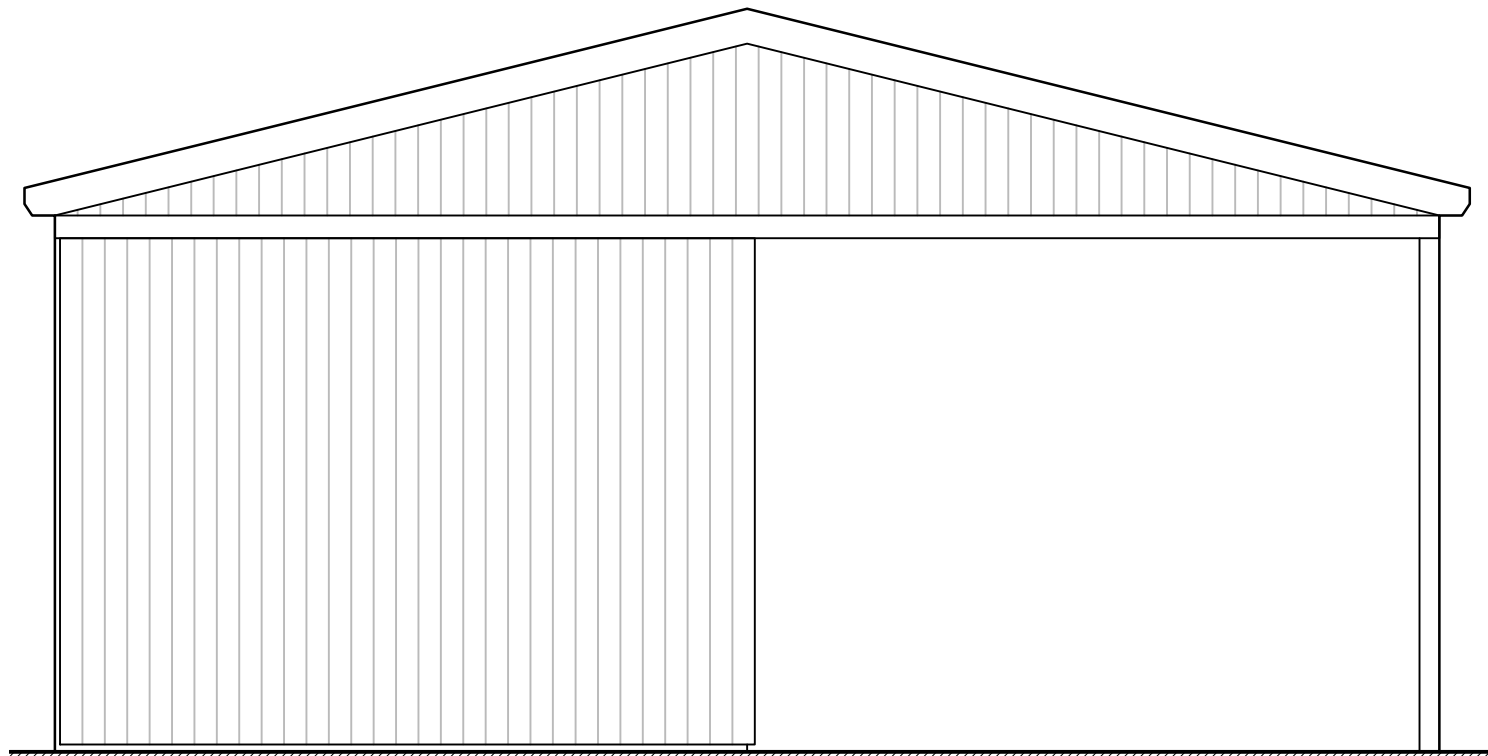
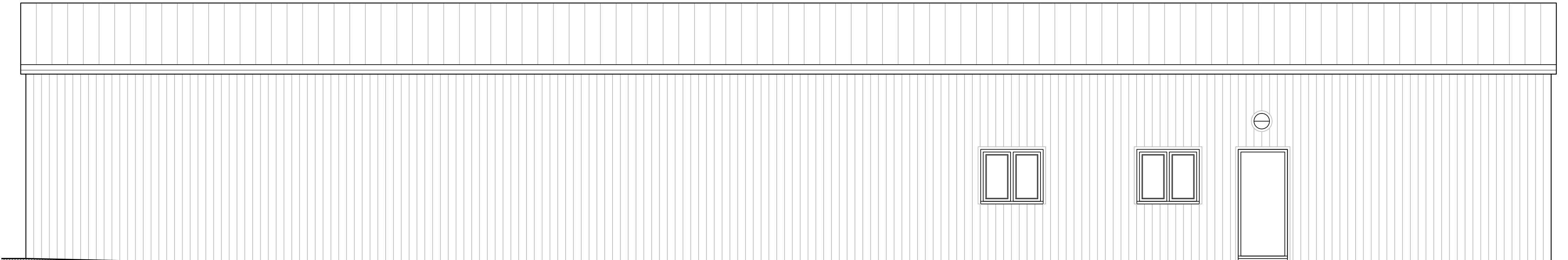
