

Diagram 10: Bedding for pipes Class D

1 Drainage - Diagram 10 Class D2
1 : 5

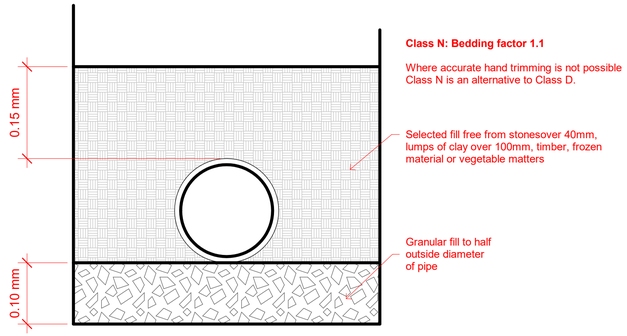


Diagram 10: Bedding for pipes Class N

2 Drainage - Diagram 10 Class N2
1 : 5

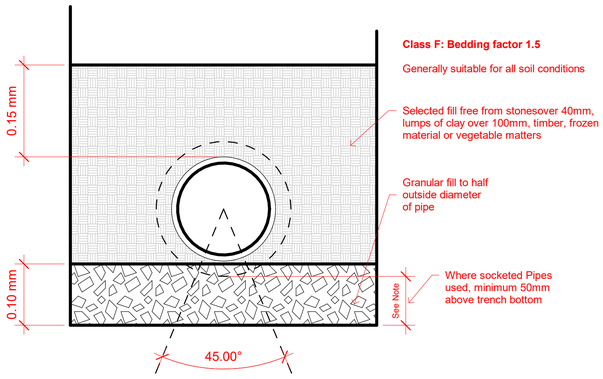


Diagram 10: Bedding for pipes Class F

3 Drainage - Diagram 10 Class F2
1 : 5

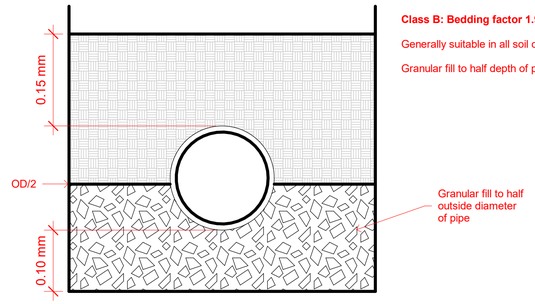


Diagram 10: Bedding for pipes Class B

4 Drainage - Diagram 10 Class B2
1 : 5

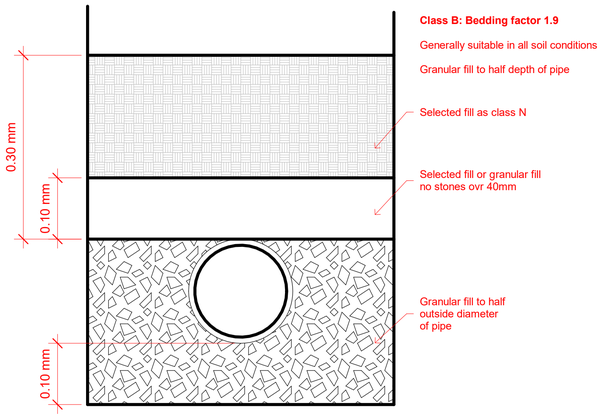


Diagram 10: Flexible pipes (Vertical Trenche)

5 Drainage - Diagram 10 Flexible Pipe (Certical Trench)2
1 : 5

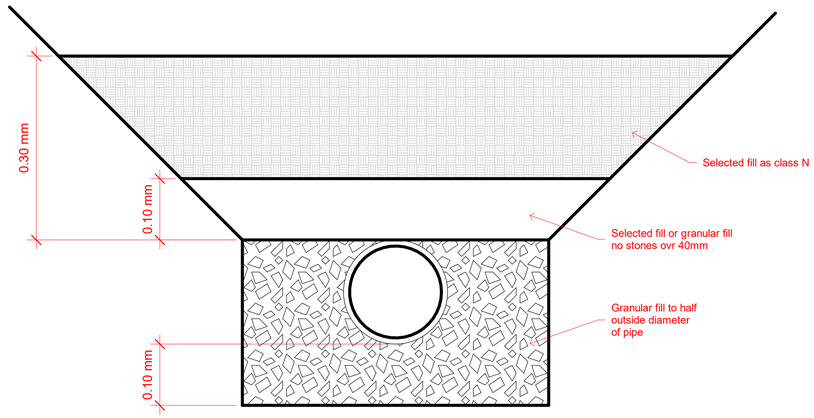


Diagram 10: Flexible pipes (Detail for Vee Trenche)

