



**1 Section A-A**  
1 : 20

**SPECIFICATION OF NEW EXTENSION ELEMENTS**

**EXCAVATIONS.**  
CONSULT STRUCTURAL ENGINEERS SPECIFICATION FOR EXCAVATION REQUIREMENTS, IF ROCK IS ENCOUNTERED, DEPTHS TO BE AGREED WITH THE BUILDING CONTROL OFFICER.  
FOUNDATION TRENCHES ARE TO BE INSPECTED AND APPROVED BY THE BUILDING CONTROL OFFICER PRIOR TO THE CONCRETE POUR AND CONSTRUCTION.

**FOUNDATIONS.**  
CONCRETE TRENCH FILL FOUNDATIONS TO 1:3:6 MIX (40MM AGGREGATE) COMPLYING WITH BS 5328. THE FOUNDATIONS ARE TO BE 600MM MIN WIDTH FOR 300MM CAVITY WALL CONSTRUCTION. DEPTH OF THE FOUNDATION TO BE A MINIMUM OF 1000MM BELOW FINISHED GROUND LEVEL / SUIT SUBSOIL CONDITIONS. FOUNDATIONS ARE TO BE SITUATED CENTRALLY UNDER THE WALLS. WHERE ADDITIONAL LOADS ARE TO BE IMPOSED ON EXISTING FOUNDATIONS, THEY ARE TO BE EXPOSED AND INSPECTED BY THE BUILDING CONTROL OFFICER OR A STRUCTURAL ENGINEER.

**SUB-STRUCTURE.**  
WALLS BELOW D.P.C. ARE TO HAVE AN O/A THICKNESS TO MATCH THE WALLS ABOVE. WALLS TO BE CONSTRUCTED FROM 100MM SOLID CONCRETE BLOCKS (DESIGNED FOR USE BELOW GROUND) LAID IN CEMENT-SAND MORTAR 1:3 MIX.  
WALL TIES IN CAVITY CONSTRUCTION TO BE S/S DOUBLE TRIANGLE OR VERTICAL TWIST TYPES EMBEDDED ONTO EACH LEAF BY A MINIMUM OF 50MM. TIE SPACING TO BE 750MM HORIZONTALLY & 450MM VERTICALLY WITH 300MM CENTERS AROUND OPENINGS.  
THE EXTERNAL SKIN CURBS TO HAVE MINIMUM 3 COURSES OF FROST RESISTANT FACING BRICKWORK BELOW D.P.C. CAVITY'S TO BE FILLED WITH LEAN MIX CONCRETE TO 225MM BELOW D.P.C. WHEN PROVIDED.

**D.P.C.**  
D.P.C. TO BE 'HYLOAD' PITCH POLYMER D.P.C. BEDDED IN CEMENT MORTAR WITH MINIMUM 100MM LAPPED JOINTS. THE D.P.C. SHOULD ALWAYS BE A MINIMUM OF 150MM ABOVE FINISHED GROUND LEVEL. WINDOW AND DOOR OPENINGS ARE TO HAVE INSULATED D.P.C. (E.G. 'DAMCOR' OR EQUIVALENT).

**GROUND FLOOR (FT-1)**  
SUSPENDED FLOOR SLAB: 75MM PROPRIETARY FIBRE REINFORCED SCREED, 500G POLYTHENE SEPARATING LAYER, 120MM RIGID INSULATION 'CELOTEX FR5000', 1200G DAMP PROOF MEMBRANE, 25MM PERIMETER INSULATION 'CELOTEX TB4000', 225MM BEAM & BLOCK FLOOR ON MIN. 150 TO 200MM VENTED CLEAR VOID.  
**TOTAL BUILD-UP TO ACHIEVE 0.15 W/M2K U-VALUE.**

**EXTERNAL WALLS (EWT-1)**  
NEW CAVITY WALLS TO BE CONSTRUCTED AS PER DETAIL LAID IN CEMENT MORTAR 1:5 USING S/S WALL TIES WITH INSULATION RESTRAINTS EMBEDDED ONTO EACH LEAF BY A MINIMUM OF 50MM AND FINISHED WITH 12.5MM EXTERNAL RENDER. TIE SPACING TO BE 750MM HORIZONTALLY & 450MM VERTICALLY, 300MM CENTERS AROUND OPENINGS. CAVITY FULLY FILLED WITH 100MM OF 'CELOTEX CF5000' INSULATION. THE INTERNAL FINISH TO BE 12.5MM 'BG THIRSTLE' BASE COAT PLASTER WITH 2.5MM 'BG THIRSTLE' SKIM FINISH, PRIMED AND PAINTED.  
**TOTAL BUILD-UP TO ACHIEVE 0.18 W/M2K U-VALUE.**

