DRAINAGE - FOUL WATER.
Inspection chambers to be u.p.v.c. Bartol installed in accordance with manufacturer's instructions in positions shown on plan.
Foul water to discharge into treatment plant installed to manufacturer's instructions.
Below ground pipework to be 100mm dia. u.p.v.c. Bartol to B.S. 4460: 1989 flexible jointed pipework laid in accordance with manufacturer's specification to 1 : 70 fall with 150mm pea gravel bed and surround.
Where pipes pass below floors, provide 150mm min. pea gravel bed and surround to maintain flexibility.
Drains to be protected under driveway and where cover is less than 600mm, by provision of concrete slabs over min. 75mm pea gravel cover.
Below ground drainage is to comply with B.S. 8301: 1985.
110mm dia. u.p.v.c. soil and vent pipes to be installed in positions shown on plan. Provide balloon grating to terminate at 900mm min. above adjacent openings within 3.0m. Provide access plate at base of stack.
Where indicated on plan, air admittance valves are to be installed in accordance with manufacturer's instructions.
Waste pipes from appliances to discharge directly into soil pipes or gullies as appropriate with access plugs at all changes in direction.
40mm dia. polypropylene wastes from kitchen / utility sinks, baths, showers and washing machines etc. 32mm dia. from wash basins with 50mm dia. combined wastes unless otherwise stated. All appliances to have 76mm deep seal traps. all above ground drainage to comply with B.S. 5572.
Where waste run exceeds 3.0m provide anti-syphon traps to appliances.
Shower tray to be set on raised plinth to allow access to trap.
where waste and soil pipes are encased in ply ducting pride adequate access panels.
Where drains run throughwalls provide concrete lintel over 900mm min. long length dependant on angle and number of drain runs.
A 50mm gap should be left all around the pipe with the opening covered by a rigid sheet material, and fill gap with compressible sealant.

DRAINAGE - SURFACE WATER.
112.5mm dia. half round u.p.v.c. gutters to discharge into 68mm dia. downpipes.
Below ground pipework to be 82mm dia u.p.v.c. flexible with 100mm - min. pea gravel bed and surround.
Pipes to be laid 1 : 70 fall to 1.2m soakaways at 5.0m min. from any building.
All work to comply with Part H3 Building Regulations 1991.

INTERNAL DRAINAGE.
Waste pipes to be Osma or equal approved PVCu connected to the appliances in the approved manner with 75mm deep seal antivac traps.
Wastes to be -

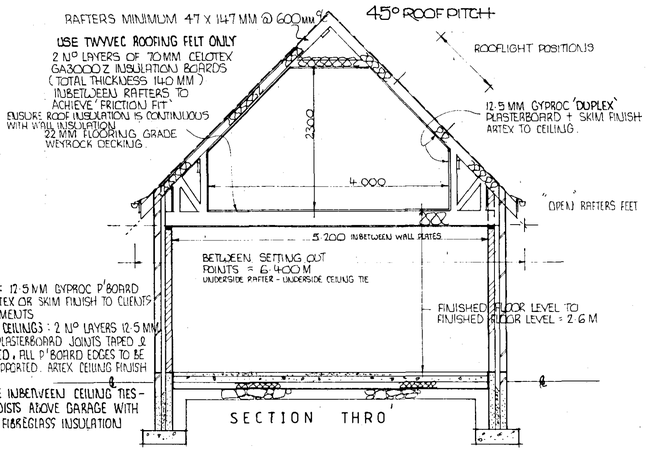
Wash hand basins	- 32mm Dia.
W.C's	- 100mm Dia.
Bath, shower and sinks	- 40mm Dia.
Collection pipes	- 50mm Dia.

SMOKE DETECTION - PART B BUILDING REGS 1991.
Mains operated self contained smoke alarms to BS5446: PART 1 to be installed in circulation areas within 7m of doors to high fire risk rooms and within 3m of bedroom doors. Where more than one alarm is installed they should be interconnected so that detection of smoke by any unit activates the alarm in the others. At least one smoke alarm to be installed to each story containing accomodation, all to be interconnected.
Self contained alarms to be permanently wired to a seperately fused circuit at distribution board.
Installation to conform to IEE wiring regulations.
Fixing of smoke alarms should be not less than 300mm from any wall or light fitting. where wall mounted units are installed their are to be at a height between 150mm and 300mm from any wall r light fitting. Where wall mounted units are installed they are to b at a height between 150mm and 300mm below the ceiling. Positioning of smoke alarms must facilitate routine maintenance.
Occupants of dwellings to be provided with information on use of equipment and its maintenence.

