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 sinqle ply roof.
Windows to have min 1/20th floor area as opening lights and 1/10th floor area as glazed area to all habitable rooms.

DRAINAGE
New 100mm drain system constructed in plastics.
Drain to be protected with 75mm concrete slab laid to the full width of the trench 150mm above the pipe where less than 600mm of cover.
All drains to be surrounded by pea gravel.
Concrete lintels provided to both leaves of external walls and internal wall where drains pass through. 50mm space all round drainpipe with masking both sides of 9mm Supalux board.
All drainage laid in accordance with BS.8301.

RAINWATER
All rainwater gutters, downpipes etc., to be black Upvc and to discharge via trapped access gullies to a suitably sized soakaway

PLUMBING
All new soil and vent pipes to be 100mm dia. Upvc fixed with wall brackets at 2.0M centres.
All bends in SVP to be so constructed as to have the largest possible radius of curvature and no change in cross section of the pipe throughout the bend.
New & Existing SVP to discharge to outside air via tile vent or similar approved terminal
Internal S & VP to be boxed in using 50 x 50 s.w. timber framing and 12.5mm plasterboard and skim.
All waste connections to S and VP's to be separated from the 100mm dia. WC. connection by 200mm measured vertically.
Sinks to have 40mm dia. Upvc branch pipes. Lavatory basins to have 32mm wastes up to 1.7 metre length, increased to 40mm up to 3.0 metre lengths. 50mm wastes over 3.0m
Hot and cold water to all sinks & whb's
All earthing of pipework is to be concealed.
All sanitary fittings to be individually trapped with 75mm deep seal traps.
Stub vent pipes to be fitted with air admittance valve above the spillover level of the highest appliance connected to it.
The boxing to the stub pipe to have an air vent grille at high level.
Hot water to bath to be limited to 48degrees C by use of in line blending valve to comply with the requirements of BS EN1111:1999

Anti-syphon traps to BS 3943 into soil vent pipe or air attaining value as indicated. No branch to discharge into SVP lower than 450mm above invert of tail of the bend at the base of the stack.

Access plate to be provided at the base of each tack immediately above FFL min 200mm bend at the base.

ALL WATER INLETS AND DRAINAGE, AS WELL AS POSITIONS OF NEW OR RELOCATED MANHOLES TO BE AGREED WITH THE BUILDER ON SITE

MANHOLES
For depths of over 900 mm to be constructed in Class B engineering brickwork, min wall thickness 225 mm, and flush pointed internally.
Base slab to be 150 mm thick concrete. Benching channel to be 30 degrees and topped with monolithic render (1:1 mortar).
Back filling to chamber should not be carried out until 48 hours after construction and hand packed with selected hard material.
Manholes deeper than 1.0 m to be fitted with iron steps set at 300 mm apart vertically and 200 mm apart horizontally.
Inspection chambers 900mm deep max to be Hepworth or similar 450mm dia polyproylene fitted in accordance with the manufacturers details and instructions

SOAKAWAYS
Position on site to be agreed with L.A. inspector but must be a of 5M from any building and subject to the results of standard percolation test.

FALLS: Foul and Surface water drains to be laid at 1:60 min unless otherwise stated.

Foul water drainage runs and connections to be inspected and fully agreed by the Building Control prior to backfilling of trenches
New drains to be connected to mains sewerage system to have permission obtained by relevant statuary authority.

HEATING
to be extended small bore h.w. radiator system
Thermostatic control in ground floor hall space and thermostatic valves to all radiators
New floor areas to have underfloor heating system if required
Space and water heating also controlled using a manually adjustable timer

Heating system generally to comply with the requirements of BS5449:1990

Existing boiler to remain in existing position. Details to be found on site visit.
Hot water & heating systems Hot water & heating system to be sealed gas fired condensing combi boiler with automatic ignition with balanced flue - outlet to terminate externally through the external wall 300mm from any opening light. System to be designed & installed by a Capita gas safe registered heating engineer/contractor. All radiators are to be convector type with thermostatic valves. New boilers to have a SEDBUK rating of 88.

Rating & capacity of existing boiler to be checked for adequacy to ensure enough spare output to be capable of servicing new extension.

