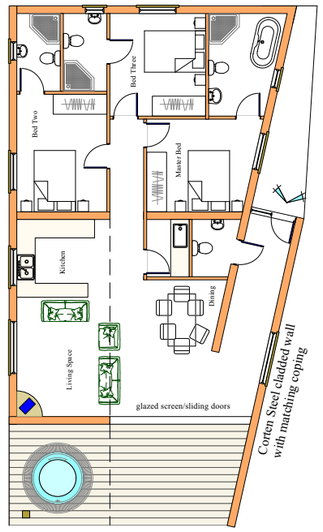
NOTES
Do NOT scale from this drawing or any other prepared by JDA in connection with this project
This drawing is copyright and may not be altered, traced, copied, photographed or used for any purpose other than for which it has been issued without written permission of the copyright holder.
The Contractor is to check all dimensions on site and report any discrepencies PRIOR TO commencing work.
All details shown on this drawing are based upon typical site conditions relatedto the area. No resposibility can be accepted for abnormal conditions unless theyhave been reported in detail so that design amendments may be considered.
All works and materials are to be in full accordance with current British Standards, Building Regulations, Agrement Certificates and Manufacturers printed instructions.
All Building Regulations inspections are to be carried out at the appropriate stages of work.

Sedum Roof with Solar Panels

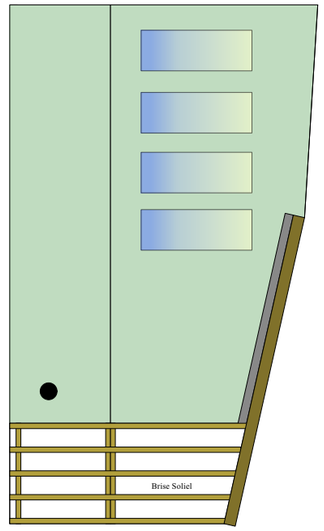
Oak Boarding

MATERIALS
Roofs - Proprietary Sedum Roofs where shown.
Standing Seam Zinc where shown
Facing Bricks where shown Traditional Brick and Stone - Light Amthill Blend in Lime based mortar.
Windows and doors - Timber hardwood - elevations as shown. Oak stain by Sikkens.
Horizontal and vertical cladding where shown - Feather edge Oak boarding - unfinished with 150mm visible gap
RW Goods
Roundstyle Cast Iron Style Rainwater System by Brett Martin - black 112mm half round
Lanterns
All Lanterns by Roofmaker Limited
Woodburner Flues
Hetas approved black Vitreous Enamel where shown
Fascias and Soffits
All in premium high density Anthracite Grey PVCU
Brise Soliel
All formed in solid seasoned Oak timber sections - joinery quality with Oak dowelled connections
Decking, Steps and Ramps
Anti slip Balau Hardwood where shown
Balustrading to Raised Areas
Black painted galvanised steel balusters, rails and handrails where shown
Corten 'A' Steel - where shown (Atmospheric Corrosion Resistant Steel)
S355J2W Quality panels. Acid proof Stainless Steel screws for fixing panels.
Waterproof seals at abutments.
Main Roadway
Self Binding Stabalised Gravel
Driveways and parking areas
Marshalls Driveline Buff Priora Permeable Paviors
Paths and Patios
Porcelain Slate Grey where shown

