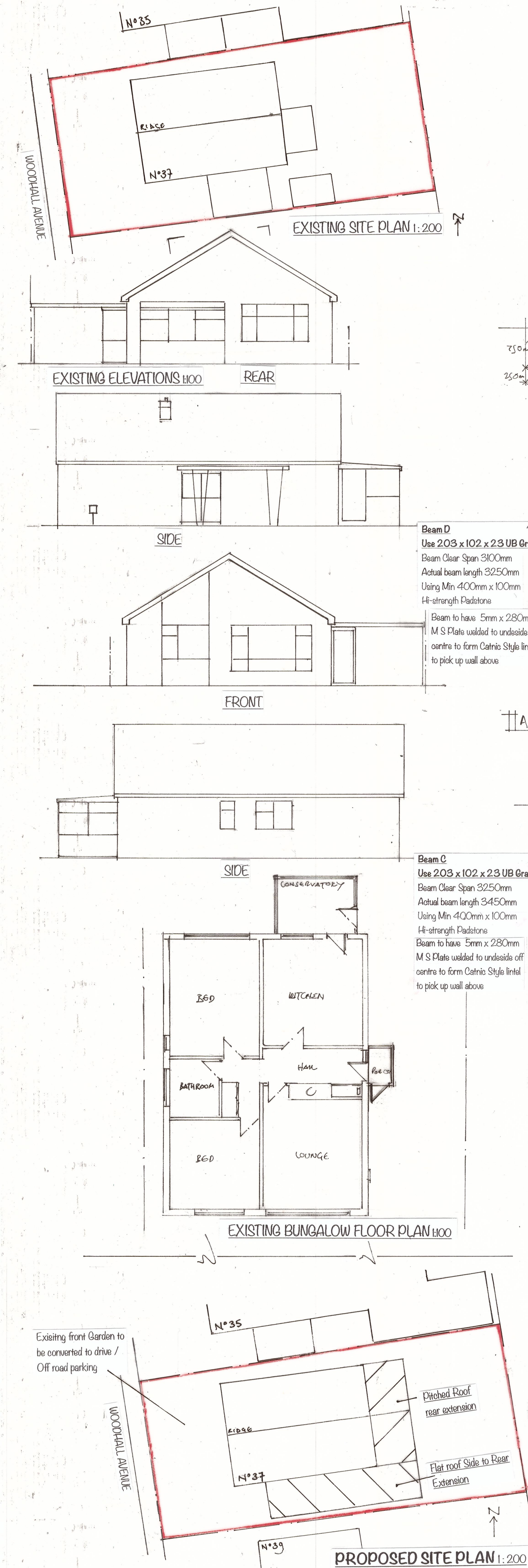




UNDERGROUND FOUL DRAINAGE (Builder is to do on site investigation to locate existing property main drains & decide on best course of action to join new Rain water & foul water pipes.)
Underground drainage to consist of 100mm diameter UJVC proprietary pipe work to give a 1:40 fall.
Surround pipes in 100mm pea shingle. Provide 600mm suitable cover (900mm under driveway).
Shallow pipes to be covered with 100mm reinforced concrete slab over compressible material.
Provide rodding access at all changes of direction & junctions. All below ground drainage to comply with BS7153 and BS8014. Builder is to liaise with the Building Inspector on any on site queries concerning the drainage for the extension.

New side Extension Flat roof:-
"U" Value achieved 0.14W/m²K.
