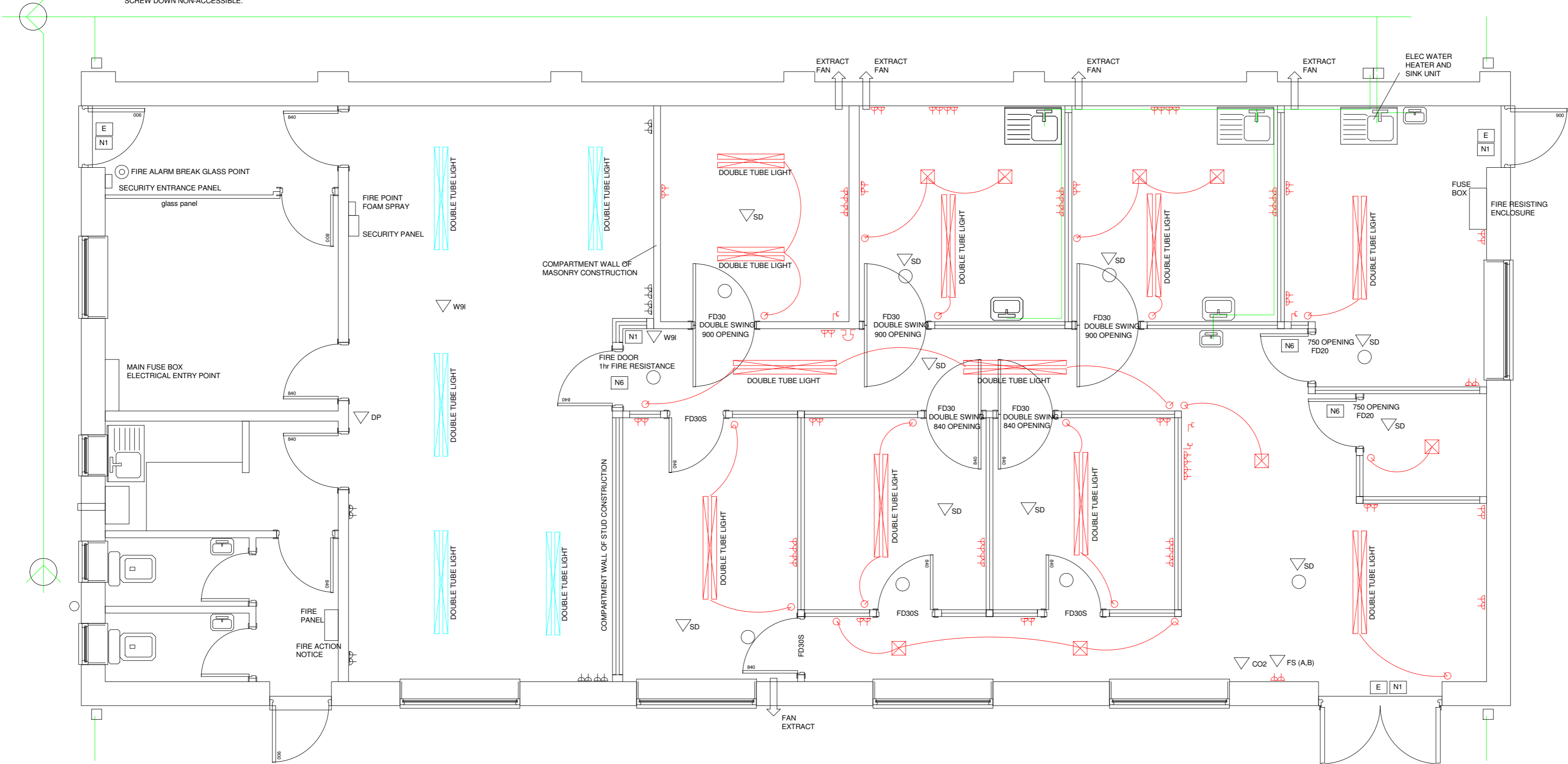


RWG - RAIN WATER GULLEY
 BIG - BACK INLET GULLEY
 SVP - SOIL AND VENT PIPE
 IC - INSPECTION CHAMBER
 IL - INVERT LEVEL
 CL - COVER LEVEL
 DRAINS ARE COLOUR CODED GREEN
 NOTE THAT IC COVERS ARE TO BE
 SCREW DOWN NON-ACCESSIBLE.

