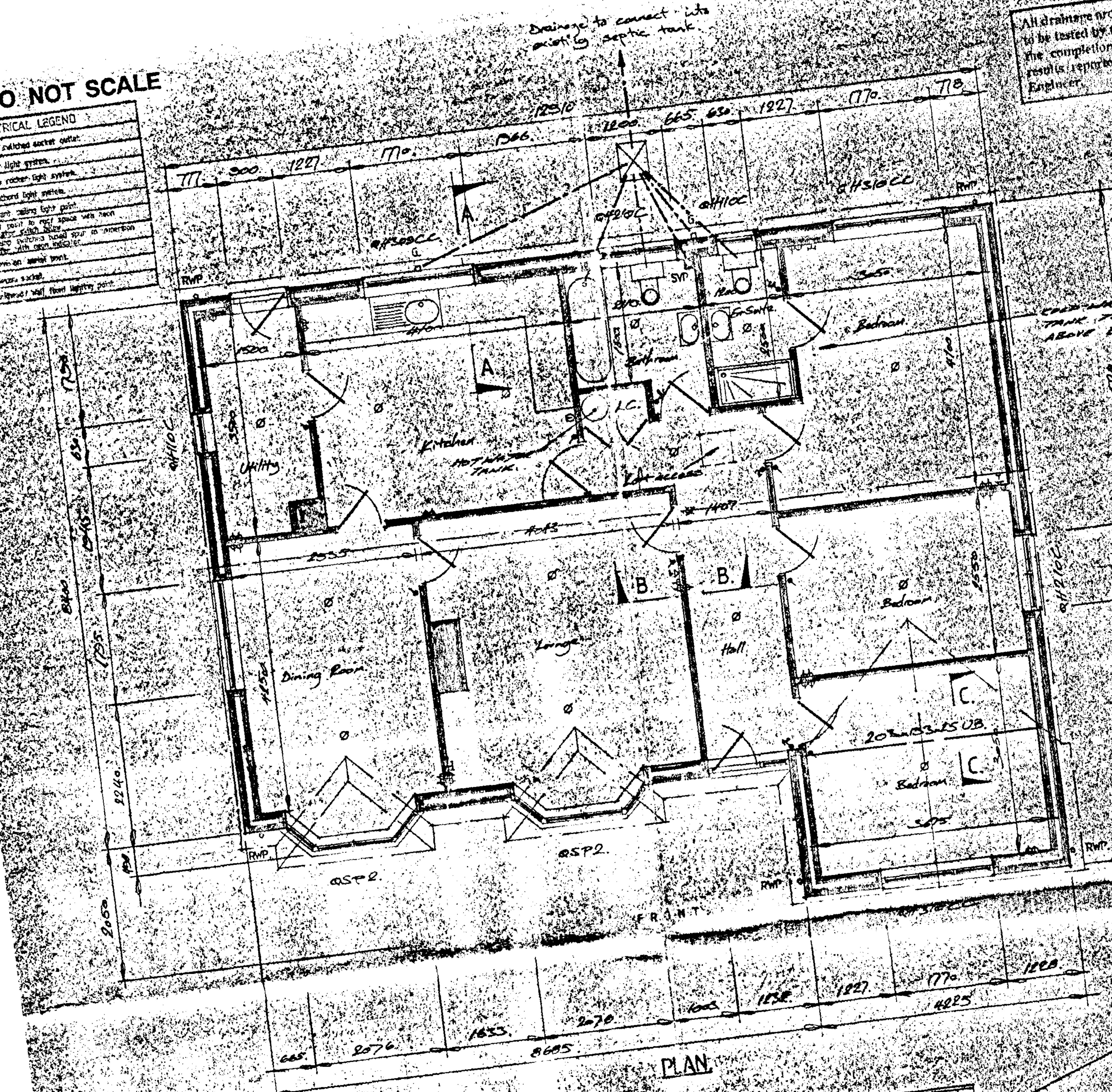
DO NOT SCALE



All drainage around the property is to be tested by the Contractor upon the completion of the works and results reported in writing to the Engineer.

