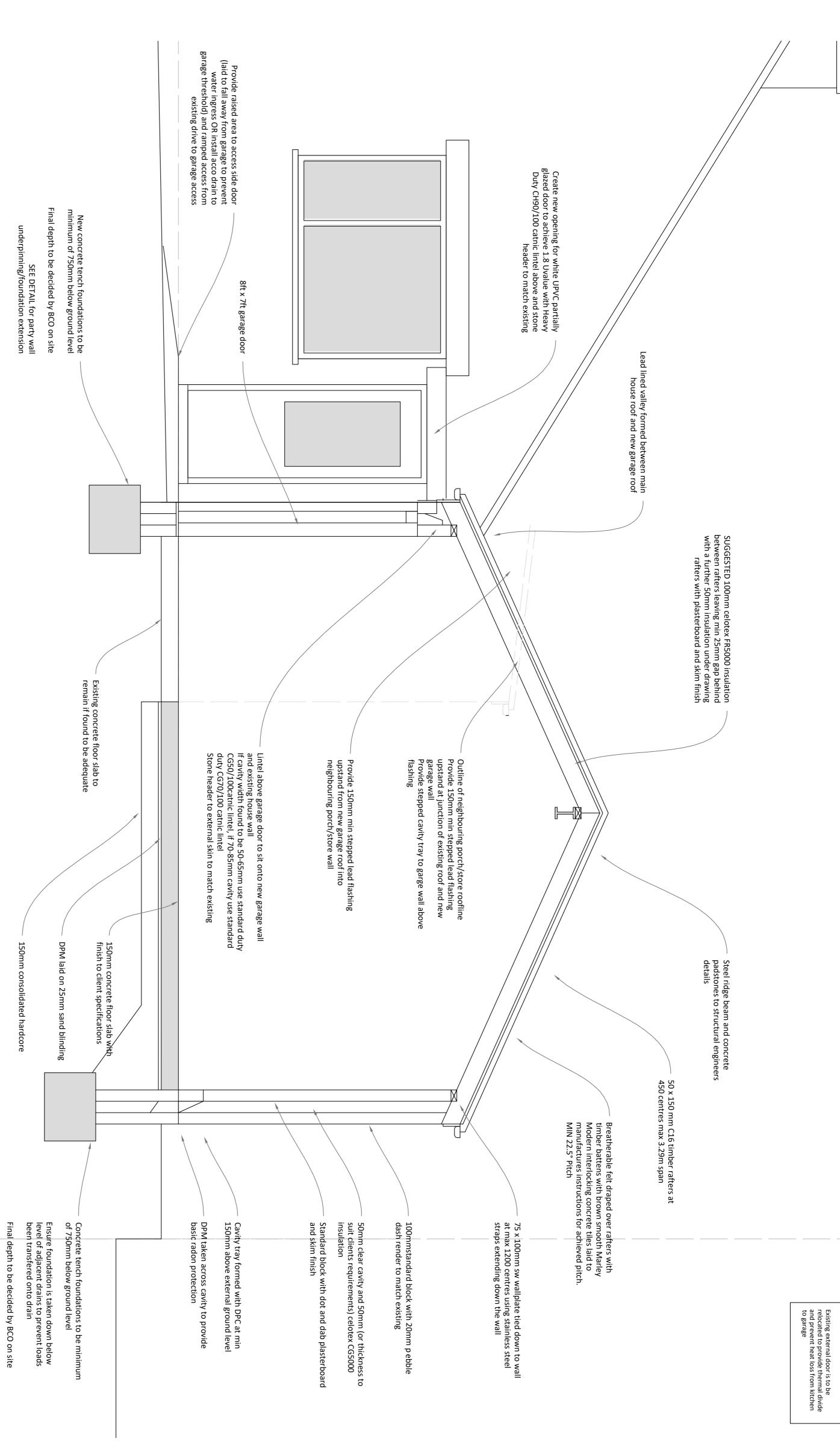
# **EXTENSION SECTION A-A 1:20**



#### RESTRAINT STRAPPING

Ceiling joists tied to rafters (if raised collar roof consult structural engineer). 100mm x 50mm wall plate strapped down to walls. Ceiling joists and rafters to be strapped to walls and gable walls, straps built into cavity, across at least 3 timbers with noggins. All straps to be 1000 x 30 x 5mm galvanized straps or other approved to BSEN 845-1 at 2m centres. LEAD WORK AND FLASHINGS

All lead flashings, any valleys or soakers to be Code 5 lead and laid according to Lead Development Association. Flashings to be provided to all jambs and below window openings with welded upstands. Joints to be lapped min 150mm and lead to be dressed 200mm under tiles, etc. All work to be undertaken in accordance with the Lead Development Association recommendations.