6 Drainage - Diagram 10 Flexible Pipe (Vee Trench)2
1 : 5

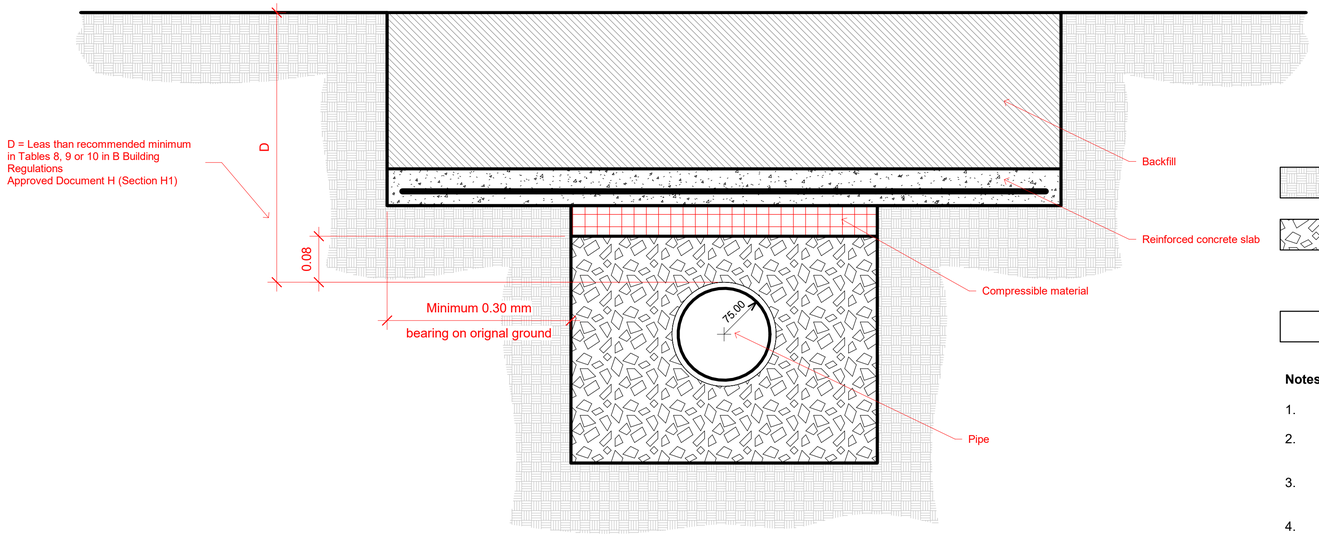


Diagram 11: Protection for pipes laid at shallow depths (Minimum sizes)

7 Drainage - Diagram 2
1 : 5

1. Selected fill: free from stones larger than 40mm, lumps of clay over 100mm, timber, frozen material, vegetable matter.
2. Granular material — For rigid pipes the granular material should conform to BS EN 1610 Annex B Table B. 15 and should be single size material or graded material from 5mm up to a maximum size of 10mm for 100mm pipes, 14mm for 150mm pipes, 20mm for pipes from 150mm up to 600mm diameter and 40mm for pipes more than 600mm diameter. Compaction fraction maximum 0.3 for class N or B and 0.15 for class F.
3. Selected fil or granular fill free from stones larger than 40mm.

Notes:

1. I Provision may be required to prevent groundwater flow trenches with class N, F or B type bedding.
2. Where the pipe has sockets and Class D bedding is used, holes which should be as short as is practicable should be prepared in the trench bottom to a given clearance of 50mm beneath the socket.
3. Where the pipe has sockets and Class F or N bedding is used, the sockets should be not be less than 50mm above the floor or the trench.
4. All dimensions are in mm.

8 Key Notes2
1 : 5

NOTES

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No.	Description	Date
1	Revision 1	Date 1
2	Dropped kerb for vehivle access added.	16/09/22
3	Obscure glazing added to Rear and Right windows on 1st Floor	28/09/22
4	Conversion of FF Toilet & Utility to Bedroom	25/09/23

Revision

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Project Name
House Front, Side and Rear Ground and First Floor Extension

Project No.	AECD_M20 1BU_2022_0001		
Drawing No.	M201BU_2022_P109_01		
Date	25/09/23	Drawn-by	AECDesign
Status	Proposal	Checked by	AECDesign
Sheet Size	A1	Approved by	AECDesign

Sheet Name
Proposed Drainage Details

Scale 1 : 5

Client Name Khaled Muwahed

Project Address
479 Princess Road Manchester M20 1BU

Sheet No.
P109

Filename: 07/09/2023 15:32:13

Specification to be read in Conjunction with Working Drawings for 479 Princess Road, Manchester, M20 1BU

DESIGN AND LEGISLATION

The following notes are intended to be used for Building Regulation Approval and construction purposes and should be read in conjunction with the working drawings, trade and workmanship specifications and finishing specifications. Any discrepancies in dimensions or constructional information should be reported immediately to AECDesign.co.uk before any further work is carried out. Do not scale from the drawings, work to figured dimensions only.

All works are to be carried out to the satisfaction of the supervising Building inspector in accordance with the Building Regulations, Approved Documents and Accredited Construction details.

GENERAL NOTES

Workmanship and materials to comply with:

Building Regulations, N.H.B.C. Requirements, British Standards or Codes of Practice other authoritative documents or technical approval certification including:

- Construction Products Directive (89/106/EEC).
- The International Standards Organisation (ISO).
- The European committee for Standardisation CEN).
- The British Board of Agreement.

All materials shall be fixed, applied or mixed in accordance with manufacturer's instructions and specification. All materials shall be suitable for the purpose they are used for. Subject to confirmation of the Project Designer - similar "approved" materials of equal performance may be substituted where those specified are not available.

The Contractor shall take into account everything necessary for the proper execution of the works, to the satisfaction of the "Inspector" whether or not indicated on the accompanying drawings or in the specification.

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SITE CLEARANCE

The site is to be cleared of the existing debris, rubble and vegetation to a reasonable sub-soil level agreed with Building Inspector. Any underground chambers to be demolished filled and compacted as Structural Engineers Specification.

SERVICES

All work and installations to comply with the regulations and recommendations of the respective "BOARD" or "AUTHORITY" or the satisfaction of the "Inspector".

