CONSTRUCTION NOTES

GENERAL NOTE
Before commencement of work, positions of all existing services including drainage are to be ascertained & any protective or diversion works are to be carried out as necessary. Severn trent approval may be required - contractor to check with relevant authority. Existing drainage inverts to be determined to establish adequate falls from new drainage fittings. Any necessary propping and strutting is to be carried out to ensure stability of the structure during building operations. All materials & workmanship are to comply with all building regulations, british standards & codes of practice. All timbers are to be double vacuum pressure impregnated with' Protim Prevac 80' or similar approved preservative, with all site cuts, ends & holes etc to be treated with 'Protim' cut end preservative liberally applied by brush.
Client/builder to carry out site investigation & results to be forwarded to the building control body to establish the levels of contamination if any & the suitability of ground conditions before the works commence.
Builder to check all load bearing elements on site before any works commence on site.
The drawings are prepared to comply with the current building regulations & are to be read in conjunction with all relevant specialist drawings, calculations & details where appropriate.
All dimensions are to be checked on site by builder before work commences, and adhered to in all cases including heights etc. As noted on the drawings. KPD takes no responsibility for any alterations to these drawings.
These drawings are for building regulation approval only. Any work undertaken before approval is obtained is all at the risk of the client and builder. KPD takes no responsibility for any work undertaken at this stage.
Please note these drawings were prepared in compliance with planning and building regulations which were in force at the time of preparation. KPD accepts no responsibility for drawings relied upon, which by virtue of a change in legislation and/or to planning guidelines or building regulations, render the drawings non-compliant with such legisation/guidlines after the preparation of such drawings.
KPD accepts no responsibility for any alterations from the approved drawings.
Nothing in our appointment or provision of drawings shall be deemed to create any appointment as or obligations as a duty holder pursuant to the regulation 7 of the com regulations 2015.
Boundaries shown are for identification only and are not to be taken as a legal definition.

Notes:
1. Upon commencement of the works the size and position of all existing structural elements as shown on the drawing are to be verified by the contractor.
2. Existing timbers shall be exposed to allow complete timber and damp survey as necessary. All timbers shall be treated or replaced in accordance with the specialists recommendations. All timber connections are to be examined by the contractor to verify their integrity and made good of deemed necessary by the inspector. Where wall plates required replacement the new timbers are to be secured by 30x2.5mm galvanised mild steel straps at 1200mm max. ctr's and screwed to existing wall with sno. 50mm long no.12 wood screws in plastic plugs.
3. All new timbers shall be strength class C16 to BS5268 part 2 unless noted otherwise. All new timber connections are to be formed using joists hangers and or framing anchors and clips supplied by 'Expamet' or similar.
4. All existing masonry shall be examined by the contractor any cracked or flaked brickwork shall be repaired or rebuilt to the satisfaction of the client. any loose or soft mortar shall be raked out and repointed.
5. All new steelwork shall comply fully with BS5950. The contractor shall take all necessary site dimensions and levels prior to commencement of fabrication.
6. The contractor shall be responsible for the stability of the existing building whilst carrying out the proposed alterations all temporary works needing propping and shoring to the existing structure shall be designed by the contractor.
7. All new brickwork to have a compressive strength of 21N/mm sq. built in 1:1:6 cement:lime:sand mortar unless stated otherwise.
8. Concrete padstones to be grade C35 10mm maximum size aggregate with 300kgs/m3 o.p.c.

