SPECIFICATION

1. EXTERNAL FINISHES

A. External walls to be in Buff/Brown facing bricks to match as near as possible those on the recent extensions to the existing building.

B. Roof to be covered in Slate Grey concrete interlocking plain tiles to match as near as possible those on the recent extensions to the existing building suitable for a 17½° pitch.

2. FOUNDATIONS

Provide concrete strip footings where shown dotted on the plan in ST4 mix 610mm & 450mm wide x 225mm thick. The foundations are to be taken down to a good load bearing strata approximately 650mm deep unless shrinkable sub-soil is encountered then this is to be increased to a minimum of 1.000m deep. Where walls are to be built off the site slab then this is to be thickened to 225mm x 450mm wide (min') plus 45° batters.

3. WALLS

270mm cavity external walls to comprise 105mm facing brick outer skin, 65mm cavity with 65mm 'Dritherm' insulation baps to the full height of the wall commencing 150mm below the base of the floor slab & to connect with the existing wall insulation where the first floor extension is proposed.. 100mm lightweight insulation block inner skin in 'Thermalite Turbo' blocks or similar approved provided that they meet the same insulation value, 13mm dense or lightweight plasterwork internally to give 0.32W/m²K. Build in as the work proceeds twisted plastic wall ties to BS1243 spaced 900mm horizontally & 450mm vertically (max) with additional ties to all formed openings & vertical expansion joints. All below ground walls to be built in either class 'A' concrete blocks, 7 Newton insulation blockin or formed in F1 type brickwork. Back fill cavities below ground level in lean-mix concrete up to 75mm below ground. Close cavities at external openings & reveals & at every cavity closure provide vertical & horizontal D.P.C's as appropriate but the cavity is not to be closed at eaves level as the wall insulation is to join together with the roof insulation in order to give a complete thermal break.. Build in as the work proceeds 'Catnic' or similar approved combined insulated lintels to all the external openings, including altered & newly formed openings in existing walls, sized & fixed strictly in accordance with the manufacturers recommendations. Provide all necessary cavity trays & weep holes as appropriate & vertical expansion joints where runs of brickwork are in excess of 6.00m runs. Provide & fix over the internal openings 'Catnic' or similar approved corrugated type lintels as manufacturers specification with the exception of the new openings formed in the present internal & external wall of the existing structure where this links with the new extension to form the access corridor, these lintels are to be 2No'CN5XA 'Catnic' box type load bearing lintels or similar approved with a minimum bearing of 150mm either end. Close cavities around external openings with 'Thermabate' or similar approved insulated cavity closers and the window frames are to be recessed in their openings to ensure a minimum 30mm overlap of the frame over the insulated cavity closer. The internal division walls where possible are to be in 100m insulation blocks if these occur over the ground floor walls & elsewhere are to be constructed with 100mm×50mm studding at 600mm centers with noggins at not more than 800mm centres and covered both sides with 15mm wallboard with a skimm finish, incorporate with the partitions a gypsum 1200 sound absorption blanket 25mm thick (min'). Ensure all edges of the plasterboard are fully supported with additional noggins as necessary. Provide continuous Pitch Polymer or Lead Bitumen D.P.C's to all new walls at ground floor level & mechanical fixings are to be provided at the abutment of all new wits to the existing structure, internally & externally. The mechanical fixings are to be used strictly in accordance with the manufacturers instructions.

4. FLOORS

The solid floors are to comprise of 65mm cement sand screed (1:3) on 100 oversite concrete (1:2:4) on 1200 gauge polythene D.P.M. which is to be lapped up the edges of the site slab all round and tucked into the horizontal D.P.C. 50mm (min). All to be laid on 100mm 'Polyfoam Plus Floorboard 220' insulation board laid strictly in accordance with the manufacturers instructions including 25mm expansion strips around the perimeter of the extension to give 0.22W/m²K insulation value, all on compacted soft sand blinding on 150mm thick mechanically compacted hardcore bed (min'). NOTE:-The hardcore is to be compacted in not more than 150mm thick layers particularly where there is an abnormal difference in levels between the new floors & the existing external ground levels. The suspended first floors to the extension area to comprise 20mm T&G chipboard decking laid on 170x38mm joists at not more than 400mm centres between the steel RSJ beams where shown with all necessary herrinbone strutting & MS beam straps to complete the works in accordance with the current building regulations. The joist are to be doubled up below partitions & bolted together.. Incorporate with the floors Gyproc 6045 sound deadening slabs laid in accordance with the manufacturers instructions, Cover the ceilings with 15mm foil backed plasterboard and also clad any supporting steel beams with 2 layers of 15mm plasterboard to give a minimum of ½ hour fire protection..

