

Proposed Section E-E

CONSTRUCTION NOTES
 This drawing is to be read along side the Specialist's, Slab, Joist, Truss, Steelwork, Mechanical Engineers & Drainage designers details. Setting out must be based on the information provided by them for the location of all load bearing elements of the building. Any discrepancies should be brought to the design parties immediately.

The builder must visit the site and will be responsible for checking and verifying all dimensions, measurements, levels, drain/wire positions and service locations prior to the commencement of any work whatsoever and the manufacture of any purpose-made components. Any discrepancies are to be notified to the designer immediately. Site boundaries are to be agreed by all parties concerned prior to the commencement of any building work and new work is to be constructed so as to cause no encroachment of adjoining ownership's unless formal agreement is gained. Any works affecting or causing disturbance to adjoining property only to be carried out with the written consent of the adjoining owners.

The builder is also responsible for ensuring that all works carried out comply with the relevant Building Regulations and/or statutory requirements whether or not they are specifically mentioned on this drawing.

All works to be in accordance with the planning approval, its conditions and informatives.

EXCAVATION AND GROUND WORKS
 All excavations are to be kept free of water and in accordance with BS 6331 and Part C of the building regulations and in accordance with any planning conditions relating to contamination.

Contractor have advised that there are gas pipelines and associated equipment within the vicinity of the application site. The applicants are advised to contact the gas protection team prior to any works commencing on site.

FOUNDATIONS
 Foundations are based on the following assumptions (a) subsoil type 4 or better (bearing capacities approved document 01/2 part e-table a1) (b) no made up ground within the loaded area (c) no weaker subsoil below bearing soil (d) no tree roots or other factors requiring variation in depth of foundations.

To be c25 mass concrete trench 600mm wide to external walls minimum depth 1000mm below external finished ground level. Exact depth to be agreed on site with building control prior to commencement of the works at soft spots to be removed and brought up to formation level utilising c10 concrete.

Walls below dpc to be in class B engineering brickwork or 7.3N Dense Blockwork where not visible, terminated a minimum of 375mm below adjacent ground level.

1200 Gauge polythene d.p.c. finished at ground level and continuous with ground floor d.p.m. (cavities to be filled with 225 mm of finished ground level with weak mix concrete.

Where drains pass through walls a brick relieving arch or concrete lintel is to be provided over the opening. Mask around pipes either side of the wall with a rigid sheet so as to prevent vermin penetrating the structure.

N.B. Foundation type mentioned above subject to site inspection.

Pad foundations for steel posts and frames are to be in accordance with Specialist Designs.

WALLS BELOW GROUND
 102.5mm engineering brickwork with a cavity to suit existing wall thickness where applicable back filled with a lean mix concrete to ground level with 100mm inner leaf of dense concrete blockwork.

Internal load bearing walls to comprise of 100mm 7.3N dense blockwork to act as buttressing to external wall. All in accordance with the Structural Engineers design.

GROUND FLOOR CONSTRUCTION
Internal Finished Floor
 150mm C25 concrete floor slab on a 500 gauge polythene sheet on 100mm Kingspan Kooltherm K103 insulation or similar to achieve 0.18W/m2K with a 25mm insulation at end of edge of slab to DPC to prevent cold bridging 1200 gauge polythene d.p.m. (continuous with d.p.c.) on min. 150mm consolidated sand-blended hardcore. See drawings for details.

All soft spots to be removed and brought up to formation level utilising c10 concrete.

Stores Floor Slab
 150mm concrete floor slab on 1200 gauge polythene d.p.m. (continuous with d.p.c.) on min. 150mm consolidated sand-blended hardcore. All to be tamped to a fall to garage door. ACO drainage channel to be installed to threshold to prevent water ingress into building.

EXTERNAL HARD STANDING
 External hard standing with appropriate expansion / contraction joints, falls, drainage gullies etc in accordance with Civil / Structural Engineers Designs. Grout and fill under steelwork in accordance with specialist design.

EXTERNAL CAVITY WALLS
 All walls generally are to be constructed in accordance with Part L compliant Accredited Construction Details.