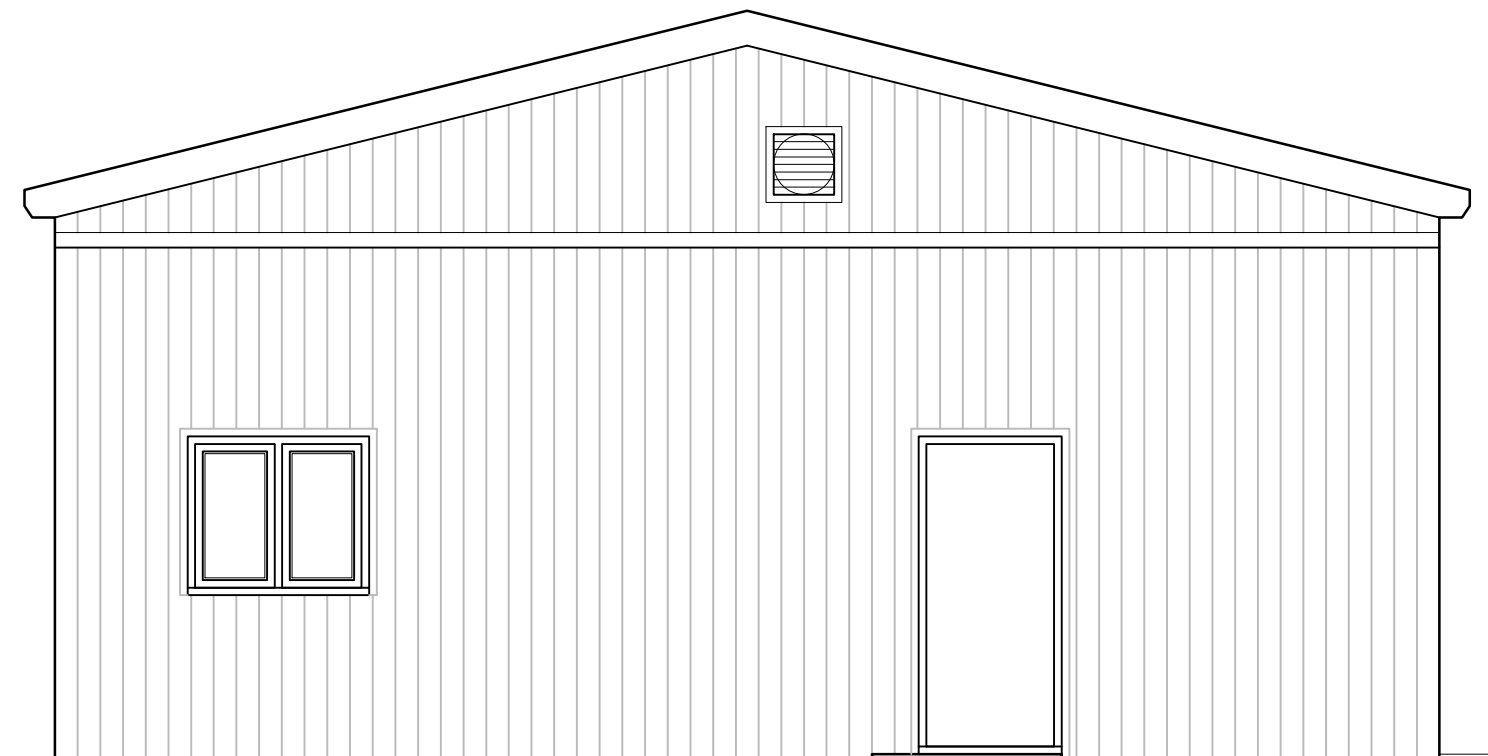




