 1:50



Indicative Section A-A

Scale 1:50



MATERIALS AND WORKMANSHIP
Whether or not indicated on the drawings, materials and workmanship shall comply with the current Building Regulations, British Standard Codes of practice NHBC (or other approved body) standards and Technical requirements and any applicable European EN, DIN or other regulations and Codes of Practice. All materials shall be fixed, applied or mixed in accordance with manufacturers' instructions, specifications and B.B.A Certificate. All materials shall be suitable for their purpose. All electrical installations shall comply with the current IEE Regulations and British Standards. All services, installations and work shall comply with the Regulations or recommendations of the respective Statutory Undertakings or Authority to the satisfaction of the relevant inspector

SITE PREPARATION
Existing lintels and supports to be checked to the satisfaction of the Inspecting Authority. Make good party wall and fire stop. Fix any loose tiles, check roof is weather tight.
Check existing plasterboard ceiling thickness achieves the required 30-minute fire resistance, if the ceiling/floor does not achieve the required 30-minute fire resistance then position mineral fibre on wire mesh fixed to new joists.

3 storey houses - the dwelling house is to be provided with a protected route, ensure the walls enclosing the stairs, landings and hallway are at least 30-minute fire resisting construction (see also notes on Fire Doors).

INTERNAL LOAD BEARING WALLS
To consist of 50 x 100mm (Use 50 x 150mm timbers over steel 3) softwood studwork @ 400mm (all load bearing stud walls to be crossed braced) centres with head and sole plates with 12.7mm plasterboard screw fixed to timbers room side. Plasterboard to have edges taped with hessian and skimmed coat plaster finish.
All internal walls separating rooms to have 100mm fibreglass inserted between timbers

Stud walls abutting room from cold areas to have 65mm Celotex insulation in-between between studs and 12mm over studs (room side) with joints taped, provide 500g polythene finished with 12.7mm plasterboard screw fixed to timbers with edges taped with hessian and skimmed coat plaster finish.

Walls to achieve a U-Value no worse than 0.28W/m2K

INTERNAL NON-LOADBEARING WALLS
To consist of 50 x 75mm softwood studwork @ 400mm centres with head and sole plates with 12.7mm plasterboard screw fixed to timbers to both sides. Plasterboard to have edges taped with hessian and skimmed coat plaster finish.
All stud walls to have 100mm fibreglass inserted between timbers.

GABLE PARTY WALLS ABUTTING COLD AREAS
Walls to achieve a U-Value no worse than 0.28W/m2K

Position Insulation to the chimney, party wall and gable walls.

Position 55mm GA4000 Celotex and battens, fix in accordance with the manufactures instructions including joints being taped with an aluminium vapour sealing tape prior to fixing of the plasterboard. Finish to be 12.5mm foil backed plasterboard skimmed. Wall achieves a U-Value of 0.28W/m2K

ROOM IN ROOF FLOOR
Reduce span of existing ceiling joists (where binders removed) by strapping (with flexible straps) onto new floor joists. Floor to be 22mm t&g chipboard flooring on 50 x 220mm C24 grade joists @ maximum **200mm centres** supported on load bearing walls and/or Simpson joist hangers onto beams. Insert 100mm thick mineral wool (mass 10kg/m3) within new floor. Continue boarding into up to eaves.
Joists to have 38 x 38mm herringbone or solid struts at mid span where the span exceeds 2.4 metres. Maintain at least a 14mm deflection gap under new timbers to top surface of ceiling.
Notching of floor joists for services should not exceed 28mm in depth and should be only within a distance of 1/4 span from ends of joists. Drilling holes should only be carried out at the centre of the depth of joist and should not exceed 25mm.
Provide double timbers under stud walls running parallel.
When placing the floor boarding all butt joints are to be supported on joists or noggins.
En-suite area - provide grade 3 resin bonded chipboard impervious to water.

EXISTING ROOF
Pitched roof with insulation at rafter level to achieve a U-Value no worse than 0.18W/m2K

Existing roof consists of 38 x 100mm rafters @ approximately 400mm centres.

Fit 40mm spacer batten under rafter (to increase rafter depth to 140mm) within room areas.

Rafters to span from stud wall support to ridge level.
Double rafter trimming around Velux roof windows.

