

**Solar PV Specification**

**Grange Leisure and Community Centre**

Design Specification

Client: Parkwood Leisure Ltd

Issued: 13th of October 2025

| **Revisions** | **Issued** |
| --- | --- |
| V1 | 21/03/2025 |
| V2 | 11/09/2025 |
| V2.1 | 19/09/2025 |

**Prerequisites**

We are delighted to extend this invitation to tender for the design and installation of a roof mounted Solar PV system at Grange Leisure and Community Centre in Swindon. The proposed project seeks to optimise the existing roof space, providing opportunity for electricity generation as part of our continued efforts to reduce our carbon footprint.

We invite experienced firms with a proven track record in Solar PV design and installation to participate in this tender process. Your expertise and knowledge will play a fundamental role in the success of this major investment.

We look forward to receiving your proposals and collaborating on this project.

**Who are we?**

The Parkwood Group of companies are leading providers of support services to public and private sector clients. The Group employs over 4,500 people throughout the UK providing services which include leisure management, green space management, healthcare, consultancy, and management of PFI projects.

**Timescales**

| **Milestone** | **Date** |
| --- | --- |
| Tender issue | 13/10/2025 |
| Tender deadline | 14/11/2025 |
| Tender review | 17/11/2025 - 28/11/2025 |
| Tender clarifications | 28/11/2025 - 12/12/2025 |
| Tender award | 08/01/2026 |
| Detailed design phase | TBC |
| Proposed construction start | TBC |

**Contact information**

If you have any questions with regards to this tender, or would like to arrange a site visit, please contact Lee Wiseman, the site manager via email - [lee.wiseman@lexleisure.org.uk](mailto:lee.wiseman@lexleisure.org.uk) and Joel Kirby, Parkwood Leisure Energy and Sustainability Manager - [joel.kirby@parkwood-leisure.co.uk](mailto:joel.kirby@parkwood-leisure.co.uk)

**1.0 - Scope of works**

**1.1 - Existing site Information**

The solar PV system shall generate electricity from sunlight using photovoltaic panels. The system shall consist of solar panels, mounting structures, inverters, electrical wiring, and associated components.

| **Site address** | | |
| --- | --- | --- |
| Address: | | Grange Leisure and Community Centre, Grange Dr, Swindon SN3 4JY |
| Available space | | The roof shown in red should be considered as part of this tender return. Structural assessment should be carried out to assess additional loads and should be considered as part of the tender return.. |

| **Category** | | **Consideration** | | **Requirement** | |
| --- | --- | --- | --- | --- | --- |
| **Statutory consents** | | Permitted development | | Required. Subject to prior approval. This will be submitted by the successful tenderer. | |
| Planning permission | | Subject to prior approval. This will be submitted by the successful tenderer. | |
| Listed building consent | | Not required. | |
| Conservation area | | No. | |
| DNO | | G99 application must be submitted by the successful tenderer. Any follow-up permissions, such as G100 and continued liaison with the DNO is the responsibility of the successful tenderer. This includes witness testing which is to be performed at no impact to the operation of the facility. | |
| Building regulations | | Contractor must conform to all relevant building regulations. | |
| **Environment** | | Solar shading analysis | | Required. | |
| Glare analysis | | Not required.  \*subject to prior approval conditions. | |
| **Roof compatibility** | | Orientation | | *Options available.* | |
| Structural assessment | | Required. | |
| Roof defects / condition | | Not to our knowledge. | |
| Materials | | Mix, to be confirmed on the site visit. | |
| Age | |  | |
| Warranty | | No. | |
| Access | | Scaffold | |
| **Budget** | | Budget Constraints | | The project budget is £50,000+VAT. This should be considered within tender returns. | |
| **Electrical infrastructure** | | | | | |
| The contractor must ensure that the mains distribution has sufficient capacity to handle the additional load and that the wiring and components are in good condition. It may be necessary to upgrade or make adjustments to the electrical infrastructure during the installation process. | | | | | |
| *Comments:* | | **To be reviewed during site visits.** | | | |

**Document checklist**

*Provided by the client*

| **Document** | | **Appendix** |
| --- | --- | --- |
| Building plans - showing plant / switch room location | | Site visit required. |
| Roof plan | | Appendix 1 |
| Roof surface O&M | | Site visit required. |
| Electricity consumption data | | Appendix 4 |
| Electrical schematics incl. metering strategy | | N |
| Photographs of roof areas and switch rooms | | Appendix 3 |
| Asbestos report | | Appendix 2 |
| Compartmentation plans | | To be confirmed |
| Fire Safety RC62 Checklist | | Appendix 5 |

**Project outcomes**

*Provided by the client*

| **Energy goals** | | **Comments (Y/N)** | |
| --- | --- | --- | --- |
| Offset a certain percentage of energy consumption | | The scheme should be suited to the roof size, building load as designed by the contractor and budget highlighted above. | |
| Completely energy independent | | No | |
| Contribute to environmental sustainability | | - | |