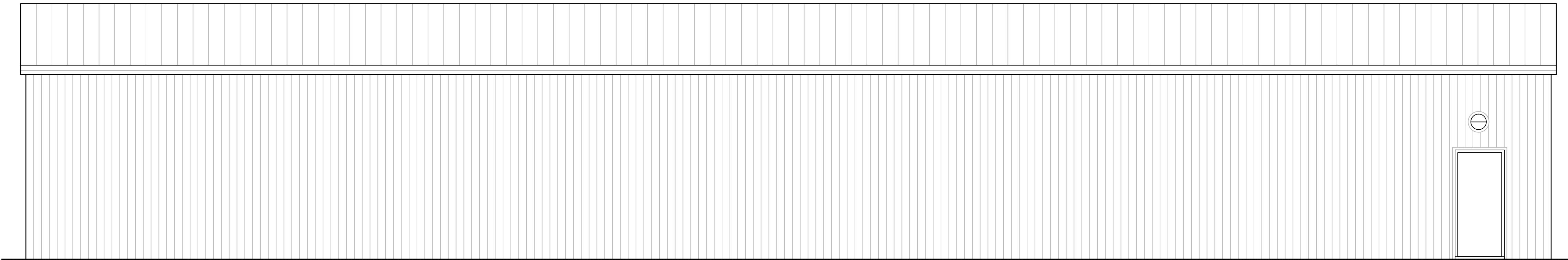
West Elevation



South Elevation



East Elevation



North Elevation

General

Do NOT scale drawings. Contractor is to CHECK all dimensions and report any discrepancies. All works and materials used are to fully comply with ALL standards as required by the current Building Regulations, relevant Trade Associations, British Standards, Codes of Practice, Manufacturers Specifications (BSA Certification, etc). All works are to be carried out fully in accordance with any structural engineer's calculations, details, instructions, as and where applicable.

Damp Proof Course

Continuous horizontal DPC is to be installed min. 75mm above existing concrete slab level to new and existing external wall linings (with min. 150mm laps).

Existing External Wall Lining

Existing blockwork external walls are to be fully lined internally with 12.5mm GYPROC Wallboard, on 500 gauge polythene vapour control layer, with all joints taped and sealed, on 100x50mm C16 treated SW studwork at max. 400mm C/C. Between timber studwork cut and tightly fit 100mm CELOTEX G44100 rigid polyurethane insulation boards.

Existing External Wall Lining (Cont'd)

New timber studwork is to be set min. 50mm away from inside face of existing blockwork external walls, on new 75mm high 100mm Class B engineering brick plinth walls. New walls are to be finished with lightweight plaster. New external walls are to be capable of achieving a minimum U-Value of 0.28W/sq.mk.

New External Wall

New external wall construction is to consist of 12.5mm Glasroc F Multiboard, on 18mm WBP plywood sheathing, on 25x50mm C16 treated SW vertical counter battens at max. 400mm C/C, on TYVEK breather membrane, on 12mm WBP sheathing plywood, on 150x50mm C16 treated SW studwork at max. 400mm C/C. New studwork is to be built up off of new 75mm high 100mm Class B engineering brick plinth walls. Cut & fit 100mm CELOTEX GA4100 rigid polyurethane board (or equal approved) between vertical studs leaving a 50mm low emissivity cavity to room side of insulation. Studwork is to be fully lined internally with CELOTEX PL4000 (50 + 12.5mm). Joints between boards must be tightly butted, taped, and jointed using appropriate tape and jointing material to create a vapour control layer (VCL). New wall is to be finished with lightweight plaster. New external wall is to be capable of achieving a minimum U-Value of 0.28W/sq.mk.