SERVICES
Provide adequate fire stopping to service penetration as set out in PART B - sections 11. 12 - 11. 14.
Reasonable provision should be made for dwelling occupiers to obtin the benefits of efficient internal and extemal lighting, as in accordance with parts 1.54 and 1.57 and table 4 of document L1.

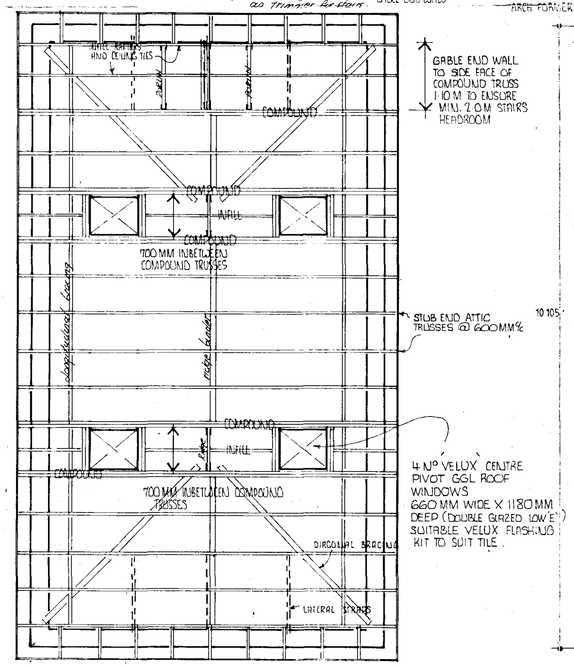
ROOF CONSTRUCTION:
Wall plates generally 100 x 65mm treated softwood with half lapped joints and fully bedded strapped down to support wall with 30 x 5mm GNS straps at max 1.2m centres.
Cut rafters fully birdsmouthed over and twice nailed to all supports. Trussed rafter roof to be designed and manufactured by an approved manufacturer and fixed, together with min 100 x 25mm sawn SW binders and bracing in accordance with B.S.5268 Part 111 1985 (and any subsequent amendment).
Twinaplate stub end trusses spaced at max 600mm centres and pitched at 45° (BOOM & 45° TRUSSES)
Provide 30 x 5mm once bent (900/100) glav.M.S. lateral restraint straps to external walls at ceiling and rafter level where shown at max 1.8m fixed with 4N 50mm B gauge CSK screws or SN 3.5 x 50mm galv. round wire nails to 3N trusses/ceiling joists minimum coupled with solid blocking support and edge packing.
All structural timbers to be kept 40mm clear of chimneys, flues etc. Provide edge restraint noggings at perimeters for plasterboard fixing.

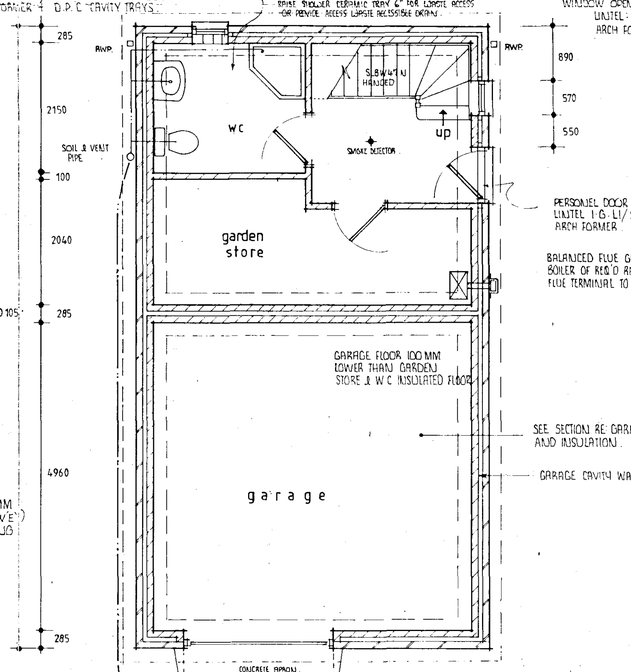
ROOF COVERING:
Concrete interlocking roof tiles on 38 x 25mm treated softwood battens gauge to suit tiling on B.S. 747 type 1B untearable roofing felt or similar on cut/trussed rafters as applicable.
Contractor is to determine tile fixing specification from manufacturers published literature with due consideration for site location, antisipated wind velocities and roof pitch.



