

First Floor Plan



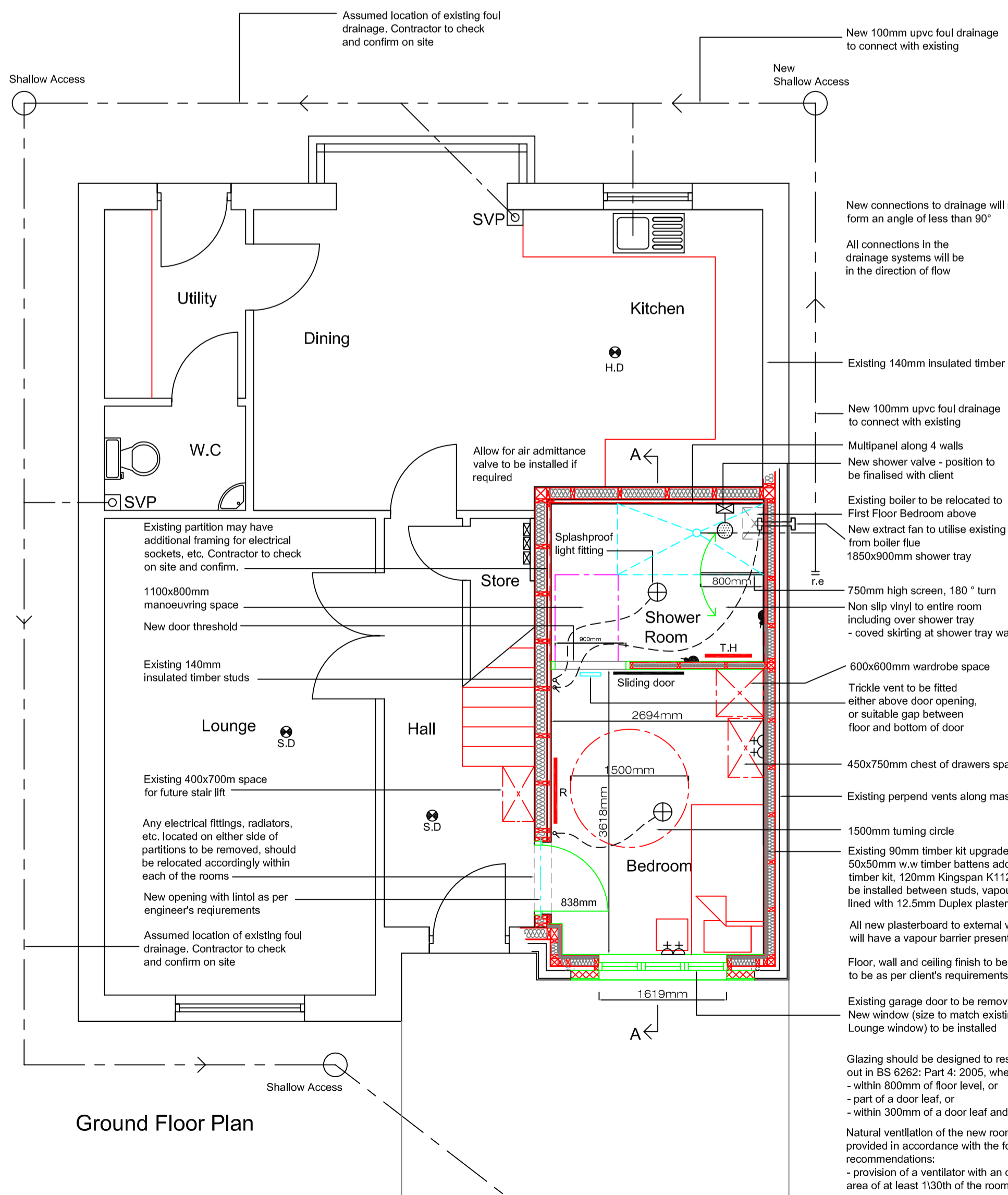
South Elevation

Architectural drawings to be read in conjunction with engineering drawings  
All dimensions to be checked on site