Cavity wall thickness to comprise of an outer leaf of 102.5mm brickwork. Cavity to be insulated with 100mm ISOVER mineral wool batts or similar installed to manufacturers requirements. Inner leaf to be 100mm thick insulating 7N Durux lightweight block work or other approved. Where an inner leaf of blockwork is shown on the plans, blockwork is to match the existing inner leaf of the existing building.

Facebrick / blockwork to be pointed and kept clean of spot in preparation for sealing or emulsion as instructed by the client. Finished with 12.5mm plaster board and skim on dot and dab as instructed by the client.

Provide horizontal movement joints to brick masonry at 12m centres avoiding chimneys with openings. All in accordance with NHBC technical guidance. The first and last movement joint on each run of masonry to begin 600mm in from each corner. Wall ties with 225mm of movement joints to be at 300mm centres vertically.

1200 gauge Hyloard or similar horizontal and vertical DPC.

Cavities closed using Thermobate or similar proprietary cavity closes to all window and door openings etc.

Class 3 cavity ties to be provided in accordance with BS1243 at 900mm c/c horizontally and @ 450mm c/c staggered vertically & @ 300mm c/c vertically within 225mm of joints.

Cavity to be kept clear of mortar spots as work proceeds and the blockwork to be kept clean.

All to achieve a U Value of 0.27 W/m2K.

Cast-in/G standard duty steel lintels to suit span and loadings of all structural openings with end bearings of 150mm minimum. Uls where required to Engineers Details.

Adhesive is to be applied with a continuous bead of adhesive at floor and ceiling level and around all sockets and switches to stop air leakage.

Flat roof edge of single storey terrace to utilise blockwork to match existing with wall ties at 450mm centres to provide lateral support for handrails. Cavity to be backfilled with a lean mix of concrete above beam and block floor with a clear brick / block to provide suitable bedding for proposed hand rails. All to be finished with appropriate powder coated aluminium flashings as necessary.

INTERNAL LOAD BEARING WALLS
 Insulated walls between Stores and Habitable Space
 Internal load bearing wall to comprise of insulating 100mm 7n lightweight block work inner leaf with cavity to be insulated with 100mm ISOVER mineral wool batts or similar installed to manufacturers requirements with 100mm medium density blockwork garage side. Finished with 12.5mm Plasterboard and skim where instructed. All to achieve a U value in excess of 0.28W/m2K.

Facebrick / blockwork to be pointed and kept clean of spot in preparation for sealing or emulsion as instructed by the client.

1200 gauge Hyloard or similar horizontal and vertical DPM.

Cavities closed using Thermobate or similar proprietary cavity closes to all window and door openings etc.

Class 3 cavity ties to be provided in accordance with BS1243 at 900mm c/c horizontally and @ 450mm c/c staggered vertically & @ 300mm c/c vertically within 225mm of joints.

Cavity to be kept clear of mortar spots as work proceeds and the blockwork to be kept clean.

Walls finished internally to clients instruction with a continuous bead of adhesive at floor and ceiling level and around all sockets and switches to stop air leakage.

Single Leaf Internal Wall
 Internal load bearing wall to comprise of a single leaf of 100mm dense blockwork up to the ground floor level and continue up to the first floor level in 100mm 7N blockwork finished 12.5mm plasterboard where instructed by the client and skim to either side.

Facebrick / blockwork to be pointed and kept clean of spot in preparation for sealing or emulsion as instructed by the client.

Concrete lintels to span all openings and service routes in accordance with manufacturers requirement.

1200 gauge Hyloard or similar horizontal and vertical DPM.

INTERNAL PARTITIONS
 To comprise of 100 x 50mm timber studs at 450mm centres vertically and 900mm centres horizontally with 25mm Isovol or similar infill. All to be finished with 12.5mm plasterboard and skim.

Note: All wiring within insulated partitions to be installed in conduit to avoid overheating.