PROPOSED BUILDING DIAGRAM (SUBJECT TO PERIODIC CHANGE)



- ### GENERAL NOTES
1. ALL WORK TO BE IN ACCORDANCE WITH THE BUILDING REGULATIONS.
 2. WORK TO PROCEED AT THE DISCRETION OF THE BUILDING INSPECTOR.
 3. ANY ADDITIONAL INSPECTION CHAMBER TO BE EITHER PLASTIC MANIFOLD OR PRE-CAST CONCRETE CONSTRUCTION. NON-VENT COVER, STEP IRONS AS NEEDED & SMOOTH IMPERVIOUS BENCHING.
 4. NEW DRAINS TO BE SUPERSLEEVE TYPE OF 100mm dia, 1.40min FALL. ANY NEW SOIL & VENT PIPE TO BE TAKEN UP TO AT LEAST 900mm HIGHER THAN WINDOW LEVEL.
 5. REINFORCED CONCRETE LINTELS OVER ANY NEW/EXG. DRAIN.
 6. WASTE PIPES TO NEW SINKS, BATHS OR SHOWERS TO BE 50dia AND HAVE 75mm DEEP SEAL TRAPS.
 7. HORIZONTAL AND VERTICAL DPC TO NEW OPENINGS.
 8. IG (or CATNIC) LINTELS TO NEW OPENINGS, 150mm END BEARINGS AND FILLED WITH FIBREGLASS INSULATION.
 9. NEW WINDOWS AND GLAZED DOORS TO BE DOUBLE GLAZED.
 10. EXG. FOUNDATIONS, WALLS AND LINTELS THAT TAKE INCREASED LOADS SHALL BE EXPOSED FOR INSPECTION.
 11. WALL TIES ON 900crs AND STAGGARED EVERY 3rd COARSE OF BRICK WORK.
 12. MILD STEEL ROOF AND FLOOR LATERAL SUPPORTS ON 1m crs.
 13. NEW CAVITY WALL RETURNS GENERALLY 665mm min.
 14. ALL NEW BWC/BLOCK NIBS TO BE ON A CONCRETE FOUNDATION.
 15. ALL ABUTMENTS OF NEW ROOFS AND WALLS ARE TO BE LEAD FLASHED (STEPPED LINEAR) WITH CODE 4 LEAD AND WHERE NECESSARY CAVITY TRAYS INSTALLED.
 16. UNLESS OTHERWISE STATED ALL BRICK AND BLOCK WORK TO BE FULLY KEYS TO EXISTING WALLS.
 17. EXPOSED TIMBERS TO BE TREATED WITH PRESERVATIVE.
 18. THE CONTRACTOR SHALL CHECK ALL DIMENSIONS & CONDITIONS PRIOR TO COMMENCEMENT OF WORK ON SITE. THE DESIGNER WILL NOT ACCEPT RESPONSIBILITY FOR ANY ANOMOLIES OR MISTAKES OCCURRING DURING CONSTRUCTION STAGES. THESE DRAWINGS ARE FOR PLANNING AND BUILDING REGULATION PURPOSES ONLY AND WHERE NECESSARY DETAILED DESIGN & SUPERVISION WILL BE CARRIED OUT ON A SEPARATE BASIS AND AS AGREED WITH CUSTOMER.
 19. THE CONTRACTOR SHOULD DISCUSS THE PROPOSED WORKS DIRECTLY WITH BUILDING CONTROL DURING ALL STAGES.
 20. PERMISSION WILL BE REQUIRED FROM OWNER OF ADJACENT PROPERTY OR LAND FOR ANY WORK ON OR BEYOND BOUNDARY.
 21. PRODUCTS OF DIFFERENT MANUFACTURERS MAY BE USED, BUT, REASONABLE QUALITY PRODUCTS ARE A MINIMUM REQUIREMENT.
