1. These drawings are copyright and should not be reproduced without written permission.
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 25m² 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. Half brick honey–comb sleeper walls to be provided at 2m. crs. maximum. Mortar mix to be 1:3 (cement:sand).
15. Air bricks to be 225x75mm. at 2m. crs. maximum.
16. Ground floor to be constructed of 22mm. square edged floor boarding on 150x50mm. s.w. joists at 400mm. crs. with 'Kingspan' Thermafloor TF70 zero ODP, 110mm. thk. supported on s.w. timber battens between joists to achieve a U–Value of 0.19W/m²k.
17. Loft floor to be constructed of 22mm. square edged floor boarding screwed to 200x50mm. s.w. floor joists @ 400mm. crs., joists to be positioned between the existing ceiling joists, new joists to maintain a 13mm. clearance gap to the ceiling below. Provide 100mm. 'Rockwool Sound Insulation Slabs' or similar approved between joists.
18. 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 Utillity Rooms to be 12.5mm. 'Gyproc Soundbloc MR' plasterboard.
19. External walls to be constructed of 100mm. 7N/mm² 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 20mm. white painted render. All render reinforcement products as recommended for purpose by manufacturer. Walls to be plastered internally with 13mm. two–coat plaster. U–Value = 0.28W/m².
20. New brickwork cavity flank wall to be constructed of:–
    Externally: Facing bricks
    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.
21. Cavities to doors and windows to be closed with proprietary insulated closer such as 'Thermabate'. U–Value = 0.28W/m²k.
22. 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.
23. Existing party wall to loft to be dry lined with 45mm. 'Kingspan Kooltherm K17' dry lining board with 12.5mm. plasterbaord and skim coat finish. U–Value = 0.33W/m²k.
24. 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.
25. Blockwork walls to be reinforced every third course with steel mesh reinforcement.
26. 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.
27. Openings to be infilled with blockwork and finished with 13mm. two coat plaster finish.
28. Mortar mix to be 1:1:6 (cement:lime:sand).
29. 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.
30. 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.
31. Stud partitions (rear of loft): 100x50mm. s.w. studs (Grade C24) at maximum 400mm. crs. with 100x100mm. s.w. posts at corners and end junctions. 12.5mm. plywood boarding to loft side and 32.5mm. 'Kooltherm K18' insulation board fixed internally with set coat finish. 70mm. 'Kingspan Kooltherm K7' insulation to inside of studwork. U–Value 0.27W/m²k.
32. 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.
33. 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.
34. 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.
35. 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.
36. New stairs to loft to be constructed in accordance with the Building Regulations, Section 'K', 28mm. treads, s.w. risers 22mm. plywood, rebated, glued and blocked. Contractor to clarify clearance and height dimensions prior to manufacture of staircase.
    Stringers = 250 x 38mm. s.w. Going = 225 + 16mm. nosing Rise = 14 No. equal in 2.81m.
    Balustrade and handrail fixed to wall, 900mm. above pitch line.
    Balustrade and handrail should be fixed at a height of between 840mm. and 1m. vertically above the pitch line, with a minimum height of 900mm. to landings. Balustrading shall be fixed to resist a horizontal force of 0.36kN/m.
    There should be no opening/gap of such a size to allow the passage of a sphere of 100mm. diameter between balusters/spindles.
37. Minimum headroom to staircase must be maintained at 2 metres.
38. Tapered treads to have a minimum 50mm. width. Tapered treads to have the same going at centre, the same rate of taper and narrow ends at the same side.
39. Stair width to be 800mm. minimum between handrail and wall.
40. Stairs: Going plus twice the rise must not be less than 550mm. and not more than 700mm.
41. New floor and roof joists to be strapped down to new timber wall plates.
42. Timbers designed to BS5286 and to be Grade C24.
43. 30 x 5mm. mild steel (with minimum 260gm/m². 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.
44. Galvanised joist hangers to be bolted to walls and nailed to joists, all holes used.
45. All built–in ends of structural timber to be treated with two coats of cuprinol.
46. All structural timbers to be tanalised.
47. Eaves to be white painted external grade plywood fascia and soffit generally to project qpprox. 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.
48. Existing pitched rafters to be battened with 70x50mm. s.w timbers, insulation to be 120mm. 'Kingspan Thermapitch TP10' between rafters, maintaining a 50mm. air gap between underside of sarking felt and top of insulation. Provide 25mm. 'Kingspan Thermawall TW56 Zero ODP' with 12.5mm. plasterboard and skim coat finish to underside of rafters. U–Value = 0.20W/m².k.
49. 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/m².k.
50. All timber to timber connections to be dogged and bolted (including existing members at ridge).
51. Dormer cheeks formed of 100x50mm. noggins, studs, head and sole plate. Doubled up at corners and adjacent windows. Studs at 400mm. crs. max. Cover externally with 12mm. external quality plywood or 12mm. 'Superlux' (if within 1m. of boundary) with bitumised breather paper. External frame insulated with 70mm. 'Kingspan Thermawall TW55' between the studs in line with the internal face, provide 32.5mm. 'Kingspan Kooltherm K18' insulated plasterboard with 3mm. set coat internally. Vertical tiling to match existing on 50x25mm. s.w. tanalised battens. U–Value = 0.25W/m².k.
52. New door to loft to be self closing FD30 door and frame with 10mm. intumescent strips, no smoke seal required. A fire certificate will be required upon project completion in respect of the door and frame. All doors to remaining habitable rooms (except Kitchen and Bathroom) to be FD20 fire doors with 10mm. intumescent strips.