DRAINAGE

- Above ground drainage to comply with BS 5572 1978.
- All existing drains are assumed and are to be confirmed by contractor to satisfaction of LA prior to commencement of work. All new drains are to be 100mm diameter Hepworth super sleeve, provide min 1:80 fall to drains. All new connections to L.A. approval. Manhole Construction: Up to 1000mm - large glass reinforced polyester. Over 1000mm - P.C. concrete sections built off 150mm concrete raft foundation.
- A drain may run under a building if at least 100mm of granular or other flexible filling is provided round the pipe. BR, H1 (2.23)
- All drain trenches if required, should not be excavated lower than the foundations of any building nearby otherwise they should comply with the conditions shown on the detailed drawings, (see details of drawings) and BR H1 (2.24) & (2.25)
- Where pipes are built into structure (e.g. Inspection chamber, manhole, footing, ground beam or wall) suitable measures (such as using rocker joints or a lintel) should be taken to prevent damage or misalignment (see details of drawings). BR, H1 (2.24)
- The depth of caver will usually depend on the levels of the connections to the system, the gradients al which the pipes should be laid and the ground levels. BR H1 (2.27), (2.41-2.45) (see details of Bedding for Pipes drawing)
- The choice of bedding and backfilling depends on the depth at which the pipes are to be laid and the size and strength of the pipes, BR, H1 (2.41). Special precautions should be taken to account of the effects of settlement where pipes run under or near buildings. BR, H1 (2.23-2.25). Pipes should be protected from damage, particularly pipes which could be damaged by weight of backfilling. (See drawing diagrams of how to lay bed rigid pipes, flexible pipes, pipes laid in shallow depths and joints for concrete encased pipes. BR, H1 (2.42-2.45)
- Where sewers (drain) meet pipes serving more than one property, the minimum diameter is to be 100mm, and 150mm if it is 10 or more dwellings. BR, H1 (2.30).
- Drains carrying foul water should have an internal diameter of at least 75mm. BR, H1 (2.33)
- Drain carrying effluent from a WC should have an internal diameter of at least 100mm. BR, H1 (2.33)
- To minimize the effects of any differential settlement pipes should have flexible joints. All joints should remain watertight under working and test conditions. Nothing in the pipes, joints or fittings should project into the pipe line or cause an obstruction. BR, H1 (2.40)
- Different metals should be separated if used by non-metallic materials to prevent electrolytic corrosion. BR H1 (2.40)
- Excavate trenches and Lay 100 mm diameter vitrified clay drains (or PVC equivalent) to B. S. 65 and 540 ("surface water' quality) including all fittings on 100 mm bed of concrete, mix to be 1 part cement; 3 parts fine aggregate 6 parts coarse aggregate 20 mm down, by volume. Drains to be laid in straight lines and to even gradients.
- Construct manhole with hall brick sides in stock brickwork on 150 mm. concrete (1:3:6 _ 20 mm) bed having 150 mm spread. Render internally in cement and sand (1:3) and haunch up from drain or channels.
- Provide and fix light duty, single seal cast iron cover with hand-holes and framed to B. S. 497. Frame and cover to be delivered coated.
- Provide and fix gullies where required. Trapped gullies to have 100 mm outlet and galvanised wrought iron gratings. Provide and fix insitu concrete kerb around gullies where required.
- Drains should have enough capacity to carry the anticipated minimum flow. In compliance with BR, H1 (2.29)
- The contractor is to allow for testing all drainage and leaving in a clean and sound condition on completion to the satisfaction of the Local Authority.

EXTERNAL WALLS

- 302.5 mm overall thickness 102.5mm outer leaf of facing brick work to match existing, 100 mm min full fill Drytherm insulated cavity to give max U-Value W/m2/k as Table 2 of Approved Document L1B.
- Inner leaf **100mm** "approved" load bearing, high insulating, concrete block work (min mass 120kg/m') (min compression strength of 7N/mm2). finished with 12.5mm Vapour-check reflective Plaster board with 2-3mm finish to give 'u' value 0.35 w/m' deg c.
- Cement is to be Portland Cement to B. S. 12. Sand for mortar to be clean and sharp from an approved source. Mortar below damp proof course is to be Cement and Sand mixed in the proportion of 1:3. Mortar above damp proof course is to be Cement, Lime and Sand mixed in the proportion of 1:1:6.
- Brickwork generally is to rise a height of 300 mm for 4 courses including joints when laid. No part is to rise more than 16 courses above another at any one lime.
- No brickwork is to be executed when the temperature is below 2^0 degrees C on a falling thermometer or 1^0 degrees C on a rising thermometer. All work is to be covered up and protected during inclement weather.
- Include for all cutting necessary for bond. Leading scaffold board to faced brickwork to be turned over during inclement weather and at the end of each day's work.
- Common Bricks matching existing or close or to be Flettons or other approved facing Bricks. The Contractor must include for all unloading and stacking required.
- Bricks below damp proof course are to be well burnt stocks or other approved bricks.
- All brickwork to be laid in English bond. Faced brickwork is to be finished externally with struck weather painting and internally with neat flush painting as the work proceeds. The contractor is to include for faced brickwork sample panel of one square metre.
- Build external walls above damp proof course to thickness shown on the drawings in faced brickwork as described above. Bed all windows and door frames in gauged mortar 1:1:6 and Point externally in mastic.
- The DPC, damp-proof course should be of bituminous material, polyethylene, engineering bricks or slates in cement mortar or any other material that will prevent the passage of moisture. The damp-proof course should be continuous with any damp-proof membrane in the floors.
- Where the damp-proof tray does not extend the full length of the exposed wall, i.e. above an opening, stop ends, an at least two weep hales should be provided.
- A rigid (board or batt) thermal insulating material built into the wall should be the subject of current certification from an appropriate body or a European Technical Approval and the work should be carried out in accordance with the requirements of that document; or Other insulating materials inserted into the cavity alter the wall has been constructed should have certification from an appropriate body and be installed in accordance with the appropriate installations code. The suitability of the wail for filling is to be assessed before the work is carried out and the person undertaking the work should operate under an Approved Installer Scheme that includes an assessment of capability. Alternatively the insulating material should be the subject of current certification from an appropriate body or a European Technical Approval and the work should be carried out in accordance with the requirements of that document by operatives either directly employed by the holder of the document or employed by an installer approved to operate under the document.
- If insulating material is inserted into a cavity in a cavity wall (D1), reasonable precautions shall be taken to prevent the subsequent permeation of any toxic fumes from that material into any part of the building occupied by people
- Urea-formaldehyde foam inserted into the cavity should be in accordance with S5617:1 985 (BS 5617:1985 Specification for urea-formaldehyde (UF) foam systems suitable for thermal insulation of cavity walls with masonry or concrete inner and outer leaves), and be installed in accordance with BS 5618:1985 (BS 5618:1985 Code of practice for thermal insulation of cavity walls -with masonry or concrete inner and outer leaves- by filling with urea-formaldehyde (UF) foam system). The suitability of the wall for foam filling is to be assessed before the work is carried out and the person undertaking the work should operate under an Approved Installer Scheme that includes an assessment of capability.

CAVITY TIES

- Galvanised wire tiles to B.S.1243 every 900mm horizontally and every 450mm vertically set in diamond pattern to give min 5 No. ties per m^2. Additional ties at 300mm c/c vertically adjacent to openings.

