BUILDING REGULATION NOTES

TO BE READ IN CONJUNCTION WITH STRUCTURAL ENGINEER'S DESIGN CALCULATION SHEETS + SKETCHES.

Preliminaries

The Contractor is responsible for all propping and the protection of the existing structure All assumed load bearing walls, foundations and structural elements are to be exposed and checked on site prior to the commencement of works.

All exposed structure is to be inspected by the Building Control Officer and verified as adequate. Any defects are to be reported to the Structural Engineer / Architect.

The contractor is to prepare safe methods of transporting and installation of all heavy items including beams and the large glazed screens etc.

Sub-structure:

600mm wide mass concrete foundations, C20 mix. Foundation depth to be min 1000mm deep or 300mm below root activity, whichever is lower. Final depths to be agreed on site with Building Control. Foundations in excess of 2.5m deep are to be designed by a Structural Engineer.

blinded DOT Type 1, 1200g polythene DPM (linked to DPC), 125mm C30 conc slab, 100mm PIR floor insulation, 30mm PIR upstand at perimeters, 500g polythene VCL, 75mm s/c screed. (U-value 0.15 W/m²K).

Existing Ground Floor: Break up existing slabs and clear away. Remove timber suspended floors including joists and make good. Remove redundant air bricks. Allow for laying new concrete slab as previously described. TOS to be 175mm below FFL. See note regarding Vandex damp proofing.

External Walls:

To existing external and internal walls, remove all plaster finishes and allow to dry. Allow for replacing all GF slabs (described elsewhere). Apply cement fillet at joint between conc slab and walls. Apply Vandex or equal approved slurry damp proofing system in accordance with manu's instruction, lapping 1.0m onto floor and 1.0m up

Apply 72.5mm PIR backed insulated plasterboard on Soudal adhesive to external walls. (U-value 0.30 W/m²K). Allow for plastering internal walls in renovating plaster.

All blockwork below DPC to be medium density concrete blocks.

New External Walls 103mm facing brick to match existing. 150mm cavity (50mm residue cavity) partially fill with 100mm PIR cavity wall insulation retained with plastic clips, 100mm med dense block inner leaf (lambda 0.50). Alternatively use 150mm full fill Dritherm 32 insulation batts. Stainless steel Type 2 cavity ties at 750cts horz, 450cts vert, staggered on alternate courses and doubled up at openings and at eaves. 13mm lightweight plaster. (U-value 0.18 W/m²K).

Close cavity at window openings and at eaves level, with 150mm cavity closers. Horz DPC cavity tray min 150mm above ground level, linked to DPM on inner leaf.

Mortar mix for work above DPC, designation (iii). Mortar mix for work below DPC, designation (i). Med density block work or face brickwork below DPC. Min 3.6N/mm² blockwork inner leaf above DPC in mortar designation (iii).

Install new beams where indicated by Engineer. Any new steel beams, lintels, plates in the external wall are to be galvanised. Provide separate cavity trays with weeps & stop ends (except under projecting eaves where a separate tray is not required).

Any new steel beams supporting the upper, are to be encased in 30min FR encasement (two layers Fireline etc).

Internal Walls / Ceilings:

Construct internal walls in 75 x 50 C24 studwork faced both sides in 12.5mm plasterboard + skim. To bathrooms and kitchens provide moisture resistant plasterboard. To bath and shower enclosures, provide tile backer boarding. Provide 50mm mineral wool batts to cavity.

Strip existing damaged ceilings and replace in new 12.5mm plasterboard + skim. To intermediate floors, allow for laying 100mm sound deadening quilt between floor joists.

Roof:

Carefully take off existing tiles and set aside for sorting and possible re-use (subject to inspection). Make up shortfall in matching clay tiles. Strip battens/felt and carry out inspection of roof timbers and make repairs as required. Install new Tyvek breather membrane or equal approved and red tile battens (or equal approved) and re-tile roof in accordance with BS 5534 incl latest updates.

Renew all leadwork including flashings, soakers, aprons etc, in accordance with Lead Sheet Association Guidance Document.

Strip out existing ceilings and replace in new 12.5mm plasterboard + skim. Allow for insulating ex. roof in 300mm mineral wool. Fit new insulated loft hatches. (U-value 0.15 W/m²K)

New Roof (level ceiling): Provide C24 rafters and ceiling joists at 400cts in accordance with Eng's details. Tyvek breather membrane or equal approved and red tile battens (or equal approved) and tile roof in Sandtoft 20/20 interlocking clay tiles (colour to match main roof) in accordance with BS 5534 incl latest updates . 300mm mineral wool insulation. 12.5mm plasterboard ceiling + skim. (U-value 0.15 W/m²K).

New Roof (sloping ceiling): Provide C24 rafters at 400cts in accordance with Eng's details. Tyvek breather membrane or equal approved and red tile battens (or equal approved) and tile roof in Sandtoft 20/20 interlocking clay tiles (colour to match main roof) in accordance with BS 5534 incl latest updates. 100mm PIR insulation between rafters (maintaining min 50mm air gap), 82.5mm PIR insulation backed plasterboard + skim. (U-value 0.15 W/m²K).

