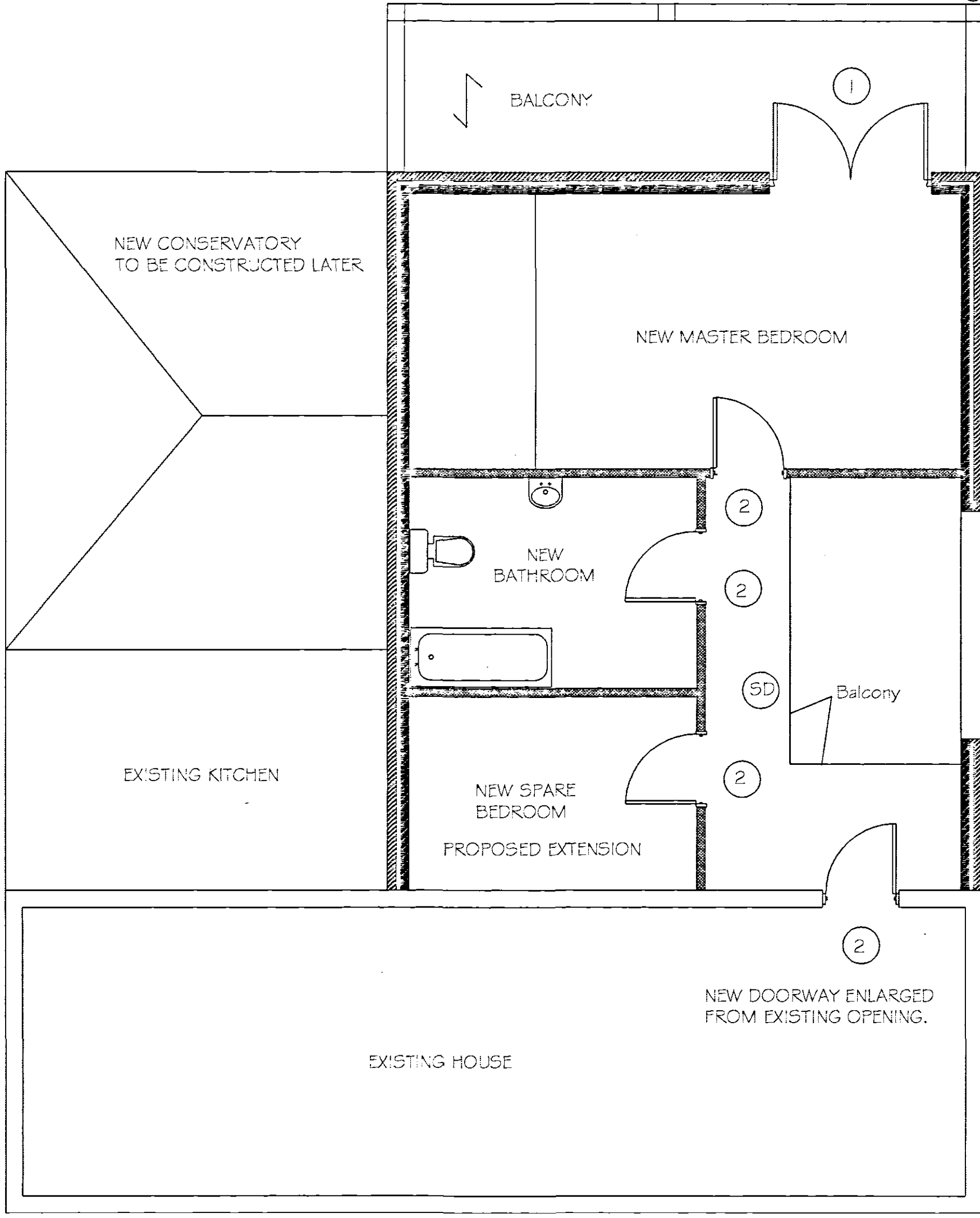
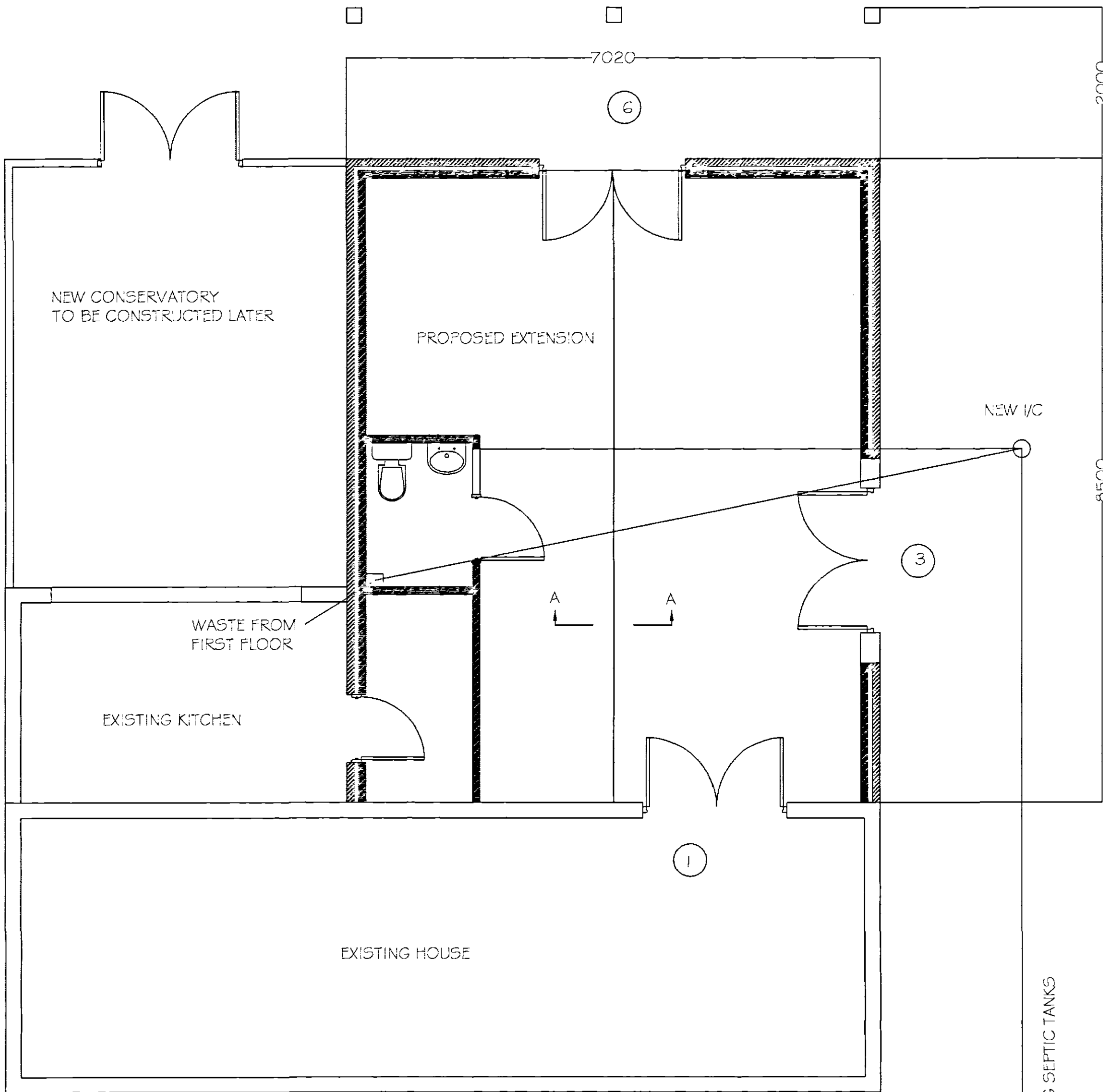