CAVITY CLOSERS

- Cut brick or block to eaves & verge. Insulated cavity closer to reveals or openings.
  Or provide insulated vertical DPC or Thermabate proprietary cavity closer installed in accordance with the manufacturer's instructions. All cavities to be closed at wall plate level with 6mm Masterboard bedded in mortar. All cavities to be closed with 6mm Masterboard or similar along verges.

MOVEMENT PROVISION

- Movement joints to be provided in accordance with BS 5628:Part 3: 1985 - Clause 20 and NHBC Standards.

JOINTS BEETWEEN DOORS AND WINDOWS

- The joint between walls and door and window frames should:
  - Resist the penetration of precipitation to the inside of the building.
  - Not be damaged by precipitation and not permit precipitation to reach any part of the building which would be damaged by it.
- Damp-proof courses should be provided to direct moisture towards the outside:
  - Where the downward flow of moisture would be interrupted at an obstruction, e.g. at a Lintel.
  - Where sill elements, including joints, do not form a complete barrier to the transfer of precipitation, e.g. under openings, windows and doors.
  - Where reveal elements, including joints, do no! form a complete barrier to the transfer of rain and snow, e.g. at openings, windows and doors.
- In some cases the width of the cavity due to thermal insulation and the 50mm clearance for drainage may be such that the window frame is not wide enough to completely caver the cavity closer. The reveal may need to be lined with plasterboard, dry lining, a support system or a thermal backing board. Direct plastering of the internal reveal should only be used with a backing of expanded metal lathing or similar.

LINTELS

- Build in all Lintels as shown on the drawings. Suitable combined steel lintels over all openings in external walls. Suitable steel box lintels over all openings in load bearing internal walls. All lintels to have minimum end bearings as specified by manufacturer or 150mm min. All elements of structure to be encased to give full hall fire resistance.
- Catnic lintels to all windows and patio door with cavity tray DPC above and vertical DPC to bath jambs. Window sills should be laid with DPC to base, back and sides.
  Note:contractor is responsible for checking suitability of lintels once opening up works have started on site.

INTERNAL WALLS

- 100mm lightweight black work finished with DPC al slab level.
- Ex external walls on GF and FF that have become internal walls are to be finished with plaster board and finish similar to new walls.

THERMAL ELEMENTS

- The Contractor is to comply with all stated minimum 'U' values and provide to the Local Authority details including U-Value calculations to show compliance with Table 4 of the Approved Document L1B of the Building Regulations prior to occupation of the building.

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THERMAL BRIDGING AND AIR LEAKAGE

- Thermal bridging and Air leakage to be limited by compliance with Accredited Construction details for dwellings and similar buildings.
- Provide Air leakage-Measures designed to reduce air leakage from the building.
- Air tightness measures will depend on the form of construction and level of workmanship.
- The objective being to form a definable, continuous air leakage barrier around the dwelling.
- Ways of preventing air leakage to be considered at every penetration of this barrier. Particular care on site should be paid to:
  - Joints between structural components e.g. wall to floors.
  - Joints around components and opening within walls.
  - Services penetrations - plumbing, electrical, and ventilation.
- Close any vertical duels al top and bottom (e.g. boxing in to SVPs).
- Seal any service penetrations.
- Select the appropriate sealant or gap filler for the size of gap and degree of movement anticipated

MASONRY CONSTRUCTION

- Ensure continuous ribbons of adhesive are used to fix the dry lining at perimeters of external walls, openings, and services on external walls. The importance of correct sealing of dry-lining on dabs needs to be stressed, as this is a key area of air infiltration and can seriously affect the overall ventilation rate. Seal under skirting boards or on suspended floors use joist hangers to support joists.

WINDOW AND DOOR FRAMES

- Standard double/triple glazed UPVC frames with 150mm wide DPC to B.S. 743 to frame prior to fixing. Window opening lights to all rooms 5 % min of room floor area. 16mm air gap and "soft" low E coating max 'u' value 2.OW/m' deg. c. All habitable windows to be fitted with permanent vents to give min 8000mm sq trickle ventilation all non-habitable rooms to give min 4000mm sq trickle ventilation.
- All glazing to external doors and windows to be 24mm sealed double glazed units with low E glass to the inner pane and the cavity filled with Argon Gas. Leading detail to be added between glazing. All glazing to be installed in accordance with Manufacturer's Specification.
- All glazing to be in accordance with PART 'N' of the BUILDING REGULATIONS & comply with BS 6206:1981. Provide toughened safety glazing to all entrance doors & internal doors including any side light frames.
- Safety glazing to BS6206:1981 to be installed in all critical locations i.e. between finish floor level and 800mm above that level in all wall and partitions; and between finish floor level and 1500mm above that level in all doors and door side panels within 300mm of either edge of the door.

BEAMS

- All I Beams, if used, are to be suitable for the supporting loads and forces, and all must have minimum end bearings as specified by manufacturer or 150mm min. all I beams must be coated with anti-rust and lire retardant coating and encased to give full hall fire resistance.
- All I beams are to be protected with DPC beneath and above to prevent condensation and infiltrated water reaching them.
- All calculations if required are to be provided by qualified Civil Structural Engineer or as specified by LA Engineer.

