

# Schedule of Requirements Solar Carpark

## 1. The Requirement

Spelthorne Borough Council (SBC) are constructing a new leisure centre and will be building a new carpark on the adjoining site. SBC wish to erect a solar canopy/solar carpark/solar carport over the new leisure centre carpark. The generated electricity would either be delivered to the grid or to be utilised in running the leisure centre. The solar carpark should provide a maximum supply of just under 1 megawatt. The lifespan of the project will be a minimum of 30 years, with options to extend the lifespan with replacement solar arrays on top of the canopy structure.

The new leisure centre carpark will be built in the first half of 2025.

The solar canopy provider must be an experienced provider with over 3 large scale solar installations within their portfolio and hold experience in working with public institutions.

We require that the solar canopy provider provide:

- The specification for all of the groundworks and foundation design by January 2025 so that the carpark provider can complete those preparations with their work to ensure the car park is fit for the solar canopy installation.
- The full construction details of the canopy including both the specifications for a glulam timber frame and steel frame options.
- A comparison between pricing, warranty, maintenance and life expectancy should be included between either frame option.

## 2. Scope of the Contract

The scope of the contract will include any and all planning, design and project implementation works related to the development of a solar carpark on the leisure centre carpark. The dimensions and current specification of the carpark will be detailed below.

Bidders should explore the potential for a demand side response contract with the national grid and the potential for extending energy to alternative buildings in the area.

A specification and pricing breakdown will be required for both a Glulam timber frame option and a steel frame option.

The successful bidder is expected to work in conjunction with the already appointed groundworks contractor to ensure the groundworks are meeting the specifications of the solar canopy. The provider should be able to work with our groundwork's contractor from January 2025.

### 3. Detailed Requirements

#### 3.1 The solar canopy:

The solar canopy is expected to cover 250 spaces on 4 central double rows within the carpark. The canopy must allow sufficient space for coaches to traverse around the outer road of the carpark by way of a fixed route. The supply from the canopies will need to have the capacity to feed either the leisure centre, other surrounding buildings or the grid.

Battery storage located on or near the carpark site should be included to enable handling of peak demands, potentially as a demand side response mechanism for the national grid.

The canopies must have sufficient lighting, and CCTV as an option.

The canopies will cover the 4 double row areas that can be seen below highlighted in red:



Suppliers can utilise the drawings provided as part of the initial planning application of the leisure centre to support their bids, found in appendix A

The panels should not have a high level of glint and glare, this will be a key part of a planning process due to proximity to Heathrow airport.

Bidders are required to provide estimated carbon dioxide savings for the lifespan of the product, in addition to estimated embodied carbon emissions associated with both a glulam timber frame option and a steel frame option.

### 3.2 The solar canopy foundation specification:

Bidders will provide their solar canopy foundation specification, detailing the construction design for supporting the solar canopy.

This construction design will consider:

- The materials and placement for the canopy supports.
- Water attenuation / drainage
- Existing building foundations vs solar canopy piling
- Existing utilities (LV/HV/Drainage/Sewer)
- Trenching for new LV cables supporting solar car park installation
- Design locations for solar inverters

### 3.3 The solar canopy project will be managed by the provider, including:

- Obtaining Approvals & Permissions (DNO and Planning Permission)
- Undertaking Technical Surveys (Electrical, Topographical, Geotec, etc)
- Completing Electrical & Mechanical Designs
- Confirming Project Scope, Cost & Programme
- Obtaining the materials
- Provision of a schedule of maintenance and requirements of a contract for the solar carpark

### 3.4 The solar canopy provider will:

- Provide projected figures for the energy output
- Costings and comparison for both a glulam timber and steel frame option
- Provide a project plan for implementation of the solar carpark
- Provide figures around options to utilise electricity in the leisure centre and through feeding back to the grid
- Details of the warranties of all elements of the products provided

- Details of the maintenance requirements and services provided.
- Provided as a separate price costs for the contract for cleaning and maintenance (for the lifetime of the contract)
- Coordinating with the groundworks contractor of the carpark to ensure groundworks of the solar carpark are integrated.

#### 4. Timetable

Tenders to be completed and submitted by the 25th of October.

The Council reserve the right to not award this tender for any reason.