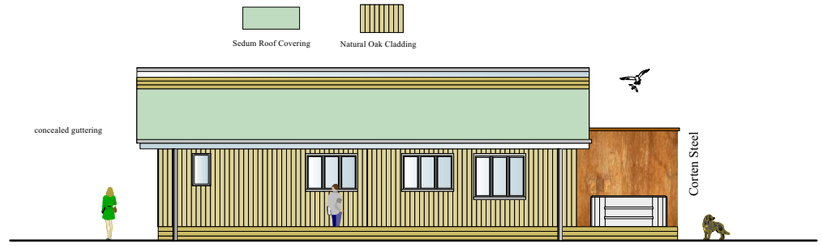
0m 10



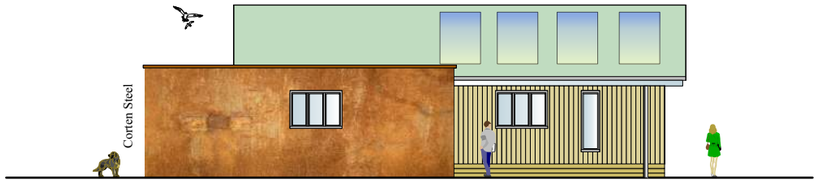
PROPOSED FLOOR LAYOUT



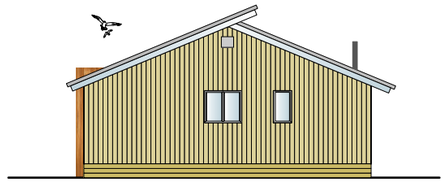
PROPOSED ROOF LAYOUT



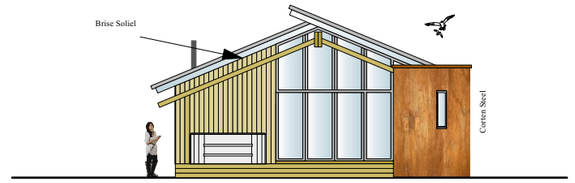
SIDE ELEVATION



SIDE ELEVATION



FRONT ELEVATION



SOLAR ELECTRIC (PHOTOVOLTAIC)
Installation to be in compliance with all manufacturer's details and specifications, the British Standard Approved Document For Photovoltaic (PV) and BS EN IEC 61730
Installation must not impair the weather tightness of the roof. All penetrations through the roof to be weatherproofed and covered with suitable flashings, purpose-made tiles, etc.
Installation to have sufficient resistance to wind suction forces for the location. The installer to calculate the wind loads for the location (taking into account the local wind speed, site altitude and topography, building height and roof configuration) and choose components or kits with a declared wind resistance that exceeds those wind loads.
The roof structure to be designed to accommodate the load of the collectors, advice of a structural engineer to be sought if required
All penetrations to be weatherproofed through the roof covering with suitable flashings, purpose-made tiles, etc
All components to have adequate resistance to the external spread of flame in compliance with Part B4 of Approved Document B.
Ensure the panels are not fitted in the shadow of overhanging branches, a chimney or aerial.
For the installation of a grid-connected system, the local Distribution Network Operator (DNO) will need to be notified if the system output exceeds 16A per phase (Engineering Recommendation G83/1).
An electrical fused spur outlet will normally be required. Pumps and controls should be located so that they are accessible for maintenance.
Solar electric panels should be inclined as steeply as possible to ensure that rain and dirt run off quickly.
Ventilation to be provided around the inverter and control equipment.
Fix permanent labels to wiring, junction boxes, etc.
Ensure that the system is commissioned properly and test for correct operation.
Provide operating instructions and maintenance recommendations for the homeowner.
An EPC to be provided with Feed-in Tariff (FIT) application showing the energy efficiency of the building the installation is attached to or wired to provide electricity to is a level D or above.
System to be commissioned and tested for correct operation in accordance with the MCS 012 standard.
All electrical work to be undertaken by a Part P registered Electrician i.e. NAPIT, ELECSA and NICEIC.

AIR SOURCE HEAT PUMP – ECODAN (OR EQUIVALENT)
Located as shown - Mitsubishi Ecodan single phase PUHZ-W85VHA2 or equivalent.
SOUND PRESSURE LEVEL AT 1M (dBA) - 45 LOW NOISE MODE (dBA) - 40

Air Source Heat Pump Installation will comply with the Domestic Building Service Compliance Guide - Dept for Communities and Local Government 2001 and BS EN15450 Tables C1 & C2 with a Seasonal Performance Factor (SPF) of at least 2.7.

The heating system is to be underfloor with water supply temperatures in the range of 30c to 40c. The Coefficient of Performance (CoP) is to be not less than 2.2 for space heating and 2.0 for domestic hot water. The Seasonal Performance Factor will be no worse than as described in Table C1 of BS EN 15450. The system will meet the minimum requirements for installation and controls in Table 35 for heat pumps.

The water distribution system is to include a low loss manifold system to maximize efficiency and ease commissioning and future maintenance. Pipework not contributing to the space heating system will be insulated to prevent heat loss. External pipework between the unit and the house to be insulated to the TIMSA Guide. The internal water distribution circuit should be protected by an anti-freeze solution as recommended by the heat pump manufacturer.