ENSURE 2 WAY LIGHTINGS TO ALL STAIRS.

STAIRCASE STAIRS TO STAIRS 905 x 2.4 M RISE
To be Boulton & Paul or equivalent - to be confirmed
Total rise 2600mm, 223mm goings, 220mm risers, and 15no. Risers in total. 42 pitch max 50mm min going to winders at newel
Handrail to be provided at 900mm min / 1000mm max. Above pitch line of stair
Balustrading to landing to be 1000mm high and capable of with standing load criteria referred to in BS 6399 PART 1 1984
Balustrade to be of design suitable in preventing children climbing on it. 99mm max. Gap between balusters to flight and landings
2.0m min. headroom to stair measured vertically at pitch line to flight. 800mm min. clear width to flight.





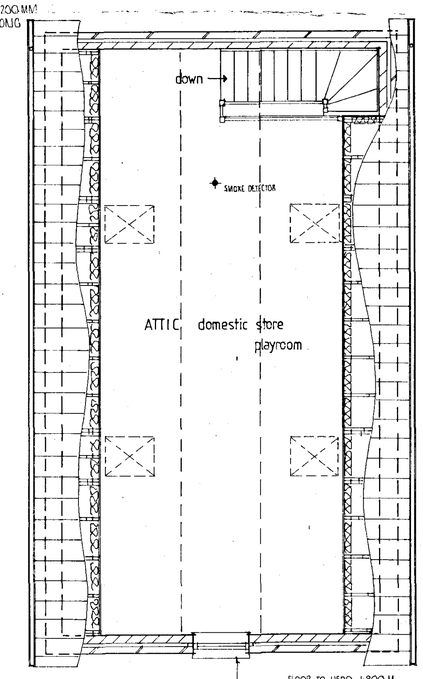
ROOF TRUSS PLAN

Bathroom and Shower Rooms - Extractors capable of ext. rate not less than 15 litres per second with intermittent operation facility.
The above extractor requirements are in addition to trickle vents and opening vents.

GLAZING.
All glazing to be low - e type glass with 16mm air gap (Pilkington k-glass or equivalent).
To be in accordance with Part N1 Building Regulations and BS 6206: 1981.
All glazing to internal doors where fitted to be toughened / laminated safety glass.
All glazing to external doors to be toughened / laminated safety glass except solid doors incorporating small glazing area not exceeding 250mm width and 0.5m area e.g. cottage style.
Patio and French doors to be fitted with safety glazing.
Double glazing to all external doors and windows.
Each safety glazed panel to incorporate the British Standard Kite Mark, as means of identification.

WINDOWS AND DOORS.
All windows to be double glazed and capable of providing not less than 1/20th floor area 'rapid' ventilation of habitable room served.
In addition, all habitable rooms to have propletry trickle vents installed to window frame at high level providing not less than 8000 sq. mm of 'background' ventilation. To kitchen, utility bathrooms and en suites provide not less than 4000 sq. mm. Where patio or French doors providethe only means of ventilation to a room provide 10,000 vent to frame.
Glazing to be in accordance with Part N Building Regulations 1991.
All external doors and opening lights to windows to be draught sealed.