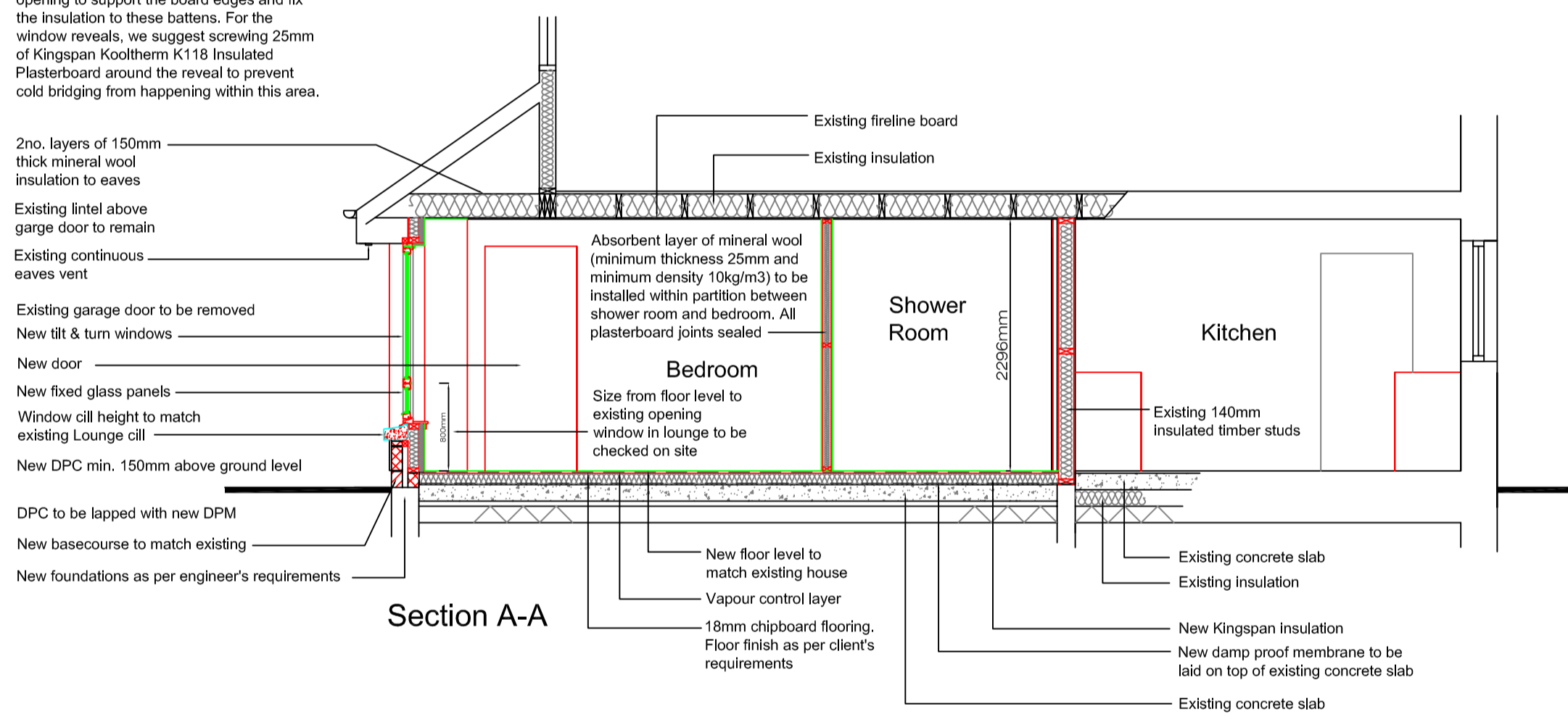
Preventing Thermal Bridging around windows (as specified by Kingspan):  
When insulating around windows you will need to put timber battens around the opening to support the board edges and fix the insulation to these battens. For the window reveals, we suggest screwing 25mm of Kingspan Kooltherm K118 Insulated Plasterboard around the reveal to prevent cold bridging from happening within this area.