Calculated in accordance with BS EN ISO 6946:2017
From Top surface down:
Single ply Membranes (Adhered with firing installed to side to Side R/W gutter on double layered 80mm x 90mm) Kingspan Thermafloor TR27
Roofing Insulation (Overall thickness 170mm) with a Vapour check bituminous layer (3mm) on Plywood decking
on 47mm x 147mm Construction C24 Grade Flat roof Timber joists at 400mm centres with 12.5 plasterboard & 2mm skim finish to under side. Roof light windows trimmed out with double Roof joists
New Rear extension Roof Specification:-
"U" Value achieved 0.14W/m²K
Roof pitch is to be identical to existing Bungalow roof
Interlocking Marley roofing tiles on treated timber battens with 38mm counter battens on Kingspan Milver Breathable membrane on New Timber Grade C24 Construction quality 47mm x 170mm Timber roof joists @ 400mm Centres
Vaulted Roof Insulation as follows:
(Calculated in accordance with BS EN ISO 6946:2017)
Ventilation rafter cavity with 120mm KOOL THERM K107 Pitched roof insulation between joists with KOOL THERM K118 52.5mm (12.5 Plasterboard internal finish) secured to underside of joists
(Note: 1 x 1000mm x 120mm or equivalent size Velux roof window to be trimmed out with double roof joists) with 100mm x 50mm C24 Timber ceiling struts fitted to stop roof spread
Standard Roof specification
Roof pitch is to be identical to existing Bungalow roof
Interlocking Marley roofing tiles on treated timber battens with 38mm counter battens on Kingspan Milver Breathable membrane on New 47mm x 170mm C24 Grade Timber roof joists @ 400mm ctrs With 47mm x 145mm C24 Grade Timber ceiling joists @ 400mm ctrs with 300mm quilted roofing insulation (laid 150mm between 150mm over) roof spread
New Extension Cavity walls Specification
"U" Value achieved 0.17W/m²K
Calculated in accordance with BS EN ISO 6946:2017
300mm Cavity construction comprising 102.5mm facing Brick to match & lay into existing, 100mm cavity with stainless steel wall ties to BS 2443 1978 with Number of Anchors per m² = 3, Diameter of Anchors (mm) 3.99mm
Maximum spacing 750mm Horizontal 450mm Vertical and 300mm vertical near any openings.
The inner leaf to be 100mm Aerated Concrete Block (K - Value = 0.15W/mK)
Cavity insulation to be 90mm Kingspan K106 Insulation with a minimum of 10mm Residual airspace. The cavity must be clear of mortar. Inside to be 12mm plasterboard & skim, Front elevation to be rendered if homeowner wishes
Separating wall between master Bedroom / kitchen
The wall is to be constructed using 75mm hi strength dense concrete Blockwork to allow for load carrying capabilities
New Side & Rear Extension Ground floor Specification
(Floor to be level with existing Bungalow floor)
"U" Value achieved 0.15 W/m²K Calculated in accordance with BS EN ISO 6946:2017
Inside surface down - 65mm Sand cement screed with 0.5mm Polythene separation layer beneath then 80mm Kingspan Kooltherm K103 Insulation with 150mm Concrete 12:4 2000kg/m³ laid on 1200g DPM or if required Vapourguard Ultimate Coated 0.9mm DPM Gas protection to BS8102:2009 (BRIA C748 & BS 8485:2015 DPM on 150mm sand bladed consolidated stone hardcore.