ROOF

- The proposed roofs pitches are as shown on the drawing sheets for the proposed building.
- The roof coverings are to match roof of existing building to be selected by the contractor or owner to L.A. approval on 38mm x 25mm soft wood battens on breathable and untearable sarking felt weighing not less than 22 kg per 20 square metre roll, type 11 to BS 747 (or breathable underlay membrane [Speedline or equivalent] to meet BS 5250:2002) on rafters (150mm x 50mm) (roof joists) in accordance with the design shown on drawings details designed fixed and braced to BS5268 @ pitch to match the design made by the Architect and approved by LA Engineer and in accordance with the manufacturer's instructions and specifications as staled in BS5534:2003. (See all drawing)
- 100mm x 50mm soft wood wall plate strapped to wall @ caves max 1800mm centres using 30mm x 5mm mild steel Straps. Wall plate is laid on DPC insulation in roof space to conform to Part L of the Building Regulations 2005.
- Straps @ 1000mm centres max built into wall and fixed to 3no rafters (roof joists) 200mm x 50mm soft wood blocking noggins under straps. 200mm fibreglass insulation to roof space laid between joists and 150mm laid over retained @ eaves with rafter tray ta maintain 50mm clear ventilation gap.
- 12.5mm Vapour-check reflective Plaster board with 2-3mm skim finish to soffit to underside of joists (Ceiling). Continuous 13mm fly screened vent gap full length of eaves soffit formed from 6mm or equivalent external quality PVC or plywood on 38mm x 38mm soft PVC or wood framing. Max U value 0.16 W/m^2 degrees c, (should a traditional roof construction be used the following timber will be used in lieu of trusses 150mm x 100mm soft wood sloping ceiling rafters (joists) spars at max 400mm c/c).
- Rafters (150mm x 50mm) (roof joists) are to be laterally reinforced with noggins.
- Roofing Felt to be laid lapped 75 mm at horizontal joints and 150 mm at vertical joints. Include for all concrete segmental ridge tiles and verge undercloack of 265 x 165 mm concrete plain tiles or similar or matching existing roof.
- Lead flashing dressed over new roof above the kitchen extension with min 150 mm upstand and cut into existing wall 25mm min. Make good existing external finish as required.

FLASHINGS

- Install Code 4 lead flashings with cavity trays over at roof / wall abutments

MECHANICAL VENTILATION

- Provide mechanical ventilation to utility and kitchen to give min 601 per second with 15 min over run operated by light switch.

KITCHEN-COOKER HOOD

- Kitchen to be fitted with a mechanical extractor vent providing not less than 60 litres / second intermittent ventilation. Ceiling mounted extractor to kitchen to be switch controlled.
- New WC to be fitted with a mechanical extractor vent providing not less than 6 litres / second intermittent ventilation. Ceiling mounted extractor to be switch controlled.
- New Utility area to be fitted with a mechanical extractor vent providing not less than 30 litres / second intermittent ventilation. Wall mounted extractor to be switch controlled.

NOTES

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4	Conversion of FF Toilet & Utility to Bedroom	25/09/23

Revision

AEC DESIGN
ARCHITECTURE ENGINEERING & CONSTRUCTION
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Project Name
House Front, Side and Rear Ground and First Floor Extension

Project No.	AECD_M20 1BU_2022_0001		
Drawing No.	M201BU_2022_P110_01		
Date	25/09/23	Drawn-by	AECDesign
Status	Proposal	Checked by	AECDesign
Sheet Size	A1	Approved by	AECDesign

Sheet Name
Proposed Building Notes (1)

Scale

Client Name: Khaled Muwahed

Project Address: 479 Princess Road Manchester M20 1BU

Sheet No.: P110

Filename: 07/10/2023 15:32:22

RAINWATER GOODS

- Rainwater Goods Capacity: To comply with AD H3 Rainwater & Drainage Section 1
- Rainwater Goods - Provide and fix approved plastic guttering and down pipes complete with all fittings, fixed in accordance with the manufacturer's instructions.
- 110mm diameter hall round or deep flow gutter. 68mm diameter rainwater pipes discharging into gully.
- Connect new rain water down pipe and all gullies to existing surface water manholes.

PLUMBING

- All work and materials including fittings shall comply with the requirements of the Local Authority.
- Soil pipes and accessories to B.S. 4514. W.C. 100 diameter waste connected to S & VP.BATH, SINK UNIT & SHOWER 76mm deep seal trap, 38mm diameter waste pipe. LB 76mm deep seal traps, 32mm diameter waste pipes, provide anti-siphonic traps where 50mm diameter common waste pipe is used for one or more appliances, waste pipes to be connected to S & VP or back inlet gully. SVP to discharge minimum 900mm above any opening lights.
- All new radiators to be fitted with thermostatic valves.
- Copper Pipes (or equivalent plastic pipes) to be in accordance with B. S. 659 for internal pipes and B. S. 1386 for underground pipes. Copper Fittings to copper tubing to be approved capillary fittings.
- Lagging. - Pipes above floor level are to be lagged with 12 mm hair felt fixed with soft copper tinned wire.
- Include for all necessary testing to the requirements of the Local Authority and Water Board.

SMOKE DETECTION

- Smoke detectors installed at ground & first floors adjacent stair areas, detectors to be permanently wired in, on a separate fused circuit To comply with B.S.6446

ELECTRICAL INSTALLATIONS

- All installations to comply with L.E.E. regulations. All fittings to comply with British Standards. Quantity, quality and position of fittings in accordance with N.H.B.C. requirements. Switches and socket outlets for lighting and other equipment should be positioned between 450 -1200 mm above finished floor level.

SERVICES

- All work and installations to comply with the regulations and recommendations of the respective "BOARD" or "AUTHORITY" to the satisfaction of the Building Control Inspector.

JOINERY

- New roof light, 2 no Velux or similar, size 1100 mm wide 1400 mm long, to be fitted in accordance with the manufacturer's instructions and specifications. French patio door (PVC) to be fitted in accordance with the manufacturer's instructions and specifications.
- PVC windows to be fitted in accordance with the manufacturer's instructions and specifications.
- All timber for joinery work shall comply with the requirements of B. S. 1186, Part I with regard to quality, moisture content, defects etc. and shall be specially selected for the purpose for which it is to be used. Timber shall be worked square and true to size, an allowance of 3-2 mm being permitted from the sizes given except where a size is described as "finished".
- Finish eaves with 220 x 25 mm grooved fascia. Finish soffits where necessary with 10 mm external quality PVC.
- Provide Window and door frames and fix frames of sizes and members indicated on the drawings bedded in gauged mortar and pointed around with approved mastic.
- Provide plywood faced both sided flush door with weather board to B. S. 459 part 2 size 770 x 1935 mm to be hung on 11 pairs 100 mm steel butt hinges.
- Provide 50 mm PVC double glazed casement windows to the sizes shown on the drawings.
- Provide and fix 250 mm long aluminium alloy casement stay and pin to casements.
- Take delivery, store and fix four sets of aluminium alloy lever handles to door.

