

**Structural work**

Civil and structural detail/information shown on this drawing is national and is for indicative purposes only. All Structural work is to be designed, detailed and scheduled by a Structural Engineer. All Steel elements of structure are to be clad with 12.5mm Gyproc Frelime plasterboard to achieve 30min of fire protection. All steelwork below ground level is to be encased in concrete, to Structural Engineers details.

**Leadwork**

Leadwork is to be carried out in minimum Code 5 lead, unless otherwise noted (i.e Code 3 for lead soakers). All leadwork is to be carried out in strict accordance with the Lead Sheet Association's manuals volumes I, II, III, and BS 1178. All exposed leadwork is to be treated with patina/iron/lead/lead oil, applied once before fixing and finally upon completion, in accordance with manufacturer's written instructions. Leadwork built into blockwork shall be painted with bitumen paint on both sides prior to building in.

**Rainwater goods & fascias and soffits for new extension**

Provide 115mm dia white UPVC gutter and 2 no. 63mm dia white UPVC downpipes to take new 82.8 sq m of rainwater for flat roof. Provide white UPVC fascias and soffits to match existing.

**Access panels**

Provide access panels into eaves space. Position to clients requirements. 25mm rigid insulation to be affixed to back of access doors into loft space to achieve a U Value of 0.35 W/m2K

**Draught proofing**

To avoid excess moisture transfer to roof voids, gaps and penetrations for pipes and electrical wiring should be filled and sealed. This is particularly important in areas of high humidity, EG, bathrooms & kitchens. An effective draught seal should be provided to loft hatches to reduce inflow of warm air and moisture.

**REV. C Flat roof construction**

Polyroof 185 membrane on 19mm smart ply on 'Kingspan Themataper' to a fall of 1:60 (to Kingspan design) over 1000 gauge polythene vapour control barrier on 12mm shuttering ply on 200x50mm s/w grade C24 roof joists @ 400mm ctrs with 200x50mm s/w poleplate bolted @ 600mm ctrs. Provide 12.5mm Gyproc Wallboard DUPLEX plasterboard (with integral vapour barrier) and thistle plaster and skim to form ceiling.

U-Value 0.18 W/m2K

**REV C Flat roof dormer construction**

Polyroof 185 membrane on 19mm smart ply on 'Kingspan Themataper' to a fall of 1:60 (to Kingspan design) over 1000 gauge polythene vapour control barrier on 12mm shuttering ply on 170x50mm s/w grade C24 roof joists @ 400mm ctrs with 170x50mm s/w poleplate bolted @ 600mm ctrs. Provide 12.5mm Gyproc Wallboard DUPLEX plasterboard (with integral vapour barrier) and thistle plaster and skim to form ceiling.

Dormer cheeks to be 3 coat sand & cement render on stainless steel renderlath on an 25x50mm s/w grade C16 fanalised battens, gauge to suit over Kingspan nilvent breathable membrane on 9mm OSB. Provide 100mm Kingspan Kooltherm K107 between 100x50mm studwork built off of doubled up rafters. Provide 32mm skim coated Kingspan Kooltherm insulated plasterboard internally.

U-Value 0.18 W/m2K

**Electrical work**

Survey to be carried out on existing electrics to determine their condition. Existing electrics in main house to be altered as required, to be looked at in more detail at a later date. Proposed extension electrics as required to be looked at in more detail at a later date.

**External walls**

300mm cavity wall construction to comprise of 100mm 'Ronez' dense concrete blockwork outer leaf, 50mm clear cavity, 50mm Kingspan insulation, 100mm 'Ronez' dense concrete blockwork innerleaf. Insulation should be fixed in accordance with manufacturers instructions, to achieve a U Value of at least 0.35 w/m2K. Externally provide minimum 18mm render. Provide an internal finish of 13mm plaster board & skim. Provide weak mix concrete below ground level where applicable. Provide Thema-Close general purpose insulated cavity closures around all openings.

**Studwork walls**

Provide 100x50mm studs @ 400mm ctrs with 100mm Isover APR 1200 insulation quilt between studs where shown, 100x50mm head & sole plate and with 100x50mm noggins staggered at half height. Double up joists under partitions where partition runs parallel to joists & noggings to be provided where partition runs at right angles to joists. Also double up joists under all baths. Provide all necessary noggins and intermediate supports as required for fixing of shelving, wall units, washhand basins etc. 12.5mm GTEC dB board and thistle plaster skim to form finish to both sides. Provide 'Weat' board to bathroom sides.