Lintels Over New Openings in External Walls

Pre-cast concrete lintels are to be provided over all new openings to external walls, and are to have min. 150mm end bearings.

Cavity Closers

Any cavities around new window openings are to be closed with proprietary THERMABATE insulated cavity closers (or equal approved). New window reveals are to be fully lined with 22mm GYPROC Thermaline BASIC insulated plasterboard.

Ground Floor Construction

New Seating Area, Kitchen, Office, Shower, WC, Locker Room, and Cupboard floor construction is to consist of 22mm moisture resistant T&G chipboard flooring, on 500 gauge polythene vapour control layer, on 50mm CELOTEX GA4050 rigid polyurethane insulation board, on 1200 gauge polythene DPM, on existing concrete floor slab. Provide sand blinding on top of existing concrete garage floor slab prior to laying DPM in order to make up floor to required level. (Perimeter = 34.2m. Area = 73.1sq.m. P/A = 0.46. Floor construction is to be capable of achieving a minimum U-Value through floor of at least 0.24W/sq.mk.

Glazing to New Windows

New glazed windows are to be double glazed with Low-E, Argon filled, hermetically sealed units, capable of achieving a min. U - Value of 1.4 W/sqm. Any glazing located in a zone between finished floor level and 800mm above floor level is to consist of either toughened or laminated safety glass. Glazed windows are to be fully draught/weatherstripped. Silicon mastic pointing is to be applied around perimeter of all frames, both externally, AND internally.

Security (Part Q)

New windows should be designed to meet the requirements of BS PAS 24:2012, or STS 204 Issue 3:2012, LPS 1175 Issue 7:2010 security rating 1, & LPS 2081 Issue 1:2015 security rating A. Frames should be mechanically fixed to the structure of the building in accordance with the manufacturers installation instructions.

Natural/Trickle Ventilation

Windows to all habitable rooms are to have windows with operable casements of an area equivalent to at least 1/20th of the floor area of each room served, in order to provide rapid ventilation. Ensure min. 500sq.mm trickle ventilation to all new habitable rooms.

Existing Ceiling/Roof Construction

Carefully remove all existing ceiling finishes to Kitchen, Staff Room, and Locker Room and remove from site. New ceiling finish is to consist of 1No. layer of 12.5mm GYPROC Wallboard on 500 gauge polythene VCL, all ready to receive lightweight plaster finish. Between existing ceiling joists cut and fit tightly 100mm GYPROC ISOWOOL 1000 insulation quilt leaving min. 50mm unobstructed air space above insulation.

New Ceiling/Roof Construction

New ceiling/roof construction over Seating Area is to consist of 18mm WBP plywood decking, on 150mm thick CELOTEX XR4150 rigid polyurethane insulation board, on 1000 gauge polythene vapour control layer (VCL), on 18mm WBP plywood decking, on 50x150mm C24 flat roof joists @ 400mm C/C. New ceiling finish below is to consist of 1No. layer of 12.5mm GYPROC Wallboard on 500 gauge polythene VCL, all ready to receive lightweight plaster finish. New ceiling/roof finish is to be capable of achieving a minimum U - Value of at least 0.15 W/sqm K.

Lateral Restraint Strapping

Where any new CEILING JOISTS run parallel with external walls, install 1500x30x5mm thick galv. MS lateral restraint @ max. 1.8m centres. Straps are to be plugged and screwed to blockwork/brick frame. Straps are to be fixed across min. 3No. joists, with solid noggins provided below straps to ensure adequate fixing.

