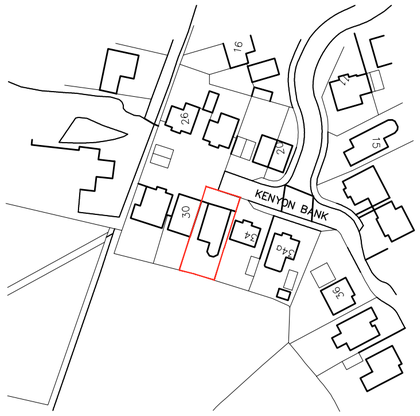
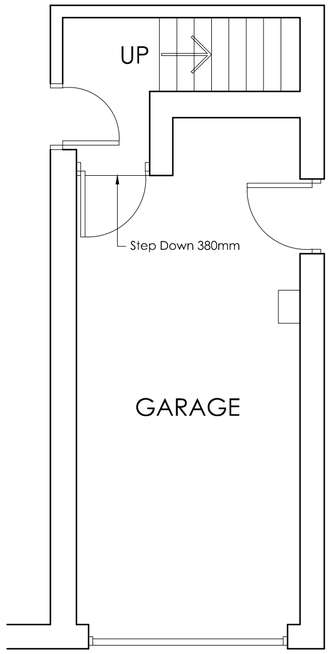
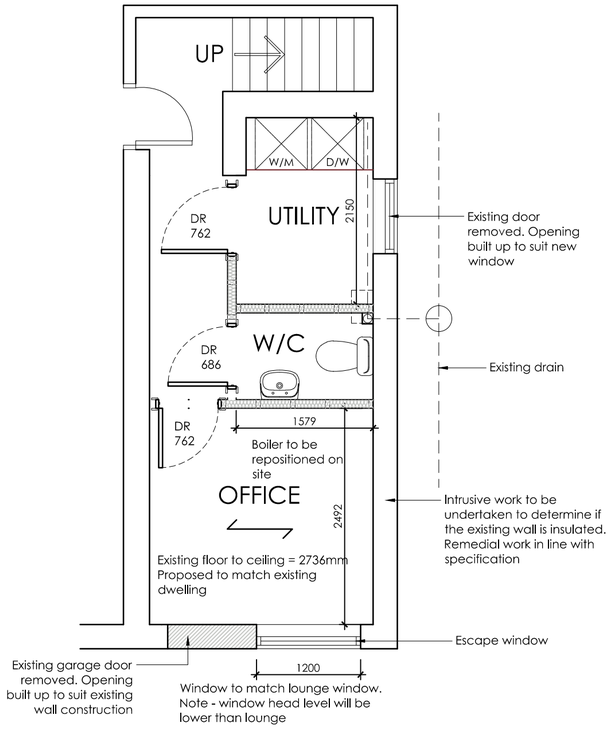


LOCATION PLAN
SCALE 1:1250



EXISTING GROUND FLOOR PLAN
SCALE 1:50



PROPOSED GROUND FLOOR PLAN
SCALE 1:50

AUTOMATIC AIR VALVE
Ground floor fittings from wc to be connected to new 110mm upvc soil pipe with accessible internal air admittance valve complying with BS EN 12380, placed at a height so that the outlet is above the trap of the highest fitting and connected to underground quality drainage encased with pea gravel to a depth of 150mm.

PIPEWORK THROUGH WALLS
Where new pipework passes through external walls the pipe work is to be provided with 'rocker pipes' at a distance of 150mm either side of the wall face. The 'rocker pipes' must have flexible joints and be a maximum length of 600mm.
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.

NEW AND REPLACEMENT WINDOWS
To achieve U-value of 1.6 W/m²K
New and replacement windows to be draught stripped and double glazed with 16mm argon gap and soft coat low-E glass. Window Energy Rating to be Band C or better.
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 extension. Windows in a cavity wall to have insulated damp proof course around opening. Windows in a solid wall to have insulated dry lining around the opening.

TIMBER SUSPENDED FLOOR
To achieve U-value of 0.25W/m²K
Provide a damp-proof membrane of at least 1200 gauge polyethylene over existing floor slab. Floor construction - Min 20mm softwood tongue and groove softwood boards or moisture resistant particle/chipboard grade type C4 to BS EN 312:2010 as required, laid with staggered joints. Provide 170 x 50mmC24 grade soft wood joists at maximum 400mm centres to suit span and to engineer's details. Joists to be supported off proprietary galvanized joist hangers built into new masonry walls or fixed to treated timber wall plates resin bolted to walls at 600mm centres. If required, floor joists also to be supported on 100mm x 50mm treated wall plates with DPC onto masonry honeycombed sleeper walls built off thickened oversite concrete. Joists infilled with 100mm Celotex GA4000 on battens or proprietary insulation clips.
The top surface of the ground cover under the building shall be above the finished level of the adjoining ground. The underside of the floor joists are not to be less than 150mm above the top of the ground cover. The underside of any wall plate is to be not less than 75mm above the top of the ground cover.
Ventilation of Floor
Provide cross ventilation under floor to outside air by ventilators in at least 2 opposite external walls of the building. Ventilation openings having an opening area of 1500mm² per metre run of perimeter wall or 500mm² per square metre of floor area whichever gives the greater opening area. All sleeper walls or similar under floor obstructions shall be of honeycombed construction or have similar provision for distribution of ventilation. The under floor space shall be free from debris. Ducts to be sealed using gas proof tap if they pass through any radon barrier.