Building regulations approval, cdm regulations, health & safety, temporary work and interim stability

1. The builder shall comply with the building regulations. Any work carried out on site prior to full building regulation approval from the building control body is entirely at the risk of the builder.
2. The builder shall comply with all aspects of the construction (Design & Management) regulations 2015.
2.1 The builder shall carry out his own risk assessments for all aspects of the Works.
2.2 The builder shall provide method statements for the following items of work or items as requested:
a) Excavation below existing foundation levels when in close proximity to existing foundations
b) Underpinning
c) Working with machinery when adjacent to or over existing occupied buildings
d) Erection/installation of steelwork adjacent to or over existing occupied buildings
3. The builder shall maintain records of all on site changes to the drawings and calculations
and provide a full set of "marked-up" drawings to show the "as-built" construction.
4. The builder is reminded that the structures stability relies on all structural elements to be completed and cured. The builder is required to consider his construction methods/sequences and to assess temporary works and bracing requirements to ensure the interim stability of partially completed

THE PARTY WALL ACT 1996: The client is responsible for conforming with the Party Wall Act 1996 and obtaining the necessary neighbour agreements in the required period depending on the extent of work to the party wall/boundary.

CONSTRUCTION NOTES

GENERAL
All work to be carried out in full accordance with current Building Regulations and 'robust details' as applicable. All on site operations to be carried out in full accordance with current Health & Safety Regulations and CDM Regulations 1994 as applicable.

FOUNDATIONS AND FOOTINGS
New ground floor external walls to be taken down to concrete strip or trench fill foundations 600 wide Internal walls to be taken down to strip foundations 440 x 200 thick. Depths to suit site conditions and to Local Authority approval prior to pouring concrete but not less than 1000mm deep.

Foundations to be grade C.20P to BS.5328:1981 (min. mix 1:3:6) concrete incorporating 2 No. 16mm diameter m/s continuation reinforcing bars set centrally under each wall leaf and on the neutral axis, lapped min 200mm and bent neatly around corners.

Build up external walls in two skins of 7N solid dense concrete trench blocks using mortar mix 1:3 up to one brick depth below finished ground level. Fill cavity with sand cement mix.

DAMP PROOF COURSE
To be Andersons XTRA-LOAD ELITE or equal approved polymeric DPC. To be installed to inner and outer skins of cavity walls and to all internal blockwork walls, to be located minimum 150mm above finished ground levels. All joints to be lapped min. 150mm (basic Radon measure).

VERTICAL DPC; at abutments of external cavity wall to solid 215 wall.

Cavity Trays And Weepholes
Cavity trays and weepholes to be provided above structural openings and base of cavity to provide basic radon protection.

Allow for suitable cavity tray and lead flashing to roof abutment as required

GROUND FLOOR
If Ground conditions permit Ground bearing floor slab to be used to specification as follows:
GROUND FLOOR SLABS AND INFILLS:
Excavated site area to be treated with weed killer.
75mm reinforced cement/sand screed on 500-1000 gauge seperation layer on 100mm Kingspan Kooltherm K103 overslab insulation (25mm edge insulation) on 100mm 100C 20P mix concrete slab, 1200gauge polythene DPM carried up at edges and lapped with dpc. If joints are required in dpm they are to be welted and tape sealed. New to existing dpm also to be welted and tape sealed.
50mm sand blinding on 150mm min crushed stone well watered and rolled hardcore.

25mm insulation to perimeter of all floors.

Construction to achieve U value of better than 0.18.

If Ground conditions don't permit using ground bearing slab then use the following suspended floor specification:

GROUND FLOOR Minimum of 150mm void under, Dense concrete block and precast concrete beam system to structural engineers and specialist suppliers design. Joints to grouted and trowelled off smooth to recieve 1200g PIFA polythene dpm with 150mm min laps & to be carried up walls to lap with dpc.
All joints in dpm to be welted, taped and sealed. 100mm Kingspan Thermafloor TF70 with 500g polythene separating layer laid over.
75mm sand cement screed to include underfloor heating system.
25mm insulation to perimeter of all floors.

Suspended concrete floor to be designed, manufactured and installed in strict accordance with the manufacturers & suppliers details and instructions.

Kingspan or similar approved insulation to be fitted in accordance with the manufacturers details and instructions.

Ventilation to underfloor void - periscopic vents at max 1.8m centres in external walls.
The openings to be large enough to give an actual open area of at least the equivalent to 1500sq.mm per horizontal metre run of wall.
All periscopic vents to have pcc lintel over in inner leaf.