LINTELS IN CAVITY WALLS TO BE OPEN BACK INSULATED LINTEL BEARING MIN OF 150MM EACH SIDE WITH HYLOAD CAVITY TRAY OVER. CAVITY TRAY TO HAVE STOP ENDS AND WEEP VENTS AT 900MM CENTERS (MIN 2ND OPENING). ALL NEW WINDOW AND DOOR OPENING REVEALS TO BE CLOSED WITH 'THERMABATE' OR SIMILAR APPROVED CAVITY CLOSERS.

**CEILING**  
CEILINGS BELOW ROOF VOIDS TO BE 15MM PLASTERBOARD & SKIMMED OVER WITH POLYTHENE VAPOUR CHECK MEMBRANE FIXED BETWEEN CEILING JOIST AND PLASTERBOARD. ALL JOINTS IN VAPOUR CHECK MEMBRANE TO BE SEALED.

**FLAT ROOF (RT-1)**  
SINGLE PLY ADHERED ON 140MM RIGID INSULATION 'CELOTEX CROWN-BOND' - FULLY BONDED ON 18MM WPB PLYBOARD ON TANALISED TIMBER FURRING ON 170X50 TIMBER JOISTS @ 450 C/C AND LINED WITH PLASTER BOARD SKIM FINISHED TO ACHIEVE A U-VALUE OF 0.14 W/M2K. VAPOUR BARRIER WELL SEALED BETWEEN THE JOISTS AND THE FURRING STRIPS. 900X30X5MM GALVANISED RESTRAINT STRAPS TO BE FIXED ACROSS JOISTS AT MAXIMUM 1500MM CENTERS AND BUILT INTO NEW EXTERNAL WALLS. ROOF FALL TO BE A MINIMUM OF 1:80 IN ALL AREAS. 75MM HIGH CHECK CURBS TO VERGE AND 150MM MINIMUM UP-STAND AND FLASHING (CODE 4 LEAD) TO ABUTMENT OF ADJACENT EXISTING WALLS. 75MM X 75MM SPLAYED TANALISED WOOD FILLET ON ALL EDGES WHERE ROOF FINISH HAS TO BE TURNED UP VERTICALLY.

**VENTILATION**  
HABITABLE ROOMS TO HAVE RAPID VENTILATION VIA OPENABLE WINDOWS OR DOORS WITH A FREE AIR AREA GREATER THAN 1/20TH OF THE FLOOR AREA OF THE ROOM AND TO HAVE BACKGROUND VENTILATION OF 8000MM<sup>2</sup>.

**GLAZING**  
ALL NEW GLAZING TO BE DOUBLE GLAZED (IF NOT SPECIFIED OTHERWISE) WITH LOW 'E' COATING OR SIMILAR APPROVED. AND IN CORNER JOINTS TO ACHIEVE A U VALUE OF 1.6 W/M2K (INCLUDING FRAME). WINDOWS TO BE INSTALLED BY FENSA APPROVED INSTALLER.  
GLAZING GENERALLY TO BE AS FOLLOWS: SAFETY GLAZING IS TO BE PROVIDED IN ALL GLAZED DOORS AND SIDELIGHTS WHERE ANY PART OF THE SAID GLAZING IS BELOW 1500MM ABOVE FINISHED FLOOR LEVEL UNLESS THESE ARE SMALL PANEES (ANY DIM UNDER 250MM & NOT GREATER THAN 0.5M<sup>2</sup>).  
SAFETY GLAZING IS TO BE PROVIDED IN WINDOWS AND DOORS WHERE THE LEVEL OF THE BOTTOM OF THE GLAZING IS BELOW 800MM. WINDOW DESIGNS TO HAVE AT LEAST ONE ESCAPE WINDOW IN EACH ROOM TO COMPLY WITH PART B OF THE APPROVED DOCUMENT.