RAINWATER GOODS

Gutters to be 100 mm diameter half round pvc, downpipes to be 68 mm diameter pvc discharging via pipe-stubs into standard rainwater gullies with rodding access. Discharging to new soakaway (positioned 5m min from any building) or into existing surface water system (to plans) via 100mm diameter pvc drains falling not less than 1:40, with min 150mm bedding and back fill of pea shingle. Excavation backfilled with DOT Type 2 material or approved selected excavated granular material. Final details to be agreed on site with Local Authority Building Control Officer's approval.

DRAINAGE

To be in accordance with BS8301 (latest edition) Section H Building Regs (1985) 1990 edition

Any drain beneath extension to be surrounded with 150mm of GEN 3 grade concrete divided with 18mm compressible board at joints.

Any pipe passing through the foundation to be sleeved and surrounded with 50m of fibreglass insulation to maintain flexibility, rigid board to be placed either side of foundation as pipe entry to prevent intrusion by soil or vermin, provide proprietary RC Builders Lintels over pipes passing through brickwork (sleeved as through foundations). New pipes to be 100mm diameter UPVC (to BS4660) by an approved manufacturer, i.e. "OSMA" with watertight joints laid to fall of not less than 1:40 and have 150mm bedding and backfill of pea shingle. Excavation backfilled with DOT Type 2 material or approved selected excavated granular material. (Pipes to have 150mm GEN 3 grade concrete surround divided with 18mm compressible board at pipe joints, under driveways). Any redundant drains are to be sealed up to Local Authority Building Control Officers satisfaction.

Provide new 100mm diameter UPVC soil and vent pipe with flow bend at foot, and terminating a minimum of 900mm above any window opening. (fitted with proprietary cage at top) ensure a min. distance of 450mm from lowest plumbing connection to invert of soil and vent pipe.

Inspection chambers are to be constructed of minimum 450mm diameter approved proprietary UPVC chambers by same manufacturer as pipework, with a 150mm bedding and surround of GEN 3 grade concrete. (Max. depth for this form of construction to be 900mm).

Note: Back inlet gullies to be provided with rodding access.

OR

A minimum 600 x 600 internal dimension (but see below) manhole constructed of 215mm thick Class B engineering brickwork on minimum 150mm thick GEN 3 grade concrete base. Provide an internal granolithic mortar benching finished to Local Authority's approval. Provide galvanised or cast iron covers and frames with medium duty cast iron covers in driveways on 2 courses of "Class B" engineering brickwork. Provide double grease sealed screw down covers to internal manholes.

Provide 150mm bedding and surround of GEN 3 grade concrete with 18mm compressible board at flexible joints to back inlet gullies.

All drainage to be air/water tested in accordance with section H Building Regs (1985) 1990 Edition and Local Authority Building Control Officer's approval.

BOILER FLUE/LINER

To be 552 x 552 wide constructed of common Fletton brickwork below roof finish/facing brickwork above roof finish.

Flue to terminate 1m above exit point of stack on highest side, or top of flue is to be at minimum 2300mm (measured horizontally) from roof finish, whichever is the greater, max. height of unreinforced flue = 4½ x width above highest exit point of stack. (All structural timber to be at least 50mm clear of flue throughout building). Permanent ventilation provided by 2 No. 100mm diameter supersleeve pipes laid under floor connected to cranked air brick in external wall.

FLUE LINER

Flexible, spirally wound, austenitic stainless steel liner to BS1449, size to suit boiler (min. 125 diameter) with all fittings necessary to provide a complete installation. Install line in one piece, fixing securely at top of stack. Ensure that flue is unobstructed and clean. Install liner in one piece, fixing securely at top of stack and to boiler with clamps supplied for the purpose by liner manufacturer. To give a gas tight seal joint at boiler, completely filling with approved jointing material.

Appliance and flue to be installed by Approved Contractor.