 22. THE BUILDER IS ADVISED PRIOR TO COMMENCEMENT OF WORK AND DURING WORK IN PROGRESS TO DISCUSS WITH THE CUSTOMER ANY ASPECTS OF WORK THAT MAY BE CONSIDERED AS 'EXTRA WORK'. THESE MATTERS MUST BE DISCUSSED, COSTED AND AGREED WITH THE CUSTOMER PRIOR TO IMPLEMENTATION.
 23. ALL BWC SHALL BE IN ACCORDANCE WITH BS5628 AND CONCRETE SHALL COMPLY WITH BS8110 'STRUCTURAL USE OF CONCRETE' AND SPECIFICATION OF PRESCRIBED & DESIGNED MIXES FOLLOWS THAT PRACTICE SET OUT IN BS5328. CONCRETE SHALL BE GRADE C25 USING SULPHATE RESISTING CEMENT TO BS4027 WITH A MINIMUM CEMENT CONTENT OF 330kg/cubic m UNLESS OTHERWISE SPECIFIED.
 24. THE NATURE OF THE GROUND AND SAFE BEARING CAPACITY SHALL BE DETERMINED PRIOR TO COMMENCEMENT. CONTRACTOR SHALL DO THIS IN CONJUNCTION WITH BUILDING INSPECTORS.
 25. ALL EXCAVATIONS SHALL WHERE NECESSARY BE TIMBERED AND STRUTTED AND SECURED TO PREVENT MOVEMENT OF THE SURROUNDING GROUND AND SAFETY OF THE BUILDING AND ADJACENT PROPERTIES BEFORE IT IS SUPPORTED BY PERMANENT WORK. PRECAUTIONS ARE TO BE TAKEN TO KEEP EXCAVATIONS FREE FROM WATER. THE BOTTOM OF EXCAVATIONS SHALL BE SEALED WITH CONCRETE IMMEDIATELY AFTER INSPECTION HAS SHOWN IT TO BE SATISFACTORY.
 26. WITH THE ADDITION OF FANS A GAS SPILLAGE TEST SHOULD BE CARRIED OUT BY A SPECIALIST CONTRACTOR.
 27. NEW REQUIREMENTS UNDER PART L OF THE BUILDING REGULATIONS WILL NOW ENCOMPASS OVERALL SYSTEM PERFORMANCE. REFER TO NOTES ON COMMISSIONING OF HEATING SYSTEM.
 28. ANY ADDITIONAL WORK DONE BY OTHER PARTIES IN REGARDS TO THIS PROJECT MUST BE APPROVED BY THE LOCAL AUTHORITY.
 29. GENERALLY ANY DEPARTURE FROM THE APPROVED PLAN MAY REQUIRE A RE-SUBMISSION FOR BUILDING REG. OR PLANNING APPROVAL. IT IS ADVISED THAT WORK STOPS UNTIL ANY SUCH APPROVAL IS OBTAINED.
 30. GENERALLY ALL ELEMENTS OF STRUCTURE TO BE 1/2hr FR
 31. ALL ELEMENTS OF STRUCTURE TO BE 1/2hr FIRE RESISTING.
 32. IN THE EVENT THAT ROOF LIGHTS ARE BEING INSTALLED, THE BUILDER SHALL ENSURE THAT THE ROOF LIGHT SELECTED IS SUITABLE FOR THE ACHIEVED ROOF PITCH ANGLE. DIFFERENT PITCH ANGLES REQUIRE A SPECIFIC TYPE OF ROOF LIGHT. FOR PLANNING PERMISSION REQUIREMENTS THE ROOF LIGHT PROJECTION FROM THE ROOF SHALL BE LESS THAN 150mm.
 33. ALLOWABLE 'U' VALUES (EXTRACTS FROM AD L1B)

