BUILDING REGULATIONS NOTES

FLOORS

22mm grade (moisture resistant P5 within bath/ensuite) chipboard on floor joists to Joist Manufacturers/Structural Engineers design and details @ 600 ctrs. Galvanised steel straps held tight against masonry walls extending over 3 joists to be verified by Structural Engineer. Where floor joists spans exceed 2.5m provide herringbone struting at mid span. 100mm sound insulation with a density of 10kg/m³ to be installed below new floor. 2x 12.5mm plasterboards tacked to underside of joists with skim coat of finishing plaster and decorated to clients requirements. Where downlighters penetrate the ceiling provide fire covers or similar. Where stack pipes pass through the floor, provide mineral fibre sound insulation.

PITCHED ROOF

Existing roof structure to be upgraded with 100mm GA4000 Celotex insulation in between rafters to achieve U value 0.15 W/m²K. To the underside of rafters (assumed existing 150mm x 45mm) provide 70mm GA4000 Celotex insulation with 12.5mm plasterboard (Board joints taped for VCL), 2.5mm skim finish, skim coat of finishing plaster and decorated to clients requirements.

Insulation to be 400mm Rockwool or similar glass fibre insulation quilt between and over ceiling joists. Provide 12.5mm foil backed plasterboard incorporating vapour barrier, skim coat of finishing plaster and decorated to clients requirements. Min. U value to achieve 0.15 W/m²K.

Roof to be designed, constructed and braced to the Structural Engineers designs. Roof to be supported with steel beams where required by Structural Engineer.

Roof eaves soffits or facias to be provided with permanent ventilation slots equal to 10mm continuous gap. Cross flow eaves ventilator used to prevent the insulation from blocking air flow across void.

FLAT ROOF CONSTRUCTION

Warm flat roof construction to consist of fully adhered single ply membrane dark grey; Alwitra Evalon roofing membrane (laid to manufacturers recommendations),18mm marine ply deck, timber firrings to achieve 1:60 slope, 110mm XR4000 Celotex insulation to achieve U value 0.15 W/m²K, 150mm x 50mm C16 timber ceiling joists (to SE details),100x65mm SW treated wallplate with restraint straps to wallplate at max 2000mm centres. to BS EN 1996-1-1:2005 & A1:2012 (to SE details). To the underside of joists provide mechanical fixed 60mm GA4000 Celotex insulation, 12.5mm foil backed plasterboard incorporating vapour control barrier, or board joints taped for VCL & air leakage barrier, skim coat of finishing plaster and decorated to users requirements

Roofs are to be designed, constructed and braced to the Structural Engineers designs. Roof to be supported with steel beams where required by Structural Engineer.

DORMER CHEEKS

To achieve minimum U Value of 0.18W/m²K. Proprietary timber composite cladding on 25 x 38mm battens (vertical counter battens to be provided to ensure vented cavity) fixed to Tyvek breathable membrane or similar, on 18mm thick WBP external quality plywood sheathing. Ply fixed to SW timber framing constructed using: 100mm x 50mm head & sole plates and vertical studs at 400mm centres to structural engineer's details & calculations. Insulation to be 150mm Celotex between studs, 25mm GA4000 insulation behind studs (mechanically fixed) with adhered 12.5mm plasterboard incorporating vapour barrier, skim coat of finishing plaster and decorated to clients requirements.

All junctions to have water tight construction, seal all perimeter joints with tape internally and with silicon sealant externally. Dormer walls built off existing masonry walls to have galvanised mild steel straps placed at 900 centres.

For additional structural information refer to SE Documentation.

STAIRS

Provide 13 No equal risers. (first floor to second floor to be checked on site before fabrication of stair) See section for indicative layouts.

Risers to be max 220mm

Goings to be min 259mm

Width to suit opening

Max pitch 42 degrees

Clear unobstructed headroom of 2000mm over existing staircase and 1900mm in centre of new flight measured from the centre line vertically off the pitch line. Hand rails to be fixed at 900mm above pitch line and at landing 1100mm above floor level. Tapered treads min 50mm @ newel post. Balustrading to be 1100mm above finished floor level unclimbable and constructed so that a 100mm sphere is unable to pass through.