STUDWORK WALLS

Constructed of regularised 75 x 50 grade SC3 studs at 400 centres with 75 x 50 head plate, sole plate and noggins to suit plasterboard joints. Provide 75mm fibreglass insulation to voids and finish both sides with 12mm plasterboard taped joints and a plaster skimcoat.

WINDOWS

(max. "U" value of 3.3 W/sq.m. K)

To be standard windows of type and materials shown on elevations with double glazed sealed units (6mm air gap) with permanent trickle vents in head of frame giving 8000 sq. mm vent to habitable rooms and 4000 sq. mm vent to kitchen/utility/bathrooms. Windows to be capable of providing a free area of ventilation equal to at least 1/20th of the floor area of each habitable room. Note: All glass within a distance of 800mm (windows)/1500mm (doors) above finished floor/ground floor level to be safety glass to BS6206 for windows and doors.

The area of windows/doors/roof lights together should not exceed 22.5% of total floor area.

VENTILATION (BATHROOM)

Mechanical ventilation to be capable of discharging 15litres/sec to external air.
Position and ducting to be determined on site.

VENTILATION (KITCHEN)

Mechanical ventilation to be combined with cooker extractor hood and to be capable of discharging 30litres/sec to external air or independent mechanical vent capable or discharging 60 litres/second. Position and ducting to be determined on site.

PLUMBING

All sanitary pipework to be in accordance with BS 5572 (latest edition).

Waste pipes to be as follows: 32mm diameter to (wash basin and bidet). 40mm diameter to (sink, bath, shower, food waste disposal unit, 1 final bowl). 100mm diameter to WC pan. 19mm diameter to overflow pipes, except as otherwise shown on the drawings. All to be white polypropylene pipes to BS:5254 or 5255 and kite marked.

Joints to be push fit with factory fitted and retained EPDM Rubber Ring Seals (OSMA Ultrabore or similar approved) pipes to be supported with circumferential pipe support brackets fixed to walls or supports with suitable fixings in accordance with manufacturer's instructions.

Branch connections to enter stack pipe at not less than 200mm vertical centres. Provide 75mm deep S or P traps to all appliances (with Anti-syphonic traps where runs exceed 1700mm), provide cleaning eyes at all changes of direction.

Stub stacks are to be fitted with an approved air admittance valve. Stub stacks to be 1m min above highest connection point.

All plumbing to be air/smoke tested in accordance with Building Regs approved document H (1985) 1990 edition and shall be to Local Authority Building Control officer's approval.

HEATING AND HOT WATER SYSTEMS

Low pressure hot water central heating system, designed and fitted in accordance with BS5449 "Code of Practice for central heating for domestic premises", with radiators in all rooms, to comprise oil fired central heating boiler of suitable rating with balanced flue, (provide adequate guarding to boiler flue if less than 2000mm above ground level) supplied and installed by Specialist Engineer. Boiler to be sited on external wall with minimum 400mm from any openable windows. Permanent vent to be fitted to kitchen with cross sectional area equal to or not less than boiler output or minimum 10,000mm². 3kw immersion heater to be fitted to hot water cylinder in airing cupboard. Position of radiators, timber, and thermostats etc. to be agreed with owner.

Provide a single 50 gallon (230 litres) water tank in loft space, supported on a tank platform constructed in accordance with BS:5268 (Part 3). Water tanks to be lagged.

OPEN FIREPLACE

Minimum finished opening required: 450 wide x 5?? high. Common Fletton brickwork below roof finish/facing brickwork above roof finish. All dimensions to be confirmed prior to work starting on site. Fireplace to be provided with minimum 125mm thick constructional hearth extending to the back and jambs in the recess and projecting minimum 550mm in front of the jambs 150mm either side of opening. Flues to be 225mm diameter rebated and socketed liners to BS1181: 1971 fixed with sockets upper most. Flues not to make an angle of less than 45° to the horizontal. Flue to terminate minimum 1m above exit point of stack on highest side, or top of chimney is to be a min. 2300mm measured horizontally from roof finish, whichever is greatest. Max. height of unreinforced chimney not greater than 4½ x width above highest exit point of stack, with clay pot or metal cowl with 75mm concrete capping. Provide 2 No. metal discharge points built into minimum 200 thick brickwork jackets or open fires in accordance with Building Regulation M4 (1). Permanent fresh air provided by 2 No. 100mm diameter supersleeve pipes laid under floor connected to cranked air bricks to BS1251 (a) structural timber brass vent grill in hearth at opening and approved. ... must be at least 50mm clear of the chimney ...