CARPENTRY

- Structural timber to be selected carcassing quality softwood and to be well cut and free from deformation and excessive knots, and to be in accordance with B. S.1860. Where built into brickwork ends of timber to be treated with approved wood preservative.
- Construct roof with timbers of sizes and centres as shown on the drawings.
- Wall plate (100x100 mm). Rafters (150x100mm) to be birds mouthed on wall plate.
- Noggings - Provide all noggings necessary for fixing plasterboard and as support for services.

PLASTERWORK AND OTHER FLOOR, WALL AND CEILING FINISHINGS

- Provide 12.5 mm gypsum plasterboard to B. S. 1230 and fix to ceiling joists with 30 mm galvanised plasterboard nails at centres not exceeding 150 mm and finished with skimming coat of neat gypsum plaster. No plasterboard shall have a free end exceeding 50 mm.

GLAZING AND PAINTING AND DECORATING

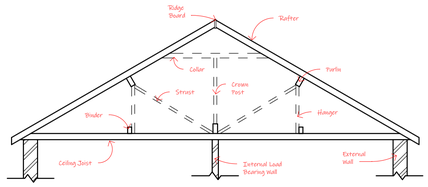
- Paints - All paints are to be as manufactured by, and used strictly in accordance with the manufacturer's instructions.
- No decorating is to be executed on a falling temperature of 1^0 C or during inclement weather and each coat is to be allowed to dry thoroughly before the succeeding coat is applied.
- Woodwork. -Wood must be dry, smooth and free from grease. All internal and external painted work to be knotted, primed all round with wood primer and stopped with hard white putty and finished as follows:
  - 1st coat Undercoating
  - 2nd coat Gloss finishing coat
- Hardwood sills (or equivalent PVC) are to be clean, dry, smooth and free from grease and to be stained and once oiled.
- Allow plaster to dry for at least two weeks during the spring and summer periods. During adverse weather conditions moisture content in plaster must not exceed 18%. Remove efflorescence and all other loose or extraneous matter by dry scraping and dusting off. Prepare and apply two coats of emulsion paint on walls and ceilings.
- External painting: All painted work externally to be white.
- Internal painting: All painted work internally to be as per client's choice.

First Floor

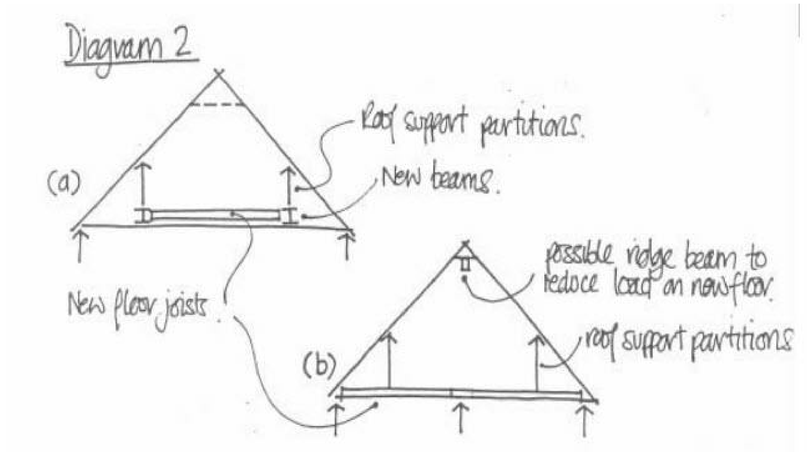
- It is assumed the proposed will be as shown in floor plans and associated sections and elevations:
- The Party Wall Act, 1996, places certain obligations on the applicant/developer to carry out work which involves the party wall (that is the separating wall) in a semi detached or terrace property. An advice leaflet on The Party Wall Act is available from the Council.
- Structural Stability of the dwelling, considering both the existing structure and the proposed alterations, with reference to the supporting Approved Document A, of Schedule 1 to the Building Regulations.
- Fire Safety in accordance with the Approved Document B, of Schedule 1 to the Building Regulations.
- Ventilation of the rooms and the control of condensation in roofs, in accordance with the Approved Document C and F, of Schedule 1 to the Building Regulations.
- Staircase provision to the new storey in accordance with the Approved Document K, of Schedule 1 to the Building Regulations.
- Thermal Insulation of the conversion in accordance with the Approved Document L, of Schedule 1 to the Building Regulations.

First Floor Stability

- In assessing the structural stability requirements, it is essential to consider the existing roof construction, new floor, and the impact the alterations will have on the structure. Special attention is to be paid to 'cut' roof involving, in this case purlins, rafters and ceiling joists as indicated in
  Diagram 1.
- Any modification in Trussed Rafter roofs, (used since the 1960's), will require additional structural considerations, and it is recommended that the client would consult a Structural Engineer early in the design process.
- With regard to the roof, it is recommanded to construct the roof of the proposed extension with the minimum disruption to the existing structure. The position of the purlins, if present, is a prime factor in determining the extent of the internal area, which can be achieved in the extension. Diagram 2 indicates two typical arrangements. The existence of loadbearing walls at first floor level is an advantage in extension works, in providing support to loadbearing elements transferred from the roof, partitions, and the new floor.
- If the the existing ceiling of the First Floor is be removed it must be replaced by a new floor at a lower level to give enough headroom for the newly created living space in extension. The joist should be capable of supporting the loads for the living space and roof. Steel joists may be used in the new floor and roof.
- Where the available height within the loft is at a premium, it is of benefit to restrict the depth of the section of the new floor joist to a minimum. This can be achieved by reducing the span of the joist where internal loadbearing walls permit, or using a higher strength classification timber, such as C24 in lieu of C16.
- When considering the minimum depth of section permissible for the new floor joists, it is recommanded to choose the section which offers the greatest resistance to deflection.
- A steel or timber beam is required. Metal fixings should be separated from a brick or blockwork chimney and this requirement generally precludes an easy solution to the problem of beam support. If the property possesses a central loadbearing masonry wall on which a suitable vertical metal or timber post can bear. This post can then accept the load from the ridge beam provided it is separated from the flue in accordance with the Approved Document guidance, and forms part of a studwork wall suitably nogged and fixed at both rafter and new floor level. This will ensure lateral stability is maintained within the structure. We suggest that a structural engineer be consulted for any calculations that may be required.
- Check whether any load-bearing walls at ground floor level have been removed to create a 'through-room' situation. Where this is the case it will be necessary to ascertain the type of lintel/beam used to form the opening in a loadbearing wall in order to establish its ability to cope with any extra loading imposed by the loft conversion. The Local Authority will normally request calculations.