| **Employer’s requirements** | | | | | |
| --- | --- | --- | --- | --- | --- |
| Solar panels | | The manufacturer, type and model of solar panel modules can be selected by the tenderer, subject to approval by PL. | | | |
|
| The panels shall meet international standards for performance, durability, and safety. | | | |
| Mounting structures | | The mounting structures shall securely support the solar panels on the desired installation location (e.g., ballasted - rooftop). | | | |
| The structures shall be made of corrosion-resistant materials suitable for outdoor installation. | | | |
| The design shall take into account wind loads, snow loads, and other environmental considerations specific to the installation location - in accordance with the structural information provided. | | | |
| Inverters | | The solar PV system shall include grid-tied inverters capable of converting the DC power generated by the solar panels into AC power for use or export to the grid. The required manufacturer for this scheme is Solis. | | | |
| The inverters shall have a minimum efficiency of 93 - 96%. | | | |
| The inverters shall meet relevant international safety standards and have built-in protection mechanisms against overvoltage, overcurrent, and other electrical faults. | | | |
| Inverters should be located in well-ventilated spaces that do not exceed the optimum / recommended operating temperatures. | | | |
| Inverters should always be mounted on fire-rated surfaces. | | | |
| Inverters should be installed as close to the solar array as possible to reduce power losses. | | | |
| Inverters should be protected from the elements, positioned away from direct sunlight, rain, snow, etc. | | | |
| Electrical wiring and protection | | The system shall include appropriate electrical wiring to interconnect the solar panels, inverters, and other components. | | | |
| The wiring shall be sized correctly to minimise losses and comply with local electrical codes and regulations. | | | |
| Protection devices, such as surge protectors, circuit breakers, and disconnect switches, shall be installed as per applicable safety standards. | | | |
| All cabling will be fully supported and secured in cable trays. | | | |
| All cabling will be labelled accordingly, and be weather-proof when external. | | | |
| Wiring diagram, providing the routes of cabling (including external cable runs) will be provided as part of the system O&Ms. | | | |
| Batteries | | It is not anticipated that there will be a requirement for batteries for this project. | | | |
| Monitoring and control | | The solar PV system shall incorporate a monitoring and control system to track system performance, energy production, and potential issues. | | | |
| The monitoring system shall provide real-time data on energy generation, consumption, and system health through the Solis interface. | | | |
| Installation and commissioning | | The solar PV system shall be installed by qualified personnel following industry best practices and local regulations. | | | |
| A comprehensive commissioning process shall be conducted to ensure the system operates as intended and meets performance specifications. | | | |
| All necessary permits and approvals shall be obtained before installation and commissioning. | | | |
| Warranty and maintenance | | The solar panels, inverters, and other system components shall have a warranty period of:   * Solar PV panels - 20 years * Solar PV - inverters - 10 years   + Option for extended warranty required. * Mounting system - 20 years | | | |
| The warranty shall cover defects in materials and workmanship and guarantee a minimum performance output over the warranty period. | | | |
| A recommended maintenance plan shall be provided to ensure optimal performance and longevity of the system. | | | |
| The contractor shall ensure that there’s a nearby water connection to enable cleaning of the solar PV panels. | | | |
| The contractor shall ensure that there’s a nearby electrical connection to enable cleaning the solar PV panels. | | | |
| Solar panel placement: panels should be accessible to clean and inspect without excessive leaning or specialist equipment. | | | |
| Inverter placement: technicians should be able to reach the inverters without difficulty for routine inspections, repairs, or replacements if needed. Always follow manufacturers instructions for specified distances between individual inverter units. | | | |
| The design shall not restrict rainwater run-off from the existing roof structure. Gulleys must be left exposed to enable roof cleaning / maintenance. | | | |
| The contractor shall provide the employer a collateral warranty of 5 years. | | | |
| The contractor will provide a comprehensive operational and maintenance manual, detailed drawings, schematics, handover training with the site team and 12-months of soft landing / servicing support (in the event of issues arising in accordance with the collateral warranty) and electrical compliance checks. | | | |
| Access | | The contractor will provide all necessary access equipment to safely complete the installation, in accordance with relevant health and safety regulations. | | | |
| H&S | | The contractor will comply with the Construction Design Management (CDM) Regulations 2015, adopting the role of Principal Contractor, and where also responsible for design, Principal Designer. | | | |
| The scheme will be compliant with RC62 and a full RC62 checklist will be completed and submitted as part of the design and handover process. This includes the installation of a fireman's switch and full integration at the fire panel. | | | |
| A pre and post fire-risk assessment must be completed at design and handover of the scheme. | | | |
| Contracts | | The contractor will enter into a JCT Minor Works Contract, or with Contractor’s Design elements depending on the package. | | | |
| Finances | | Contractor to carry out a detailed financial assessment including upfront cost, available incentives or rebates, potential energy savings, and return on investment. | | | |
| Installer profile | | Installers must be MCS approved. Please provide evidence. | | | |
| Please provide evidence of previous, similar projects. | | | |
| DNO | | The contractor will be responsible for submitting the relevant applications to the DNO. | | | |

**Tender return requirements**

*Provided by the contractor*

| Information provided | | |
| --- | --- | --- |
| A detailed roof plan illustrating the location of the solar PV array, detailing tilt and orientation. | |  |
| Indicative location for inverters and wiring runs. | |  |
| Glare and shade analysis. | |  |
| Structural-sign off for the proposed system. | |  |
| Accurate generation and payback report. | |  |
| Method statement for the installation. | |  |
| Proof of MCS qualifications. | |  |
| Relevant case studies and ideally testimonials. | |  |
| Itemised cost for the supply and install of the solar array by building. | |  |
| Confirmation of relevant DNO application, timescales and any risk associated. | |  |
| Lead-in times and expected start date (beginning with mobilisation / detailed design). | |  |

| Tender returns, clarifications & site visit coordination | | |
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| Contact: | | [lee.wiseman@lexleisure.org.uk](mailto:lee.wiseman@lexleisure.org.uk) / joel.kirby@parkwood-leisure.co.uk |