#### Ground floor:

70mm concrete screed to be laid on top of 500g polythene vapor barrier over 150mm Celotex flooring insulation or similar. With 25mm Celotex insulation 'up standing' insulation around perimeter to prevent 'cold bridging'. All to be sat upon the existing 150mm reinforced concrete slab.

Floor U value to achieve 0.16 W/M<sup>2</sup>K

#### Drainage & Plumbing:

Foul - above ground waste sizes, shower 40mm dia. hand basin 32mm dia. all with 75mm deep seal traps and rodding access at all connections and change in direction. Hot taps to be on the left of all sanitary appliances. 110mm dia. soil and vent pipe to showers vented to external air a minimum 1.0M above eaves level. All other soil pipes to be fitted with air admittance valves sited 450mm above hand basin level. - below ground - 110mm Osma drain laid to fall a minimum 1 in 70 on a bed of pea gravel or shallower than than 450mm to be concreted. Osma plastic manholes to connect manholes to connect into existing foul sewer on saddle connection in accordance with SWW specification and supervision. Hot water supply must NOT exceed 48°C, blending valve should be mounted as close to the taps as possible. Water storage vessels should not allow water to exceed 100°C

### Wall Construction (timber frame and block):

External walls to be 100mm (7.0N/mm<sub>2</sub>) dense concrete block-work with 50mm clear cavity onto Glidvale TF200 Thermo breather membrane fixed to 9mm OSB boarding onto 140mm x 38mm CLS timber frame. Studs at 600mm. ACTIS Hybris 105 to be fitted the inside of the timber frame (leaving 35mm clearance) Fit ACTIS H Control insulation to inner face of timber frame. This will have all joints lapped and taped to create a vapor control layer (VCL) held in place using 38mm x 38mm battens to create a service void. Outer block skin to be tied to timber frame using stainless steel wall ties with 50mm clear cavity. Inner face to be finished with 12.5mm plaster-board and 5mm thick gypsum skim to receive decoration. Timber frame to be set on perimeter cavity trays (with weep holes @ 900mm centres in block-work) Both skins tied together with timber frame stainless steel wall ties @ 700mm horizontal and 450mm staggered vertical spacing and a maximum of 150mm from door and window jambs. All openings to have 50mm x 50mm (covered in DPC) cavity closer's fitted. Cavity closer's to be fitted at the head of cavity. Internal stud partitions: 90mm x 38mm CLS stud-work at 600mm centers with head and sole plates and half height noggins. 90mm Rock wool (with a minimum density of 10kg/M3) insulation to center. Internal face to be finished with 12.5mm plaster-board (with a minimum density of 10kg/M3) and 5mm thick gypsum skim to receive decoration.

#### Flat roof (warm roof):

Flat roof to be of a 'warm roof construction' using Engineered I beams ceiling joists set @ 400mm centers as per specialist manufacturers design and specification. To this fix a VAPOR barrier and 12mm PLY with 120mm thick PIR Celotex or similar. To this fit 18mm thick wbp sheeting ply to top face, finished with GRP roofing supplied and fitted in accordance to manufacturers specification and instructions. GRP roof finish

to AA, AB or AC class fire rating. Internal ceiling to finished with 12.5mm Gyproc plasterboard skimmed to clients choice

Roof U value to achieve 0.16 W/M<sup>2</sup>K

## Lateral restraining:

Lateral retaining to gable wall to be provided by 30mm x 5mm thick galvanised mild steel straps at a maximum of 2,000mm centre located over / under in-line noggins and fixed to min. 3 No. trusses using 50mm long No. 12 wood screws into each truss and noggin.

RS = lateral strap under rafter

# Windows & Doors:

uPVC windows with 28mm Low E Argon filled insulated and double glazed sealed units with 20mm air gap. Trickle vents equivalent to 8,000 sq. mm. Glazing to windows with a sill height less than 800mm to be fitted with toughened safety glass to BS 6206.