INSULATED PARTITIONS
 Timber stud walls forming the thermal envelope are to be filled with 50mm Kingspan Kooltherm K107 insulation and finished internally with 37.5mm Kingspan Kooltherm K18 insulated plasterboard or similar and skim and all in accordance with the structural engineers details. All to be finished with 12.5mm plasterboard and skim.

All to achieve a U value in excess of 0.28W/m2K as necessary.

Note: All wiring within insulated partitions to be installed in conduit to avoid overheating.

EXTERNAL STEPS AND RAMPS
 Staircase and handrails to clients specifications are subject to fabricators designs. All in accordance with Part K & M of the Building Regulations.

For General Access stairs the staircase must have a maximum rise of 170mm and a minimum going of 250mm.

The normal relationship between the dimensions of the rise and going can be expressed as detailed in Approved Document K, which states that twice the rise plus the going (2R+G) should be between 550mm and 700mm.

Noising of steps to contrast visually to rest of staircase in accordance with Part K.

Provide new 1:12 ramp to the rear entrance in accordance with Part K.

Handrail Height
 Stairs to have handrail on at least one side if they are less than one metre wide and on both sides if they are wider than one metre. There is no need for handrails beside the bottom two steps of a stairway. Minimum heights of 900mm for both stairs and landings.

No openings in any balustrading should allow the passage of a 100mm sphere.

LIFT
 Ability Lifts Optimum 100 enclosed vertical platform lift in accordance with the manufacturers requirements. Ground floor to receive a Type 1h door. On the first floor the lift is to receive a type 1a door unless otherwise expressed by the client.

FIRST FLOOR CONSTRUCTION
 Wall system cross-joints or similar Metal Web Floor System to specialist designs all to achieve a 5kN/m2 commercial loading. Design assumed 300mm deep joists with 4x120mm chords at 400mm c/c to suit maximum span. Ceiling to be underlain with 12.5mm plasterboard, scdm joints and skim in thistleboard finish. First floor to receive 22mm 18G chipboard deck. Floor to be overlaid with a 25mm resilient floor deck.

All to achieve 30 minutes fire protection.

Lateral support and straps to be provided in full accordance with Part B of the building regulations and specialist details.

Joints to generally receive 100mm Isovol or similar infill for sound assistance within the buildings thermal envelope.

Note: Resilient floor deck to be extended to threshold of existing function room.

First floor above Slab
 Metal Web Floor system as above to specialist details are to be provided and finished with 22mm moisture resistance 18G chipboard floor boards overlaid with a 20mm resilient floor deck. Insulated between joists with 200mm ISOVER gas insulation underlain with 37.5mm Kingspan K18 insulated plasterboard and an additional layer of 12.5mm plasterboard and skim, all to achieve 60 minutes fire protection. All to achieve a U value of 0.22 W/m2K.

TERACE / BALCONY
 Precast beam and block floor to be installed in accordance with the manufacturers requirements and specifications. Minimum penetration of service pipes work in accordance with guidelines. Roofed roof, gas tight seal to penetrations, using expanding foam with cement mortar pointing.

32 x 450 x 450mm paving slabs on Pavepad paving supports on a single ply non bituminous membrane on a 150mm 2018-FRC membrane on 60mm minimum sealed (taken to achieve a fall of a minimum of 1:80 into formed concrete gutter).

Parapet / flat roof edge with individual wall steps to each block and wall face at 450mm centres to provide lateral support for handrails.

STEELWORK / LINTELS
 Lintels and steelwork to be in accordance with structural engineers details. All to be concealed where possible.

Lintels to be appropriate to wall type and span.

Cast-in / G Lintels to have a bearing of a minimum of 150mm. All to be in full accordance with the Structural Engineers Designs and manufacturers details.

Concrete lintels to be utilised on all new door openings in existing walls to suit span and load. All in accordance with the manufacturers details.

All supporting beams to be fire protected to achieve at least 60 minutes fire protection.

PORTAL FRAME
 Portal Frame, Foundations, Slab and sheeting rails all in accordance with Structural Engineers details and Fabricators design all with appropriate dampings and gullies.

Kingspan KS1000 RW cladding to Canopy, Colour Greenwhey Grey.