Construction Notes:

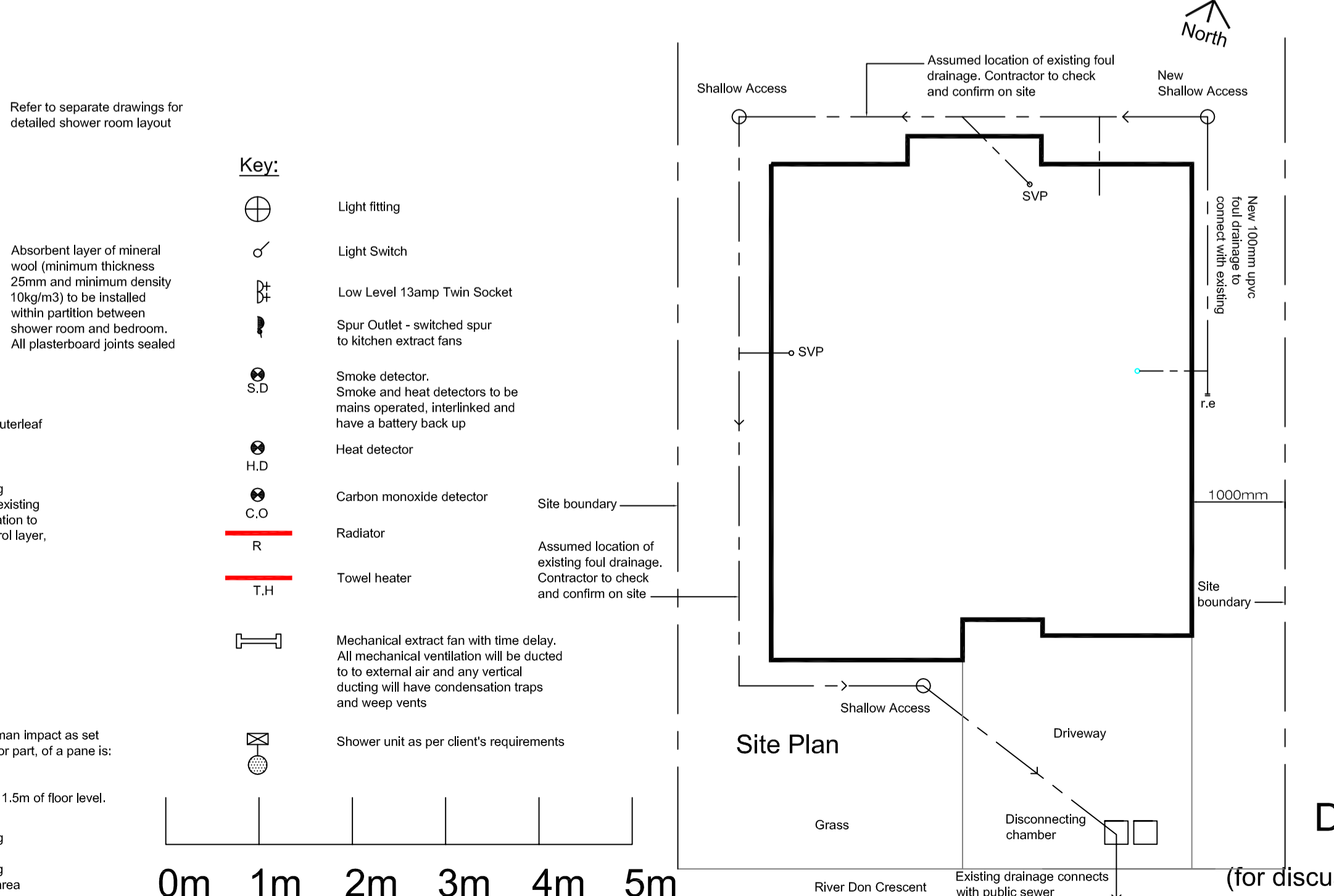
- Upgrading of existing garage floor:**  
Floor finish as per client's requirements, 18mm chipboard, 100mm Kingspan K103 insulation (with vapour control layer), damp proof membrane on top of existing concrete slab.
- Upgrading to existing garage walls:**  
Existing garage walls, 100mm rendered blockwork walls with 90x50mm timber kit, and ventilated cavities, to be upgraded using 50x50mm w.w timber battens added to existing timber kit, 120mm Kingspan K112 insulation to be installed between studs, vapour control layer, lined with 12.5mm Duplex plasterboard.
- Ventilation of wall cavities:**  
Ventilation of external wall cavities is necessary to prevent the build-up of excessive moisture that could damage the fabric of a building. Ventilation holes can also be used to drain excess water from the cavity that has entered through the outer leaf.
- Timber frame - interstitial condensation:** is one of the major problems that need to be addressed in timber framed buildings. To reduce the amount of interstitial condensation to a level that will not harm the timber frame or sheathing, a cavity of at least 50mm wide should be provided between the sheathing and the cladding. Where timber, slate or tile cladding is used, the width of the cavity should be measured between the sheathing and the inner face of the cladding, ignoring the battens and counter battens.
- Where the outer leaf is of timber, slate or tile clad construction,** a vented cavity should be provided. A ventilated cavity should be provided for extra protection in severely exposed areas. Where necessary refer to BS 8104: 1992. Due to the air gaps inherent between the components of a timber, slate or tile clad wall, no proprietary ventilators should be necessary and a 10mm free air space should be sufficient.
- Cavity barriers -** where the wall cavity is sub-divided into sections by the use of cavity barriers e.g. at mid-floor level in a 2 storey house, the ventilators should be provided to the top and bottom of each section of the cavity. Care should be taken with rendered walls to prevent blockage of the ventilators.
- Masonry outer leaf -** where the outer leaf is of masonry construction, venting of the cavity is normally sufficient. Cavities should be vented to the outside air by installing ventilators with at least 300mm<sup>2</sup> free opening area at 1.2m maximum centres. Precipitation can penetrate the outer leaf of an external wall and cavities are normally drained through weep holes. These weep holes can also provide the necessary venting.
- Dividing up cavities:**  
Cavities should be measured either horizontally or vertically, as the case may be, along the centre-line of the cavity and not diagonally. Every cavity should be divided by cavity barriers so that the maximum distance between cavity barriers is not more than 20m where the cavity has exposed surfaces which achieve European Classification A1, A2 or B, or 10m where the cavity has exposed surfaces which achieve European Classification C, D or E.
- Exclusions -** cavity barriers are not necessary to divide a cavity:  
- formed by two leaves of masonry or concrete at least 75mm thick, or  
- in a ceiling void between a floor and a ceiling constructed in accordance with the guidance in clause 2.4.3, or  
- between a roof and a ceiling constructed in accordance with the guidance in clause 2.4.3, or  
- below a floor next to the ground where the cavity is either inaccessible or is not more than 1m high.
- Infilling of existing garage door opening:**  
100mm rendered blockwork walls with 90x50mm timber kit, and ventilated cavities, to be upgraded using 50x50mm w.w timber battens added to existing timber kit, 120mm Kingspan K112 insulation to be installed between studs, vapour control layer, lined with 12.5mm Duplex plasterboard.
- Internal wall construction:**  
75 x 38mm timber studs at 600mm centres with 12.5mm plasterboard, with taped & filled joints ready for decoration. New shower room partition to be insulated with min. 25mm absorbent layer of mineral wool with minimum density 10kg/m<sup>3</sup> for sound reduction purposes.