Ensure a minimum of 40 RW dB is achieved within studwork walls. Min. mass per unit area of plasterboard to be 10kg/m2 (i.e 12.5mm GTEC dB board) Min. density of mineral wool to be 10kg/m3, min. thickness 100mm

**Wall Ties**

Wall ties to be positioned @ 450mm ctrs vertically and 600mm ctrs horizontally staggered and 300mm ctrs around all openings, in accordance with BS EN 845- 1:2003.

**Wall Plate**

Provide 100 x 50mm s/w grade C16 wallplate secured to top of innerleaf of cavity wall, bolted @ 900mm ctrs with 12mm dia. bolts and 'Bat' straps @ 900mm ctrs fixed to at least 3 courses of blockwork.

**Differential Settlement**

Where new cavity walls abut existing walls, provide 'Cotnic' stronghold wall connectors, provide mastic seal to external leaf.

**REV. C Pitched roof construction (extension)**

Re-use existing pannels where possible and provide new pannels to match on 50x25mm s/w grade C24 fanalised battens, gauge to suit, on 'Vap-R-free Xtra' breathable sarking membrane on 150x50mm s/w grade C24 rafters at 400mm ctrs birdsmouthed over 100x50mm s/w grade C16 wallplate. Provide 100mm Kooltherm K107 solid slab insulation between rafters and maintain min 50mm gap between roofing felt and insulation, also provide an additional 42.5mm of Kingspan Kooltherm K118 insulation (incorporating plasterboard) to underside of rafters and thistle plaster skim to form ceiling finish. Provide 30 x 5mm galvanised restraint straps at not more than 2 metre centres, between rafters and gable wall.

Provide 100 x 50mm Collar ties @ a maximum of 1200mm ctrs bolted through dog-tooth connectors at connections to rafters.

(U-value 0.18 W/m2K)

Provide roof ventilation at eaves level to give the equivalent of 25mm continuous clear ventilation behind or over fascia board.

Provide ventilation equivalent of 5mm continuous ventilation/marley ridge ventilation or similar.