**DRAINAGE**  
BELOW GROUND DRAINAGE PIPES PENETRATING WALLS TO HAVE LINTELS OVER WITH 50MM SPACE ALL ROUND PIPE FILLED WITH A COMPRESSIBLE MATERIAL. MASK AROUND PIPE ON BOTH SIDES OF WALL WITH RIGID BOARDS.  
DRAINAGE GENERALLY: 110MM DIA BELOW GROUND DRAINAGE PIPES TO HAVE A MINIMUM FALL NOT LESS THAN 1:80 FOR THE MAIN FOUL DRAINS AND FALL NOT LESS THAN 1:40 FOR INDIVIDUAL BRANCH DRAINS. WITH A MINIMUM COVER OF 600MM UNLESS PROTECTION PROVIDED OVER THE PIPE.  
PIPES TO BE BEDDED IN 100MM THICK BED AND 150MM THICK SURROUND OF PEA GRAVEL (10MM SIZE, AGGREGATE TO BS882PART 2) BEFORE COVERED IN MIN 150MM OF SELECTED FILL AND REGULAR FILL ON TOP.  
INSPECTION CHAMBERS TO BE PROVIDED AT THE HEAD AND END OF THE DRAINAGE RUN, AT ALL CHANGES IN DIRECTION, AT CHANGES IN GRADIENT, AT CHANGE IN PIPE SIZE AND AT ALL JUNCTIONS WITH OTHER DRAINS. ON LONG DRAIN RUNS PROVIDE INSPECTION CHAMBERS AT REGULAR INTERVALS. ENSURE THAT CLEARING LEVELS ARE PROVIDED ON WASTE PIPE RUNS IN STRATEGIC POSITIONS TO ALLOW FULL CLEANSING OF THE SYSTEM. ALL PROPRIETARY GULLIES AND DRAINS TO BE INSTALLED ACCORDING TO MANUFACTURERS INSTALLATION GUIDANCE.

CONCRETE LINTELS TO BE PROVIDED OVER ALL DRAINS WHEN PASSING THROUGH SUB-STRUCTURE WALLS. A 50MM CLEARANCE TO BE MAINTAINED ALL AROUND THE PIPE AND FILLED WITH COMPRESSIBLE MATERIAL. OPENING BE COVERED WITH CEMENTITIOUS BOARD TO PREVENT SOIL OR RODENT ENTRY.

PROPOSED DRAINAGE SYSTEM TO BE AGREED WITH THE LOCAL BUILDING CONTROL OFFICER PRIOR TO STARTING ON SITE.

ALL DISUSED DRAINS ARE TO BE GROUTED OFF AT BOTH ENDS WITH CONCRETE.

**SURFACE WATER DRAINS.**  
NEW DRAINS TO BE 110MM DIA U.P.V.C. UNDERGROUND PIPES WITH PUSH-FIT JOINTS. DRAINS TO BE LAID TO FALL, SAND BEDDED AND SURROUNDED IN PEA SHINGLE. NEW SOAKAWAYS TO BE MINIMUM OF 5M FROM BUILDING & 6M IN A CLAY SUBSOIL. CARRYOUT PERCOLATION TEST ON SITE AND AGREE WITH BUILDING CONTROL OFFICER THE DEPTH AND SIZE OF THE SOAKAWAY BEFORE STARTING ANY DRAINAGE WORK.

**ELECTRICAL WORKS**  
ALTER/EXTEND EXISTING SUPPLY TO SERVE FITTINGS REQUIRED BY CLIENT ON SITE / INDICATED ON DRAWING  
ALL WIRING AND ELECTRICAL WORK WILL BE DESIGNED, INSTALLED, INSPECTED AND TESTED IN ACCORDANCE WITH THE REQUIREMENTS OF BS7671-THE I.E.E. 17TH EDITION WIRING GUIDANCE, AND BUILDING REGULATION APPROVED DOCUMENTS FOR ELECTRICAL SAFETY BY A COMPETENT PERSON REGISTERED WITH THE ELECTRICAL SELF-CERTIFICATION SCHEME AUTHORIZED BY THE SECRETARY OF STATE (BRE, BSI, ELECSA, NAPIT OR NICEIC). THE COMPETENT PERSON IS TO SEND TO THE LOCAL AUTHORITY A SELF-CERTIFICATE WITHIN 30 DAYS OF THE COMPLETION OF THE WORKS. THE CLIENT MUST RECEIVE A COPY OF THE SELF-CERTIFICATION CERTIFICATE AND A BS7671 ELECTRICAL INSTALLATION TEST CERTIFICATE AND FORWARD COPIES TO BUILDING CONTROL.