COMMISSIONING
Upon completion of the works the builder is required to issue to the building inspector a notice confirming that the fixed building services have been commissioned in accordance with a procedure approved by the secretary of state.
A set of operating and maintenance instructions should be left for the occupier.

PART Q

SECURITY DOORS
All external doors and windows to be designed to meet security requirements of British Standard Publication PAS 24:2012 and letter plates to have max aperture of 260 x 40mm and to be located as per par 1.3 of Part Q.
Main doors to each dwelling to have door viewer, door chain or door limiter.

All door and window frames to be mechanically fixed to the structure in accordance with the manufacturers instructions.

WINDOWS
Windows to ground floor level, basement and easily accessible rooflights manufactured to meet the security requirements of British Standards publication PAS 24:2012, or designed and manufactured in accordance with Appendix B of Approved Document Q.

All door and window frames to be mechanically fixed to the structure in accordance with the manufacturers instructions.

PART R

INFRASTRUCTURE
In accordance with Part R of the Building Regulations, provide physical infrastructure (from the service providers access point to the occupiers network termination point) so that copper or fibre optic cables or wireless devices capable of delivering broadband speeds greater than 30mpbs can be installed.

ENERGY CONSERVATION
Low Energy at 40 lumens per circuit watt efficacy in accordance with L1 para 42 to be fitted to all rooms.

SMOKE ALARM
Automatic smoke alarms, to BS 5446 part 1, connected to mains supply with battery back up. Smoke alarms to be interconnected and installed to BS5839 part 6 2013 - category LD3 Electrician to supply commission certificate on completion

A self contained smoke alarm is to be fitted to each storey of the dwelling house, each one fitted in the circulation area, and interconnected. If ceiling mounted it is to be at least 300mm from any wall or light unit. If wall mounted it is to be fixed between 150 and 300mm below the ceiling. The smoke alarm is not to be located immediately above a stair shaft so that easy access is available to the unit and is to be located within 7 metres of a kitchen or living room or within 3 metres of a bedroom.

SMOKE DETECTION / FIRE PROTECTION
Interlinked mains operated smoke detectors with battery back up to be located in hall and landing areas, and a heat detector in the kitchen (all to BS 5839 pt 6, 2004 LD3).

SD Smoke detectors to be provided in positions shown.

CO Carbon Monoxide detector fitted in rooms with a boiler

HD Heat Detector fitted in kitchen

FD30 = Fire Door with 20 Minutes (minimum) integrity & rising butt hinges self closing

FD30s = 30 Minutes integrity fire door with self closing device and smoke stop and intumescent se

ELECTRICAL INSTALLATION
All new cable runs to be concealed, no surface wiring is to be used. Switches, sockets and other electrical equipment controls are to be positioned at a height usable by all i.e between a height of 450mm&1200mm above finished floor level in accordance with approved document M.
All work to comply with the latest edition of the IEE code. Contractor to allow for extending existing circuits as necessary.

All fixed internal light fittings to be high-efficacy types with a minimum luminous efficacy of 75 lumens per circuit watt, in accordance with Approved Document L (2021). Fittings shall be dedicated low-energy types (e.g. LED or equivalent) designed so they cannot accept lamps with a lower efficiency. All rooms to be provided with compliant fittings. Where installed in a new or existing dwelling, internal light fittings should have local controls to allow for the separate controlof lighting in each space or zone. Controls may be manual, automatic or a combination of both.
All fixed external lighting should have both an automatic controls which switch luminaires off in response to daylight, and if luminous efficacy is 75 light source lumens per circuit-watt or less, automatic controls which switch luminaires off after the area lit becomes unoccupied. If luminous efficacy is greater than 75 light source lumens per circuit-watt, manual control is acceptable.

All electrical works to be carried out to meet the requirement of part P of the building regulations by a person competent to do so.
Prior to completion the local authority are to be provided with a copy of either:
An electrical installation certificate issued under a competent person scheme
or
An electrical installation certificates as defined in BS 7671 signed by a person competent to do so.

ELECTRICAL INSTALLATION AND POSITIONS OF SOCKETS AND LIGHTS TO BE DISCUSSED WITH BUILDER OR ELECTRICIAN

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

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