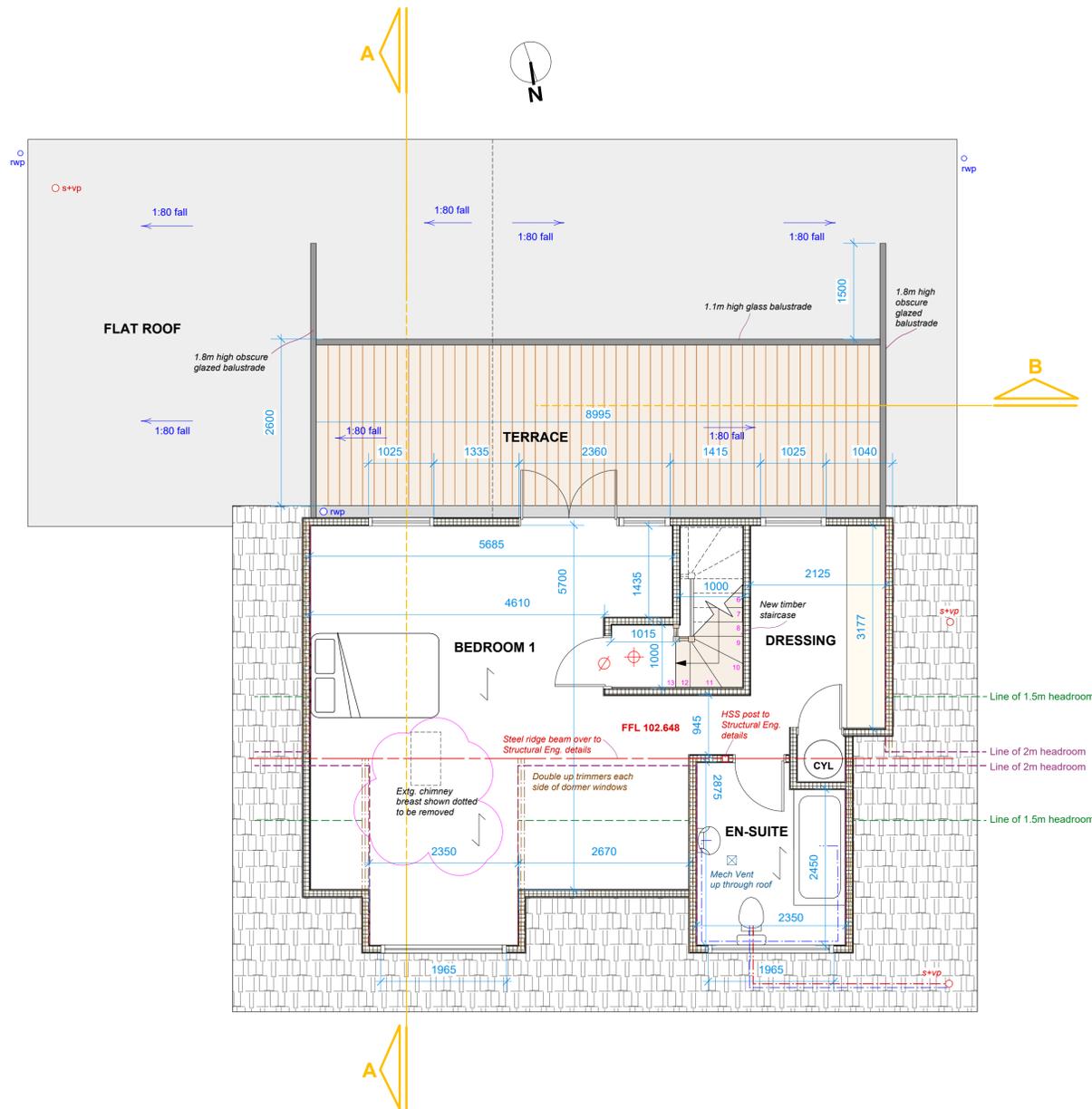
**Smoke detectors**

Approved type smoke detector alarms to be installed at ceiling level to all landings, all alarms to be wired into electrical system and interlinked to comply with BS589-6:2004 and Part B of the building regulations

**Heat detectors**

Approved type heat detector alarms to installed at ceiling level and to comply with BS5839-6:2004

-  Carbon monoxide detector
-  Denotes mains supply fire detector with battery back up (rate of rise)
-  Denotes mains supply smoke detector with battery backup
-  Denotes 1/2 hour F.D.



**FIRST FLOOR PLAN**

**I WOULD LIKE TO CONFIRM THAT IN ORDER TO SATISFY POLICY GP9 OF THE ISLAND DEVELOPMENT PLAN WE HAVE TAKEN INTO CONSIDERATION THE INSULATION, DRAINAGE, WATER EFFICIENCY, MATERIALS, WASTE STORAGE AND DISPOSAL, TOGETHER WITH THE CONSERVATION OF FUEL AND POWER HAVE ALL BEEN CAREFULLY CONSIDERED.**

**First floor construction**

Provide 22mm plywood flooring on 100x50 s/w C24 floor joists screwed and glued to existing 100 x 50mm floor joists @ 400mm ctrs with 100mm 45 kg/3 mineral wool between for sound insulation. Allow to double up joists under studwork. Provide 13mm plasterboard to underside to form ceiling. 30 x 5mm galvanised steel restraint straps at not more than 2 metre centres.

**REV. B Staircase construction**

Provide new timber staircase comprising of 13 no. risers of 203.7mm and 225mm goings, based on new FL-FL height of 2648mm (dependant on final FFL). Risers and goings are to be rebated into 250x38 string. Maintain 200mm headroom from pitch line of steps. Provide adequate trimming to staircases, doubled up joists unless otherwise noted. Ensure a continuous handrail to be 900mm high on all parts of the staircase with no part of the balustrading to be 'non climbable'. FL-FL height to be confirmed on site prior to staircase fabrication. All constructed in accordance with BS 5395 & Approved Document K of the Building Regulations. Goings of tapered treads should measure of least 50mm at the narrow end and should be designed to satisfy GTS K1 1.18 & 1.20 and diagram 8.

**Ventilation**

All ventilation to comply with Approved Document F of the Building Regulations 2006.

All habitable rooms to be provided with a rapid ventilation opening of at least 1/20th of the floor area. Also to incorporate background ventilation of at least 80,000mm2 to each dwelling by means of trickle ventilators and 2 air bricks each side of gable to suit.

Bathrooms to be provided with extract ventilation to give minimum 3 no. air changes per hour with fan wired in to light switch to give 20 minute over run. Minimum rate of extract 15 litres/second. Unit to be housed at high level on external wall and to vent up through air brick. Alternatively unit to be housed in ceiling and to vent up through roof and out through tile vent or ridge vent to match roof finish as shown.

Kitchen to be mechanically ventilated by means of a cookerhood extracting at a rate of not less than 30 litres per second operated intermittently with cooking.

