

**Land at Snoxhall Fields**

**Knowle Lane**

**Cranleigh**

**GU6 8JN**



**Construction Notes**

**Erection of a new machine shed and associated storage and equipment stores within a compound**

Employer: Cranleigh Parish Council

September 2025

Revisions:

**NOTE: Should the contractor wish to amend any details contained below he should agree these in writing with the Project Manager & the Local Building Control Officer before implementing them.**

**These notes are to be read in conjunction with structural engineer's details and calculations including reference to timber and steel identifiers shown on drawings**

## **1.00 FOUNDATIONS**

*Break out existing site base, reduce levels to allow for new sub-structure and level to allow for drainage fall. Allow to retain existing materials close to site for use elsewhere.*

- 1.01** Foundations are to be in strict accordance with Structural Engineers design & specification.
  - 1.02** Foundations to be of a depth as determined by the Structural Engineer based on trial pits / soil evaluations etc and to be to LA approval and NHBC guidelines
  - 1.03** Foundations under load bearing walls/columns are to be at the level as required by Structural Engineer based on findings of trial pits & calculations and all to Local Authority approval.
  - 1.04** Foundations are to be at or below invert level of adjacent drains which are within 1.0m (or in accordance with Diagram 8 of Part H1 of the 2015 Approved Document).
  - 1.05** Openings formed in walls where drains pass through to have 65mm precast concrete lintels 150mm min bearings over, with a minimum 150mm gap to surrounding foundations. The opening shall be masked either side with suitable rigid sheet material to prevent the entry of vermin (or in accordance with diagram 7 Part H1 of the 2015 Approved Document). Strip site area to 300mm min.
  - 1.06** The site is to be prepared by clearing all existing structures, rubbish, undergrowth and the like, grubbing out existing foundations (where required), redundant drains & old tree roots and stripping vegetable soil over the building area to the satisfaction of the Local Authority (or in accordance with C1 & C2 of the 2012 Approved Document).
  - 1.07** Concrete to SE specification.
  - 1.08** Walls are to be located centrally on foundations, thickness of the foundations to be not less than projection from foundation to wall faces, all subject to Structural Engineers requirements & LA approval.
  - 1.09** 100mm Sleeves are to be provided where utilities have to pass through foundations but to be avoided.
  - 1.10** Foundation width SE specification.
  - 1.11** Density of blockwork to SE specification.
- 2.00 DRAINAGE** *to comply with Approved Document H 2015, BS8301:1985*  
*There is no existing drainage on the site.*  
Surface water drainage to Drainage Engineer's design.  
*The proposal for fw includes the installation of a new water treatment plant. With connections as follows:-*

- 2.01** Flexible joints are to be laid on 150mm granular fill at minimum 1 in 40 falls (unless otherwise stated) on bed and surround to suit drain location and all in accordance with diagram 10 and table 8 & 10 of Part H1 of the 2015 Approved Document (refer also to diagram A3/A4 where minimal cover).
- 2.02** Foul water drains to be taken to water treatment plant via new inspection chamber 100mm PVC-U pipes to comply with BS 4660 and BS 5481. Vitrified clay pipes to comply with BS 65 and BSEN 295.
- 2.03** Water treatment plant to be installed by specialist manufacturer to comply with UK Building Standards and regulatory requirements. To discharge into existing watercourse once relevant application has been submitted and approved. – Drainage Engineer to advise.
- 2.04** New inspection chambers to be installed in strict accordance with manufacturers recommendations. Base of chamber to be set in and on compacted backfill and surrounded by 'as dug' and / or granular bedding material.
- 2.05** All drainage to be set at falls to comply with Approved Documents Part H1 - Table 6 for foul drains & Approved Documents Part H3 – 3.15 for surface water drains.
- 2.06** Access chambers etc to be in accordance with Approved Documents Part H1 – table 11 & 12 and manufacturers recommendations and of a type suitable for the depth required.
- 2.07** All manholes / inspection chambers to be fitted with heavy duty or screw down covers in traffic areas and medium duty elsewhere.
- 2.08** Where drains are in grassed areas and have less than 0.6m cover they should have concrete paving slabs laid over as bridging with at least 75mm of granular fill above the pipe and below slabs and a minimum of 100mm granular fill around the pipe and below.
- (See diagram 10 & 11 Part H1 of the 2015 Approved Documents).
- 2.09** All drains & sewers passing underneath building to be encased in 150mm of pea shingle/ granular material to fill void in item 1.05
- 2.10** Surface water drains in 100mm PVC-U or vitrified clay pipes with flexible joints laid at a fall of 1:100 (unless stated otherwise) on bed and surround to suit drain location and in accordance with diagram 10 and table 8 & 10 of Part H1 of the 2015 Approved Documents (refer also to table 9 & 10 where minimal cover).
- 2.11** New 125mm deepflow gutters to be connected to rainwater goods all leading to surface water drainage route to existing water course.
- 2.12** Drainage below heavily trafficked or unusually loaded areas to be in accordance with Structural engineers' details.