STRUCTURE

FOUNDATIONS, STEEL BEAMS, PURLINS, RAFTERS, LINTELS, FLOOR JOISTS, PADSTONES & BEARINGS, SUSPENDED SOLID FLOORS, BLOCK STRENGTH, LATERAL RESTRAINT, SCREEN WALLS, RETAINING WALLS, ALL MOVEMENT JOINTS , PIER SIZES & STRUCTURAL STABILITY OF WALLS, BUTTRESSES ETC., TO BE DESIGNED BY STRUCTURAL ENGINEER.

New steel beams inserted together with padstones etc to carry existing/new construction all to structural calculations.
HALF HOUR FIRE PROTECTION; to structural steel beams supporting floors and steel columns to be encased with 12.5mm Fireline plasterboard and skim to give 30mins fire resistance.
If restricted space around beams then coat the steelwork with intumescent paint to the thickness required by the manufacturer to provide 30mins fire protection

Piers & corner piers minimum brick return of 650mm measured externally or 400mm internally.
Lintels to be insulated in external walls.
Weep holes at 450mm centres over lintels

Foundations within 5m of any trees to be adequate for root protection.

DOORS & WINDOWS
Glazing in doors which is wholly or partially within 1500mm from floor level and any glazing between finished floor level and 800mm above that level in internal and external walls and partitions should conform to at least Class C of BS 6206.
However if the smaller dimension of the pane is greater than 900MM, it should conform to at least Class B of BS 6206. In both cases glass must be marked in accordance with BS 6206.
Window and Door Reveals
All window reveals to be formed by closing cavity at jambs and cills with Thermabate or similar approved, insulated cavity closer to avoid cold bridging, installed strictly in accordance with manufacturers instructions.

ALL EXTERNAL DOORS AND WINDOWS TO BE DOUBLE GLAZED
Windows and doors to be glazed with 24mm minimum sealed double glazed units comprising Low E glass or K glass of 0.15 emissivity and 16mm gap giving a U value of 1.5W/sq.m K
Velux windows to be fitted with double glazed units giving u value of better than 1.5W/sq.m K and to have double rafters to both sides, top & bottom
Rooflight to be 'Plateau' from The Rooflight Company, fitted with double glazed units giving u value of better than 1.5W/sq.m K and to have double rafters to both sides, top & bottom and fitted in accordance with the manufacturers details and instructions and to be compatible with the single ply roof.
All new first floor bedrooms to have windows capable of being used as a means of escape ie; a minimum of 0.33sq.m, and at least 450mm wide & 450mm high clear opening with the cill between 800 & 1100mm above floor level
Windows to have min 1/20th floor area as opening lights and 1/10th floor area as glazed area to all habitable rooms.

WINDOW AND DOOR REVEALS
All window reveals to be formed by closing cavity at jambs and cills with Thermabate or similar approved, insulated cavity closer to avoid cold bridging, installed strictly in accordance with manufacturers instructions.

LINTELS
To be either Catnic or similar approved (or to structural engineers details) to have minimum 150mm end bearing.

TIMBER TREATMENT
All existing timber to be checked for damage and repaired/replaced with similar materials as necessary, under the guidance and agreement of the conservation officer and the structural engineer.
All existing timbers in roof spaces to be treated against rot and infestation.
All structural timber to be pressure impregnated with an approved fungicide/insecticide preservative fluid all in accordance with B S 4978:1975 and BS 5268.

CEILINGS
To be 12.5mm plasterboard with scrim taped joints and 3mm skim finish. 50x50mm noggins to be provided to all unsupported edges.

