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2. These drawings are issued by 'Hemhurst Technical Services Ltd.' subject to the condition that it is not copied, reproduced or distributed either in whole, or in part, or used in anyway detrimental to 'Hemhurst Technical Services Ltds' interests.
3. Figured dimensions are to be followed in preference to dimensions scaled from drawing.
4. All site particulars, dimensions and sizes of existing structure are to be checked on site by the builder before work commences.
5. All work is to be carried out in accordance with the latest Building Regulations and Codes of Practice.
6. The builder shall undertake the design, supply and installation of all electrical and water/waste services and as such, shall supply an inventory of sockets, lights, radiators etc., with his estimate.
7. The builder shall liaise with the client regarding supply and installation of finishes and fittings such as Kitchen Units and Bathroom Suites.
8. All new electrical work is to be designed, installed, inspected and tested in accordance with BS7671 (2015), switches and electrical outlets shall comply with Diagram 1.5 in Approved Document M4 of the Building Regulations. These installation works are to be undertaken by a person registered with an electrical self certification scheme, or alternatively by a suitably qualified person, with a certificate of compliance provided by that person to Building Control upon completion of the works.
9. A Heat Detector is to be provided to the Kitchen in accordance with BS 5839-Parts 1 and 6. Heat Detector to be connected to the mains electrical supply with battery back up and a separate fuse on the distribution board.
10. All floors to be fitted with mains operated smoke alarms to BS5446-Part 1:2000 or BS5446-Part 2:2003, all interconnected to sound simultaneously. Detectors to be wired back to separate fuse on the distribution board. The fire and alarm system, shall be a minimum Grade 2 D2, Category LD3 standard in accordance with the relevant recommendations of BS5839-Part 6.
11. Provide one energy efficient lamp (40 luminaire-lumens per circuit watt) within the proposed extension (one energy efficient lamp per 25m<sup>2</sup> of the extension).
12. The final depth of the foundations shall be agreed on site with the Building Inspector and/or the Structural Engineer.
13. DPC to solid walls to be Hyload-2 or similar approved. Horizontal dpc to be provided at minimum 225mm. above ground level and to be lapped a minimum of 150mm. and bonded. Cavity wall DPC shall be Cavilock Trays by 'Cavity Trays' or similar approved provided at a minimum 225mm. above ground level, lapped and bonded in accordance with manufacturers instructions. 200mm. wide vertical insulated dpc's to be provided at jambs of openings. Cavity tray dpc's also to be provided over door and window openings incorporating pre-formed end stops. Weepholes to be provided at 1200mm. crs. in course above cavity trays and dpc with a minimum 2 No. to each door or window. Damp proof membrane to be dressed up wall and made continuous with horizontal dpc, all joints and penetrations taped to provide basic Radon protection.
14. Ground floor to be constructed of 75mm. screed on 80mm. Thermafloor TF70 insulation by 'Kingspan' (including 25mm. edge insulation) to achieve a U-Value of 0.21W/m<sup>2</sup>k., lapped and taped at edges on 150mm. deep concrete slab reinforced with A142 mesh top, 50mm. cover on 1200 gauge dpm.
15. Ceilings to be 150x50mm. s.w. ceiling joists at 400mm. crs. with 12.5mm. plasterboard and skim coat soffit. Provide 300mm. glass-fibre quilt insulation between and over joists. Ceiling finishes to Bathrooms and Utility Rooms to be 12.5mm. 'Gyproc Soundbloc MR' plasterboard.
16. Front and rear external walls to be constructed of 100mm. 7N/mm<sup>2</sup> lightweight blockwork inner and outer leaf. 100mm. cavity to incorporate 50mm. 'Kingspan Kooltherm K8' insulation board with a 50mm. clear cavity to external face, board insulation held in place by cavity tie clips. External finish to be pebble dashed render to match existing. All render reinforcement products as recommended for purpose by manufacturer. Walls to be plastered internally with 13mm. two-coat plaster. U-Value = 0.28W/m<sup>2</sup>.
17. New flint brickwork cavity walls to be constructed of:-  
Externally: Facing bricks to be agreed with client.  
Cavity: 100mm. wide to incorporate 50mm. 'Kingspan Kooltherm K8' insulation board to internal face of wall construction.  
Internally: 100mm. Thermalite 'Turbo' blockwork with 13mm. two coat plaster finish.
18. Cavities to doors and windows to be closed with proprietary insulated closer such as 'Thermablate'. U-Value = 0.28W/m<sup>2</sup>k.
19. Openings to be infilled with 215mm. 'Thermalite Turbo' blockwork, with plaster finish, 13mm. thick in two layers on both sides.