INTERNAL WALLS (IF REQUIRED)

Non-loadbearing partitions are to be timber stud partitioning with 150 x 47mm timber studs at 450mm maximum centres, two rows of intermediate noggins, faced both sides with 12.5mm Knauf Soundshield plasterboard (minimum 10kg/m²) with filled & taped joints. 100mm unfaced mineral wool batt or quilt with min density 10kg/m³ placed between studs creating 25mm cavity. 12.5mm Knauf Sound Moistureshield to all walls and ceilings to bathrooms & en-suites. Sole and head plates are to be one continuous piece.

INTERNAL WALLS (LOAD BEARING) (IF REQUIRED)

Load bearing partitions if required are to be 100mm concrete blockwork, strength to be confirmed by Structural Engineer finished with 12.5mm plasterboard on dabs each side joints filled and taped, ready for decoration.

Blockwork partitions previously described provide half hour fire resistance and class 'O' surface spread of flame.

DPC, CAVITY TRAYS & FLASHINGS

Cavity trays, horizontal and vertical DPC in 2000 gauge polythene to BS 6515 to all openings in external walls inclusive of meter boxes and wall/roof abutments. All DPC and DPM to be continuous. All cavity trays to be provided with weep holes.

LINTELS

To be Keystone Hitherm or similar approved of galvanised mild steel, cavity to be factory insulated. Unless specifically required due to loadings, no lintel shall have a continuous baseplate. If this is unavoidable provide an insulation strip of a thickness to achieve an 'R' value of 0.34m²K/W behind drylining to soffit of window opening. (NB: an alternative position for trickle vents may be required). Outer edge of lintel with preformed cavity tray to be provided with weep holes where applicable. Lintels specifications to be confirmed by Structural Engineer.

STRUCTURAL ENGINEER

To provide full structural engineers details, calculations and specifications - to be submitted under separate cover to support this application prior to start of any works on site.

STRUCTURAL STEEL BEAMS

If required, steels are to be clad with 2 layers of 12.5mm plasterboard with joints staggered and taped with 5mm gypsum plaster skim to give 30 mins fire protection.

WINDOWS

Windows to be standard double glazed PVC-U low 'E' or 'K' glass double glazed units with Max U-value of 1.4W/m²K. By specialist manufacturer to match existing. Frames to be positioned with a minimum 10mm overlap of cavity closer with 12mm air gap and insulated lintel to eliminate cold bridging and condensation.

All windows and doors to be draught stripped. Insulated cavity closers Dacatie T221, or equivalent, integral with window interceptors subframe.

Glazing to doors where within 1.5 m from floor level will be class C to BS 6206. Safety glass to be provided where glazing unit is less than 800mm from FFL.

Emergency egress windows should have an unobstructed opening, by easy clean hinges, that is at least 0.33m² with a clear opening of 450mm x 750mm would be a min satisfying paragraph 2.11 of Approved Doc B. The bottom of the opening should not be more than 1100mm and not less than 800mm above finished floor level.

GLAZING

All glazing to be double glazed 24mm units with LOW E glass, by specialist manufacturer.

All glazed doors and low level glazing below 800mm above finished floor level to be laminated and toughened safety glass to BS 6206:1981 to a height of 1500mm and at least 300mm either side of a door.

Internal doors should allow air to move within the dwelling by providing a free area equivalent to a 10mm undercut in a 760mm wide door. Doors should be undercut to achieve one of the following If the floor finish is fitted: 10mm above the floor finish or the floor finish is not fitted: 20mm above the floor surface.

DRAUGHT SEALING

All windows, doors and loft hatches along with main entry and exit points to be draught sealed. Drylining to be sealed at junction with window/door frames at perimeter of all walls, junctions, around openings and under window board.