VENTILATION
All habitable rooms to have 8000 sq. mm trickle ventilation plus an openable window or door equal to 1/20th of the floor area.
Kitchens to have background trickle ventilator of 4000 sq. mm plus an openable window and a mechanical extract fan capable of extracting 30 litres per second if a cooker hood or if a fan located elsewhere capable of extracting 60 litres per second.
Ventilation to an internal wc provided by an extract fan capable of extracting 6 litres per second operated intermittently and have an overrun of 15 minutes.
Air inlet provided by a 10mm gap under the door. Wc's with window to have opening of window equivalent to 1/20th floor area does not require mechanical extract.
Bathrooms and shower rooms to have background trickle ventilator of 4000 sq.mm and to be provided with an extract fan capable of extracting 15 litres per second and operated intermittently plus an openable window.
Utility Room to have trickle vent of 4000sq.mm and fan capable of extracting 30 litres per sec.
All extracts from fans to be connected via a pvc duct to outside air, terminating in an approved grille.

LIMITING AIR LEAKAGE
The cavity wall insulation must be taken down below damp course level, finishing 150mm below the underside of the floor slab insulation.
The cavity wall insulation and roof insulation
must meet at the top of the wall
Cavity wall insulation must be carried up to the full extent of gable walls.
A 25mm upstand of insulation must be provided around the perimeter of floors, including where the floor slab touches outside wall (usually at door thresholds) using Celotex T-breaktm
TB3000 boards.
All cavity closers must befire proof and insulated.
All details are designed to comply with the robust construction manual details for air leakage and thermal bridging. A suitably qualified person should be appointed to inspect all works during construction, and shall issue a signed report on completion and issue to local authority.

EXTERNAL WALLS
Construction to comprise: 103 brick to match existing, 100mm cavity filled with 100mm Drytherm32 100mm Celcon Solar or similar thermal blockwork inner lining to be 65mm PIR plasterboard on dabs and skim finish. achieving U-val 0.18 W/m²K

Both leaves of wall construction to be tied together using stainless steel vertical twist ties at 900mm horizontal, 450mm vertical centres and no greater than 300mm at reveals.
Cavities to be closed at reveals with proprietary fire proof closer such as Thermabate.
Brickwork and blockwork attached to existing with Simpson Strong tie masonry connectors or similar ties

WALL TIES
Two and a half wall ties per square metre of masonry with a maximum horizontal spacing is 900mm and a maximum vertical spacing is 450mm. Each wall tie to be set a minimum of 50mm into both masonry leaves. Cavity wall ties to be stainless steel and 225mm in length.Wall below dpc to be standard dense concrete foundation blocks or semi engineering bricks
Three courses of blue engineering bricks in 1:3 mortar to all 215mm external walls as dpc.

BONDING OF NEW AND EXISTING WALLS
New walls to be secured to existing walls by use of stainless steel Firfix or Crocodile (or S.A.).
Fixings in accordance with manufacturers instructions complete with weather strip and mastic pointing. 100mm Dpc behind all wall end ties.

CAVITY
To be cleared of all mortar droppings and closed at all openings at top of wall with blocks, bricks or 9mm supalux board.
Lean mix concrete cavity fill to 150mm min. below dpc.

MORTAR
Shall be at least in strength 1:1:6 Portland cement/lime/fine aggregate mortar measured by volume of dry materials up to the proportions given in BS.5628. mix to be 1:1/2:4 below dpc.

RENDERED EXTERNAL WALLS
As above but outer leaf is 100mm Thermalite Shield block with 10mm Polymer render on render carrier board mechanically fixed through 20mm insulation (Kingspan Optim-R external wall system or similar approved),

LEAD FLASHINGS AND SOAKERS
to all abutments to roof (see Lead Sheet Association Details)
All lead flashings to roofs abutting vertical wall to have cavity trays dressed over the flashing in the wall. Every third perpendicular joint over flashing to be left open and clear to allow cavity moisture to escape.

EAVES & SOFFITS
Soffitts and fascias to be upvc orpainted or stained, treated timber

ALL DIMS IN MILLIMETERS UNLESS NOTED OTHERWISE
DO NOT SCALE EXCEPT FOR PLANNING PURPOSES
IF IN DOUBT - ASK

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