20. Movement joints to walls to be provided at the following maximum centres, 6m. for blockwork walls, 7.5 to 9m. for calcium silicate bricks and 12m. for clay bricks, all in accordance with the NHBC regulations.
21. Cavity walls are to be constructed with stainless steel double triangle or vertical twist wall ties at 750mm. horizontal and 450mm. vertical centres staggered, except within 750mm. of openings, where they are to be 225mm. crs. vertically.
22. New brickwork and blockwork walls to be bonded to existing with 'Crocodile Wall Extension Profile'. Provide two coats of 'RIW Flexiseal Pro' between the existing wall and profile fixing.
23. Mortar mix to be 1:1:6 (cement:lime:sand).
24. Stud partitions (internal): 100x50mm. s.w. studs at maximum 600mm. crs. with 100x100mm. s.w. posts at corners and end junctions. 12.5mm. 'Gyproc Soundbloc' plasterboard both sides with set coat finish. Provide 100mm. 'Rockwool Sound Insulation Slabs' or similar approved between studs.
25. Stud partitions (wet areas): 100 x 50mm. s.w. studs at maximum 600mm. crs. with 100x100mm. s.w. posts at corners and end junctions. 12.5mm. 'Gyproc Soundbloc MR' plasterboard to both sides with set coat finish. Provide 100mm. 'Rockwool Sound Insulation Slabs' or similar approved between studs.
26. New steel beams to be painted with two coats of bitumastic paint prior to fixing. Steel beams to be encased in two layers of 12.5mm. plasterboard wired at 100mm. crs. with 8mm. set coat finish, exposed steelwork to be painted with intumescent paint to achieve 30 minute fire resistance.
27. Pairs of steel beams are to be bolted together with M12 bolts and spacers at 600mm. crs. maximum. Spacers are to be of a suitable length.
28. Steel beams are to be supported on concrete padstones as indicated on the drawings, with full or 150mm. minimum bearing whichever is the most practical. Steel beams are to be fixed to padstones with 2 No. Ragbolts or Resin Anchors.
29. Lintels over openings to be galvanised m/s insulated I.G. lintels with minimum 150mm. bearing at each end. Generally, all lintels to be BBA certified and designed and tested to relevant standards (BS5977 Part 1 1991 and Part 2 1983). Width to suit openings and bearing requirements above.
30. New floor and roof joists to be strapped down to new timber wall plates.
31. Timbers designed to BS5286 and to be Grade C24.
32. 30 x 5mm. mild steel (with minimum 260g/m<sup>2</sup>. zinc coating) restraint straps to be provided at 1.5m. crs. anchoring floors and roof to walls. Straps should be long enough to engage at least three rafters/joists and have a minimum 'turn down' length of 100mm. Straps to be fixed with at least four 8 gauge x 50mm. countersunk head plated steel screws.
33. Galvanised joist hangers to be bolted to walls and nailed to joists, all holes used.
34. All built-in ends of structural timber to be treated with two coats of cuprinol.
35. All structural timbers to be tanalised.
36. Eaves to be white painted external grade plywood fascia and soffit generally to project approx. 250mm. to suit window heads. Masterboard soffit above front door. Soffit to be provided with 25mm. continuous ventilation protected with an insect grille. Water goods to be 110mm. half round gutters with 63mm diameter rain-water pipes, all in black uPVC.
37. Roof tiles to match existing (Redland 49's) fixed to BS5534:Pt 1 on 38x25mm sw tanalised battens on sarking felt on 150x50mm. s.w. timber rafters at 400mm. crs.
38. Flat roof to be constructed of dark grey fibre glass resin finish on 118mm. roofing grade plywood/chipboard on timber firrings set to 1:40 fall on 200x50mm. s.w. joists. at 400mm. crs. with vapour control barrier and 12.5mm. moisture resistant plasterboard and skim coat soffit. Insulation to be 200mm. 'Celotex XR4000' insulation board between joists. U-Value = 0.17 W/m<sup>2</sup>k.
39. Roof to be constructed of 12.5mm. mineral chippings hot bonded to 3 layer fibre based roofing felt on 18mm. roofing grade plywood/chipboard on timber firrings set to 1:40 fall on 200x50mm. s.w. joists. at 400mm. crs. with vapour control barrier and 12.5mm. moisture resistant plasterboard and skim coat soffit. Insulation to be 200mm. 'Celotex XR4000' insulation board between joists. U-Value = 0.17 W/m<sup>2</sup>k.

Revisions	Notes	Client:	Project:	HEMHURST TECHNICAL SERVICES LIMITED	
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		Drawing:	Standard Notes	Drawn: S. Quigley A.C.I.O.B. Date: May 2021	Drawing No. Rev.
				Scale: N.T.S.	HHL/658-3