Finish as noted on elevations etc. Structure ... roofing felt, on roof structure as plans etc. Wall plates strapped to internal leaf by 30 x 2.5 galv. plates by standard truss shoes. Wall plates strapped to new and existing mild steel L straps x 1200mm long at 1200 centres. Structure strapped to new and existing gable walls at rafter and ceiling level with 30 x 5 galvanised mild steel L. Straps turned down new cavity or fixed to existing, wall straps at 1200mm centres. Straps fixed to min. 3 No. rafters/ceiling joists with noggins at strap positions. All roof timbers to be treated with preservative and to be in accordance with BS4471. Provide 200mm minimum fibreglass insulation between ceiling joists Rockwool Roll Batts (thermal conductivity of 0.037 w/mk or similar approved). Cross ventilation achieved by proprietary insect proof soffit vents giving a continuous 10mm gap along eaves. Provide code 5 lead flashing at abutment with chimney stack/non ventilated wall. Provide proprietary "VULCANAL" fibreglass through valley strip or similar approved to valleys and finish tiles to manufacturer's specification. Ceilings to be finished with foil backed plasterboard with taped joints and 5mm plaster or artex skim coat, Plasterboard thickness 9.5mm for ceiling joists at 400mm maximum centres, otherwise 12mm.

For ventilation at abutment with existing wall provide either continuous "Marley"/Glidevale MR30 abutment ventilation system fixed in accordance with manufacturer's instructions giving (5,000 sq.mm./m. free ventilation area) or Marley thru' vent tiles at 900 centres fixed 2 courses down from abutment giving (5,000 sq.mm./m. free ventilation area). With code 5 lead flashing at abutment to suit either system. (Notes where abutment is with new cavity wall provide a proprietary cavity tray in new wall discharging out over new lead flashing at abutment). Provide code 5 lead flashing to unvented abutments.

Note: If roof pitch is less than 15° then ventilation at eaves to be increased to 25mm and at vented abutments provide Glidevale FV250 continuous abutment ventilation (25,000 sq.mm. vent) fixed in accordance with manufacturer's instructions.

Roof trusses to designed, manufactured and supplied by specialist, in accordance with BS5268: 1985 (1988 revision) Parts 2 and 3. Brace in accordance with BS5628 Part 3.

The supplier shall be solely responsible for the design of the truss rafters and other timber members including bracing. The roof shall be fixed by the supplier or in accordance with the supplier's instructions.

Note: Ensure pitch of roof adequate for type of tile. Possible double roof felt, increase tile lap etc.

EXTERNAL WALLS

(max. "U" value 0.45 W/sq.m K).

External leaf facing brickwork as detailed on elevation, (to extend min. of 2 course below nominal ground level), 75mm cavity, and 100mm Lignacite internal leaf. Built off Hyload or similar approved dpc positioned a min. of 150mm above external ground level, lapped min. 100mm with existing dpc, provide foundation quality bricks below dpc level. Brick cavities below ground level to be filled with lean mix concrete to 225mm below dpc. Dpc's and dpm's are to be bonded together over internal leaf. All new works to be properly tied to existing (see note). 150mm wide vertical dpc's and insulated cavity closers to be provided to reveals of all doors and windows. Stainless steel wall ties to be positioned at 900mm centres horizontally and 450mm centres vertically, additional ties to be provided at not less than 300mm centres to reveals of all openings through wall. Thermal insulation to be achieved by 75mm Rockwool Cavity Batts (thermal conductivity of 0.036 w/mk) (or similar approved) held by clips on stainless steel wall ties to internal leaf. Lintels to be Catnic (or similar approved) steel type Bitumastic painted with expanded polystyrene infill, with minimum 150mm end bearing. Loads and spans are not to exceed the manufacturer's specification. Cavities closed at eaves by mineral wool cavity closer or 9mm asbestos board bedded in mortar. Internal wall surfaces to be finished with a 2 coat Gypsum plaster finish o/a thickness 13mm. Provide brick reinforcement to reveals less than 350mm.