Sloping and flat areas of roof to be insulated using 100mm GA4000 Celotex insulation in-between rafters and 40mm TB 4000 Celotex insulation under rafters, maintain 50mm clear gap over to allow roof ventilation through.

Celotex joints to be taped with aluminium vapour sealing tape prior to fixing of the plasterboard.

Finish to be 12.7mm foil backed plasterboard (screw fixed to timbers) with taped joints skimmed to client's requirements.

Plasterboard to be finished with artex or skim to client's requirements.

DORMER
Walls to achieve a U-Value no worse than 0.28W/m2K

Dormer to be clad in vertical clay tiles, colour and texture matching existing, fixed to 25 x 38mm horizontal battens on counter battens fixed over breather membrane on 9mm exterior grade plywood (supalux to dormer cheeks within 1000mm of boundary).

Wall to consist of 50 x 100mm softwood studwork @ 400mm (all load bearing stud walls to be crossed braced) centres with head and sole plates.

Insulate using 70mm FRA000 Celotex insulation in-between between studs and 12mm TB4000 Celotex over studs (room side) with joints taped, provide 500g polythene finished with 12.7mm plasterboard screw fixed to timbers with edges taped with hessian and skimmed coat plaster finish.

DORMER FLAT ROOF
Flat roof or roof with integral insulation to achieve a U-Value no worse than 0.18W/m2K

Lay 13mm bedded solar reflective stone Chipping's onto threes-layer roofing felt in accordance with BS 747 on 19mm external grade plywood decking fixed to firrings providing a minimum fall away from main house ridge of 1:60.
Flat roof joists to be 50mm x 170mm C24 @ 400mm centres bearing onto 50 x 100mm softwood wall plate. Bolt flat roof joists to rafters.

Position 100mm GA4000 Celotex insulation in-between flat roof joists, maintain 50mm clear gap over to allow roof ventilation through. Insulate underside of flat roof with 45mmTB4000 Celotex (screwed through to timber joists) with foil backed plasterboard screw fixed to the underside of timber joists, all in accordance with manufactures recommendations.

Plasterboard to be skimmed to client's requirements.
Position 25mm soffit ventilation at eaves.

Celotex - use Celotex Insulation Clip to fix insulation between joists. Fit the clips at one metre maximum centres along the edge of the insulation.
Secure the second layer of Celotex insulation to the underside of the joists with broad-headed clout nails. Joints between boards must be tightly butted and sealed with a self-adhesive aluminium foil tape to create a vapour seal. Ensure that the length of the fasteners are adequate to secure the plasterboard lining.
A vapour control layer 500 gauge polythene should be installed to the underside of the flat roof joists (prior to second layer of Celotex being positioned) in en-suite area.

ROOF VENTILATION
Roof to be ventilated using high-level tile vents equivalent to a 5mm continuous gap.
Low-level ventilation would be provided with a clear opening equivalent to a continuous 25mm strip running the full length of the eaves.

RAINWATER DRAINAGE
Rainwater gutters and down pipes to be manufactured in heavy grade pvc-U to BS 4576. Gutter to be half round section, down pipes to be round section, and colour all as External Material notes.

WINDOWS
Windows and roof windows to achieve a U-value no worse than 1.6W/m2K or a centre-pane U-value no worse than 1.2W/m2K

To be Velux roof lights and uPVC windows (windows to be white).

Opening elements to be draught stripped.

All glass to be safety toughened/laminated in critical areas, to BS 6206.

En-suite - install an openable window of no minimum opening size and provide background ventilation of at least 2500mm2. The internal door separating the en-suite from the adjacent bed room to have an undercut of a minimum area of 7600mm2 (equivalent to an undercut of 10mm above the floor finish for a standard 760mm width door).

New external openings to be 1/20th of the floor area the opening they are serving to provide purge ventilation.
New external windows and/or doors have background ventilation of at least 8000mm2 (8000mm2 per room).

MECHANICAL EXTRACTION
En-suite - mechanical ventilation to extract to outside air at a rate of not less than 15 litres per second

Where background ventilators and mechanical extraction fans are fitted in the same room they should be located 500mm apart.