Additional mechanical ventilation to rooms in the following areas:-

Kitchen - 60 liters / second WC - 15 liters / second Shower - 15 litres / second

Ensure a 10mm air gap to WC doors. Extractor fans to be installed in accordance to Approved document F1 appendix E 'Good practice guide to the installation of extractor fans for'. All new windows and doors to be rebated minimum 25mm behind external rendering. Ensure all new windows achieve 1.6W/M<sub>2</sub>K. Maximum sill height 1,100mm. Fixed mechanical ventilation and any associated controls must be commissioned and tested. Notice of test results are to be provided on completion. Ensure all new external doors achieve a minimum U value of:-

3.0W/M<sub>2</sub>K for solid door up to 40% glassed

1.8W/M<sub>2</sub>K for doors with 40% - 60% glassing

1.6W/M<sub>2</sub>K of doors with more than 60% glassing All doors to be fitted with toughened or laminated safety glass and any glazing within 300mm of a door to be toughened or laminated safety glass. All to BS 6206. All windows and doors to be designed to PAS 24 or equivalent security standard, and installed in accordance with the manufacturers details. Intumescent cavity closer's to be fitted around all window and door openings.

## Smoke & Heat detectors:

Mains operated smoke and heat detector to BS EN 14604 2005 with battery backup to be fitted at positions marked thus:-