All glazing in critical locations to be toughened or laminated safety glass to BS 6206, BS EN 14179 or BS EN ISO 12543-1:2011 and Part K (Part N in Wales) of the current Building Regulations, i.e. within 1500mm above floor level in doors and side panels within 300mm of door opening and within 800mm above floor level in SAFETY GLAZING

New and replacement windows to be double glazed with 16mm argon gap and soft coat low-E glass. Window Energy Rating to be Band C or better and to achieve U-value of 1.6 W/m²K. The door and window openings should be limited to 25% of the extension floor area plus the area of any existing openings covered by the NEW AND REPLACEMENT WINDOWS

## NEW AND REPLACEMENT DOORS

New and replacement doors to achieve a U-Value of 1.80W/m²K. Glazed areas to be double glazed with 16mm argon gap and soft low-E glass. Glass to be toughened or laminated safety glass to BS 6206, BS EN 14179 or BS EN ISO 12543-1:2011 and Part K (Part N in Wales) of the current Building Regulations.

### BACKGROUND VENTILATION

Background ventilation - Controllable background ventilation via trickle vents to BS EN 13141-3 within the window frame to be provided to new habitable rooms at a rate of min 5000mm²; and to kitchens, bathrooms, WCs and utility rooms at a rate of 2500mm². PURGE VENTILATION

Shallow pipes to be covered with 100mm reinforced concrete slab over compressible material. Provide rodding access at all changes of direction and junctions. All below ground drainage to comply with BS EN 1401-1: 2009.

Purge ventilation - New Windows/rooflights to have openable area in excess of 1/20th of their floor area, if the window opens more than 30° or 1/10th of their floor area if the window opens less than 30°. Internal doors should be provided with a 10mm gap below the door to aid air circulation. Ventilation provision in accordance with the Domestic Ventilation Compliance Guide.

#### RAINWATER DRAINAGE

New rainwater goods to be new 110mm UPVC half round gutters taken and connected into 68mm dia UPVC downpipes. Rainwater taken to new soakaway, situated a min distance of 5.0m away from any building, via 110mm dia UPVC pipes surrounded in 150mm granular fill. Soakaway to be min of 1 cubic metre capacity (or to depth to Local Authorities approval) with suitable granular fill and with geotextile surround to prevent migration of fines. If necessary carry out a porosity test to determine design and depth of soakaway.

## UNDERGROUND FOUL DRAINAGE

Underground drainage to consist of 100mm diameter UPVC proprietary pipe work to give a 1:40 fall. Surround pipes in 100mm pea shingle. Provide 600mm suitable cover (900mm under drives).

## INSPECTION CHAMBERS

Underground quality proprietary UPVC 450mm diameter inspection chambers to be provided at all changes of level, direction, connections and every 45m in straight runs. Inspection chambers to have bolt down double sealed covers in buildings and be adequate for vehicle loads in driveways.

### ABOVE GROUND DRAINAGE

All new above ground drainage and plumbing to comply with BS EN 12056-2:2000 for sanitary pipework. All drainage to be in accordance with Part H of the Building Regulations. Wastes to have 75mm deep anti vac bottle traps and rodding eyes to be provided at changes of direction.

## Size of wastes pipes and max length of branch connections (if max length is exceeded then anti vacuum traps to be used): Wash basin - 1.7m for 32mm pipe 4m for 40mm pipe, Bath/shower - 3m for 40mm pipe 4m for 50mm pipe, W/c - 6m for 100mm pipe for single WC.

that the on to SVI All brance above are internal above. ch pipes to connect to 110mm soil and vent pipe terminating min 900mm ny openings within 3m. Or to 110mm upvc soil pipe with accessible air admittance valve complying with BS EN 12380, placed at a height so outlet is above the trap of the highest fitting. Waste pipes not to connect /P within 200mm of the WC connection.

## Supply hot and cold water to all fittings as appropriate.

### PIPEWORK THROUGH WALLS

Where new pipework passes through external walls form rocker joints either side wall face of max length 600mm with flexible joints with short length of pipe bedded in wall. Alternatively provide 75mm deep pre-cast concrete plank lintels over drain to form opening in wall to give 50mm space all round pipe: mask opening both sides with rigid sheet material and compressible sealant to prevent entry of fill or vermin. -provided with a volume. 0 ::

#### ELECTRICAL

All electrical work required to meet the requirements of Part P (electrical safety) must be designed, installed, inspected and tested by a competent person registered under a competent person self certification scheme such as BRE certification Ltd, BSI, NICEIC Certification Services or Zurich Ltd. An appropriate BS7671 Electrical Installation Certificate is to be issued for the work by a person competent to do so. A copy of a certificate will be given to Building Control on

## OIL HEATING APPLIANCES UP TO 45kW

Oil burning appliances up to 45kW to be installed, commissioned and tested by an installer registered with OFTEC, in compliance with Approved Document J. On completion, building control is to be provided with a copy of the commissioning

Rev

Description

Date

Date - 01.2017

Drawn By - EH

unless stated

Scale - 1:100 @ A1

#### OIL STORAGE TANKS Oil tanks up to 3500 litres.

Oil tanks to be:

-placed on a 50mm thick a concrete base which extends 300mm beyond the base of the tank

## -located in the open air, 1.8m min from buildings or flues and 760mm from boundaries.

-provided with a proprietary fire resistant pipe and valve system

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drains, the tank should either be:

Emma Hall MBEng BA hons www.plansanddesign.co.uk 07912 845 210

Design

Plans

DRAWING REF: 2HC/BR/03

If there is a risk of pollution to

## Garage is to be an unheated space with insulation to walls and roof to provide comfort only

PARTY WALL DETAIL 1:20