1 Diagram 1
1 : 20



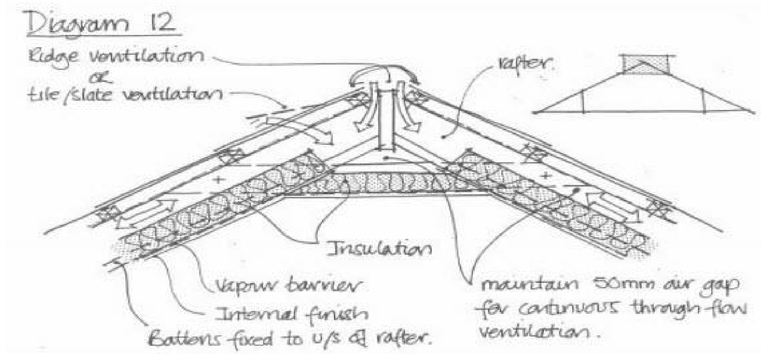
ROOM VENTILATION

- The formation of a habitable room requires the provision of both 'rapid ventilation', (an opening window), and 'background ventilation'. In addition, in showers or bath facilities, 'mechanical ventilation' is also required.
- Habitable rooms, such as Bedrooms, require rapid ventilation to an area equivalent to 1/20th of the floor area, Example.; Floor area 20m2 = Rapid vent opening lm2, and background ventilation of 8,000mm2
- The Bathroom, requires mechanical extract, but in lieu of the fan overrun, an opening window and background ventilation of 4,000mm2 has to be provided.

ROOF VENTILATION

- The roof void will require ventilating on two opposite sides to promote cross ventilation. and prevent the build-up of excessive condensation.
- Where the new ceiling follows the pitch of the existing roof, two important design features need to be included;
  (a) The provision of ventilation both at the eaves level and ridge, to promote a flow of air above the insulation, and,
  (b) A minimum air space of 50mm between the insulation and the roof covering.

- Where the 50mm air gap, is causing problems due to the thickness of insulation required to achieve the requisite level of thermal performance, and the depth of the existing rafter member, a typical method of overcoming the problem using a high performance insulant and battens fixed to the underside of the rafters. (See Diagram 12).



NOTES

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No.	Description	Date
1	Revision 1	Date 1
2	Dropped kerb for vehivle access added.	16/09/22
3	Obscure glazing added to Rear and Right windows on 1st Floor	28/09/22
4	Conversion of FF Toilet & Utility to Bedroom	25/09/23

Revision

AEC DESIGN
ARCHITECTURE ENGINEERING & CONSTRUCTION
Committement to Design Excellence
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Project Name
House Front, Side and Rear Ground and First Floor Extension

Project No.	AECD_M20 1BU_2022_0001		
Drawing No.	M201BU_2022_P111_01		
Date	25/09/23	Drawn-by	AECDesign
Status	Proposal	Checked by	AECDesign
Sheet Size	A1	Approved by	AECDesign

Sheet Name
Proposed Building Notes (2)

Scale 1 : 20

Client Name Khaled Muwahed

Project Address
479 Princess Road
Manchester
M20 1BU

Sheet No.
P111

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THERMAL INSULATION

- Provision must be made for insulating the roof, including the pitched section, and the new internal walls within the conversion to prevent heat loss.

ROOF INSULATION

- Use of a high performance insulant to the pitched roof section which allows greater flexibility in providing effective cross-ventilation, and also increased height within the room.
- For flat or shallow pitched roofs, a 'warm roof' construction.

- N.B. A warm roof construction is achieved by placing a layer of rigid insulation across the top of the roof joists creating a warm roof void which will not be subject to condensation and therefore requires no ventilation. You should take the advice of your Building Control Surveyor as to what grade of insulation is adequate.

RIGID BOARD INSULATION

- Check that the rigid board insulation supplied for use in the rafter voids is of a high performance foam based insulant and not the cheaper white polystyrene normally used for cavity wall insulation. The former is twice as efficient thermally and allows increased height within the room. If in doubt, contact your Building Control Surveyor for advice before installation. Thermal efficiency requirements change regularly, please ask for the up to date 'U Value' requirement.

PARTY WALLS

- Check the construction of party walls at roof level. Cavity walls or 225mm solid walls usually present few problems, but 100mm thick single skin walls are problematical when beams or floor joists have to bear upon them. Building solutions, which avoid penetration of such walls, should be adopted. Fireproofing at roof level and at beam bearings should also be addressed.

STAIRCASE ACCESS

When a new storey is proposed within a residential unit, a permanent access must be provided, which ideally will take the form of a traditional staircase similar to that which provides access from ground to first floor.

TRADITIONAL STAIRCASE

- If a traditional flight is proposed, the parameters for the rise, going and pitch of the flight are as follows; Max Rise 220mm - Min Going 220mrn - Max Pitch 42°. The normal relationship between the dimensions of the rise and going is that twice the rise plus the going (2R + G) should be between 550rnm and 700mm.

HEADROOM

- Where space permits, a clear 2 m of headroom should be provided above the pitch line of the flight as indicated in Diagram 13. However, sometimes there is not enough space to achieve this height. The headroom will be satisfactory if the height measured at the centre of the stair width is l.9 m reducing to 1.8 m at the side of the stair as shown in Diagram 14.

WIDTH

- The width of the flight should ensure the safe passage for people, particularly when evacuating the building in the event of fire, although not specifically controlled by the Building Regulations. The width should ideally be 800mm where two habitable rooms are involved in the conversion, however, a reduced dimension of 600mm would normally be acceptable if access is only being given to a single habitable room. It should be noted that a bedroom and en-suite bathroom is accepted as a single room provided that there is an additional W.C. in the dwelling.