5 . DOORS, FRAMES & WINDOW FRAMES

The door frames & window frames are to be in PVCU to match those on the recent extensions in the styles as illustrated & manufactured by a specialist manufacturer to comply fully with BS7950 for security & BST413 for extrusions & to BS5619 for mobility requirements., All windows are to be double glazed with 24mm DG units with low 'E' glass to the inner surface to give 2.0W/m²K insulation value & safety glass complying with BS6206 is to be used in doors, any glazing within 300mm of door edges & any glazing within 800mm of floor level. All windows to incorporate controllable trickle ventilators giving 8000mm² free air space to habitable rooms & 4000mm² to all other rooms & having fitted fly screens & in addition to have openable areas equivalent to 1/20th of the floor area of the room they serve. Egress opening lights are to be provided to all the bedrooms & the new window in the extended dining room to comply with Part B, 2000 edition of the building regulations. The frames are to be set back in the brickwork openings & must overlap the insulated cavity closers a minimum of 30mm.

6. ROOF

Redland 'Cambrian' concrete interlocking slates or similar are to beused to the roofs to the extensions with contrasting hip & ridge tiles to match the recent extensions. All coverings are to be laid strictly in accordance with the manufacturers instructions on treated battens complying with BS4471 on Tyvek Supro-Plus breather underlay laid with 150mm laps & to be fully supported at eaves all round together with proprietary over fascia ventilation units giving equivalent free air space to a 10mm gap to roof perimeter & to be fitted with fly screens. Roof supporting structures are to be fabricated using 'Fink' type gang nailed roof trusses by a specialist manufacturer complying fully with BS5268 pt3, 1985 & fixed strictly in accordance with the manufacturers instructions & spaced at 600mm centres (max). Additional strengthening timbers are to be incorporated in the roof in accordance with the TRDA tech' bulletin No1 comprising 2No 100 x 25mm ceiling binders, 100 x 25mm ridge binder, 100 x 25mm bracings on internal members & diagonal ceiling ties. 100 x 50mm continuous wall plate bedded in cement sand morter (1:3) with 5mm M.S. anchor straps at 1.800m centres (max). Provide additional timbers to support any cold water feed tanks which mey be situated in the roof in accordance with BS5268 pt3. All structural timbers to be out of SC3 grade timber. The roof space is to be insulated throughout with 100mm thick glassfibre insulation which is to be laid between the trusses with a 150mm overlay in the opposite direction which is to be well tucked into the eeves to join with the wall insulation & a beffle board is to be provided all eeves level in order to maintain a 25mm clear air space between the insulation & underside of the roofing felt. The roof 'U' value is to be 0.16Wm²K Provide & fix 25mm treated deal fascia all round the perimeter of the building to match the existing with exterior ply sofit boards. Provide & fix all round the roof self coloured P.V.C. gutters & downpipes in the positions as indicated in a matching style to the existing. The ceilings throughout are to be formed in 15mm foil backed plasterboard which is to be fixed & supported on all edges with additional noggins as appropriate & finished with 'Artex' compound or skim coat plaster as directed by the client. All timbers which are to be built in or concealed are to be pre treated against rot & infestation with an approved preservative by a specialist. The flat roofed area over the escape stairs is to be 'Warm Roof' construction to comprise 100mmx38mm joists at 400mm centres covered with 22mm exterior quality plywood or chipboard decking covered with Anderson or similar approved roofing materials vapourtec base layer,'Rocksil Roofmax' 120mm thick insulation board covered with HT Elastomeric mineral coated upper layer to give 0.29Wm²K. The valley gutters between the roofs are to be pre-formed glassfibre units fixed in accordance with the manufacturers instructions. The valley gutter between the roof & the second storey extension is to be formed in code 5 lead laid on 25mm T&G jointed boarding and flashings, soakers & secret gutters at abutments are to be in code 4 lead.

7. VENTILATION

Provide mechanical ventilation to all internal rooms, toilets & bathrooms to give 3 air changes per hour, ducted to the outside and operated from the rooms lightswitch. The fans are to have a 3 min' overun and the doors giving access to the rooms are to have a 25mm clear air space between the bottom of the door & the floor covering. Provide mechanical ventilation to the other Toilets & Bathrooms to give 15 litres per sec' extraction rate & to the Kitchen to give 30 litres per sec' extraction rate. Note the fan to the kitchen should be adjacent to the cooker if not then the extraction rate is to be increased to 60 litres per sec'.