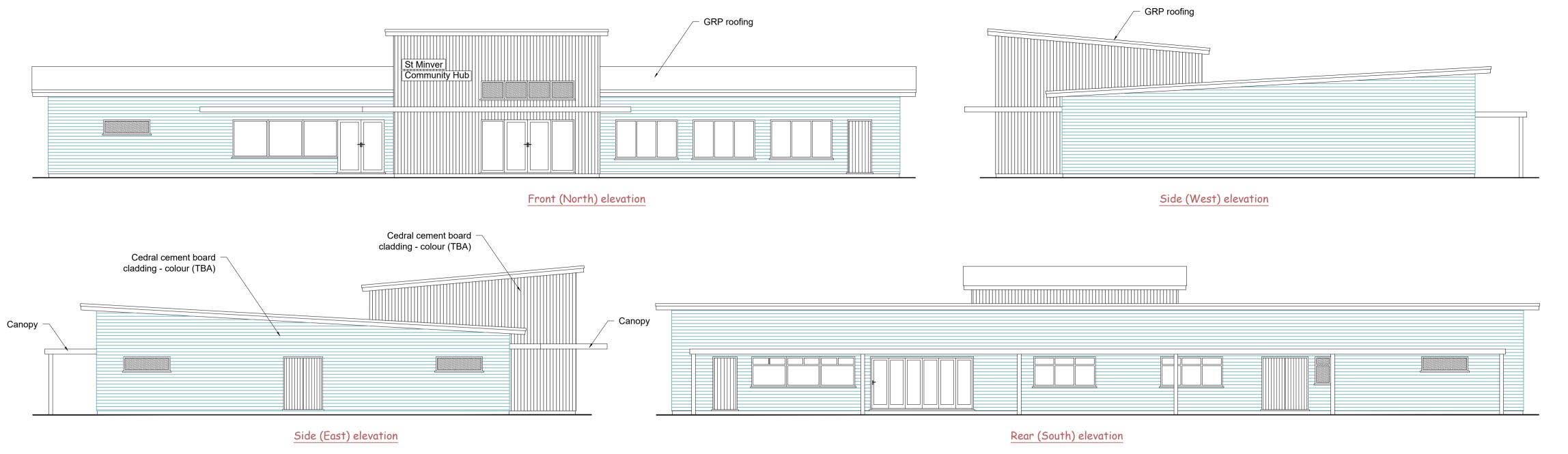
HD = Heat detector

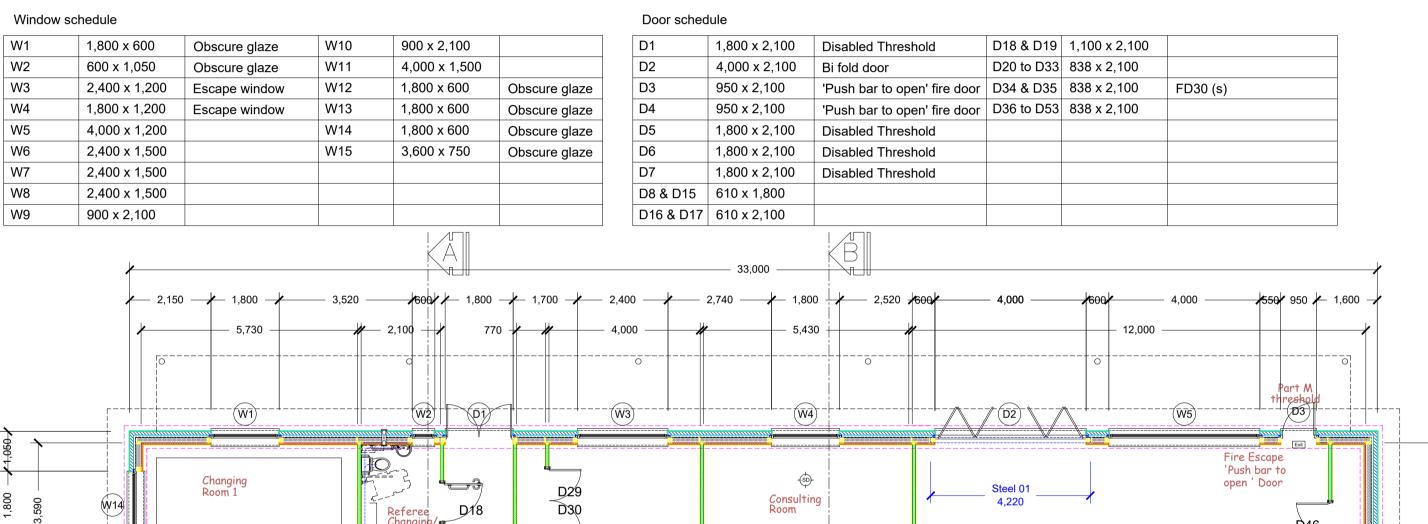
SD = Smoke detector

Smoke detector to cover minimum of 7.5M radius on each floor level. All smoke and heat detectors must me interlinked.

# Electrical installations:

All electrical work must be carried out by a registered scheme member who will issue a certificate of conformance in accordance to BS7671. All lighting to be energy efficient compact fluorescent or LED. All switches, sockets and electrical outlets are to be set between 450mm and 1,200mm from FFL. Ensure that the building is equipped with high-speed-ready in-building physical infrastructure up to a network termination point for high-speed electronic communications network.





Meeting Room Community Hall 2 D33 D1/9 D84 FQ30(s) € D35 FD30(s) D50 Community Hall 1 D12 D13 D14 D15 Community Cafe (50M<sup>2</sup>) to new soak-away min 5M from building —— 3,280 —— - 1,800 <del>- 585</del> Preliminary drawing to SWW awaiting Building main sewer Floor plan

Heating:

Air-to-water air source heat pump to feed radiators. Design, specification and installation as per manufacturers recommendation. Details to follow.

### Ambulant disabled steps:

The approach to the proposed steps will be on good firm and level ground. The gradient must not exceed 1 in 20. The width will be no less than 900mm. The flight will be unobstructed and the rise of a flight between landings is not more than 1.8M. Each flight will have a top and bottom and intermediate landings if necessary. The rise of each step must be uniform and between 75mm and 150mm. The going of each step must not be less than 280mm. If the flight contains three or more steps, a continuous hand rail will be provided on one side and be between 850mm and 1.0M in height and will extend a minimum of 300mm beyond the top and bottom nosing.

### Means of access:

The approach to the proposed building will be on good firm and level ground. All access ramps and pathways will not be greater than 1 in 20. Steps to have a maximum riser of 150mm with a minimum going of 280mm. Handrails to be provided where there is three steps or more. All doorway thresholds will not exceed 15mm in height. All ground floor doorways and corridors to have a minimum clear width of 900mm. For electrical outlet positions - see electrical installation notes . All means of access to comply with Approved Document Part M. Doorway widths to be:

800mm minimum clear access width on all new builds

## Fire protection:

All steel beam are to be fire protected to a minimum 30mm fire resistance by cladding with 15mm Gypsum Glasroc F Firecase fireboard. To be installed as per manufacturers data sheet.





Control final approval