Refer to drainage note for pipe penetration solution.

Mortar to be 1:3 cement/sand below dpc and 1:6 cement/sand with approved plasticiser above dpc.

INTERNAL PARTITION WALLS

100mm Lignacite, built off Hyload or similar approved dpc. Provide foundation quality flettons up to dpc level and build off foundation or build off dpc on top of ground slab. Finish walls with a 2 coat gypsum plaster finish o/a thickness 13mm to both sides.

- Windows to be 'Sovereign' horizontal bar PVC-U by Boulton & Paul. Refer to plan for reference numbers.
- Patio doors to be 'RDE2P10W' PVC-U by Boulton & Paul.
- External doors to be 'RDEE' PVC-U by Boulton & Paul.
- Internal doors to be 'Sapele' luxury flush by Boulton & Paul.
- Front entrance frame is to include a side light (OFER1229 from Boulton & Paul catalogue). Side light to be on the right hand side as shown on the plan.
- For style & colour of kitchen units & bathroom suites, refer to client.
- Provide skirtings throughout, type, painted or stained to clients choice.
- Provide coving throughout painted with 2 coats of emulsion, colour to clients choice.
- All ceilings to have an Artex finish, pattern & colour to clients choice. WITH 2 COATS EMULSION
- Internal walls to be painted with 2 coats of emulsion, colour to clients choice.
- OIL TANK TO BE LOCATED AT REAR OF PROPERTY. LOCATION TO SUIT CLIENT. TANK TO BE SITUATED ON 200 THK. CONC SLAB (RC35) WITH A393 MESH TOP AND BOTTOM ON 225 THK. LAYER OF WELL CONSOLIDATED GRANULAR FILL TYPE DOT. 1.



REVISIONS		
A.	23.1.97	GENERAL REVISIONS AND ADDITIONS

Project
RUTLAND COTTAGE
WHAPLODE ST. CATHERINE
LINCOLNSHIRE.

Title
PLAN & ELEVATIONS
OF PROPOSED BUNGALOW.

Client
Mr. & Mrs. TUNNICLIFF

DETERMINED PLAN

Architect

Scales 1:50. Drawn [initials] Date JAN 97
Job Manager Quality Check [initials]

Richard Jackson Partnership
CONSULTING CIVIL & STRUCTURAL ENGINEERS
26 High Street, Hadleigh, Ipswich, Suffolk IP7 5AP Tel. 01473 823?39
Malvern House, 199 Marsh Wall, Meridian Gate, London E14 9YT Tel. 0171 538 2??6
2 Wellington Court, Wellington Street, Cambridge CB1 1HW Tel. 01223 314794
6 The Old Church, St Matthews Road, Norwich, Norfolk NR1 1SP Tel. 01603 219797