### **3.00 SUBSTRUCTURE CAVITY WALLS**

**3.01** To be in accordance with manufacturer's design and specification.

### **4.00 DAMP PROOF COURSE**

**4.01** To be in accordance with manufacturer's design and specification.

**4.02** All dpc's are to be 150mm min overlap.

**4.03** All dpc's to be fully overlapping with DPM's by 100mm min. Dress vertical dpcs into rebates in frames and tack fix.

**4.04** All lead flashings as required to be in strict accordance with recommendations set out in Lead Sheet Association Handbook current edition. Code 4 soaker and Code 6 cove flashings dressed 35mm min into chases 150mm upstand.

### **5.00 FLOORS**

**5.01** To Structural Engineer's design and specification.

### **6.00 EXTERNAL WALLS**

**6.01** To be in accordance with manufacturer's design and specification.

### **7.00 INTERNAL WALLS/ partitions width dependant on location – see floor plans and s/e details**

#### **7.01** Stud wall

12.5 plasterboard and skim

38 x 89 studwork @ 400c-c infilled with min. Knauf acoustic insulation

Tilebacker board (eg Hardie backer, Knauf Aquapanel etc) to wet areas (bathroom/ utility)

**7.02** Partitions to provide class O spread of flame (usually via plasterboard lining)

### **8.00 ROOF**

**8.01** To be in accordance with manufacturer's design and specification.

### **9.00 WINDOWS & DOORS - GENERALLY: -**

**9.01** Windows with hermetically sealed 24mm double glazed units, argon filled, low E glass to achieve min "u" value = 1.4W/m<sup>2</sup>k all by approved manufacturer to BS 7412. See below for toughening / lamination requirements.

**9.02** Window units to be fitted in accordance with manufacturer's recommendations using stainless steel fixing cleats. Windows to be set back min.75mm from external face.

**9.03** Perimeter of doors and windows to be sealed externally with a fillet of sealant pointing to heads and jambs - colour to match window / door frame

- 9.04** All opening lights to be fitted with security locking furniture to facilitate securing in a partially open or totally closed position, except designated escape windows.
- 9.05** Opening lights are to have reflex hinges to allow external window cleaning from inside the building.
- 9.06** Insulated cavity closers (Thermabate or similar) to be used around all window and door openings. – see also item 6.05
- 9.07** New double glazed openable rooflight with associated flashings and installed in strict accordance with manufacturer's recommendations.

#### **10.00 GLAZING**

- 10.01** Laminated / Toughened glass where applicable and in accordance with BS6206 in window areas below 800mm from FFL and all glazed windows and doors below 1500mm. All glazing to BS 6262 and Kite marked. Obscure glass were indicated on drawings. Obscuration level 4.
- 10.02** Industrial buildings must provide a sound attenuation of not less than 50dB set against external noise with the windows shut and an alternative means of ventilation such as trickle vents or equivalent.

#### **11.00 VENTILATION**

- 11.01** Min. 8000m<sup>2</sup> background ventilation to each room provided by controllable air vents built into walls and trickle vents. Ventilation to comply with BR Part F Volume 2.
- 11.02** Mechanical extraction to shower/ wc room to give 30 ltrs/min operated intermittently via light switch with 15 min. overrun.
- 11.03** Openable vents (i.e. casements/fanlights) to give 1/20<sup>th</sup> floor area natural ventilation

#### **12.00 RAINWATER GOODS**

- 12.01** 125/150mm deep flow UPVC black rainwater goods or equal approved to match existing New gutter to connect to existing where possible. Elsewhere downpipes and rainwater gullies to be connected to surface water drainage route.