BALANCED FLUE BOILER DETAILS.

IN THE EVENT OF A NEED TO REPLACE OR PROVIDE A NEW BOILER, NEW REGULATIONS ARE APPLICABLE. THE BOILER/GAS APPLIANCE WITH BALANCED FLUE AND A CAPACITY OF 7-14kW WILL REQUIRE CLEAR 600mm AIR SPACE AROUND THE FLUE OUTLET. OTHER TYPES OF GAS APPLIANCES ARE AFFECTED AND IT IS ADVISABLE THAT THE MANUFACTURERS SPECIFICATIONS BE ADHERED TO. ALTERNATIVELY REFER BACK TO ARCHITECT PRIOR TO INSTALLATION. ANY REPLACEMENT BOILER TO BE CONDENSING TYPE. ANY WORKS TO BOILER FLUE AND OUTLET TO BE DESIGNED, INSTALLED, TESTED AND CERTIFIED BY GAS SAFE REGISTERED CONTRACTOR.

COMMISSIONING OF HEATING SYSTEMS

THE SPACE HEATING AND HOT WATER SYSTEM MUST BE INSPECTED AND COMMISSIONED TO ENSURE THE RELEVANT REQUIREMENTS OF L1(b) AND (a) HAVE BEEN COMPLIED WITH. UPON COMPLETION OF THE INSTALLATION THE PERSON RESPONSIBLE FOR ACHIEVING THE COMPLIANCE MUST PROVIDE THE CLIENT AND THE COUNCIL WITH A CERTIFICATED STATING THAT SUCCESSFUL COMMISSIONING HAS BEEN CARRIED OUT. THE PERSON GIVING THE CERTIFICATE MUST HAVE A RECOGNISED QUALIFICATION.

THE COMBUSTION INSTALLATION MUST BE CHECKED BY QUALIFIED INSTALLER AND A REPORT DRAWN UP SHOWING THAT MATERIALS COMPONENTS AND FLUES HAVE PASSED RELEVANT TESTS. REPORT COPIES TO BE GIVEN TO CLIENT AND THE COUNCIL.

FOR THE PURPOSES OF DETERMINING THAT THE COMBUSTION APPLIANCES CAN BE SAFELY INSTALLED, WHERE A HEARTH AND FIREPLACE OR CHIMNEY IS PROVIDED OR EXTENDED A DURABLE NOTICE CONTAINING INFORMATION ON THE PERFORMANCE OF HEARTH FIREPLACE OR CHIMNEY MUST BE AFFIXED IN A SUITABLE PLACE WITHIN THE BUILDING.

THE OWNER/OCCUPIER OF THE BUILDING MUST BE PROVIDED WITH SUFFICIENT INFORMATION WITH THE RELEVANT SERVICES SO THAT THE BUILDING CAN BE OPERATED AND MAINTAINED IN SUCH A MANNER AS TO USE NO MORE ENERGY THAN IS REASONABLE IN THE CIRCUMSTANCES.

GENERAL DRAINAGE NOTES

RIGID PIPES (VITRIFIED CLAY TO BS85) SHALL BE USED WITH WATER TIGHT FLEXIBLE JOINTS. PIPE RUNS SHOWN ON DRAWING ARE ASSUMED DIRECTIONS AND UNKNOWN DEPTHS. NEW PIPE RUNS CLOSE TO A BUILDING MAY REQUIRE CONCRETE FILL AND THE SITE CONDITIONS WILL DETERMINE THE FILL LEVELS. EXG. PIPE RUNS CLOSE TO NEW BUILDINGS MAY REQUIRE RE-EXCAVATION AND/OR IDENTIFICATION TO DETERMINE CONCRETE FILL LEVELS. ANY NEW OR EXG. DRAIN THAT WILL BE CONCRETE ENCASED & INTEGRAL WITH A SLAB, A FOUNDATION OR A WALL WILL REQUIRE FLEXIBLE JOINTS AND 600mm LONG ROCKER PIPES AT EACH SIDE OF THE INTERGRATED SOLID PIPE RUN. DEPTH OF COVER OF DRAINS TO BE ESTABLISHED ON SITE. MINIMUM GRADIENT OF NEW DRAINS TO BE 1:40. CONNECTIONS OF DRAIN TO DRAIN TO BE OBLIQUE AND IN DIRECTION OF FLOW. DRAIN ACCESS POINTS (ICs) TO BE PROVIDED AT BENDS, CHANGES OF GRADIENTS, CHANGE OF PIPE SIZE, AND AT THE HEAD OF A LONG DRAIN RUN. NOTE THAT ICs TO HAVE NONE ACCESSIBLE COVERS. THE LOCATION OF ANY PUBLIC SEWER WILL NOT BE IDENTIFIED ON THIS DRAWING. BUILDING CONTROL SHALL IN CONJUNCTION WITH THE DRAINAGE AUTHORITY IDENTIFY THE LOCATION OF ANY PUBLIC SEWER THAT MAY AFFECT THE DEVELOPMENT.