- Electric:**  
An electrical installation should be designed, constructed, installed and tested such that it is in accordance with the recommendations of BS 7671: 2018 as amended (18th Edition). Outlets and controls of electrical fixtures and systems should be positioned at least 350mm from any internal corner, projecting wall or similar obstruction and, unless the need for a higher location can be demonstrated, not more than 1.2m above floor level. This would include fixtures such as sockets, switches, fire alarm call points and timer controls or programmers. Within this height range:  
- light switches should be positioned at a height of between 900 and 1100mm above floor level.  
- standard switched or unswitched socket outlets and outlets for other services such as telephone or television should be positioned at least 400mm above floor level. Above an obstruction, such as worktop, fixtures should be at least 150mm above the projecting surface.  
Where socket outlets are concealed, such as to the rear of white goods in a kitchen, separate switching should be provided in an accessible position, to allow appliances to be isolated.
- Writing & Power:**  
Smoke alarms should be mains operated and permanently wired to a circuit which should take the form of either: an independent circuit at the main distribution board, in which case no other electrical equipment should be connected to this circuit (other than a dedicated monitoring device installed to indicate failure of the mains supply to the alarms); or a separately electrically protected regularly used local lighting circuit.  
The standby supply for smoke alarms may take the form of a primary battery, a secondary battery or a capacitor.  
All smoke alarms in a dwelling should be interconnected so that detection of a fire in any alarm, operates the alarm signal in all of them. Smoke alarms should be interconnected in accordance with BS 5839: Part 6: 2019.  
Smoke alarms to comply with BS 5839:Part6:2004 and BS EN 14604:2005. Located as shown.
- Decoration:**  
All new plasterboard linings to be sealed & taped. All new skirting boards to be painted and have profile to match existing. Wall finish to be confirmed. All window cills to be painted to match existing.
- General construction notes:**  
All new and exposed hot water and heating pipes to be insulated as per BS 5422: 2001 to prevent heat loss from successive draw offs. All glazing in new doors and sideights below 1500mm to be in accordance with BS 6262 Part 4:1994. Draught strips to be fitted to all new windows.
- Plumbing:**  
Existing mains hot water system - to be extended.  
Existing gas boiler to remain.
- Heating recommendations:**  
Every dwelling should have some form of fixed heating system, or alternative that is capable of maintaining a temperature of 21°C in at least 1 apartment and 18°C elsewhere, when the outside temperature is minus 1°C.  
Heating, hot water and ventilation in a dwelling should be inspected and commissioned in accordance with the manufacturers instructions to ensure optimum efficiency. Written information should be made available for the use of the occupier on the operation and maintenance of the heating and hot water systems to encourage optimum efficiency.  
An approved Certifier of Construction, who has been assessed to have the professional skills and relevant experience, can certify compliance of plumbing, heating or drainage installations.
- Security of doors and windows:**  
Doors should be designed and installed to resist forced entry at:  
- an external door to a dwelling or common area of a domestic building; and  
- an entrance or egress door to a flat or maisonettes and  
- a door between a dwelling and a conservatory or garage.  
Windows and glazing should be designed and installed to resist forced entry where:  
- located at ground floor level and easily accessible; or  
- where otherwise easily accessible from outside, such as by climbing on building projections.  
This can be achieved by:  
- meeting the recommendations for physical security in section 2 of 'Secured by Design' (ACPO, 2009); or  