PROPOSED EXTENSION FOR MR PETER NICHOLSON, LAVENDER FARM, SHEPEA STOW, CROWLAND, PETERBOROUGH, PE12 0TY.



FOUNDATIONS
700 WIDE * 225 DEEP STRIP FOOTING TO CAVITY WALL. 450 WIDE * 225 DEEP STRIP FOOTING TO SINGLE LEAF BRICK. CONCRETE GELIS MIX. ALL TAKEN DOWN TO A SUITABLE LOAD BEARING SUBSTRATA. IF ANY HIGH LOAD BEARING SUBSTRATA IS ENCOUNTERED THE DESIGNER IS TO BE INFORMED BEFORE LAYING ANY CONCRETE ETC AND THE ADVICE OF A CONSULTING ENGINEER MAY BE OBTAINED. DEPTH OF FOUNDATION TO BE ACCERTAINED BY NATURE OF SOIL AND PROXIMITY OF TREES. ALL THE ABOVE TO BE APPROVED BY LOCAL BUILDING INSPECTOR.

WALLS
225 CAVITY BRICK TO COMPRISE OF TWO SKINS OF BLOCK EXTERNALLY RENDERED AS EXISTING. 65 CAVITY WITH 65 DITHERM INSULATION LAID TO MANUFACTURERS INSTRUCTIONS. 100 TARMAC TO PLATE TOP BLOCK STD AERATED CONCRETE BLOCK OR SIMILAR RENDERED AND SKINNED INTERNALLY TO ACHIEVE U-VALUE OF 0.35 W/M2K. MORTAR MIX AS RECOMMENDED BY BRICK BLOCK MANUFACTURER AND TO BE B.R.E. DIGEST No. 173 & C.P. 121 PART 1 1973. GALV OR SIMILAR WALL TIES AT 500 CRS HORIZONTAL & 450 CRS VERTICAL. STAGGERED & AT 500 CRS AS NEAR TO DOOR / WINDOW AND ABOVE HEADS. DPC & DPM TO BE LAPPED AND CONTINUOUS. CLOSE CAVITY AT PLATE LEVEL. CLASS A CONC. BLOCKS BELOW GROUND LEVEL. ALL BRICK BELOW GROUND LEVEL TO BE F.L. QUALITY. 50% 100 WALL PLATE OFF MORTAR BED WITH 300*50*1000 Lg GALV METAL ANCHOR STRAPS AT MAX 2m CRS EXPIRIENT OR SIMILAR WALL STARTERS. PROVIDE THERMAL BREAKS WHERE REQUIRED IN THE STRUCTURE TO AVOID COLD BRIDGING OCCURRING.
WALLS ABOVE FIRST FLOOR TO BE INSULATED STUD PARTITIONS.

GROUND FLOOR
150 MM CONSOLIDATED HARDCORE BUILT. 1200 GAUGE DPM LAPPED OVER DPC. 100 THK JALUTE FLOORING. GRADE SD INSULATION BOARDS WITH PERIMETER INSULATION TO WALLS ALL LAID TO MANUFACTURERS INSTRUCTIONS. 100 MM CONCRETE GELIS MIX. SAND / CEMENT SCREED TO BRING FLOORS LEVEL (MIN 40mm).

FIRST FLOOR
75*220 GRADE SC3 TIMBER JOISTS AT 600 C/C SPANNING 3.25 BETWEEN STEEL AND NEW WALL STRUTTING TO BE AT MID PINT. DOUBLE UP JOISTS UNDER PARTITIONS AND BATH. WITH 19mm WEYBROCK OR SIMILAR TAG FLOORING GRADE DECKING. PROVIDE 100MM INSULATION TO FLOOR CAVITY TO REDUCE IMPACT NOISE. DOUBLE UP JOISTS FOR TRIMMER AND TRIMMING MEMBERS TO BALCONY. CEILING TO BE 15mm PLASTERBOARD.