INTERNAL STUD PARTITIONS
100mm x 50mm softwood treated timbers studs at 400mm ctrs with 50 x 100mm head and sole plates and solid intermediate horizontal noggins at 1/3 height or 450mm. Provide min 10kg/m² density acoustic soundproof quilt tightly packed (eg:100mm Rockwool or Isowool mineral fibre sound insulation) in all voids the full depth of the stud. Partitions built off doubled up joists where partitions run parallel or provide noggins where at right angles (if required). Walls faced throughout with 12.5mm plaster board with skim plaster finish. Taped and jointed complete with beads and stops.

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 completion.

INTERNAL LIGHTING
Install low energy light fittings that only take lamps having a luminous efficiency greater than 45 lumens per circuit watt and a total output greater than 400 lamp lumens. Not less than three energy efficient light fittings per four of all the light fittings in the main dwelling spaces to comply with Part L of the current Building Regulations and the Domestic Building Services Compliance Guide.

HEATING
Extend all heating and hot water services from existing and provide new TRVs to radiators. Heating system to be designed, installed, tested and fully certified by a GAS SAFE registered specialist. All work to be in accordance with the Local Water Authorities bye laws, the Gas Safety (Installation and Use) Regulations 1998 and IEE Regulations.

NEW GAS BOILER
Heating and hot water will be supplied via a wall mounted condensing vertical balanced flue pressurised boiler with a min SEDBUK rating of 90%. No combustible materials within 50mm of the flue. System to be fitted with thermostatic radiator valves and all necessary zone controls and boiler control interlocks. The system will be installed, commissioned and tested by a GAS SAFE Registered Specialist and a certificate issued that the installation complies with the requirements of PART L. All work to be in accordance with the Local Water Authorities bye laws, the Gas Safety (Installation and Use) Regulations 1998 and IEE Regulations.

ESCAPE WINDOWS
Provide emergency egress windows to any newly created first floor habitable rooms and ground floor inner rooms. Windows to have an unobstructed openable area that complies with:
- minimum height of 450mm and minimum width of 450mm.
- minimum area 0.33m².
- the bottom of the openable area should be not more than 1100mm above the floor.

The window should enable the person to reach a place free from danger from fire.

BACKGROUND AND PURGE VENTILATION
Background ventilation - Controllable background ventilation via trickle vents in compliance with Approved Document F 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 - New windows/rooflights to have openable area in excess of 1/20th of the floor area if the window opens more than 30°, or 1/10th of the 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.

EXTRACT TO UTILITY ROOM
To utility room provide mechanical ventilation ducted to external air capable of extracting at a rate of 30 litres per second. 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. Intermittent extract fans to BS EN 13141-4. All fixed mechanical ventilation systems, where they can be tested and adjusted, shall be commissioned and a commissioning notice given to the Building Control Body.

EXTRACT TO W/C
W/C to have mechanical ventilation ducted to external air with an extract rating of 15l/s operated via the light switch, to have a 15min overrun if no window in room. 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. Intermittent extract fans to BS EN 13141-4. All fixed mechanical ventilation systems, where they can be tested and adjusted, shall be commissioned and a commissioning notice given to the Building Control Body.

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). 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.

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
Above ground drainage to comply with BS EN 12056-2:2000 for sanitary pipework. All drainage in accordance with part H of the Building Regulations. Wastes to have 75mm deep anti vac bottle traps and rodding eyes 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)
Sinks - 3m for 40mm pipe 4m for 50mm pipe
Washing machine and dishwasher - stand pipe 50mm
Wash basin - 1.7m for 32mm pipe 3m for 40mm pipe
Bath/shower - 3m for 40mm pipe 4m for 50mm pipe
W/c - 6m for 100m for single wc
All branch pipes to connect to 110mm soil and vent pipe. Waste pipes not to connect within 200mm of the wc connection.
Supply hot and cold water to all fittings as appropriate.

PLANNING PERMISSION
Agent to determine whether the garage conversion requires planning permission or listed building consent as the garage may be restricted by specific conditions that prevent its use for anything other than the parking of a private car. The owner is strongly advised to check with The Council's Development Control section before starting work. Please note that it is a criminal offence to carry out unauthorised work to a listed building even if the work is completely inside the property.

THERMAL BRIDGING
Care shall be taken to limit the occurrence of thermal bridging in the insulation layers caused by gaps within the thermal element (i.e. around windows and door openings).

MATERIALS AND WORKMANSHIP
All works are to be carried out in a workmanlike manner. All materials and workmanship must comply with Regulation 7 of the Building Regulations, all relevant British Standards, European Standards, Agreement Certificates, Product Certification of Schemes (Kite Marks) etc. Products conforming to a European technical standard or harmonised European product should have a CE marking.