VENTILATION

or intermittent extract - vent to extract a minimum of 30l/s via cooker hood or 60l/s if located elsewhere, extracting to

Mechanical extracts fans to be commissioned and certified by installing engineer.

Should extract ductwork enter the roof void it shall be insulated and incorporated with a condensation trap.

Bedroom 1, Bedroom 4 and Bedroom 5: Install proprietary decentralised MVHR units

Background ventilation (trickle vents) of at least 8,000m² is required to new habitable rooms (to other rooms refer to Document Part F, Table 1.7) provided at a min of 1.7m above floor level and 0.5m away from any extract. Purge ventilation (openable window) should be provided to all habitable rooms equal to 1/20th floor area of windows that open 30° or 1/10th of floor area for other windows.

Spaces where background ventilation or purge ventilation cannot be achieved to be installed proprietary decentralised

If a habitable room does not contain windows that can be opened (e.g. an internal room), should have a permanent opening between the two rooms with a minimum area of 1/20 of the combined floor area of the two rooms.

ELECTRICS

All installations to IEE Edition 19 and NIC standards and test certificates submitted to Building Control on completion.

Switches/Sockets- placed in a zone between 450mm and 1200mm from finished floor slab, Provide 40 lumens/circuit-watt luminaries (or fittings which can only receive the appropriate bulb) to comply with table 4 in Part L1 of the Buildings Regulations.

To Comply With PART P Building Regulations. All electrical work is to be designed, installed, inspected and tested in accordance with BS 7671:2018 or an equivalent standard. These installation works are to be undertaken by a person registered with an electrical self certificate scheme, or alternatively by a suitably qualified person, with a certificate of compliance produced by that person to Building Control prior to commencement of works.

LIGHTING

High efficiency light fittings, capable of only accepting lamps having a luminous efficiency greater than 45 lumens per circuit watt, will be provided in rooms or circulation areas most frequently used, at a rate of 100% of new fixed light fittings. (areas that do not count towards total are less used areas such as Cupboard, other storage etc).

HEATING

New Combination Boiler installation to comply with BS 5258 and conform to BS 7671: 2018. Boiler to have a 'Sebduk A' rating of 89.5%minimum.

All radiators to have thermostatic control valves (except room where thermostat is located and heated towel rails.)

Pipework is to be insulated in floors, garage and roof and within 1m of cylinder => 0.045 w/m k.

SMOKE ALARMS

Grade A smoke alarms. A mains operated fire detection and alarm system with a battery back up is required to at least Grade A Category LD2 standard in accordance with the recommendations of BS 5839-6: 2013.

All smoke alarms within dwelling are to be inter-connected and to be permanently wired to a separate 3 amp MCB fused circuit at the distribution board in accordance with IEE Regulations. A standby power supply such as a battery is required with visual and audible signal of power failure.

They may operate at a low voltage via a mains transformer. At least one smoke alarm should be sited within the hallway and each landing of the staircase. A smoke alarm should be sited within 7.5m of each habitable room. If ceiling mounted, smoke alarms should not be over a stairwell, within 300mm of a wall or within 300mm of a light fitting. If wall mounted, smoke alarms should not be over a radiator and should be fixed elsewhere within 150 to 300mm of the ceiling.

Carbon monoxide detector to be fitted in dwelling if any solid fuel appliance is opted for. To be located and installed in accordance with Building Regulations, Approved Doc. J.

RAINWATER GOODS (upvc)

Rainwater goods colour to match existing, 100mm upvc half round guttering with 68mm dia upvc down pipes, Marley or similar, to positions indicated on plan, to discharge into existing system to discharge into 1m³ soakaways min 5 metres from any building.

UNDERGROUND DRAINAGE

To be designed in accordance with BS 8301 Building Drainage BS 8005 and in accordance with the Building Regulations, Approved Doc H.