Utility to be mechanically ventilated at a rate of extract not less than 30 litres per second. Unit to be housed at high level on external wall.

**Lighting to extension**

Energy efficient light fittings to be fitted within extensions to satisfy Table 4 of Part L of 2002 building regulations.

**Hot water temperature limitations**

The maximum hot water temperature discharging from the bathhub and whirlpool bathhub filler shall be limited to (48°C) by a device that conforms to ASSE 1070 or CSA B125.3. The water heater thermostat shall not be considered a control for meeting this provision.

Showers and tub-shower combinations in buildings shall be provided with individual control valves of the pressure balance, thermostatic, or combination pressure balance/thermostatic mixing valve type that provide scald and thermal shock protection. These valves shall conform to ASSE 1016 or ASME A112.18.1/CSA B125.1. Gang showers, when supplied with a single temperature-controlled water supply pipe, shall be controlled by a mixing valve that conforms to ASSE 1069. Handle position stops shall be provided on such valves and shall be adjusted per the manufacturer's instructions to deliver a maximum mixed water setting of 120°F (49°C). The water heater thermostat shall not be considered a suitable control for meeting this provision.

**Oil boiler**

Boiler with balanced flue and flue guard to comply to comply with Part J and Part L1 of the Building Regulations. Ensure flue termination complies with Manufacturer's instructions. Grant VortexBlue Oil boiler : regular : condensing modulating (15 - 36kW) 90.7 - 93.3% Gross SAP 2009 annual efficiency. Flue to terminate up through roof to comply with Part J of the Building Regulations.

**Windows & doors**

Window to be powder coated aluminium double glazed, casement window. 'U' Value of 1.5w/m2k. Style as per elevations. All windows in habitable rooms to have a minimum clear openable width and height of 450mm and minimum clear opening area of 0.33m2.

Doors to be powder coated aluminium.

**Safety glazing**

All glazing to comply with Approved Document N of the Building Regulations 2000, in particular Diagram 1 'Critical Locations in Internal & External Walls'. All glazing between finished floor level and 800mm above that level and between finished floor level and 1500mm above that level in a door or a side panel within 300mm of a door should be safety glazing to comply with BS 6206:1981.

**New floor**

75mm sand/cement screed reinforced with D49 mesh on 500 gauge polythene separating layer on 75mm Kingspan Themataper TF70 insulation on 100mm C35P concrete slab (To Structural Engineers details) on 1200 gauge Visqueen polythene DPM, lapped in with DPC in walls, on 30mm stone dust blinding on min 225mm well consolidated hardcore. Provide 20mm Kingspan TF70 insulation upstand vertically around perimeter of ground floor.

(U-Value 0.25/m2K)

**Foundations**

Provide 225mm thick x 750mm wide grade ST2 or grade GEN1 concrete strip foundations. Taken down to a suitable ground bearing, to be agreed on site with States Building Inspector. All foundations to be at least 600mm below ground level.

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**NOTES**

Any discrepancies found on this drawing must be reported to the architects immediately.

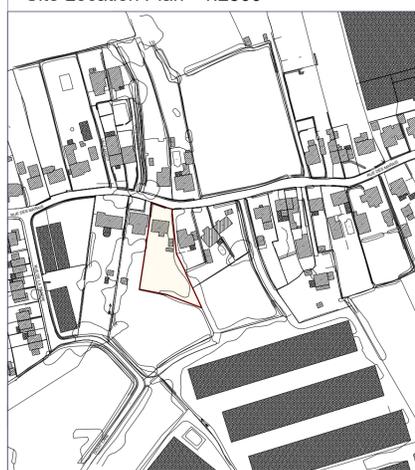
Figured dimensions to be used in preference to scaled dimensions.

Contractors must check all dimensions on site prior to commencement of work.

**REVISIONS**

No.	Date	Description	Drawn
A	July 2018	Amendments made to Planning req.	JT
B	Oct 2018	Amendments made to Planning req.	JT
C	Jan 2020	Raise ridge of main pitched roof	JT

**Site Location Plan - 1:2500**



**TORODE**  
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<b>JOB</b>	Proposed roof conversion, extension and alterations at Teewah
	Rue du Marais Vale Guernsey GY68AX Miss A. Doel & Mr. D. Marriott
<b>Drawing</b>	Working drawing- Floor plan
<b>Scale</b>	1:50
<b>Date</b>	
<b>Signed</b>	
<b>Drawn</b>	JT
<b>Dwg. No.</b>	<b>6060-06-C</b>