53. Windows to maintain openable area of 1/20th and natural light area of 1/10th of total floor area of rooms so enclosed. Windows should also have trickle vents to provide background ventilation of 8000mm².
54. Windows to first floor habitable rooms to be escape windows with egress hinges, the obstructed opening shall be 500x850mm., bottom of window to be not more than 1100mm. and not less than 800mm. above the floor.
55. Glazing in critical locations (all door glazing within 1500mm. of floor level and window glazing within 800mm. of the floor) to be impact resistance/toughened in accordance with Approved Document Part N and BS6206. New windows to achieve a U–Value of 1.6 W/m².K.
56. Kitchen to be fitted with cooker hood extracting at a rate of 30 litres/second and a 4000mm². trickle ventilator. Bathroom, w.c. and Utility Room to be fitted with mechanical extract fans extracting at a rate of 15 litres/second with a 15 minute over–run linked to the light switch and 4000mm². trickle vents.
57. Kitchen and Utility Room sinks to have 38mm. dia. wastes, handbasins shall have a 32mm. dia. waste. Bath to have a 38mm. dia. waste and Shower to have 50mm. dia. waste. All wastes to have 75mm. deep seal traps and rodding eyes to all bends. All wastes longer than 2m. to be fitted with anti–siphon valves. Rodding access shall be provided at all junctions within drain runs. Wastes to be taken into 100mm. svp or stub stacks with 'slow bends at bases' in uPVC. Shower trays to be fitted with top access to traps. W.C. to have 100mm. dia. waste. Long runs to be oversized as required. All waste fittings to be to BS5572.
58. Wastes from handbasin/bath/shower to enter stub stack 200mm. above w.c. connection. Stub stacks to incorporate Hunter Nouveau Relief valves.
59. Existing/New S. & V. pipe and waste pipes to be encased with removable panelling to allow for access. soil and vent pipe to be extended a minimum of 900mm. above any opening within 3 metres of pipe. Alternatively, soil and vent pipes terminating within loft space shall be fitted with air admittance relief valves.
60. R.W.P.'s to drain to soakaway 5m. min. from building. Soakaway to have a minimum capacity of 1m³ and formed of honeycomb brickwork, perforated concrete rings or a proprietary crate system. The chamber must be left empty. Final size of soakaway to be agreed on site.
61. New manhole to be constructed of 215mm. semi–engineering brickwork (450x600mm. internally) on a 150mm. thk. concrete base or with a proprietary uPVC inspection chamber.
62. New 100mm. dia. S. & V. pipe to be installed with large radius bend at base, run to existing/new manhole to be in 100mm. dia. 'Supersleve' pipes on a 150mm. pea shingle and protected to the satisfaction of the local authority. Run to independently discharge into invert in manhole. All in accordance with BS8301.
63. All new radiators to be fitted with 'thermostatic radiator valves'.
64. Rooflight upstand to be insulated with 90mm. 'Kingspan K12' insulation with 9.5mm. foil backed plasterboard and skim coat finish. U–Value = 0.29W/m²k.
65. External party walls to be constructed of 100mm. 7N/mm² 'Thermalite Aircrete Hi–Strength 7' blockwork inner and outer leaf. 100mm. cavity to incorporate full cavity insulation at ground floor and 50mm. 'Kingspan Kooltherm K8' insulation board with a 50mm. clear cavity to external face from first floor level, board insulation held in place by cavity tie clips. External finish to be 20mm. white painted render. All render reinforcement products as recommended for purpose by manufacturer. Walls to be plastered internally with 13mm. two–coat plaster. U–Value = 0.28W/m².
66. First floor to be constructed of 22mm. square edged floor boarding screwed to 175x50mm. s.w. floor joists @ 400mm. crs. with 12.5mm. 'Gyproc Soundbloc' plasterboard ceiling and skim coat finish. Ceilings to Bathrooms and Utillity Rooms to be 12.5mm. 'Gyproc Soundbloc MR' plasterboard. Provide 100mm. 'Rockwool Sound Insulation Slabs' or similar approved between floor joists.
67. Internal walls to be constructed of 100mm. 7N/mm² 'Thermalite Turbo' blockwork with plaster finish, 13mm. thick in two layers on both sides.
68. New stairs to Maisonette to be constructed in accordance with the Building Regulations, Section 'K', 28mm. treads, s.w. risers 22mm. plywood, rebated, glued and blocked. Contractor to clarify clearance and height dimensions prior to manufacture of staircase.
    Stringers = 250 x 38mm. s.w. Going = 225 + 16mm. nosing Rise = 14 No. equal in 2.81m.
    Balustrade and handrail fixed to wall, 900mm. above pitch line.
    Balustrade and handrail should be fixed at a height of between 840mm. and 1m. vertically above the pitch line, with a minimum height of 900mm. to landings. Balustrading shall be fixed to resist a horizontal force of 0.36kN/m.
    There should be no opening/gap of such a size to allow the passage of a sphere of 100mm. diameter between balusters/spindles.
69. Roof tiles to match existing fixed to BS5534:Pt 1 on 38x25mm sw tanalised battens on sarking felt on 150x50mm. s.w. timber rafters at 400mm. crs.
70. Existing party wall to be dry lined with 45mm. 'Kingspan Kooltherm K17' dry lining board with 12.5mm. plasterbaord and skim coat finish. U–Value = 0.33W/m²k.

Revisions	Notes	Client:	Project:	HEMHURST TECHNICAL SERVICES LIMITED
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			Drawing: Standard Notes	Drawn: S. Quigley A.C.I.O.B. Date: September 2021 Drawing No. HHL/660–25 Rev. Scale: N.T.S.