GROUND FLOOR PLAN



ATTIC ROOF PLAN

FLOORS U-value = 0.24W/m²k
Ground Floor: 50mm cement/sand screed (1:3 mix) on 100mm concrete oversite, 100mm approved EPS insulation (λ=0.037W/mk), 1200 gauge polythene dpm well lapped with wall dpc on 50mm sand blinding and 150mm clean, sound, well-consolidated hardcore.
All EPS joints taped and protected in accordance with manufacturer's instructions during subsequent operations. Perimeter EPS insulation to screed depth.
Note: Cone floor slab to be thickened out under non-loadbearing block partitions to 250mm overall thickness, 450mm wide at base with sides tapered outwards at 45°. OMIT SCREED AND INSULATION TO GARAGE & FLOAT FINISH O/SITE CONCRETE.

FOUNDATIONS.
Strip all top soil / vegetable soil locally and reduce levels further as necessary. Unless otherwise stated foundations to be 700mm wide x 225mm deep under cavity walls and 450mm wide x 225mm deep under 100mm loadbearing walls. Foundations to be taken down minimum 750mm below ground level or to an approved firm base as agreed with local authority on site Building Control Inspector. Foundation concrete ST4 strength class.

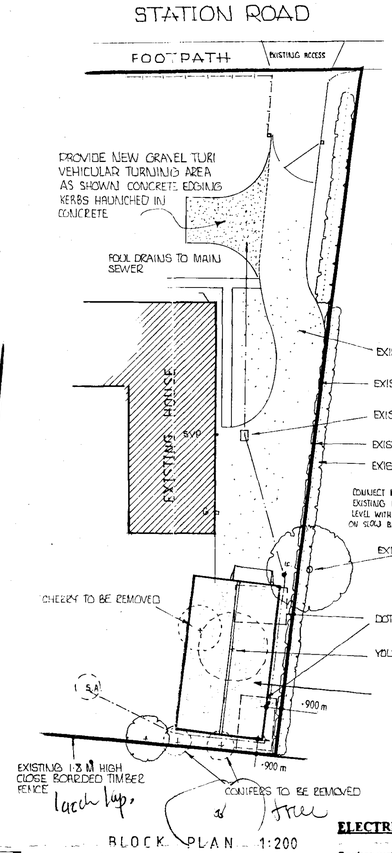
Any foundation in close proximity to tree's to be deepened in accordance with current NHBC practice 'note 3' and any subsequent amendment.

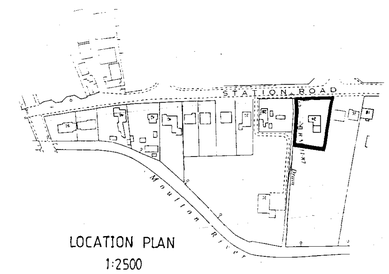
SUB STRUCTURE WALLING.
Class 'B' engineering brickwork or Class 'A' concrete brickwork (7 n/mm²) in 1:3 cement mortar. Bricks below D.P.C. to be F.L. designation and to BS 3921
1:2 lean mix concrete cavity fill and to terminate 225mm below lowest D.P.C. level. Internal 100mm walls below D.P.C. in class 'A' concrete blockwork. Drains passing through walls to be protected by concrete lintel with a 50mm gap between underside of the lintel and the crown of the pipe. Gap filled with compressible material. Provide vermin guard to external face of wall.
D.P.C. installed a minimum 150mm above ground levels to both skins of cavity walls and all internal walls.

EXTERNAL WALL.
285mm cavity wall construction to comprise: -
100mm facing brick (to B.S. 3921: 1974 for clay brick, B.S. 187: for calcium silicate brick).
85mm cavitherm insulation to cavity.
Inner leaf to be 100mm Tarmac Toplite or similar approved insulation blockwork.
13mm s/c render and skim to internal face.
Provide galvanised or stainless steel wall ties to B.S. 1243: 1978 installed at 750mm cts. Max. Horizontally, 450mm cts. Vertically. Ties at 225mm cts. Max. Vertically within 225mm of reveals of unbound jambs to all openings.
Cavity to be closed at all openings and in roof space incorporating horizontal and vertical D.P.C.'s Damcor insulating vertical D.P.C.