8. DRAINS

All drain runs manholes & fittings to be in meeting UPVC ware complying fully with & installed in accordance with approved document H (2002) edition or the Building Regulations & laid to self cleansing falls min' 1:80 max' 1:40. Installation to comply fully with BS8301, drains passing beneath building to have 100mm pea gravel surround and the floor slab is to be reinforced over. Drains passing through walls are to be properly bridged over with concrete lintel supports & a 50mm clearance is to be allowed around the pipes filled with compressible material. All sanitary fittings are to have 40mm int' dia waste pipes (min') & deep seal traps and all pipe runs are to have rodding eye access points at each change of direction. All above ground drains to comply BS5572. All drain runs, F.W. & S.W. not under a path and having less than 600mm cover are to have concrete slabs laid over as bridging on a 75mm pea gravel bed. Pipes below roadways having less than 900mm cover are to have reinforced concrete bridging over. Provide 100mm dia' UPVC vent & waste pipes where shown to terminate in a balloon finial 900mm above window/door heads (min'). Surface water drains to be in 100mm dia' UPVC ware with 150mm pea gravel surround to discharge to an existing surface water drain or soakaways as shown. The foul drains are to connected into the existing foul drains which discharge to the public sewer. *All drains (new & Existing)* are to be pressure tested on completion.

9. STRUCTURAL CALCULATIONS

Manufacturers calculations for the roof trusses and structural engineers calculations for the supporting steelwork are to be submitted to the Local Authorities for checking and approval prior to work relating to these items being put in hand.

10. HEATING

Heating to the extensions & the existing parts of the property are heated from the balanced flue gas fired boiler situated where shown and the new rooms & circulation areas, bathrooms, dining room extension & kitchen extension are to be heated by low emission radiators each having its own individual thermostatic control. All pipework within the roof space and in any unheated areas is to be insulated and the pipe insulation is to have a thermal rating of not less than 0.45W/m²K and a thickness equal to the outside diameter of the pipe up to a maximum thickness of 40mm.

11. DISABLED REQUIREMENTS.

The extension is to be fully compliant with part M of the building regulations to cater for the disabled.

12. LINTELS

The lintels for the external openings are to be 'Catnic' or equivalent open back insulated lintels without baseplate which meet part L of the building regulations from the amended CG/CU range type CG50/100 for lengths up to 3.90m & type CU50/100 for lengths up to 4.80m. All lintels are to be fixed in accordance with the manufacturers instructions.

13. ENERGY CONSERVATION

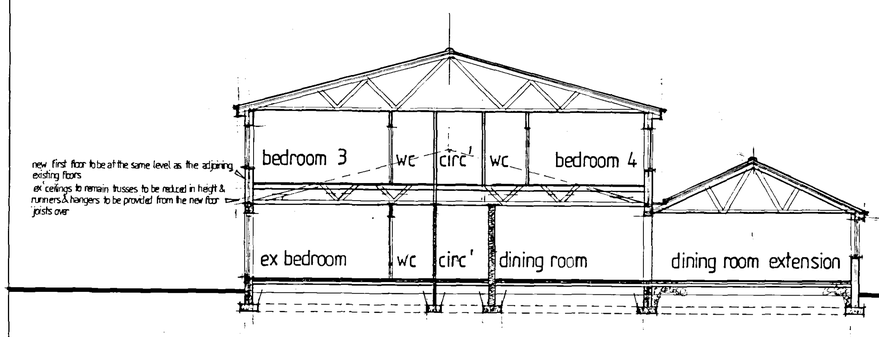
Approved low energy light units are to be used to all circulation areas, bathrooms & toilets dining room & any general external lighting.