WINDOWS AND DOORS
 UPVC windows and doors to match existing and to achieve a U value of 1.6 W/m2K.

All glazing to comply with diagram 1 Part N1 and BS EN 626. Glazing to be safety glass to BS EN 12165: 1991.

Windows to have trickle ventilation. See ventilation notation.

Key operated locks to windows are not permitted.

FD30 fire door with intumescent cold smoke seal and self closing device to be provided as necessary.

Doors to have a glazed aperture between 500mm and 1500mm from finished floor level. Handles to doors to be operable by a clubbed fist and should not be cold to the touch. Maximum force that should be used to open an internal door is 200N.

All fire doors between circulation spaces and between circulation spaces and communal rooms to receive Geogigan wired vision panels to fully comply with part M & B of the building regulations.

Final exit doors to be fitted with a simple fastening device operable from the inside without the use of a key.

All new doors opening into protected areas to be reviewed for suitability, modified or replaced to achieve 30 minute fire resistance.

Doors to receive self closes with intumescent strips and smoke seals, all as appropriate and in accordance with Part B of the building Regulations.

All fire doors between circulation spaces and between circulation spaces and communal rooms to receive Geogigan wired vision panels to fully comply with part M & B of the building regulations.

Push pads to be installed in accordance with BS EN 1125 & BS EN 179 where required.

Provide 1000mm disabled door set to Disabled WC to current British standards incorporating all accessible nonconformity in line with Part M of the building regulations.

Provide Powder coated Sectional up and over door to stores area.

ROOF CONSTRUCTION
 Mosley Mansip Roof tiles to match existing on new filling battens to suit, spaced in accordance with the tile manufacturers recommendations on falling fall on fixed rafters to specialist design spaced to 75 x 100mm wall plate both ends. All to be anchored to CP. Part 2 1970. Galvanised n.s.s. slats, 6 x 30mm to be used at ceiling member and rafter level at 2000 mm c/c (max). fixed to a min. of two members.

Roof finished within rafters to be finished with 100mm Kingspan Thermapatch IP10 between rafters, maintaining a 50mm air gap and underlain with 37.5mm Kingspan Kooltherm K18 insulated plasterboard and skim. All to achieve a U value of 0.18W/m2 K. All in accordance with manufacturers details.

Note: Insulation subject to final layout, i.e. tile centres and stud depth.

Roof finished within ceiling joists with 300mm thick glass fibre quilt laid in between and over ceiling members, to achieve U value of 0.14 W/m2 K. Batten tray to be installed to ensure minimum of 20mm clear air gap above insulation to maintain ventilation. Ventilation of eaves and ridge achieved using roof ventilators. Ceiling to be underlain with 12.5mm foil backed plasterboard, scdm joints and skim in thistleboard finish.

FLASHINGS
 Code 4 lead flashings to all abutments turned up walls for at least 75mm.

FASCIAS, EAVES, GUTTERS AND DOWNPIPES
 Provide new UPVC fascia boards to all tp match existing.

DRAINAGE
 All pipe work to BS 5572: 1978

Waste pipe size:
 W.I.B to be 32mm dia up to 1.7 m run or 40 mm with 75 mm traps to sink.
 W.C. - 100 mm dia separate connectors with 75 mm deep seat traps to 100 mm UPVC Soil&Vp. with external with bid cage min. 900 mm above nearest window heads or taken to tie into fixable ductwork.

An or admittance value (Dvgs) or similar is to be installed to vent runs as required.

BELOW GROUND DRAINAGE
 Locate external drainage and ensure suitability of any pipework to be retained.

Contractor to satisfy themselves with the use, location, run, levels and falls of existing culverts / drainage onsite.

Foul and Storm water drainage to be Hallowth Whiffed Clay pipes and fittings with diameter to suit at minimum fall 1 in 40 and installed in accordance with manufacturers recommendations.

MAIN SERVICES
 Extend all main services to the extension i.e. water, electricity, gas, telephones etc. Liaise with all service authorities and comply with their statutory requirements for the installation / extension of their services. Pay all fees due.