For full heating, the heat pump and any supplementary domestic HW heating should be capable of supplying water in the range of 60c to 65c.
The domestic hot water (DHW) system should include a tank thermostat and a time clock to optimise the time taken to heat the water.
Heat pump unit controls to include :
1. control of water pump operation (internal and external)
2. control of water temperature for the distribution system
3. control of outdoor fan operation
4. defrost control of external airside heat exchanger
5. protection for water flow failure
6. protection for high water temperature
7. protection for high refrigerant pressure
8. protection for air flow failure

External controls to include :
1. room thermostat to regulate the space temperature and interlocked with the heat pump operation
2. timer to maximize the operation of the heat pump

System installation by Radiant Heating Hougham Mill Lane, Marston, Grantham Lincs, NG32 2FU. info@heating-solutions.biz 01400 250572

AIR SOURCE HEAT PUMPS (ASHPS) GENERAL PERFORMANCE REQUIREMENTS
External pipework between the dwelling and the ground heat exchanger should be insulated following the TIMSA guidance
Pipe sizes should be in accordance to manufacturer's recommendations
The load-bearing capacity of surface to take the heat pump, hot water cylinder and thermal store (where fitted) equipment to be assessed and access for maintenance should be provided.
Increase the rating of the mains electrical power supply if required to accommodate the electrical current drawn by the heat pump.
Fix permanent labels and flow arrows to pipework, valves, etc.
Where the heat pump is to be backed up by another heat source, the control of that source must be interlocked to ensure that it can never operate as the priority or 'lead' device.
Ensure that the system is commissioned properly and tested for correct operation by a member of the Microgeneration Certification Scheme.
All electrical work to be undertaken by a Part P registered Electrician i.e. NAPIT, ELECSA and NICEIC.
Installation to be BS EN 14511: Air conditioners, liquid chilling packages and heat pumps with electrically driven compressors for space heating and cooling (4 parts), BSI 20
Provide operating instructions and maintenance recommendations for the homeowner.
Health and safety Care should be taken to address all issues, including: the risk of Legionnaires' disease.

PLANNING CONSENT COMPLIANCE
The soft landscaping scheme shall be carried out as approved no later than the first planting season following the occupation of the dwelling to which it relates or the completion of development, whichever is the earlier. The management plan shall be implemented in accordance with the details contained therein.
Any trees, shrubs or hedges forming part of the approved landscaping that die, are removed, become diseased or unfit for purpose [in the opinion of the LPA] within five years of the implementation of the landscaping scheme shall be replaced during the next available planting season by the Developers, or their successors in title with an equivalent size, number and species being replaced.
Any replacement trees, shrubs or hedgerows dying within five years of planting shall themselves be replaced with an equivalent size, number and species.
Thereafter the planting scheme shall be carried out in accordance with the approved details at the first available planting season.

Schwegler Sparrow Terrace 'BOX SST'

Ibstock Eco-habitat for Swifts 'BOX IES'

Integrated Eco Bat Box

CDM REGULATIONS 2015
The client must abide by the Construction Design and Management Regulations 2015. The client must appoint a contractor, if more than one contractor is to be involved, the client will need to appoint (in writing) a principal designer (to plan, manage and coordinate the planning and design work) and a principal contractor (to plan, manage and coordinate the construction and ensure there are arrangements in place for managing and organising the project).
Domestic clients
The domestic client is to appoint a principal designer and a principal contractor when there is more than one contractor, if not your duties will automatically transferred to the contractor or principal contractor.
The designer can take on the duties, provided there is a written agreement between you and the designer to do so.
The Health and Safety Executive is to be notified as soon as possible before construction work starts if the works:
(a) Last longer than 30 working days and has more than 20 workers working simultaneously at any point in the project.
Or: (b) Exceeds 500 person days.

John Dickie Associates
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5, Victor Way, Cherry Holt Road,
Bourne, Lincs PE10 9PT
Tel 07778 297733 jda@ndirect.co.uk

Proposed Holiday Home Development at ;
Bleu Ray Farm
Millgate, Whaplode
PE12 6RY

Drawing Title : Facility Managers Accommodation

Scale 1 to 200 at A3 Portrait

Date April 2023

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