WASTE PIPES. NEW WASTE PIPES TO BE 50mm dia WITH 75mm DEEP SEAL TRAPS. ANTI-VAC TRAPS TO BE FITTED TO FITTINGS.

ESCAPE WINDOW SIZE

WHERE ESCAPE WINDOWS ARE NEEDED, THE OPENINGS FOR ESCAPE PURPOSE SHOULD BE EQUAL TO 0.33sqm WITH A WINDOW BOARD HEIGHT 800 TO 1000 FROM FLOOR LEVEL. THE MIN. CLEAR HEIGHT TO BE 450mm OR THE MIN. CLEAR WIDTH TO BE 450mm.

GLAZING REQUIREMENTS (EXG TO BE CHECKED) SAFETY GLASS TO BE USED BETWEEN FINISHED FLOOR LEVEL AND 1500mm ABOVE THAT LEVEL. 'U' VALUE TO BE AT LEAST 1.6 IN UPVC WINDOWS AND/OR DOORS. DOUBLE GLAZING WITH 16mm PANE GAP AND LOW 'E' (en = 0.05) FOR PVC-U WINDOWS AND/OR DOORS. ALL GLAZING WITHIN CRITICAL LOCATIONS MUST SATISFY APPROVAL DOCUMENT 'K'.

LIGHTING ENERGY EFFICIENT LIGHT FITTINGS TO BE INSTALLED ON THE BASIS OF THREE PER FOUR FIXED LIGHTING FITTINGS.

STRUCTURAL USE OF TIMBER

ALL STRUCTURAL TIMBER MEMBERS ie. JOISTS, RAFTERS, PURLINS, LINTELS, TRIMMERS, TIMBER TIES ETC. SHALL BE IN ACCORDANCE WITH BS 5268:2:2002. TIMBERS USED SHALL BE C16min FROM SUPPLIES THAT WERE STAMPED 'DRY' OR 'KD'. (REF. TO ANY CALCS) TIMBERS USED SHALL BE FROM GRADE STRESSED STOCK. MAXIMUM THICKNESS OF ANY MEMBER TO BE 100mm AND MAXIMUM DEPTH OF ANY MEMBER SHALL BE 300mm. ANY NOTCHES IN A TIMBER MEMBER SHALL BE LIMITED TO MAX. 1/8th DEPTH, BE BETWEEN 1/20th & 1/4 OF SPAN FROM A SUPPORT. DRILLED HOLES TO BE AT THE MIDDLE AXIS OF MEMBER AND NOT MORE THAN 1/4 OF DEPTH, NOT LESS THAN THREE DIAMETERS APART, & BE BETWEEN 0.25 AND 0.4 SPAN. NAILED JOINTS TO HAVE MIN. 2 SCREW DRIVEN NAILS. WHERE BEAMS AND TRIMMERS ARE BOLTED TOGETHER THEN THE PREPARED BOLT SIZE IS M16 WITH NUT AND WASHER AND 400mm APART.

STUD WALL TYPE 1

min 50x100 TIMBER STUDS AT 400crs (VERT & HORIZON), 100mm KINGSPAN INSULATION 13mm PLASTER BOARD EACH SIDE WITH 3mm PLAST. SKIM. OPTIONAL 12mm OSB EACH SIDE. PB FIXINGS TO BE 50mm LONG NAILS OR SCREWS AT 250crs. FIRE RESISTANCE = 30mins. ACOUSTIC ISOL 'N' = 44dB. INNER & OUTER SURFACES = 0.18. OSB BOARDING 0.012/0.014 = 0.86. INSULATION 0.1/0.03 = 3.33. PLASTER BOARD 0.026/0.16 = 0.16. 'U' VALUE = 0.22W/sqmK = 4.53.