STAIRCASE
The staircase to consist of soft wood stair rise (max. 220mm) going (min 220mm), maximum pitch of 42 degrees with 2000mm minimum clear headroom.
Handrail to stairs to be 900mm high minimum, balustrade to be vertical non climbable at maximum of 100mm centres.
Landing area lengths not to be less than the staircase width.
Winders having consistent going at centre and min 50mm going where tread abuts newel post.
Stairs with sloping roof over to have min head height of 1900mm at centre and 1800mm at side.
Stair width to be 750mm wide.
Handrails, newel posts and spindles to client's choice.
ABOVE GROUND DRAINAGE
Above ground drainage to be in accordance with BS 5572.

SVP at rear to be routed to terminate at least 0.9m above windows within 3 metres. All waste pipes are to be uPVC in accordance with BS 5525.

All fittings to have 75mm deep seal traps in ABS plastic confirming to BS 3943.
Basins to have 32mm diameter wastes.
Showers and combined appliance wastes which shall be 50mm diameter.
WC's will be 100mm diameter.
All waste pipes shall be laid to fall.
All plumbing shall be installed in accordance with approved manufacturer's instructions.

The maximum lengths of waste pipes shall be as follows: -

32mm pipe = 1.7m maximum length
40mm pipe = 3.0m maximum length
50mm pipe = 4.0m maximum length
100mm pipe = 6.0m maximum length

ELECTRICAL INSTALLATION
All work is to be in accordance with Approved Document P and BS 7671: 2008.

Reference should be made to the 'Domestic Building Services Compliance Guidance 2010 Edition'.

Notifiable work to be carried out by a competent person who is registered with an electrical self - certification scheme authorised by the secretary of state. On completion of the works the owner is to receive a signed Building Regulations self - certification certificate (a copy of this should be sent to the building control authority). In addition the owner is to receive a completed electrical installation certificate signed by the competent person.

The positioning of switches, fittings and sockets etc. are to be agreed with client prior to work commencing.

Fixed internal lighting - provide, in areas affected by the building work, provide low energy efficient light fittings that number not less than three per four of all the light fittings in the main dwelling spaces of those areas. Low energy light fittings should have lamps having a luminous efficacy greater than 45 lumens per circuit-Watt and a total output greater than 400 lamp lumens. Light fittings may be dedicated fittings which will have separate control gear and will only take low energy lamps (eg . pin based fluorescent and compact fluorescent lamps, or standard fittings supplied with low energy lamps with integrated control gear (e.g. bayonet or Edison screw base compact fluorescent lamps).

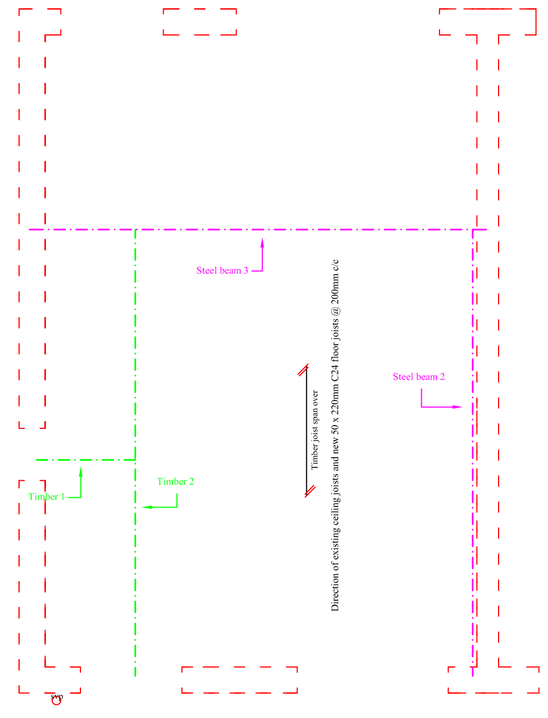
Lighting fittings in less used areas like cupboards and other storage areas do not count towards the total. It may be more appropriate to install the energy efficient light fitting in a location that is not part of the building work e.g. to replace the fitting in the Hall when creating the additional room.

Interlinked self contained smoke detectors/alarms to be positioned on each storey level within the circulation areas (as indicated). The power supply for the detectors should be derived from the dwelling house's mains electricity supply. The mains supply to the detectors should comprise a single independent circuit at the dwelling house's main distribution board (consumer unit) or a single regularly used local lighting circuit. There should be means of isolating power to the detectors without isolating the lighting.