WINDOWS
ALL CODES ARE FOR SOFTWOOD BOLTON AND PAUL / JOHN CARR WINDOW / DOOR CODES. CLIENT MAY REQUIRE WHITE UPVC DOUBLE GLAZED WITH 16 mm AIR GAP BETWEEN SEALED UNITS AND DRAFT SEALED WITH LOW-E GLASS. WINDOWS TO HAVE OPENABLE AREA OF AT LEAST 1/20 OF THE FLOOR AREA AND TRICKLE VENTS TO GIVE 8000mm2 VENTILATION TO HABITABLE ROOMS AND 4000mm2 TO OTHER ROOMS.
ALL WINDOWS TO HABITABLE ROOMS IN THE UPPER STORY SHOULD HAVE AN UNOBSTRUCTED OPENABLE AREA OF 0.33M2 AND AT LEAST 450mm WIDE AND 450mm HIGH AND CILL LEVEL NOT TO BE HIGHER THAN 1100mm ABOVE FLOOR.
ALL UNITS TO HAVE 150mm BEARING & LAID TO MANUFACTURERS INSTRUCTIONS.
ALL GLAZING TO COMPLY WITH B.S. 6206 STD. I.E. WINDOWS : ANY GLASS WITHIN 600 ABOVE FFL TO BE TOUGHENED. DOORS : ANY GLASS WITHIN 1500 ABOVE FFL AND 300 AROUND DOOR TO BE TOUGHENED.
WINDOWS DO NOT EXCEED 25% RULE.
WINDOWS AND DOORS WILL BE RECESSED OVER THE CAVITY BY 30mm.
VELUX WINDOW TO FIT BETWEEN ROOF TRUSSES WITH INSULATED STUD DOWN TO CEILING LEVEL.

HEATING
EXTEND EXISTING HEATING SYSTEM. POSITION OF RADIATORS TO BE AGREED WITH CLIENT. THERMOSTATIC CONTROLS TO ALL RADIATORS.

ELECTRICS
SOCKETS / OUTLETS / LIGHT SWITCHES TO BE I.E.E. REGULATIONS & N.H.B.C STD. POSITIONS TO BE AGREED WITH CLIENT.

SMOKE DETECT ON
PROVIDE MAINS OPERATED SELF CONTAINED SMOKE ALARMS TO BS5446 PART 1 IN ACCORDANCE WITH APPROVED DOCUMENT B1.

ROOF
SAIDTOFT OR SIMILAR APPROVED INTERLOCKING ROOF TILES TO MATCH EXISTING HOUSE. ONE LAYER OF UNITERABLE ROOFING FELT TYPE IF SPARKING FELT WITH MIN 150 OVERLAP. BATTENS 38*25 T.T. AT GAUGE CENTRES. TYPHPLATE OR SIMILAR APPROVED ROOF TRUSSES PINK TYPE AT 600 C/CES FITTED TO MANUFACTURERS INSTRUCTIONS TO MATCH EXISTING ROOF. INSULATION TO ROOF TO BE 250 mm FIBREGLASS CROSS LAD. SOFTWOOD FASA BOARDS AND SOFTITS TO MATCH EXISTING. PROVIDE EITHER 1) OVER FACIA
VENTILATION SYSTEM COMPRISING OF HIGH DENSITY BLACK POLYPROPYLENE STRIP VENTILATORS, COMB FILTERS, VACUUM FORMED POLYSTYRENE DUCT TRAYS AND TIMBER FLETS / FLYWOOD SUPPORTS OR 2) CONTINUOUS 100mm SLOTTED VENT STRIP COMPLETE WITH ROLLED FORMED BAYES VENT BETWEEN RAFTERS TO PROVIDE 50mm CLEAR OPENING.