NOTE: Due to No prior Knowledge on ground soil conditions the foundations are shown at a minimum depth required, Builder to confirm exact depth on site with Building control. If Mini piles are a requirement to support below the concrete foundation beam the builder is to provide Piling design & details to the Building Inspector for prior approval before works commence. Builder is to liaise with Building control on any questions / queries on the required foundations

- NOTES (WHERE APPLICABLE)
- HOME OWNER/CLIENT & BUILDER MUST READ
 - ONLY THE PLAN APPROVED BY BUILDING CONTROL TO BE USED FOR CONSTRUCTION PURPOSES
 - ALL DIMENSIONS ARE TO BE SITE CHECKED BY BUILDER
 - DO NOT SCALE DRAWINGS
 - ANY NEW BRICKWORK IS TO MATCH & KEY INTO EXISTING
 - WINDOWS & DOORS TO BE DOUBLE GLAZED WITH 20mm GAP BETWEEN FRAMES FILLED WITH ARGON GAS WITH INTER FRAME WELDING LINE CONTING TO ACHIEVE U VALUE OF 1.4 W/M²K OVER BUILT UP CONTROLLABLE TROUBLE VENTS OF 800mm² TO HABITABLE ROOMS AND KITCHEN WITH 4.000mm² ELSEWHERE VENTS SET 100mm FROM FLOOR LEVEL AND 500mm FROM ANY EXTRACT FAN. NEW INTERNAL DOORS TO HABITABLE ROOMS TO BE MIN 20 MINUTE FIRE RESISTANT STANDARD
 - ALL NEW BEAMS & LINTELS TO HAVE A MIN BEARINGS OF 150mm. TIMBER MEMBERS MUST HAVE A 100mm MIN BEARING
 - ROOF & FIRST FLOOR MUST BE TIED DOWN TO WALLS WITH AS GALVANISED STRAPS OF 30mm x 5mm AT 1500mm CENTRES
 - NEW ROOF SPACE TO BE VENTILATED TO BS 5556. BACKGROUND VENTILATION 8000mm² EQUIVALENT AREA TO BE PROVIDED TO HABITABLE ROOMS
 - NEW FOUNDATIONS/WALLS ARE TO CONFORM TO BUILDING REGULATION 1 & 2 / APPROVED DOCUMENT A
 - THE FOUNDATION DIMENSIONS SHOWN ARE MINIMUM ONLY AND ARE GIVEN WITHOUT ANY ADVANCE KNOWLEDGE OF "ON SITE" SOIL CONDITIONS. IF THE EXISTING FOUNDATIONS OF THE PROPERTY HAVE TO TAKE ANY ADDITIONAL LOADS THEY SHOULD BE EXPOSED AND PASSED BY THE L.A OR PRIVATE BUILDING CONTROL INSPECTOR ON SITE. IF PILES ARE REQUIRED THE BUILDER IS TO PROVIDE A PLAN FRAMEWORK OF EXACT DETAILS TO BUILDING CONTROL. 3R HESLOP WILL NOT BE INVOLVED IN THE DESIGN OF THE PILES
 - ANY UNDER-SITE DRAINAGE MUST BE EXPOSED & ENCASED IN 150mm CONCRETE
 - NEW WALL CAVITIES MUST BE INSULATED AS PER SPECIFICATION OR WITH 150mm EPS INSULATION TO ACHIEVE THE MIN "U" VALUE FOR WALLS
 - NEW STEELWORK MUST HAVE A MINIMUM FIRE RESISTANCE OF 30 MINUTES
 - ALL WALL CAVITIES ARE TO BE CONTINUOUS
 - ALL CAVITY BARRIERS TO BS 5544 APPENDIX G2
 - RO LINTELS BUILT INTO WALLS OVER DOORS
 - FOUNDATIONS WITH 100mm OF GRABE TO BE BUILT DOWN TO TO DRAIN WAST LEVEL
 - CAVITY CLOSURES TO HAVE VERTICAL & HORIZONTAL DOORS INSULATED TYPE
 - ALL NEW PLUMBING IS TO COMPLY WITH BS 5572
 - ALL MATERIALS USED IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS
 - NEW DRAINAGE LAY TO SELF CLEARING FALLS WITH SODDING ACCESS
 - NEW INSULATION TO BE INSULATED WITH "ROOFST DESIGN" ISSUED BY DEPTA
 - LIGHTING MUST BE LOW ENERGY LIGHT FITTINGS WITH A MINIMUM LUMINOUS EFFICIENCY OF 75 LIGHT SOURCE LUMENS PER GRAMM UNIT