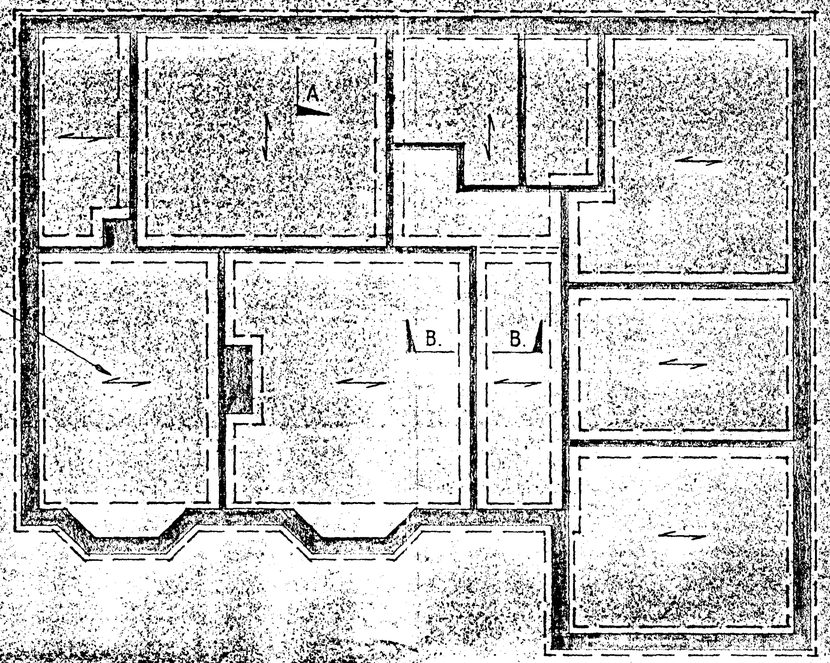
Drawing No. 19082 / 10. A

SOUTH HOLLAND DC
HOUSING & PLANNING
14 OCT 1997
Ref: 1094/97.

For Sections & Foundation details refer to drawing No. 19082/11.

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DO NOT SCALE



PLAN ON FOUNDATIONS

FOUNDATIONS

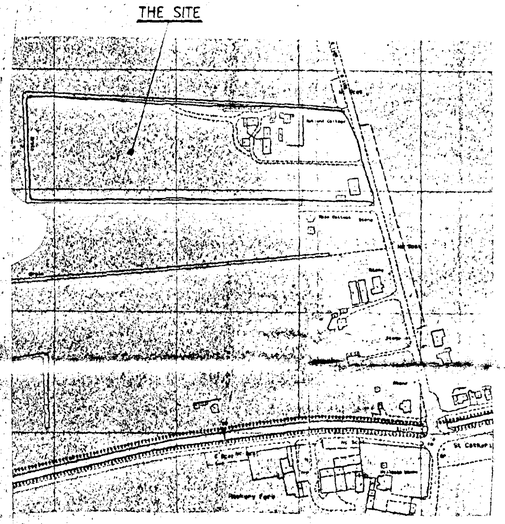
Concrete GEN 3 ~~strip 560mm deep~~ 450mm wide, trench filled and finished in mineral grouted up ~~300mm below external ground level~~ 300mm below root zone. 150mm below drain invert level or to Local Authority Building Control Officer's requirements, whichever is the deepest. Refer to drainage note for solution to drain penetrations.

SUSPENDED PRE-CAST GROUND FLOOR

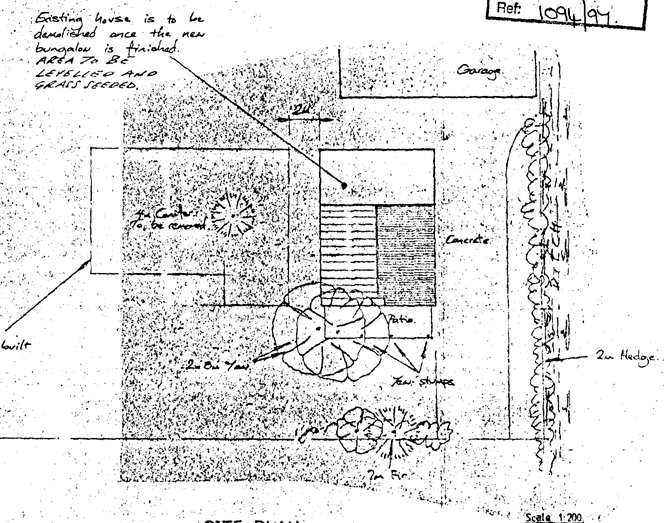
(max. "U" value 0.45 Wm²/m²K)

Constructed of 65mm thick 4:1 cement/sharp sand screed on 50 mm thick ~~rigid~~ flooring grade SD polystyrene insulation on 3 coats of BIW painted dpm on 150 mm thick PC beam and block/plank floor to specialist design and manufacture, built into internal skin and/or ext. internal brick sleeper walls on dpc, built off foundations. Provide min. 150mm void below p.c. floor. (Note:- If external ground level is higher than internal ground level, provide 50mm (C10) concrete blading on 1000g polythene buried to inner skin with 3 coats of Synthaprufe all sealed with dpc). Ventilation of new floor to be provided by proprietary 225 x 75 air bricks at 2m centres in external/sleeper walls. Provide telescopic vent ducts between floor void and air bricks.