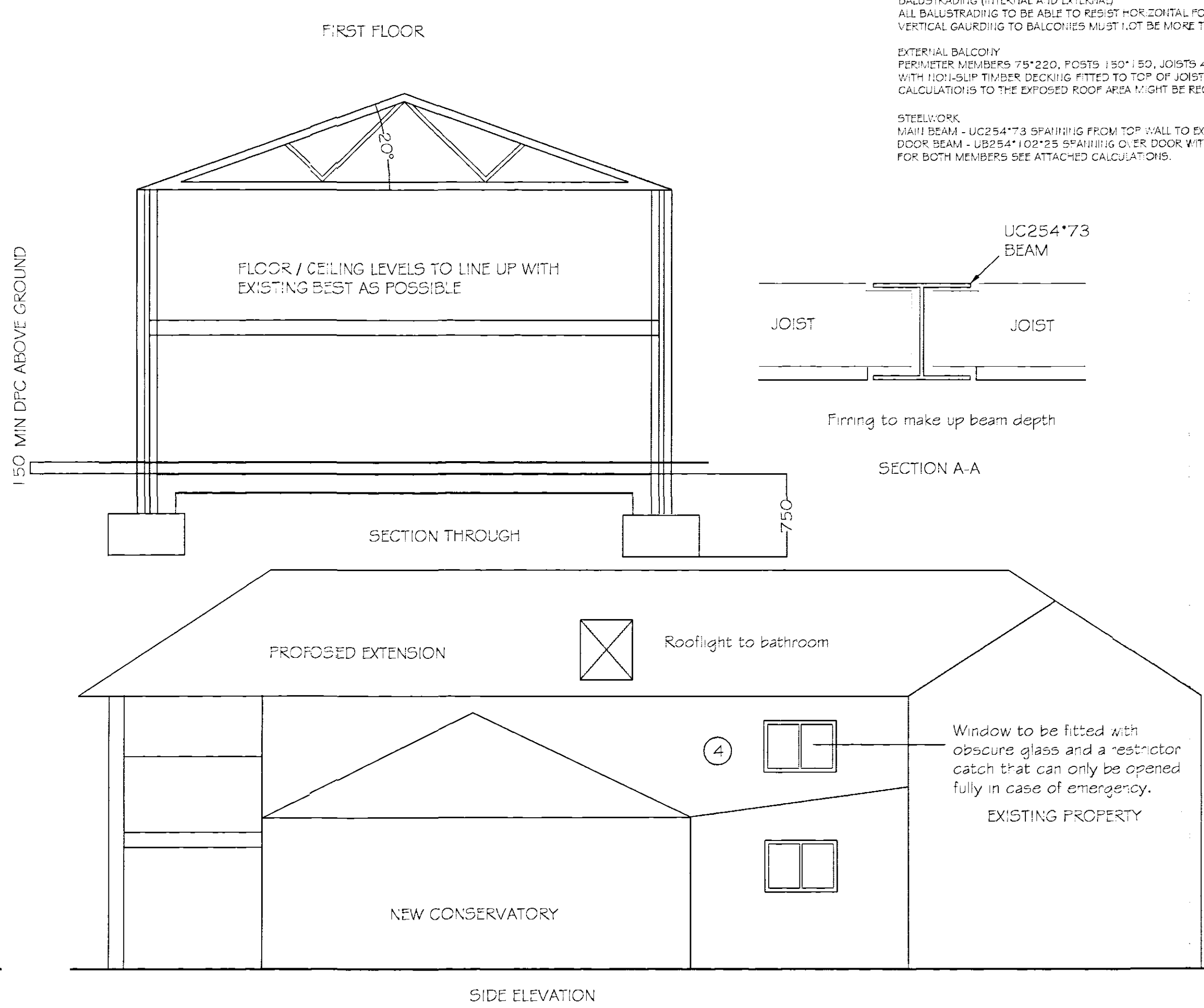
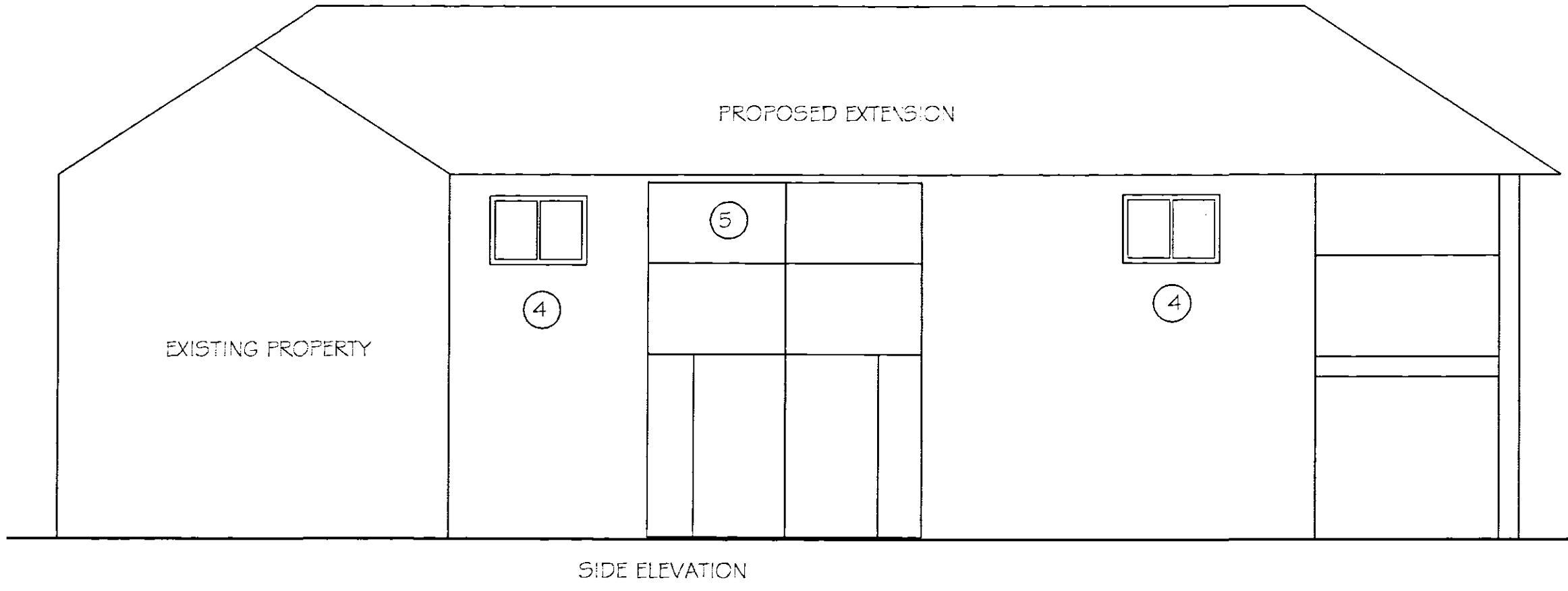
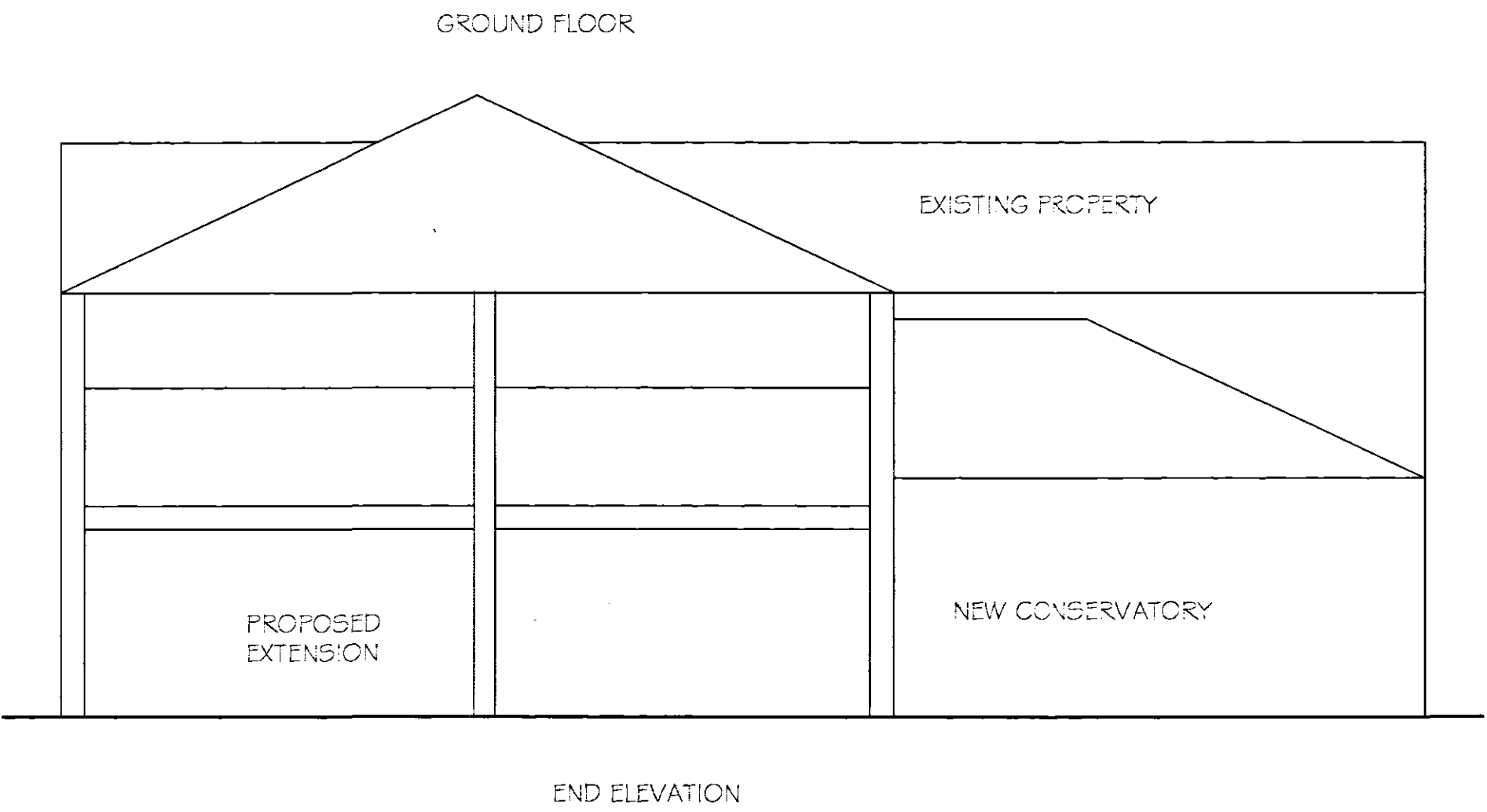
DRAINS
NEW PIPENWORK GOING UNDER PROPOSED EXTENSION TO BE 100mm UPVC POLYDRAIN OR SIMILAR PIPENWORK. PIPE LAID TO MANUFACTURERS INSTRUCTIONS. DRAINS PASSING THROUGH WALL TO HAVE CONC. UTTEL OVER WITH 50mm CLEAR AROUND. DRAINS TO BE SEALED WITH METAL PROTECTION WHERE THEY PENETRATE THE WALLS. PIPES TO BE LAID ON SELECTED BACKFILL & GRANULAR BED. ALL JUNCTIONS TO HAVE SLOW BENDS. PROTECT ALL DRAINS WITH LESS THAN 600mm COVER WITH CONC. SUBSIDIARY FALL TO MIN 1 IN 100. BUILD IN NEW POLYDRAIN HIGH DENSITY BLACK POLYETHYLENE L.C. WITH UP SEAL & CAST IRON LID. S.V.P. TO HAVE BALLON FINAL TO ALL WASTE PIPES PROVIDE 75mm DEEPSEAL TRAP & RODDING POINTS. CONNECTION OF THE WC TO THE DRAINS TO BE 450 ABOVE THE INVERT OF THE DRAINS. CONNECTED TO EXISTING SEPTIC TANK. SVP TO EXTEND TO OPEN AIR.