Detectors to be of the Ionization type if positioned in habitable rooms and of the Optical type when located in circulation areas. They should be ceiling mounted (predominantly flat and horizontal ceilings), within 7.5m of doors to habitable rooms and kitchens and be at least 300mm from light fittings and bulkheads.
Detectors should be positioned for ease of routine maintenance i.e. cleaning and testing, do not position detectors over stairs or in openings between floors.

The occupants of the dwelling should be provided with the manufactures information on the operation and maintenance of the smoke detection equipment.

If down lighters are used they must comply with fire resistance and sound insulation requirements - details will need to be submitted to Building Control.



Beam Layout

Indicating assumed load bearing walls, new beams and new floor joists over

Scale 1:50

SERVICES
Provide new condensing combination type boiler in garage strictly in accordance with manufactures recommendations and in accordance with the requirements of Part J & L of the Building Regulations. Details of the boiler installation to be provide to the Building Control Authority and to have efficiency not less than that recommended for its type in the Domestic Heating Compliance Guide and have an efficiency which is not worse than two percentage points lower than that of the appliance being replaced.
Provide TRV's to new radiators.

Heating and hot water systems are to be properly commissioned.
All gas work must be carried out by an approved gas installer.

FLASHINGS etc
All lead flashings and gutters etc to be in accordance with the recommendations of the Lead Sheet Association document 'Rolled Lead Sheet - The Complete Manual' and conform to BS & ES 12588:1999. Apply patination treatment to external lead surfaces.

INTERNAL WALL TILING
All tiles are to be fixed using a proprietary waterproof adhesive and mould resistant waterproof grout.
Wall tiles in shower enclosures are to be bedded on a solid bed and NOT A KEYED BED.
All excess grout to be cleaned off and a tool finish applied to all joints.
Tiling to be taken over the lip of shower trays when they have them.
If electrical fittings and radiators are removed during the course of the works, they are to be refixed immediately after completing grouting.
Wall tiling is to be carried behind all fixtures and fittings except kitchen and bathroom units.

STEEL BEAMS
Steelwork to Structural calculations to be built-in solid supported on steel plates to design.

Exposed edges of steels to have 30-minute fire protection.

Steel connections to design by supplier in accordance with the 'Green Book' Joints in Steel Construction: Simple Connections.

Major construction elements to be positioned using a mobile crane.

For beam schedule see structural calculations.

GENERAL
Expanded metal lathing, hangers and framing anchors to be supplied by Simpson Ltd. All timbers are to be bolted at connections and doubled members with 12mm diameter bolts (see calculations for flitch beams).
All timbers to be birds mouthed over top plates to stud walls.
Provide fireproof hoods to down lighters.
Provide fire collars at new floor level to first floor extract fan ducting(s).
Major construction elements to be positioned using a mobile crane.

Lay and fix 3.2mm thick oil tempered hardboard over and fixed to existing 1st floor landing area.

Protected route - form protected stairway by positioning FD 30 doors to all habitable rooms accessed from ground floor hall, first and second floor landings (self closing devices not required). Doors to be hung with 1.5 pairs of all metal hinges (nylon and nylon bushed hinges are not acceptable). The essential components of the hinges on which the fire door is hung should be made entirely of materials having a melting point of at least 800oC. Door stops to be upgraded to the Building Inspector requirements.

A		
B		
C		
	Date	Revision

Copyright

Steven M Norton
CHARTERED SURVEYOR

26 Mulberry Avenue
Fareham
Hampshire
PO14 2SN
Tel: 01329 517649
Email: office@stevennorton.co.uk
www.stevennorton.co.uk

RICS

Architectural Services
Planning & Building Regulation advice and submissions
Party Wall Services
Project Management
Project Monitor Services
Contract Administration

Client
Mr & Mrs Wild

Job Title
Loft Conversion & Rear Dormer @
2 Dudleston Heath Drive
Cowplain
Waterlooville
Hampshire
PO8 8AR

Drawing Title
Indicative Section A-A
Indicative Section B-B
Beam Layout

Scale As shown

Date November 2011 | Drawn By SMN

Drawing No. wild-11-03 | Rev.