 - MINIS OPERATED WATERLEAK SMOKE DETECTORS TO BS 5446 DOMESTIC or BS 5446:2000 or BS 5446:2 2003 DOMESTICAL DETECTORS ATTACHED WITH BATTERY SHOWN AS
 - THE CLIENT / HOME OWNER MUST INFORM THEIR NEIGHBOURS OF WORK TO BE CARRIED OUT ON OR NEAR TO BOUNDARY AS REQUIRED BY THE PARTY WALL ACT IN WRITING 2 MONTHS BEFORE WORKS BEGIN
 - THE CLIENT / HOME OWNER IS RESPONSIBLE FOR CORRECT LOCATION / ACCURACY OF THE BOUNDARY. THE BUILDER MUST BE AWARE OF THE REQUIREMENTS OF THE PARTY WALL ACT AND MUST STUDY THE BOOKLET AVAILABLE FROM THE LOCAL AUTHORITY BEFORE COMMENCING THE PROJECT
 - ELECTRICAL WORKS BY "NON-COMPETENT PERSON SCHEME" MEMBER
THE CLIENT / HOME OWNER MUST SATISFY THEMSELVES THAT THE ELECTRICIAN EITHER EMPLOYED VIA THEMSELVES OR BUILDING CONTRACTORS IS QUALIFIED TO CARRY OUT ALL OF THE PARTS OF THE PROPOSED ELECTRICAL WORKS & TEST THE WORKS IN ACCORDANCE WITH BS 7671 THE IEE WIRING REGULATION GUIDANCE AND ARE FULLY AUTHORISED TO ISSUE RESIDENT CERTIFICATES AS REQUIRED BY PART P OF THE BUILDING REGULATIONS EFFECTIVE 1/05
ALL ELECTRICAL WORKS MUST MEET THE REQUIREMENTS OF PART P ELECTRICAL SAFETY AND WILL BE DESIGNED, INSTALLED, INSPECTED, TESTED BY A PERSON COMPETENT & QUALIFIED TO DO SO AND A SELF CERTIFICATION CERTIFICATE BE SUBMITTED / ISSUED TO THE LOCAL AUTHORITY BY THE COMPETENT PERSON WITH 30 DAYS OF COMPLETION OF THE ELECTRICAL WORKS
THE CLIENT / HOME OWNER MUST ALSO RECEIVE A COPY OF THE WIRING & CABLES OF THE INSTALLATION BE INSPECTED BY A INDEPENDENT "COMPETENT PERSON" AND ON COMPLETION OF THIS INSPECTION IN ADDITION TO THE ABOVE STATED CERTIFICATE AN ADDITIONAL "COMPETENT PERSONS" ELECTRICAL INSTALLATION CERTIFICATE COMPLYING WITH BS 7671 TO BE PROVIDED TO THE HOMEOWNER / CLIENT & LOCAL AUTHORITY
A "COMPETENT PERSON" MEANS A MEMBER OF CDDM ELECTRICAL COMPETENT PERSONS SCHEME
 - ELECTRICAL WORKS BY "NON-COMPETENT PERSON SCHEME" MEMBER
ALL WIRING & ELECTRICAL WORKS MUST BE DESIGNED, INSTALLED, INSPECTED & TESTED IN ACCORDANCE WITH THE REQUIREMENTS OF BS 7671 THE IEE WIRING REGULATION GUIDANCE & PART P ELECTRICAL SAFETY ON COMPLETION OF THE WORKS A COPY OF THE INSTALLERS TEST CERTIFICATE COMPLYING WITH BS 7671 IS TO BE PROVIDED TO THE CLIENT / HOMEOWNER & LOCAL AUTHORITY AND PRIOR TO ANY COVERING OF THE WIRING & CABLES OF THE INSTALLATION BE INSPECTED BY A INDEPENDENT "COMPETENT PERSON" AND ON COMPLETION OF THIS INSPECTION IN ADDITION TO THE ABOVE STATED CERTIFICATE AN ADDITIONAL "COMPETENT PERSONS" ELECTRICAL INSTALLATION CERTIFICATE COMPLYING WITH BS 7671 TO BE PROVIDED TO THE HOMEOWNER / CLIENT & LOCAL AUTHORITY
A "COMPETENT PERSON" MEANS A MEMBER OF CDDM ELECTRICAL COMPETENT PERSONS SCHEME
 - MECHANICAL VENTILATION TO BE FITTED AS FOLLOWS BATHROOMS TO HAVE 15L/HR/SECOND AIR CHANGE, KITCHENS AND OTHER AREAS TO HAVE A MIN OF 60L/HR/SEC AIR CHANGE DUCTED TO EXTERNAL AIR. FANS TO HAVE A 15mm OVER RUN TIME IN ADDITION THE WINDOWS TO THESE AREAS TO HAVE CONTROLLABLE VENTS OF MIN 2500mm²
 - ANY WORKS CARRIED OUT ON THE GAS APPLIANCES OR CENTRAL HEATING SYSTEM MUST ONLY BE DONE SO BY A GAS SAFE REGISTERED CONTRACTOR
GAS FIRED HEATING SYSTEMS REQUIRE 92% MINIMUM EFFICIENCY