SURFACE WATER DRAINAGE
USE MARLEY OR SIMILAR 112mm HALF ROUNO PVC GUTTER TO MATCH EXISTING TO 65mm RAMP COMPLETE WITH REDUCER CONNECTED TO 110mm UPVC PIPES FLEXIBLY JOINTED TO FALL MINIMUM 1:80 (AS RECOMMENDED BY MARLEY). TREICH TO BE AS NARROW AS PRACTICAL. PREPARED BED WITH 100mm DEEP LAYER OF RECOMMENDED BEDDING MATERIAL I.E. GRAVEL FROM 5 TO 10mm. SAND OR OTHER MATERIAL WHICH HAS A COMPACTION FACTOR LESS THAN 0.9. PLACE SELECTED BACK FILL MATERIAL AROUND PIPE AND CAREFULLY COMPACTED UP TO MINIMUM HEIGHT LEVEL WITH THE CROWN OF THE PIPE. COMPACT BACKFILL BY HAND UNTIL 300mm OF COVER HAS BEEN MADE. REMAINING BACKFILL CAN BE COMPACTED WITH MECHANICAL COMPACTING EQUIPMENT. ALL TAKEN TO SOKAWAYS MINIMUM OF 5m FROM BUILDING CONSTRUCTED OF MINIMUM 1200mm DIAMETER BRICK FILLED HOLE WITH POLYTHELE OVER AND COVERED WITH TOPSOIL ETC.