- by use of doorsets and windows which are tested and certified by a notified body as meeting a recognised standard for security; or  
- by use of doorsets and windows manufactured to meet recognised product standards and defined component performance.  
To ensure a robust, basic standard of security, a doorset or window should be designed and constructed in accordance with the general recommendations of the product standard appropriate for the material used, such as:  
- BS 7412: 2007, for PVCu units;  
- BS 644: 2009, for timber window units;  
- BS 4873: 2009, for aluminium alloy units;  
- BS 6510: 2005, for steel-framed units.
- Installation and fixing of doors and windows:**  
To ensure a robust installation, fitting of a doorset or window should be in accordance with:  
- the recommendations given in section 8 of BS 8213-4: 2007; or  
- manufacturer's written instructions where these meet or exceed the recommendation within this British Standard.
- Access to manual controls:**  
The location of a manual control can have a significant effect on both the ease of operation of the device and safety in use. Positions that are inaccessible present a greater risk of accident when bending or reaching. Any control that is intended for operation by the occupants of a building should be installed in position that allows safe and convenient use.  
An operable window, rooflight or other ventilator, that provides natural ventilation to meet Standard 3.14, should have controls for opening, positioned at least 350mm from any internal corner, projecting wall or similar obstruction and at a height of:  
- not more than 1.7m above floor level, where access to controls is unobstructed, or  
- not more than 1.5m above floor level, where access to controls is limited by a fixed obstruction, not more than 900mm high which projects not more than 600mm in front of the position of the controls, such as a kitchen base unit. Where obstruction is greater, a remote means of opening, in an unobstructed location, should be provided, or  
- not more than 1.2m above floor level, in an unobstructed location, within an enhanced apartment (see clause 3.11.2) or within accessible sanitary accommodation (see clause 3.12.3) not provided with mechanical ventilation.  
The above guidance does not apply to windows or rooflights openable only for cleaning or maintenance purposes or that are controlled by an automatic system, or to trickle ventilators.
- Lighting:**  
A minimum of 100% of the fixed light fittings and lamps installed to be of a low energy type.  
The fittings may be either:  
- dedicated fittings which have a separate control gear and will only take fluorescent lamps (pin based lamps); or  
- fittings including lamps with integrated control gear (bayonet or Edison screw base lamps).
- Trickle Ventilators:**  
Bedroom: trickle ventilation: 12,000mm<sup>2</sup>.  
Shower Room: mechanical extraction capable of at least 15 l/sec (Intermittent) - trickle ventilation: 10,000mm<sup>2</sup>.  
Note: where the trickle ventilator is ducted, the recommended areas above should be doubled.  
A trickle ventilator should be positioned so that a part of it is at least 1.75m above floor level to allow at least some movement of air within the dwelling and reduce stratification.
- New Housing Legislation (comes into force in February 2022):**  
A basic level of fire detection will be required in all dwellings. It is strongly recommended that all future smoke alarms which will be necessary as part of the new legislation be installed during the works covered under the Building Warrant application.  
One smoke alarm installed in the room most frequently used for general daytime living purposes  
One smoke alarm in every circulation space on each storey, such as hallways and landings  
One heat alarm installed in every kitchen  
All alarms should be ceiling mounted and interlinked. There is also a requirement for carbon monoxide detectors to be fitted where there is a carbon-fuelled appliance (such as boilers, fires (including open fires, heaters and stoves) or a flue.
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Ground Floor Plan