14. CERTIFICATES & BUILDING LOGBOOK

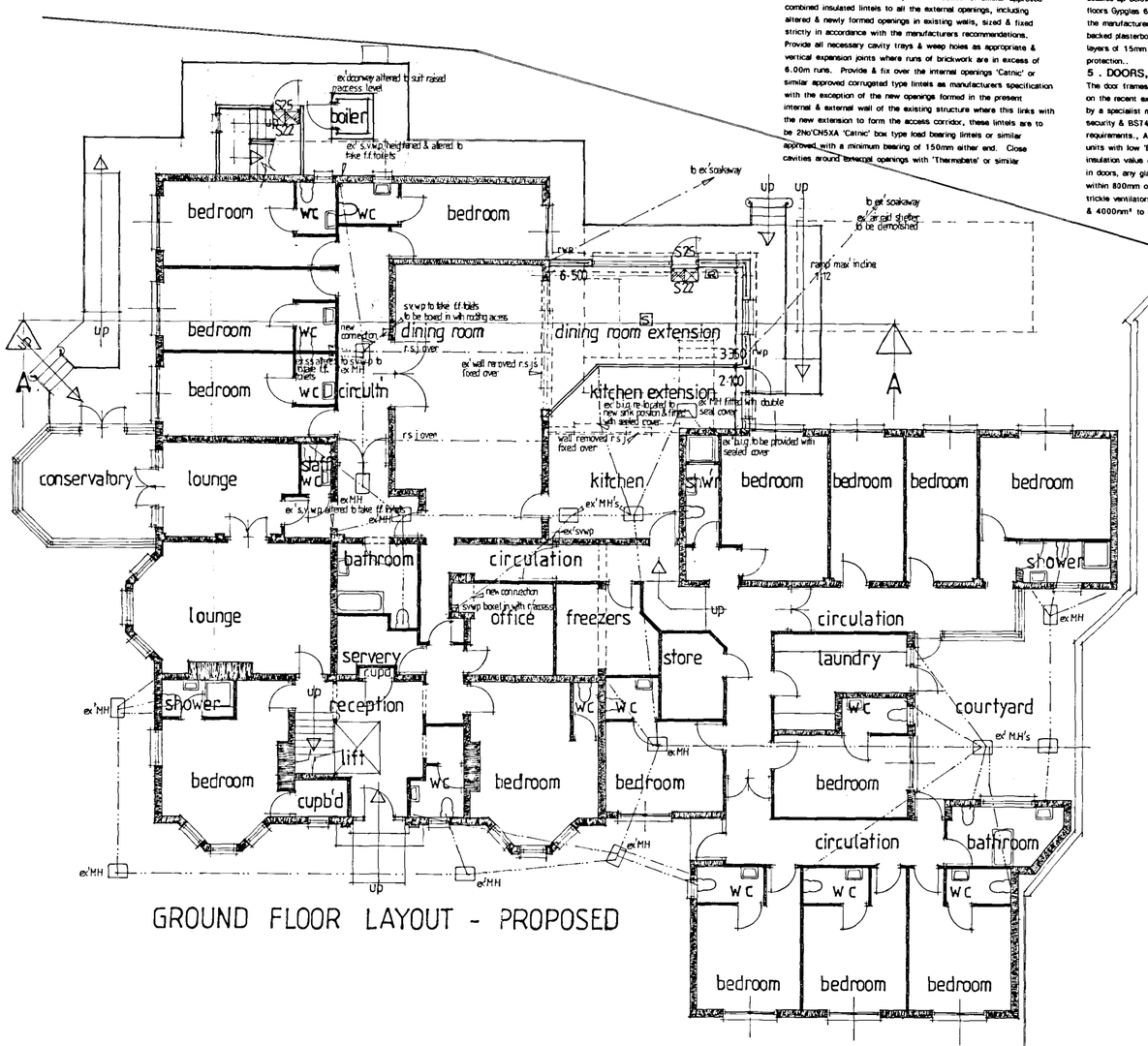
The general contractor is to be reponsible for ensuring that all relevant certificates are provided for the testing, inspecting & commissioning of mechanical & electrical equipment installed in the premises and a building logbook and energy meters are to be provided in accordance with part L2 of the building regulations.

15. ESCAPE STAIRS

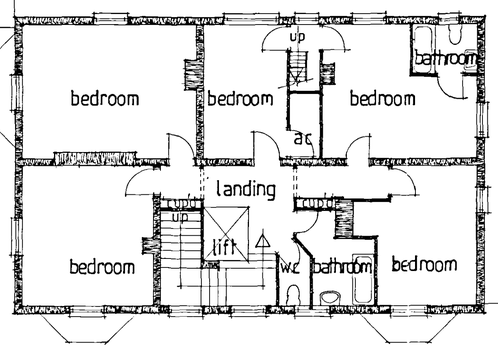
The escape stairs and enclosure are to be by a specialist manufacturer in rust resistant treated steelwork & the stairs are to be finished with a non-slip surface and fully compliant with the building regulations having a 280mm going and a rise not exceeding 180mm. Provide all necessary handrails & gaurd rails and the exterior is to be clad with a stained timber vertical boarding as prior approved by the local council planning department.



SECTION A • A



GROUND FLOOR LAYOUT - PROPOSED



FIRST FLOOR LAYOUT EXISTING

DETERMINED PLAN

279/06

MR D KESHWARA
NUTTEN STOVEN
RESIDENTIAL HOME
81 BOSTON ROAD
HOLBEACH LINCS PE12 8AA
GROUND FLOOR ADDITION

Note:- The Contractor is to be responsible for checking all dimensions on site prior to works being put in hand and will also be responsible for setting out the works and determining levels. This drawing is to be read in conjunction with drawing no's 04:49:03 & 02:17:3B

WORKING DRAWING

DRAWING NO	04:49:01
DATE	SEPT 04
SCALES	1:100
AMENDMENTS	

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