WATER SUPPLY
 Existing water supply to be extended into extension to current British standards, Part G and in accordance with the utility providers requirements.

All cold water installation works are to be carried out in accordance with water authority regulations 1999

HEATING
 Assess the existing central heating and hot water system and extended or replaced as necessary.

Heating system to incorporate zone controls via thermostatic radiator valves.

ELECTRICAL INSTALLATION
 Extend existing electrical supply from existing as necessary. All to be in strict accordance with latest IEE regulations.

Emergency lighting throughout in accordance with BS5266 Part 1 1999.

Extend or replace if necessary the automatic fire detection system in accordance with BS5839 Part 1 to provide a category L1 System to be a fully automatic analogue addressable fire alarm system and to include gas shut off, and lift void detection throughout.

Call points to be installed in accordance with BS 5839-2:1983.

All light switches and socket outlets to be located between 450mm and 1200mm from finished floor level.

Electrical layout to clients requirements, provide low energy fittings.

Wall mounted sockets and switches for lighting and other equipment are to be sited between 450mm and 1200mm from the finished floor level.

Note: For compliance with part P of the current approved document, an electrical installation certificate issued under the Competent Persons Scheme is to be issued to the Council prior to occupation of the extension.

VENTILATION
 All works to be in accordance with Part F of the building regulations and where applicable Building Bulletin 101, ventilation for schools. Ventilation of habitable rooms to be provided by using operable windows or 5% of the room contained with a trickle ventilator, to give no less than 8000 sq mm background ventilation. The opening should be controllable and secure and to be located to avoid draughts.

The following intermittent mechanical extraction rates are to be achieved:

Ventilation in assembly areas to be to CIBSE Guide 8:2005 Section 2.3.3 and CIBSE AM10:2005 and in full accordance with Part F of the Building Regulations.

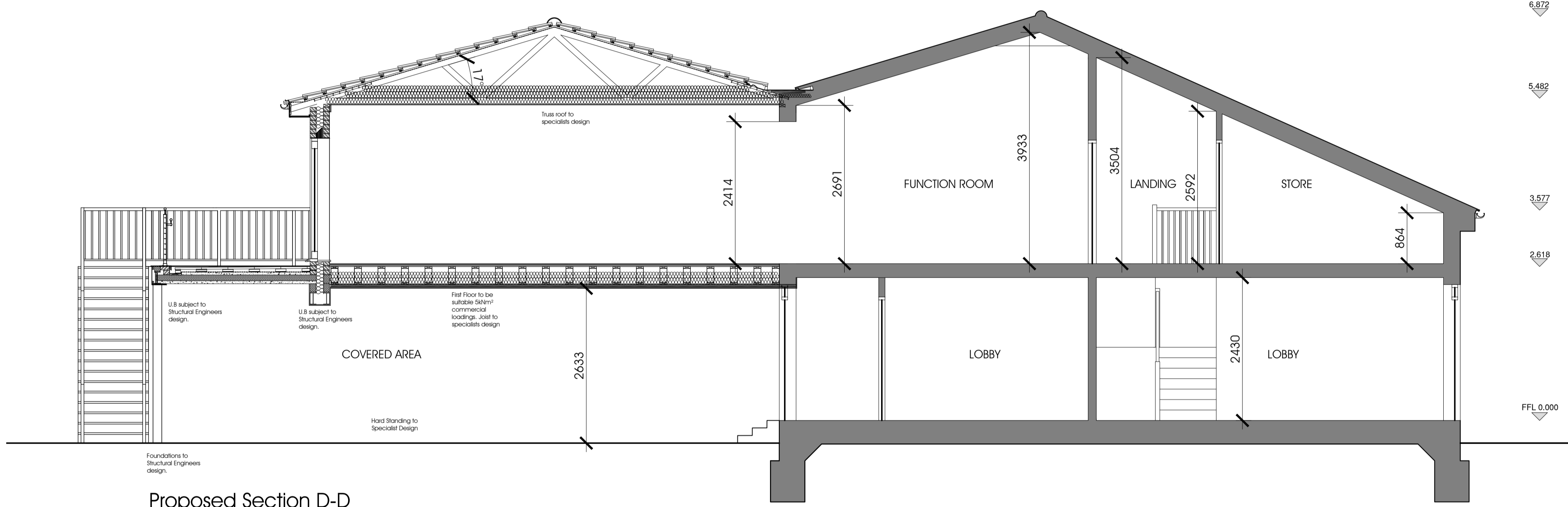
Kitchen:
 Extract fan to extend air providing 30m adjacent to hob.