Roof to be strapped down to wall at max 1.6m cts with 2.5x30mm GMS vert straps, min 1.0m long. Straps to be P+S to inner leaf with at least one fixing within 150mm bottom of strap

Horz GMS straps at 1.6m cts between walls and floor/roof members. Where joists are parallel to wall, fix strap to min 3no. timbers with solid noggins between and solid blocking between last timber and external wall.

New treated timber fascias, soffits and guttering to match existing.

Doors / Windows / Carpentry:

Alter stairway openings in accrdance with Eng's details and employ joiner to construct new stairs in acordance with BS5395. 840mm wide stairs. 900mm guarding. 229mm going. 13no. risers. Max 42° pitch. Total rise to be determined on site. Min 2.0m

Employ FENSA registed company to complete design and fit new white traditional flush casement Part L compliant doors and windows (final style TBC with client). Provide toughened glass in critical locations. Provide obscure glazing to bathrooms. Trickle vents in head, 8,000mm² to habitable rooms, 4,000mm² elsewhere. Opening casements equivalent to at least 1/20th floor area. Open plan kitchen diners need min 3no. vents 8,000mm² each. (min U-value 1.4 W/m²K).

Entrance doors and french doors to low thresholds.

To upstairs bedrooms and downstairs inner rooms, provide flying mullion french casement windows to provide means of escape. Refer to plans for details.

Provide new skirtings and architraves, final profile to match existing style or TBC by the client

Finishes:

Reinstate all plasterboard surfaces affected by the works and skim

New wall, ceiling and floor finishes to be agreed with Client and to be read in conjunction with the client's room data sheets.

Full height tiling to shower enclosures. Extent of other wall tiling to be agreed with client. Apply BAL WP1 waterproofing kit to shower and bath enclosures prior to tiling.

Mechanical & Electrical Services:

Employ specialsit to complete design and install new solar panel installation. Installer must be MCS qualified and produce commisioning certification upon completion to ensure any installation would meet SEG.

Employ Heating Engineer to complete design of new heating and H+C water systems, to suit new layout. New radiators to be fitted with TRV's. It is the Engineer's responsibility to ensure compliance with Building Regulations.

Employ Electrical Engineer to complete design of new electrical system, in accordance with BS 7671 (IEE regulations) and new AD Part P. Engineer to liaise with client and agree type and final position of electrical fittings. Provide 100% low energy light fittings. All faceplates to be flush type.

Electrical Engineer to complete design and install individual fans. To bathrooms, provide mechanical extract fan 15 litres/sec linked to air sensor controller. To Kitchens and Utility Rooms provide extractor fans 30 litres/sec. Kitchen fan to be located adjacent to hob (cooker hood). To windowless WCs, provide mechanical fan 6 litres/sec linked to light switch with 15min overrun.

New Ground Floor Slabs: Reduce ground level and lay min 150mm well consolidated and accordance with BS 5839-6:2019+A1:2020 Grade D category LD2. Detectors to be interlinked and fitted with battery backup. Provide optical detector in rooms with open fires.

Kitchen / Bathrooms:

completed by others. Work to be liaised with main contract including wall, floor and ceiling finishes.

Plumbing Services:

The builder is to locate the existing foul drains within the site. If any shared drain is to be built near (within 3m), then the appropriate declaration to be made to Water Authority. No internal manholes will be permitted. Refer to Approved Document Part H with regard to building adjacent to existing drains. Builder to allow for adapting or maintaining and protecting foul drainage on site. Final details to be agreed on site in conjunction with Building Control.

Rainwater: Provide black metal traditional gutters and downpipes to match existing. All new downpipes to be connected to new soakaways, min 5m away from building. designed to either BRE Digest 365 or CIRIA Report 156. Contractor to carry out percolation test to determine final size to the satisfaction of Building Control. Soakaways to be constructed in plastic soakaways crates wrapped in geotextile membrane, 100mm coarse sand bed and surround with outer layer of geotextile membrane to prevent ingress of fines. Provide adequate cover in selected dug material (nom. 400mm cover,

Provide trap sizes and seal depth in accordance Approved Document Part H1, Table 1. Common appliances are:

Bath/shower - 40mm dia, 50mm deep seal

WC Pan - 100mm dia, 50mm deep seal

pipe discharging into a gully should terminate between the grating or sealing plate and the top of the water seal. Unventilated branch pipes are limited to those stated in Table 2 & Diagram 3, H1. Ventilation of branch pipes is not required if the length and slope do not exceed those shown in Table 2 or Diagram 3, H1. 42. 110Ø soil vent pipe to be

Provide access and rodding point near base of stack for cleaning purposes.

External Works:

Final design details of external works to be agreed with the client. External works may be subject to agreement with the Local Planning Authority.

Pitched Roof:

150mm o/a cavity. Lightweight plaster + set.

1:20 @ A1

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