#### **13.00 INTERNAL PLUMBING**

- 13.01** 32mm UPVC trapped waste to basins. 40mm trapped wastes to sinks. 75mm deep seal traps to wastes on soil and vent pipes (50 to wc)
- 13.02** Provide anti siphon traps where distance to soil and vent pipe is over 1.7m.
- 13.03** Branch waste sizes as follows:
  - i) WC - min 100dia. with max. 6m run with 9mm/m fall
  - ii) Washbasins - min 32dia. with max. 1.7m run. Min. 40mm

dia.with max.3m run.

Fall of branch wastes for washbasins to be as indicated in diagram 3 AD H1 (2015). Where 40mm branch pipe is used the tail of the trap should be lengthened by 50mm before increasing the diameter. Sinks - min. 40dia with max. 3m run. Min. 50dia for 4m run. Fall of branch wastes for sinks to be between 18-90mm/m.

- 13.04** Lowest connection to soil and vent pipe to be 450mm above the drain invert.
- 13.05** Connection of wc branch pipes to soil and vent pipes to have sweeps of min 50mm or a radius of 450mm.
- 13.06** Provide rodding access to all lengths of discharge pipes / wastes which cannot be reached by removal of traps OR reached from another part of the building.
- 13.07** Provide 100mm diameter soil and vent pipes, taken up through roof space to proprietary ridge terminal, unless otherwise dictated, all to finish not less than 900mm above any opening into the building. The terminal outlet used should not restrict the flow of air.
- 13.08** All pipes should be easily accessible for repair.
- 13.09** Durgo valves, where used, to be fitted at a level above the flood plane of the highest appliance.
- 13.10** Soil and vent pipes within common areas are to be encased in ducts constructed in 38 x 50mm sw framing and lined with 1 layer of 12.5mm plasterboard with access panels formed where necessary, fixed with brass cups and screws.

#### **14.00 ELECTRICAL SERVICES**

- 14.01** The electrical installation is to be designed and installed by a specialist sub-contractor who is registered with the NICEIC or ECA in compliance with Part P of the BR.
- 14.02** All electrical installations should be installed and tested in accordance with the latest edition of the IEE Regulations (currently 18<sup>th</sup> edition) and the requirements of the Local Electricity Supplier
- 14.03** The work to be undertaken by an installer registered under a suitable electrical self-certification scheme, or by a suitably qualified person, with a certificate of compliance produced by that person to building control on completion of the works.
- 14.04** All rooms to be fitted with high efficiency light fittings (i.e. light fittings only capable of accepting lamps having a luminous efficacy greater than 40 lumens per circuit-watt).

These fittings should be positioned in rooms or circulations areas most frequently used.

- 14.05** New consumer unit to be installed to current IEE standards (18th edition)

#### **15.00 FIRE SAFETY**

**15.01** Smoke alarms to be mains operated, self-contained and conforming to BS 5446 Part 1. It should be in accordance with the relevant recommendations of BS 5839 Part 1 to at least an LD2 standard. In all circulation areas, on each storey, any high-risk areas, and located based on a fire risk assessment of the building and its activities. To be at least 300mm from any wall or light fitting.

**15.02** Heat detector within store and workshop

**16.00 HEATING / HOT WATER**

**16.01** heating to accommodate radiators in welfare unit and workshop and towel rail (to be electrically supplied).

**16.02** boiler required – to heating engineers recommendation for the services that require hot water.

**16.03** all radiators shall be provided with thermostatic radiator valves TRVs.

**17.00 STEELWORK**

**17.01** Any steelwork to be grade S275 in accordance with BS EN10025, 1993, shot blasted clean to grade SA21/2 and painted with one coat of high build zinc phosphate primer (d.f.t. 75 microns). Steelwork built into wall to be additionally painted with 2 coats high build bituminous paint.

15 September 2025