WALLING BELOW D.P.C.
Any brickwork below d.p.c. level to be F. L. quality.
Class A blockwork to be used below d.p.c. to B.S. 6073
Below ground to be celcon Trench Block.
Provide lintel to wall wher penitrated by services.
Provide horizontal d.p.c. at 150mm min. above finished ground level.
D.p.c. to be continuous and lapped with d.p.m.
Lean mix to cavity to terminate 225 below lowest d.p.c. level.

DAMP PROOF COURSE.
To be from 2000 gauge black polythene to BS 6515 or bitumen based to BS 6398 laid to both leafs of external wall and to all internal walls. To external wall d.p.c. to be laid 150mm above ground level with d.p.c. to inner leaf linked to floor d.p.m. All d.p.c.'s to be bedded on mortar. All vertical and horizontal cavity closures to incorporate a d.p.c. At roof to wall abutments, flexible cavity trays are to be used and are to rise 225mm up the cavity. Flues to be provided with a d.p.c. at their junction with the roof by the use of 3 courses of clay engineering brickwork to BS 3921 laid to break bond and bedded and jointed with mortar.



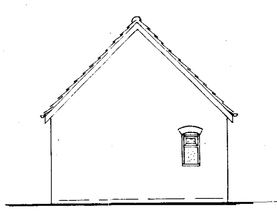


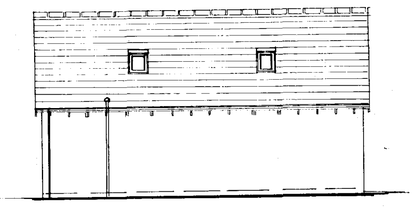
LINTELS.
Lintels to be I.G. galvanised steel or similar approved lintel to B.S. 5977. Selection and installation to be in strict accordance with manufacturer's instructions.
Provide 150mm min. end bearing to all lintels with bit. felt d.p.c. Cavity tray provided in accordance with B.S. 5628 Part 3: 1985 to all external wall conditions except where protected by eaves overhang.

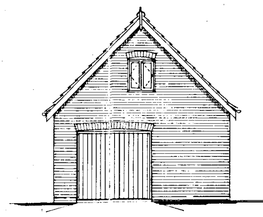
ELECTRIC
Socket outlets and light points to I.E.E. regulations and N.H.B.C. standard.
and socket outlet. Light switches and sockets for lighting and other equipment in habitable rooms to be at a height between 450mm and 1200mm from f.f.l.

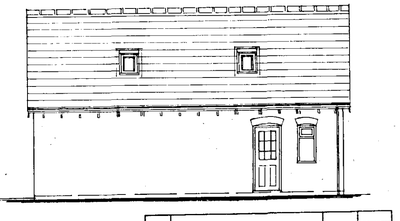
HEATING
Gas fired balanced flue boiler to be installed in position indicated on plan.
Proposed boiler efficiency to be in accordance with table 2 SEDBUK rating.

All hot water and heating pipes including cylinders to be insulated in accordance with REG. L1 Building Regulations.
Where balance flue appliance installed provide durable guard to flue outlet 600mm min. from adjacent openings and corners of building.
Hot water storage system to be vented type.
Hot water storage system to be insulated so as to limit heat loss to 90 W/M of surface area of system to comply with BS 1566: PARTS 1& 2: 1984 or BS 3198: 1981.
Room thermostat / thermostat valves to radiator installed to control heat output from boiler system.


REAR ELEVATION


SIDE ELEVATION


FRONT ELEVATION


SIDE ELEVATIO

SHDC
PLANNING & DEVELOPMENT
19 JAN 2004
Ref. 04/65/04

DETERMINED
PLAN

ISSUE	DESCRIPTION	APPR'd	DATE

PODDINGTONS
Architectural Design Consultants
Est. 1969
Unit 7, The Flaxmill, Flaxmill Lane, Pinchbeck, Spalding, Lincs NG34 8QU Tel. (01775) 720866 Fax. (01775) 720877

Client. MR R.J. EXLEY

Project. DETACHED GARAGE AT VICTORY HOUSE, 24 STATION ROAD MOULTON SPALDING LINCOLNSHIRE

Drawing. FULL PLANS

Drawn | Scale: 1:50, 1:100, 1:1250 | Date. JAN 04 | Checked. | Approved.

Dwg. No. 3158-1 | ISSUE.