Section A-A



Site Plan

- Key:**
- Light fitting
  - Light Switch
  - Low Level 13amp Twin Socket
  - Spur Outlet - switched spur to kitchen extract fans
  - Smoke detector
  - Smoke and heat detectors to be mains operated, interlinked and have a battery back up
  - Heat detector
  - Carbon monoxide detector
  - Radiator
  - Towel heater
  - Mechanical extract fan with time delay
  - All mechanical ventilation will be ducted to external air and any vertical ducting will have condensation traps and weep vents
  - Shower unit as per client's requirements



Draft

(for discussion purposes)

REV	DATE	COMMENTS
B	10.04.24	Draft Building Warrant notes added
A	16.02.24	Layout amended
REV	DATE	COMMENTS

**douglas ARCHITECTURE** DOUGLAS ARCHITECTURE LIMITED  
30 Sains Circle, Bridge of Don  
Aberdeen, AB22 2TW  
Tel: 01224 443965  
Email: info@douglasarchitecture.co.uk

CLIENT: GEORGE SMITH  
PROJECT: 2 RIVER DON CRESCENT, ABERDEEN  
CONTENT: PROPOSED FLOOR PLANS, SECTION & ELEVATIONS  
DATE: JANUARY 2024 SCALE: 1:50 @ A1 DRAWING NO.: 3096\_02B  
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