VENTILATION
TO WC PROVIDE MECHANICAL VENTILATION TO GIVE A MIN AIR FLOW OF 15 LITRES PER SECOND TO THE EXTERNAL AIR WITH 15 MM OVERHULL C/W GUARD.
TO BATHROOM PROVIDE MECHANICAL VENTILATION TO GIVE A MIN AIR FLOW OF 15 LITRES PER SECOND TO THE EXTERNAL AIR C/W GUARD.
BALUSTRADING (INTERNAL AND EXTERNAL)
ALL BALUSTRADING TO BE ABLE TO RESIST HORIZONTAL FORCE OF 0.36 kN AND AT A HEIGHT OF 900mm INSIDE AND 1100mm OUTSIDE VERTICAL GAUDDING TO BALCONIES MUST NOT BE MORE THAN 100mm APART.

EXTERNAL BALCONY
PERIMETER MEMBERS 75*220. POSTS 150*150. JOISTS 47*147 @ 600 C/C.
WITH NON-SLIP TIMBER DECKING FITTED TO TOP OF JOISTS. ALL TIMBER TO BE EXTERIAL GRADE AND TRATED.
CALCULATIONS TO THE EXPOSED ROOF AREA MIGHT BE REQUIRED FROM A STRUCTURAL ENGINEER.

STEELWORK
MAIN BEAM - UC254*73 SPANNING FROM TOP WALL TO EXISTING.
DOOR BEAM - UB254*102*25 SPANNING OVER DOOR WITH STUB TO RECEIVE MAIN BEAM.
FOR BOTH MEMBERS SEE ATTACHED CALCULATIONS.



REF	QTY	BOULTON AND PAUL	IG LINTOL	LENGTH
1	2	FCS180	L1/S 50	2400
2	3	760 WIDE	STUDWORK	
3	1	FCS180	L1/S 50	3000
4	3	2N07CV	L1/S 50	1500
5	1	BESPOKE	L1/H/D 50	3000
6	1	FCS180	AS CALCS	