Leadwork Generally

All leadwork carried out generally is to be fully in accordance with the recommendations laid out in the Lead Sheet Development Association's Guide to Good Practice handbook.

Electrical Installation

All electrical installations are to fully comply with all current IEE Regulations & Supply Authorities Byelaws. Electrical installation is to comply fully with Part M of the current Building Regulations. ALL sockets, switches, circuit boards, etc. are to be installed at a height that is at least 450mm above finished floor level, but no more than 1200mm high (this is to include light switches). Any new consumer unit must be positioned so that the switches are between 1350mm & 1450mm above finished floor level. All electrical work is required to meet the requirements of Part P (Electrical Safety), and must be designed, installed, inspected, and tested by a person competent to do so. Prior to issuing a final completion certificate, the building inspector should be satisfied that Part P has been fully complied with. This will require an appropriate B.S. 7671 Electrical Installation Certificate to be issued for the work, by a person competent to do so.

Energy Efficient Lighting

A minimum number of LOW ENERGY high efficiency type light fittings are to be provided. 100% of all new internal fixed light fittings are to be of an energy efficient type taking only low energy lamps OR standard fittings. 100% of bulbs are to be low energy lamps with integrated control gear (e.g. Bayonet or Edison screw base compact L.E.D lamps).

Installation of Downlighter fittings

Any downlighter fittings being installed, are to be fully fire protected by the installation of proprietary intumescent downlighter fire covers (by ENVIROGRAF or similar), installed over each fitting within the ceiling void to prevent the spread of fire through any resultant holes cut in the plasterboard during installation. NB: ALL new downlighter fittings to be of low energy L.E.D type.

Fire Precautions Generally

Where any plumbing pipework or electrical cabling passes through walls or ceilings, ALL pipes and cables are to be fitted with Intumescent sleeves (ENVIROGRAF Product 25, or similar approved) installed in strict accordance with manufacturers details/specifications. Fire sleeves are to achieve a minimum of 30 minutes fire resistance.

Where any soil & vent pipes (SVP) or stub stacks (S/S) pass through separating ceilings or walls, ALL pipes are to be fitted with intumescent pipe collars (ENVIROGRAF, or similar approved) installed in strict accordance with manufacturers details/specifications. Fire collars to achieve a minimum 30 minutes fire resistance.

Where any ventilation ductwork passes through separating ceilings or walls, ALL ducts are to be fitted with intumescent fireblock dampers (ENVIROGRAF, or similar approved) installed in strict accordance with manufacturers details/specifications. Fireblock dampers are to achieve a minimum 30 minutes fire resistance.

Any new exposed steel beams and columns within new Seating Area, Kitchen, Office, Shower, WC, Locker Room, and Cupboard are to be fully encased with 15mm GYPROC Fireline board with lightweight plaster finish to achieve min. 30 minutes fire protection.

Heating & Hot Water Systems

Install wall mounted electric radiators in positions indicated on the plan. Install room thermostats and timers as necessary to allow fully controllable heating. All external doors and windows are to be fitted with draught excluders. Any gaps in construction, such as around services pipework, are to be fully sealed, to limit the infiltration of draughts.

Heating & Hot Water Systems (Cont'd)

Install instantaneous electric water heaters to new sink and basin positions, and electrically operated shower to new Shower Room. **NOTE: The heating engineer, upon completion & testing of both the heating & HWS systems, is to provide a test and commissioning certificate for each. Maintenance & operating instructions are to be made available to the occupants.**

Mechanical Ventilation

To Kitchen provide min. 60 litres/second extract fan (or 30 litres/second if incorporated within a cooker hood over the cooker). To WC provide min. 6 litres/second extract fan wired to light switch. Ensure min. 15 minute over-run & 10mm gap under door. To Shower Room provide min. 15 litres/second extract fan wired to light switch. Ensure min. 15 minute over-run & 10mm gap under door.

Note: All extract fans are to be installed in accordance with the requirements of Approved Document F1 - Means of Ventilation. A copy of the notice of commissioning to be provided to building control before completion.