EXISTING STRUCTURE
Existing structure including foundations, floor, beams, walls, roof and lintels are to be exposed and checked for adequacy prior to commencement of work and as required by the Building Control Officer. Particular care must be taken if the existing external wall is single leaf construction with piers, checks for stability and defects must be performed.

FULL FILL CAVITY WALL
To achieve minimum U Value of 0.28W/m²K
New cavity wall to comprise of 105mm facing brick to match existing. Full fill the cavity with 85mm Dritherm32 cavity insulation as manufacturer's details.
Inner leaf to be 100mm lightweight block, K value 0.16, (Aircrete, Celcon solar, Topblock toplite standard). Internal finish to be 12.5mm plasterboard on dabs. Walls to be built with 1:1:6 cement mortar.

FOUNDATIONS
Trial hole to be excavated to ascertain whether the garage has a continuous foundation across the infill which is adequate to build off. If there is no foundation provide 225mm x 600mm concrete foundation, mix to conform to BS EN 206-1 and BS 8500-2. Depth be a minimum of 1000mm below ground level, to existing foundation depth or to be agreed on site with Building Control Officer to suit site conditions. All constructed in accordance with 2004 Building Regulations A1/2 and BS 8004:1986 Code of Practice for Foundations. Ensure foundations are constructed below invert level of any adjacent drains. Sulphate resistant cement to be used if required. Please note that should any adverse soil conditions be found or any major tree roots in excavations the Building Control Officer is to be contacted and the advice of a structural engineer should be sought.

LINTEL SUPPORT FOR NEW WALL
Trial hole to be excavated to ascertain whether the garage has a continuous foundation across the infill which is adequate to build off. If there is no foundation dig a trench across the opening, provide a suitable concrete lintel (2no 100 x 150mm deep concrete lintels (RMC) or 2no 100 x 140 pre-stressed lintels) to span the opening of a single garage door, for larger opening a lintel design will be required, cut lintels into the brickwork below the damp proof course or place onto the concrete foundation projections, provide minimum 150mm bearing to both sides, concrete fill the cavity below lintels to prevent vermin entering the dwelling.

TYING EXISTING TO NEW WALL
Cavities in new wall to be made continuous with existing where possible to ensure continuous weather break. If a continuous cavity cannot be achieved, where new walls abuts the existing walls provide a movement joint with vertical dpc. All tied into existing construction with suitable proprietary stainless steel profiles connected to the existing wall and tied centrally to the proposed brick/ blockwork at 450 centres.

DRY LINING EXISTING CAVITY WALL
To achieve min U-value 0.30W/m²K
The existing external walls must be checked for stability and be free from defects as required by the Building Control Officer. Mechanically fix 62.5mm Celotex PL4000 insulated dry-lining board to 25 x 50mm treated timber battens set at maximum 600mm centres to wall and positioned horizontally at floor and ceiling level.
Fix using drywall screws or galvanised clout nails placed at 150mm centres. Tape joints and seal perimeter edges with mastic, to provide a vapour control layer (VCL). An injected DPC may also be required if one is not already present and working in existing wall. New DPC to be made continuous with floor DPM. All work in accordance with BS 8212(Code of practice for dry lining). A lesser provision of insulation may be appropriate where meeting such a standard would result in a reduction of more than 5% in the internal floor area of the room.

CAVITY WALL INSULATION
To achieve minimum U-value of 0.55W/m²K
Provide blown fill cavity wall insulation to thermally upgrade existing cavity wall. Work to be undertaken by an approved installer who holds a current BSI Certificate of Registration of Assessed Capability and operates under The Cavity Insulation Guarantee Agency (CIGA). An injected DPC may be required if one is not already present and working.

DPC
Provide horizontal strip polymer (hyload) damp proof course to both internal and external skins minimum 150mm above external ground level. New DPC to be made continuous with existing DPCs and with floor DPM. Vertical DPC to be installed at all reveals where cavity is closed. The cavity should extend to at least 225mm below the DPC or where this is not possible provide a cavity tray at the base with weep holes at 600 ctrs. Existing walls may require an injected DPC if one is not already present and working.

WALL TIES
All walls constructed with stainless steel vertical twist type retaining wall ties built in at 750mm ctrs horizontally, 450mm vertically and 225mm ctrs at reveals and corners in staggered rows. Wall ties to be suitable for cavity width and in accordance with BS 5628 and BS EN 845-1: 2003.

White Agus PARTNERSHIP
ARCHITECTURAL SERVICES
OFFICE ONE
34 VICTORIA ROAD
BARNSLEY.
S70 2BU
Phone: 01226 208482
Email: info@whiteaguspartnership.co.uk
Web: www.whiteaguspartnership.co.uk

Project.	Client.
PROPOSED GARAGE CONVERSION AT 32 KENYON BANK, DENBY DALE HD8 8TF	MS B. CHEESMAN
Drawing Title. PLANS	Date. JULY 2021 / Scale. 1:50 @A2
	Ref. 21–081 / Dwg. No. 01 / Rev. A

Date	Suffix	Description	Date	Suffix	Description
22/07/2021	A	REVISED TO CLIENTS REQUIREMENTS			