W.C.
 Extract fan vented direct to external air providing min 6 l/s intermittently controlled rapid ventilation with 15 min over run.

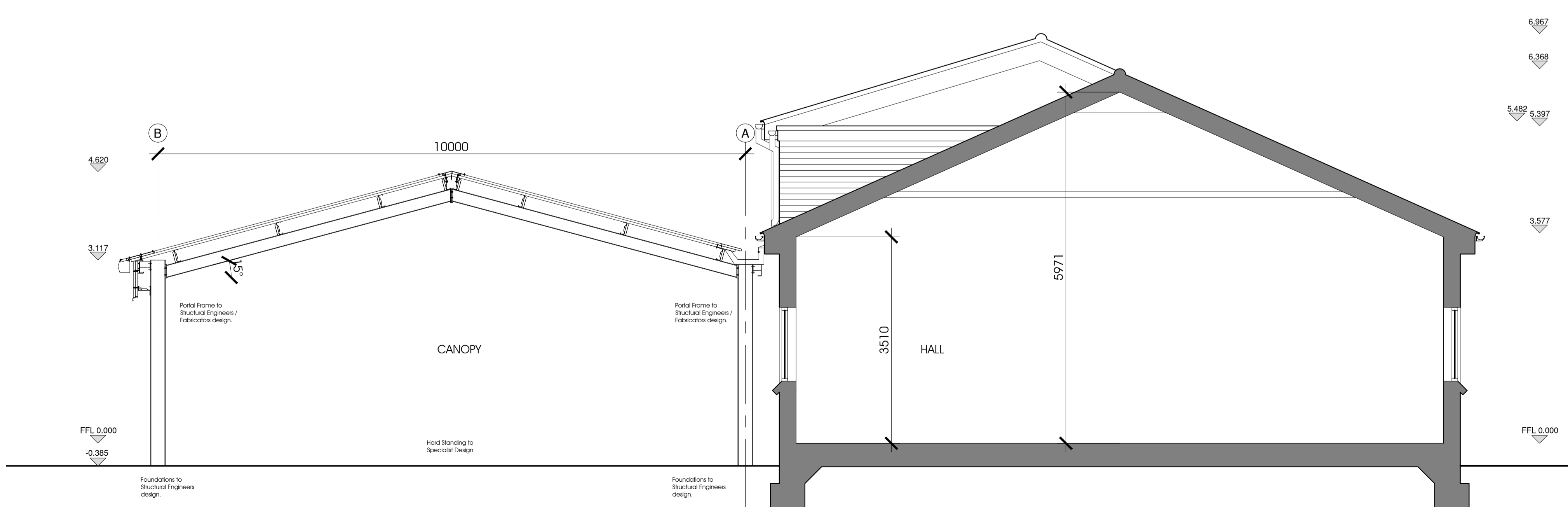
GENERAL
 All exposed timber to be treated with preservative in accordance with the Building Regulations.

SIGNAGE
 Fire signage and notices in accordance with the health and safety (signs & signals) regulations 1996.

Exit signage should be provided at all changes in direction in the new corridors where not already installed.



Proposed Section D-D



Proposed Section C-C

EXTERNAL STEPS AND RAMPS
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Project	Proposed two storey side and rear extension of Rolleston Scout Hut, Station Road, Rolleston-On-Dove Burton-On-Trent DE13 9AB	Disc.	Proposed Sections
Drawn	MFR	Scale	1:50 @ A1
Date	29.06.2020	Status	Building Regulations
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