HANDRAILS

- A single handrail is required to a flight under lm in width, unless 2 are specifically needed as mentioned earlier, positioned at a height between 900mm and l000mm from the pitch line of the flight. The pitch line is one drawn through all the nosings of the treads contained in the flight as shown in Diagram 13.

GUARDINGS

- All flights and landings require guarding if a drop of more than 600mm is involved. Balusters are to be constructed so that a l00mm sphere cannot pass through any opening in the guarding, to prevent children from being held fast. Guardings should be positioned at a minimum height of 900mm, and should not be climbable. In practice vertical balusters are the generally accepted method of compliance.

FD30 SPECIFICATION FIRE DOOR

- A FD20 fire-resisting door rated to BS 476: Part 22, can be identified by 'core plugs' set into the lipping of the door. If the plug has a red core within a white background, an intumescent strip will be required in either the door or frame to achieve the rating. However, if the door is identified by a blue core within a white background, then the additional provision of intumescent is not required to satisfy a FD30 performance. Other forms of identification are also being introduced, if in doubt ask your Building Control Surveyor. Two hinges would normally be provided for this rating. Doors do need to be self-closing to protect children of being injured, but adults should keep fire doors closed at all times.

ELECTRICAL SAFETY

- Any new fixed electrical installations for domestic premises will be required to be designed and installed in accordance with the Building Regulations, Approved Document P & British Standards 7671. (Further details can be obtained from your Local Building Control Authority).
- **NOTE**: If you are employing the services of an electrician registered to a self certifying body, then Building Regulation Approval is not required.

SOIL & VENT PIPES

- Check that any new or existing soil and vent pipe will terminate at least 900mm above any opening into the building, which is within 3.0m of the pipe.

SLIDING HINGES

- Where an escape window is required, ensure that this window is not fitted with the 'slide-across' type of hinge. Although this facilitates easy cleaning, it may also reduce the effective opening size of the window below the minimum of at least 0.33m2 (clear area) and at least 450mm high and 450mm wide, indicated in the Approved Document guidance.

PLASTIC / NYLON HINGES

- It is not acceptable to use plastic or nylon type hinges and door furniture in conjunction with fire doors.

SOIL & VENT PIPES

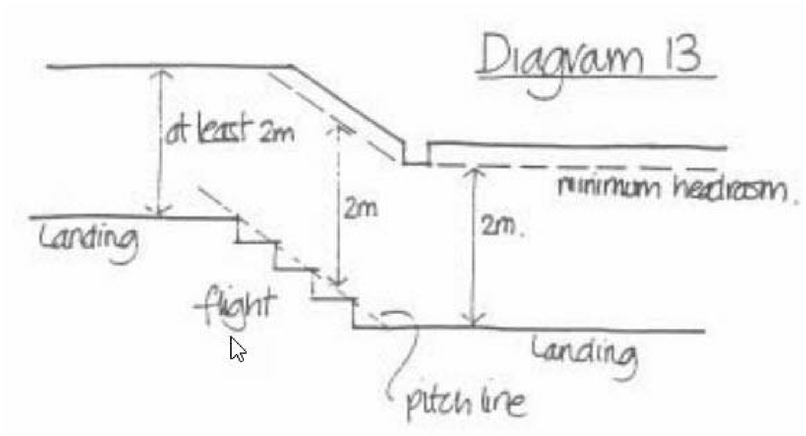
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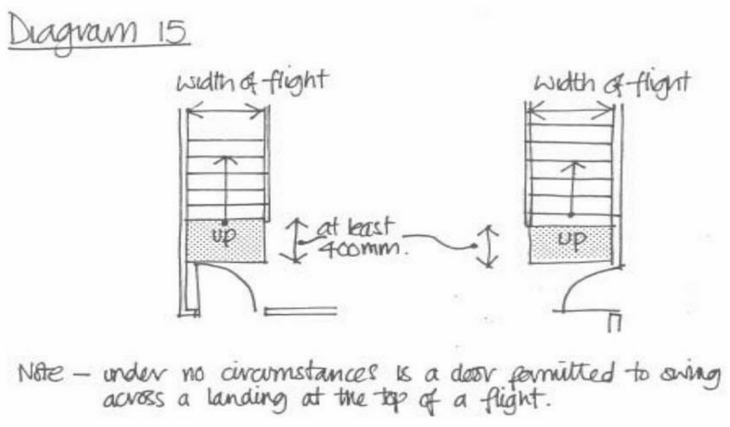
LANDINGS

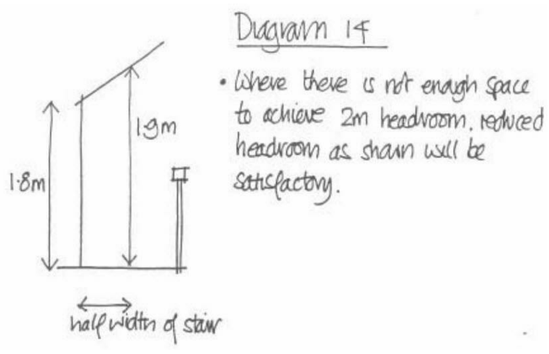
- A landing should be provided at the bottom and top of the flight, with the width and length of the landing being at least the width of the flight. A door may swing across a landing at the bottom of a flight if it leaves a clear space of at least 400mm across the full width of the flight as indicated in Diagram 15.

Bins

- Bins will be store inside fenced wooden enclosure as shown on the Front Garden illustrations shown indicated by diags 1, 2, 3 & 4. To keep the enclosure vented, it will be left open on the top.







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Revision

AEC DESIGN
ARCHITECTURE ENGINEERING & CONSTRUCTION
Committement to Design Excellence

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Project Name
House Front, Side and Rear Ground and First Floor Extension

Project No.	**AECD_M20 1BU_2022_0001**		
Drawing No.	**M201BU_2022_P112_01**		
Date	**25/09/23**	Drawn-by	**AECDesign**
Status	**Proposal**	Checked by	**AECDesign**
Sheet Size	**A1**	Approved by	**AECDesign**

Sheet Name
Proposed Building Notes (3)

Scale

Client Name **Khaled Muwahed**

Project Address
479 Princess Road Manchester M20 1BU

Sheet No.
P112

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