STUD WALL COMPARTMENT TYPE

min 50x125 TIMBER STUDS AT 400crs (VERT & HORIZON), 100mm KINGSPAN INSULATION SINGLE LAYER 15mm GYPROC FIRELINE BOARD EACH SIDE WITH 3mm PLASTER SKIM. PB FIXINGS TO BE 50mm LONG NAILS OR SCREWS AT 250crs. FIRE RESISTANCE 60mins. ACOUSTIC ISOLATION UP TO 62dB. INNER & OUTER SURFACES = 0.18. PLASTER BOARD 0.030/0.16 = 0.187. INSULATION 0.125/0.03 = 4.167. 'U' VALUE = 0.22W/sqmK = 5.037.

EXG CEILING INSULATION

INSULATION BETWEEN & OVER CEILING JOISTS USE EARTHWOOL OR ROCKWOOL ROLL 100mm BETWEEN AND 170mm OVER. INNER & OUTER SURFACES = 0.18. INSULATION 0.27/0.044 = 6.14. PLASTER BOARD CLG 0.013/0.16 = 0.08. 'U' VALUE = 0.156 W/sqmK = 6.40. 'U' VALUE ALLOWABLE = 0.16W/sqmK.

ROOM VENTILATION (ALL ROOMS)

PURGE VENTILATION - VIA DOOR OR WINDOW OPENING AT LEAST 1/20th FLOOR AREA. WINDOWS TO OPEN MORE THAN 30deg. SEE ALSO ESCAPE WINDOW SIZES. BACKGROUND VENTS OF MINIMUM 8000sqg mm. eg. TRICKLE VENTILATOR.

ROOM VENTILATION (KITCHEN) MECHANICAL EXTRACT VENTILATION FOR RAPID VENTING. AT A RATE OF 60L per sec. (OR 30L per sec IN COOKER HOOD), AND BACKGROUND VENTS OF MINIMUM 8000sqg mm. eg. TRICKLE VENTILATOR.

ROOM VENTILATION (TOILET) MECHANICAL EXTRACT VENTILATION FOR RAPID VENTING. AT A RATE OF 6L per sec. WITH INTERMITTENT OPERATING & 15mins. OVERRUN.

- ⊗ CEILING MOUNTED LIGHTING INCLUDES THEATRE LIGHTS
- LIGHTING WALL SWITCH
- △ DOUBLE 13A WALL OUTLET
- ⊗ DOUBLE FLUORESCENT LIGHT EXISTING AND NEW LOCATIONS

FIRE SAFETY SYMBOLS

- EMERGENCY LIGHTING POINT
- FIRE ALARM CALL POINT
- ⊗ SOUNDS TO BS 5837
- W91 FIRE EXTINGUISHER 9L WATER
- CO2 FIRE EXTINGUISHER (CARBON DIOXIDE)
- FS (A,B) FOAM SPRAY (NOT FOR ELEC FIRE OR FLAMMABLE METAL FIRE)
- DP FIRE EXTINGUISHER DRY POWDER
- N6 NOTICE 'FIRE DOOR KEEP SHUT'
- N1 NOTICE 'FIRE ACTION'
- E NOTICE 'FIRE EXIT'
- PB NOTICE 'PUSH BAR TO OPEN'
- SD SMOKE SENSITIVE DETECTOR
- HD HEAT SENSITIVE DETECTOR

NOTE THAT AUDIBLE WARNING SHOULD BE NOT LESS THAN 85DBA OR 5DBA ABOVE NORMAL BACKGROUND NOISE.

KEITH SWAIN DESIGN

KEITH SWAIN 01744 885131 07980 555415
 swain.keith@sky.com

DRAWING NUMBER	P13545
PROPOSED DEVELOPMENT	
CHANGE OF USE OF VACANT BUILDING TO VETERINARY SURGERY AND ASSOCIATED OFFICE/SHOP AT PASTURE LANE BUSINESS CENTRE RAINFORD ST HELENS WA11 8PU	

WORK MUST NOT BEGIN UNTIL APPROVAL FROM LOCAL AUTHORITY