GAS BOILERS FITTED IN EXISTING PREMISES REQUIRE ONE OF THE FOLLOWING:
FLUE GAS HEAT RECOVERY / HEAT EXCHANGER / LOW CARBONISATION
SMART THERMOSTAT WITH AUTOMATION & OPTIMISATION
IN ANY CASE THE REGISTERED INSTALLER MUST BE FAMILIAR WITH CURRENT APPROVED DOCUMENT L1
 - THERE MAY BE FEES DUE TO DAY TO THE L.A & PRIVATE BUILDING CONTROL BEFORE THE BUILDING INSPECTOR VISITS / SITES OFF THE PROJECT. THE HOMEOWNER/CLIENT SHOULD CHECK WITH THEIR BUILDING CONTROL FACTOR
 - THE BUILDER MUST TAKE REASONABLE MEASURES TO PREVENT AIR LEAKAGE FROM THE PROPERTY & AIR GAPS AROUND DOOR & WINDOW FRAMES TO BE SEALED. FLOORS MUST BE AIRTIGHT AND ANY HOLES IN THE EXTERNAL WALLS FOR DRAINAGE ETC TO BE FULLY SEALED. ALL INSULATION TO BE CONTINUOUS WITHOUT AIR GAPS
 - PLYWOODS MUST MEET A MINIMUM STANDARD OF EN 1995 UNTIL THE TRADE TEST STANDARD HAS BEEN ESTABLISHED
 - THE DESIGNER / ARCHITECT IS NOT RESPONSIBLE FOR ANY VOIDS / DRAINS OR OTHER UNDERGROUND OBSTRUCTIONS FOUND NEAR OR UNDER THE BUILD SITE
 - A PROPER SURVEY OF AIR IS TO BE PROVIDED TO THE KITCHEN IN ORDER THAT THE COOKING APPLIANCES CAN FUNCTION EFFICIENTLY WITHOUT CAUSING DISCOMFORT
 - A CONTINUOUS SUPPLY OF HOT WATER TO BE PROVIDED TO THE KITCHEN THAT DOES NOT EXCEED THAT Laid DOWN
 - ALL NEW TESTED WORK IS TO BE 30 MINUTE FIRE PROOF 2 x 10mm PLASTERBOARD LAYERS AND SKIM ON 50mm x 50mm TIMBER MOULDERS @ 400mm CENTRES
 - THE CLIENT MUST BE SURE THAT THE SIZES OF THE ROOMS SHOWN ARE SATISFACTORY
 - IF THE PROPOSED ROOF IS TO BE OF A GABLE VAULTED TRUSS SYSTEM THE BUILDER MUST OBTAIN APPROVAL FROM BUILDING CONTROL FOR THE DESIGN / TRUSS CALCULATION BEFORE WORK COMMENCES
 - THIS PLAN IS PROVIDED FOR BUILDING REGULATION SUBMISSION / APPROVAL AND IF REQUIRED PLANNING PERMISSION AND DOES NOT TAKE INTO ACCOUNT ANY FAULTS IN THE EXISTING STRUCTURE OF THE PROPERTY
 - INDEMNITIES TO THE L.A AND IF PLANNING PERMISSION HAS BEEN ASKED ANY REQUIRE A NEW APPLICATION. IF CLIENT HAS INSTRUCTED DESIGNER / ARCHITECT THAT PLANNING IS NOT REQUIRED DUE TO ADVICE FROM A 3RD PARTY 3R HESLOP IS FREE FROM ANY OBLIGATIONS THAT MAY ARISE IF AN ISSUE FROM PLANNING DEPARTMENT HAPPENS DURING CONSTRUCTION
 - IT IS THE RESPONSIBILITY OF THE BUILDING CONTRACTOR TO OBTAIN A COMPLETION CERTIFICATE FROM THE PRIVATE BUILDING CONTROL DEPARTMENT ONCE THE FINAL CHECK HAS BEEN COMPLETED AND THE PROJECT IS SIGNED OFF BY THE BUILDING INSPECTOR
 - IF REQUIRED THE HOMEOWNER/CLIENT MUST INFORM THE LEASEHOLDER OF THE PROPOSED WORKS/PROJECT THAT IS TO BE CARRIED OUT ON THE PROPERTY BEFORE WORKS COMMENCE
 - IF THE HOME OWNER/CLIENT OR BUILDER COMMENCES ANY WORK WITHOUT FULL PLANNING APPROVAL IN PLACE THEY DO AT THEIR OWN RISK AND THE DESIGNER / ARCHITECT WILL NOT ACCEPT ANY LIABILITY FOR ANY PERSONAL INJURY SUFFERED / ALTERATIONS, COSTS, DELAYS & LEGAL PROCEEDINGS RESULTING FROM THIS
 - IF REQUIRED THE DESIGNER / ARCHITECT WILL VISIT & MEASURE THE PROPERTY THEN DESIGN THE PROJECT TO THE CLIENTS WISHES. COMPLETE ANY NECESSARY APPROVALS AS WELL AS FEES ON FEES AND DEPRECIATION DRAWS READY FOR SUBMISSION BUT WILL NOT TAKE PART IN ANY BUILDING WORKS