Waste Plumbing

All new waste pipes serving new sanitaryware fittings are to be UPVC and are to connect into new soil & vent pipe (SVP) as indicated on the plan. Waste pipe diameters are to be as follows:

WC - 110mm dia.
Basin - 32mm dia. (40mm dia. if length more than 1700mm)
Shower - 40mm dia.
Kitchen Sink - 40mm dia.
Washing Machine - 40mm dia.
Dish Washer - 40mm dia.

Waste Plumbing (Cont'd)

All appliances are to be fitted with min. 75mm deep sealed traps. Rodding eyes are to be provided at all changes in direction.

Any stub stacks (S/S) installed are to be fitted with an automatic air admittance valve ("Durgo"), and are to terminate above the flood plane of the highest fitting connected into it. Rodding eyes are to be fitted at all changes in direction. Any boxing in is to be formed with 50x50mm SW stud framing, and 12mm thick WBP plywood sheeling. Any boxing in to stub stacks is to have ventilation grill & access panel fitted.

Note: The top manhole in foul drainage run must be vented by a soil & vent pipe. Soil & vent pipe (SVP) is to terminate min. 900mm above any opening into the building within 3 metres, and is to be fitted with proprietary cage or roof panel fitted.

Sound Insulation / Fire Protection to Soil & Vent Pipes
Where any soil & vent pipes (SVP) are located within any occupied rooms, pipes are to be fully encased in mineral wool quilt (or a similar insulating material at least 25mm thick). Boxing out is to be formed with min. 25x25mm C16 treated SW framing, with 2No. layers of 12.5mm thick GYPROC Wallboard plasterboard (or any other board with a min. thickness of at least 25mm and with a min. weight of at least 15 kg/sq.m).

Wholesome Water
Wholesome water supplies are to be provided to units used for drinking, washing, etc. (ie: water that complies with s.67 of the Water Industry Act 1991).

Wholesome Water (Cont'd)

Any sanitaryware appliances used by employees or members of the public are to be fitted with in-line blending valves limiting the temperature of hot water to a maximum of 48 degrees.

Underground Drainage Pipework

Any new underground drainage is to consist of 100mm dia. UPVC pipework (HEPWORTH or equal approved), laid to falls of between 1:40 & 1:80, and bedded in granular fill or in accordance with pipe manufacturers recommendations. Where any drain runs pass through walls, an opening is to be formed, and bridged over with precast concrete lintels, maintaining a clear 50mm gap fully around pipe. Openings are to be masked both sides of wall with a rigid sheet material, capable of preventing the ingress of vermin. Any pipe runs with less than 900mm cover, or passing below vehicular trafficways are to be bedded and surrounded in min. 150mm thick 1:2.4 mix concrete, with flexible joints (FLEXCELL) provided at every pipe joint, or max. 5m lengths. Alternatively, pipe run can be protected with a concrete slab, cast over top of pipework run, with min. 75mm gap maintained between slab and top of pipe. New foul drain runs are to be connected into existing F.W. drainage system. (For details, see site plan drawing). Manholes/Inspection Chambers are to be provided at all changes in direction, and where any junctions occur along pipe run.

Manholes (Inverts > 900mm in depth)
Any new brick built manholes are to be constructed as follows: 150mm thick 1:2.4 mix cast concrete slab, with min. 215mm thick Class B engineering brickwork (English bond), laid in 1:3 mortar using sulphate resistant Portland cement, and flush pointed above benching level. Benching is to consist of 1:2.4 mix concrete with smooth, impervious finish.

Inspection Chambers (Inverts < 900mm in depth)
Any new inspection Chambers are to consist of proprietary preformed UPVC chambers (by HEPWORTH or equal approved), and bedded & surrounded in min. 150mm granular fill. Manholes/Inspection Chambers generally are to be fitted with light duty cast iron cover and frame (use heavy duty frame and cover for any manholes located within driveway areas). All drainage works are to be installed and tested to the satisfaction of Building Control, and are to comply strictly with all current British Standards, & Codes of Practice.