Plastic pipelines for drainage generally to be PVCu to BS EN 1401-1 Class SN4 Kitemark certified. Strength to suit particular location of drainage and traffic loads to Engineers details. Bedding Class to be Type P under roads and Type W under the building to be in accordance with BS 8301. Bedding flexible pipes to be in accordance with diagram 10 of Building Regulations, Approved Doc. H, 100mm of granular material below pipe back filled to crown with similar material with further same material to 100mm above crown (granular material to conform to BS EN 12620 size 4/10 Annex B Table B and should be single size material or graded material from 5mm up to a max size of 10mm for 100mm pipes, 14mm for 150mm pipes, 20mm for pipes 150 to 600mm diameter. Excavated material may be used as back fill in max 300mm consolidated layers but to be free of stones larger than 40mm, lumps of clay over 100mm, timber frozen material and vegetable matter. Compaction factor 0.3 for Class N, 0.2 for Class F and B.

SURFACE WATER DRAINAGE

All surface water drainage laid to falls may be 1:100 min (1:80 preferred) to discharge into new soakaways min 5m from any part of the building to have a min capacity of 1.5m³ below lowest entry invert level. Porosity (percolation) test results to be submitted by contractor. Proprietary slot drains to be fitted adjacent to any level access areas.

EXISTING DRAINS

Before starting work, check invert levels and positions of existing drains, sewers, inspection chambers and manholes against information shown on drawings and report and discrepancies. Adequately protect existing live drains and maintain informal flows during construction.

MATERIALS

Materials should comply with appropriate British Standards or Agrément Certificates and the materials should be marked, stamped, independently certified or otherwise justified by test or calculation to show their suitability.

WORKMANSHIP

All workmanship to be carried out by appropriately certificated workmen and in no circumstances fall below the standards set out in BS 8000: All Parts.

CDM (2015) REGULATIONS

The Principal Contractor must:

- Plan, manage and monitor the construction phase and coordinate health and safety matters to ensure that, so far as is reasonably practicable, the construction work is carried out without risks to health or safety;

- Liaise with the Principal Designer for the duration of the Principal Designer's appointment and share relevant health and safety information;

- Make and maintain arrangements for effective cooperation of matters relating to health, safety and welfare of workers; - Consult with workers on matters that may affect their health, safety and welfare

DEMOLITION

The contractor should be familiar with key structural elements of the building, to enable a sequence of demolition and adequate support that ensures the integrity of the building, and safety of site operatives/general public. Under no circumstances is any demolition work to be undertaken unless a Refurbishment & Demolition Asbestos Survey has been prepared in accordance with the Control of Asbestos Regulations 2006. If located on site, any asbestos should be managed in accordance with current HSE directives.

NOTES:

All dimensions to be checked on site. Any discrepancies to be reported to the CA, prior to manufacture/construction
 Refer to Structural Engineers details/ drawings for all beam, column, padstone, masonry strength calculations

3) Finishes & decorations to Clients specification
4) Allow for cutting of tiles around switches, sockets and making good
5) Allow for boxing's to existing & new services
6) All fixings and installation to manufacturers specifications and detail

requirements
7) Existing Walls/doors/ floors to be protected

8) All M&E fixtures/fittings/equipment is notional. Final positions to be checked and confirmed with client9) Sanitary appliances are not images of actual products. They are for

illustrative purposes only 10) All signs to be rigid plastic or aluminium, drilled and screwed (not glued)

11) Fire extinguisher positions and types are notional and final specification, supply and install will be the responsibility of the client's fire equipment sub-contractor
12) Proprietary intumescant coatings to be applied to all exposed

structural steelwork with a minimum 60 minutes fire resistance

A SE & Client Amendments 06.10.23

No. Description Date



Drawing Title:

Building Regulations Notes AS PROPOSED

Project Title: 498 Edge Ln, Droylsden,

Manchester, M43 6JW

1655-BR-04

Date: August 2023
Scale: Various

Drawing No.:

Drawn: NM
Checked: RS

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Annotated dimensions are to be taken in preference to scaled dimensions and site dimensions must be checked before work is commenced