Suspended precast concrete floor system to be designed by others for the following imposed loads:
Self contained 2 — 5 1.5 kN/m² + partitions
dwelling unit 3 — 5 + finishes + self weight

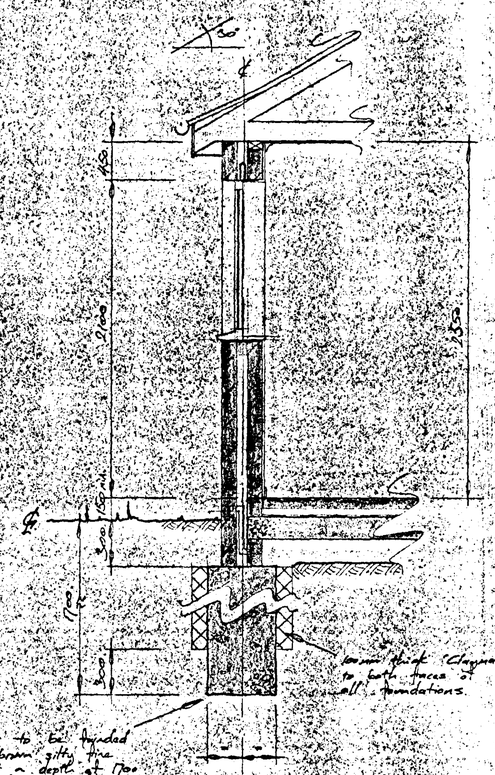


LOCATION PLAN

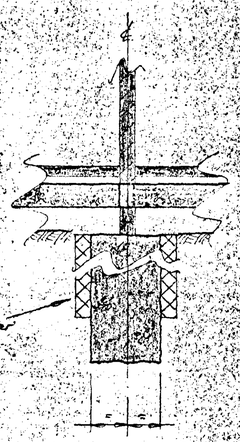


SITE PLAN

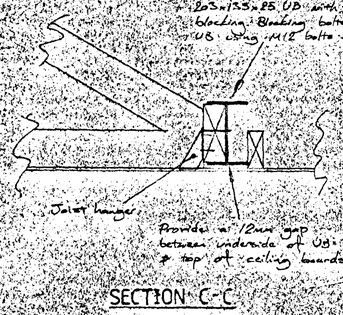
1:2500 NORTH HOLLAND DC
HOUSING & PLANNING
14 OCT 1997
Ref: 1094/97



SECTION A-A



SECTION B-B



SECTION C-C

REVISIONS			
A	27.4.98	GENERAL REVISIONS AND ADDITIONS.	

Project
RUTLAND COTTAGE
WHAPLODE ST. CATHERINE
LINCOLNSHIRE.

Title
TYPICAL SECTIONS & FOUNDATION DETAILS.

Client
Mr. & Mrs. TUNNICLIFF.

Architect

Scales 1:50, 1:20 | Drawn JM | Date Jan '97

Job Manager | Quality Check

Richard Jackson Partnership
CONSULTING CIVIL & STRUCTURAL ENGINEERS
28 High Street, Hadleigh, Ipswich, Suffolk IP7 5AP Tel (01473) 823818
Malvern House, 198 Marsh Wall, Millwall Gate, London E14 9YT Tel (0171) 536 2000
2 Worlington Court, Warkington Street, Cambridge CB1 1NW Tel (01223) 214794
6 The Old Church, St Matthews Road, Norwich, Norfolk NR1 1SP Tel (01603) 219767

Drawing No.
19082 / 11 A

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