ALL LIGHT SWITCHES, POWER POINTS, TV SOCKETS, TELEPHONE JACK POINTS ETC. TO BE NOT MORE THAN 1200MM AND NOT LESS THAN 450MM FROM FLOOR LEVEL IN EACH STOREY AS REQUIRED BY PART M OF THE APPROVED DOCUMENTS.

ENERGY EFFICIENT LIGHTING IS TO BE PROVIDED IN ACCORDANCE WITH PART L1 SECTION 1.52.

**RADIATORS**  
REMOVE AND INSTALL RADIATORS IN EACH ROOM LOCATION TO BE AGREED WITH CLIENT AND CONNECT TO EXISTING HEATING SYSTEM WHERE THE BOILER HAS ADEQUATE CAPACITY (CONTRACTOR TO CONFIRM). EACH RADIATOR TO BE FITTED WITH A TRV.

**NEW PLASTERWORK**  
15MM O/A THICKNESS PLASTERWORK TO NEW OR EXISTING BRICK/BLOCK WALLS AND PARTITIONS. UNDERCOAT: 12MM; FINISH COAT: 3MM FINISHED PLASTER.

**PROTECTION TO STEELWORK**  
ALL STEEL BEAMS TO BE SURROUNDED WITH 2 LAYERS OF 12.5MM PLASTERBOARD AND SKIMMED OVER WITH 3MM FINISHING PLASTER. OR PAINTED WITH 300MM STEEL - INTUMESCENT PAINT

**MISCELLANEOUS ITEMS**

NO PART OF THE NEW BUILDING IS TO BE CONSTRUCTED OUTSIDE THE BOUNDARIES OF THE SITE, IF CONSTRUCTING ON THE BOUNDARY, PRIOR AGREEMENT TO BE OBTAINED IN WRITING FROM THE NEIGHBORS.

ALL SUPPLY PIPE WORK TO BE CHASED IN TO WALLS WHERE POSSIBLE, WHERE CHASING IS NOT POSSIBLE ENSURE THAT PAPERWORK IS BOXED IN, ALL AREAS TO BE BOXED TO BE AGREED IN ADVANCE.

ALL FIXTURES AND FITTINGS SUPPLIED ONLY OR SUPPLIED AND FITTED BY THE CONTRACTOR TO COMPLY WITH NECESSARY REGULATORY BODY'S GUIDANCE; AND CLIENT TO BE INDUCTED ON THE OPERATION AND HEALTH / SAFETY ASPECTS.

PLEASE NOTE THAT THESE DRAWINGS ARE PRIMARILY FOR OBTAINING BUILDING CONTROL APPROVAL. IF THIS INFORMATION IS USED FOR PROVIDING A QUOTAION FOR CONSTRUCTION FOR THIS PROJECT, PLEASE ENSURE ALL FINISHES TO SURFACES, AND ALL OTHER NECESSARY CONSTRUCTION DETAILS AND SPECIFICATIONS ARE AGREED WITH CLIENT PRIOR TO COSTING.

**NOTES:**

- All dimensions and levels are to be checked on site by the Main Contractor before work commences. The Architect is to be informed immediately of any discrepancies.
- Do not scale this drawing, use written dimensions only.
- All dimensions are in millimetres unless otherwise stated.
- All dimensions to be varied on site.

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If in doubt, ask before action.

Scale:

1:5	m	50	100	150	200
1:10	m	100	200	300	400
1:20	m	200	400	600	800
1:50	m	500	1000	1500	2000

Rev	Date	Description
P02	DD 02/03/17	Issued for Building Control Approval

**STATUS**  
Building Control Issue

**PROJECT**  
13, Brabazon Close  
Shortstown  
Beds MK42 0FL

**CLIENT**  
Paul Donnelly

**TITLE**  
GA Sections - Sheet 1

SCALE	As indicated	@A1	DRAWN	DD
DATE	04/02/19		REV.	P02

**DRAWING NUMBER**  
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