

Short Contract

A contract between **The Secretary of State for Health and Social Care, as part of the Crown, acting through the Medicines and Healthcare products Regulatory Agency**

and **Solarsense UK LTD**

For **Solar Panel Installation (Roof-mounted PV) – Phase 1**

C105419

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Notes about this contract are printed in boxes like this one. They are not part of the contract.

Contract Data

The *Employer* is

Name **Medicines and Healthcare products Regulatory Agency**
Address **Blanche Lane, South Mimms, Potters Bar, Hertfordshire, EN6 3QG.**
Telephone **01707 641 000**
E-mail address **purchasing@mhra.gov.uk**

The *service* is **Solar Panel Installation (Roof-mounted PV) – Phase 1**

The *starting date* is **5th December 2022**

The *service period* is **36 months (with option to extend for a further 12 months)**

The *period for reply* is **2** weeks.
The *assessment day* is the **1st** of each month.

Does the United Kingdom Housing Grants, Construction and Regeneration Act (1996) apply? **No**

Contract Data

The *Adjudicator* is

Name

Address

Telephone

E-mail address

The interest rate on late payment is % per complete week of delay.

Insert a rate only if a rate less than 0.5% per week of delay has been agreed.

The *Contractor* is not liable to the *Employer* for loss of or damage to the *Employer's*

property in excess of **£2,000,000.00**..... for any one event.
.....

The *Employer* provides this insurance

Only enter details here if the *Employer* is to provide insurance.

.....
.....

The minimum amount of cover for the first insurance stated in the Insurance Table is **£2,000,000**

The minimum amount of cover for the third insurance stated in the Insurance Table is **£2,000,000**

The minimum amount of cover for the fourth insurance stated in the Insurance Table is **£2,000,000**

The *Adjudicator nominating body* is

The *tribunal* is

If the *tribunal* is arbitration, the arbitration procedure is

The terms and *conditions of contract* will be NEC3 Term Service Short Contract April 2013

Only enter details here if additional conditions are required.

Z1 Official Secrets and confidentiality

- Z1.1 The Official Secrets Act 1989 and, where appropriate, the provisions of section 11 of the Atomic Energy Act 1946 apply to this contract from the starting date until the Defects Certificate or a termination certificate has been issued.
- Z1.2 The Contractor notifies his employees and his Subcontractors of their duties under these Acts.
- Z1.3 The Contractor does not use or disclose information concerning the contract obtained either by the Contractor or by any person employed by him except for the purposes of the contract.

Z2 Security

Contract Data

- Z2.1 The Contractor submits to the Project Manager details of people who are to be employed by him and his Subcontractors in connection with the works. The details include a list of names and addresses, the capacities in which they are employed, and other information required by the Project Manager.
- Z2.3 Employees of the Contractor and his Subcontractors are to carry an Employer's pass whilst they are on the parts of the Site stated in the Contract Data.
- Z2.4 The Contractor submits to the Project Manager for acceptance a list of the names of the people for whom passes are required. The Project Manager issues the passes to the Contractor. Each pass is returned to the Project Manager when the employee no longer requires access to that part of the Site or after the Project Manager has given notice that the employee is not to be admitted to the Site.
- Z2.5 The Contractor does not take photographs of the Site or the works or any part of them unless he has obtained the acceptance of the Employer.
- Z2.6 The Contractor takes the measures needed to prevent his and his Subcontractors' people taking, publishing or otherwise circulating such photographs.

Z3 Payment of undisputed invoices within 30 days by contracting authorities [Employers], contractors and subcontractors – Public Contracts Regulations 2015, Regulation 113

- Z3.1 That any payment due from the Employer to the Contractor under the contract is to be made no later than the end of a period of 30 days from the date on which the relevant invoice is regarded as valid and undisputed.
- Z3.2 Any invoices for payment submitted by the contractor are considered and verified by the Employer in a timely fashion and that undue delay in doing so is not to be sufficient justification for failing to regard an invoice as valid and undisputed.
- Z3.3 That any subcontract awarded by the contractor contains suitable provisions to impose, as between the parties to the subcontract—
- (i) requirements to the same effect as those which sub-paragraphs Z5.1 and Z5.2 require to be imposed as between the parties to the public contract; and
 - (ii) a requirement for the subcontractor to include in any subcontract which it in turn awards suitable provisions to impose, as between the parties to that subcontract, requirements to the same effect as those required by this sub-paragraph Z5.3.

Z4 Orders and Invoicing

- Z4.1 All orders for goods, requests for planned preventative maintenance, reactive maintenance and replacement parts must be subject to a purchase order from the Employer.
- Z4.2 All invoices must state the Employers purchase order number, otherwise the invoice will be returned to the supplier.
- Z4.3 A single invoice must only relate to a single purchase order (PO). The employer cannot process invoices against multiple POs.

Z5 General Data Protection Regulation (Regulation (EU) 2016/679) – “GDPR”

Z5.1 GDPR CLAUSE DEFINITIONS:

Data Protection Legislation: (i) the GDPR, the LED and any applicable national implementing Laws as amended from time to time (ii) the DPA 2018 [subject to Royal Assent] to the extent that it relates to processing of personal data and privacy; (iii) all applicable Law about the processing of personal data and privacy;

Data Protection Impact Assessment: An assessment by the Controller of the impact of the envisaged processing on the protection of Personal Data.

Controller, Processor, Data Subject, Personal Data, Personal Data Breach, Data Protection Officer: take the meaning given in the GDPR.

Data Loss Event: Any event that results, or may result, in unauthorised access to Personal Data held by the Processor under this Agreement, and/or actual or potential loss and/or destruction of Personal Data in breach of this Agreement, including any Personal Data Breach.

Data Subject Request: A request made by, or on behalf of, a Data Subject in accordance with rights granted pursuant to the Data Protection Legislation to access their Personal Data.

Contract Data

DPA 2018: Data Protection Act 2018

GDPR: the General Data Protection Regulation (Regulation (EU) 2016/679)

Joint Controllers: Where two or more Controllers jointly determine the purposes and means of processing

LED: Law Enforcement Directive (Directive (EU) 2016/680)

Protective Measures: Appropriate technical and organisational measures which may include: pseudonymising and encrypting Personal Data, ensuring confidentiality, integrity, availability and resilience of systems and services, ensuring that availability of and access to Personal Data can be restored in a timely manner after an incident, and regularly assessing and evaluating the Effectiveness of the such measures adopted by it including those outlined in Annex 2 (Security).

Sub-processor: Any third Party appointed to process Personal Data on behalf of that Processor related to this Agreement

- Z5.2 The Parties acknowledge that for the purposes of the Data Protection Legislation, the Customer is the Controller and the Contractor is the Processor unless otherwise specified in Annex 1. The only processing that the Processor is authorised to do is listed in Annex 1 by the Controller and may not be determined by the Processor.
- Z5.3 The Processor shall notify the Controller immediately if it considers that any of the Controller's instructions infringe the Data Protection Legislation.
- Z5.4 The Processor shall provide all reasonable assistance to the Controller in the preparation of any Data Protection Impact Assessment prior to commencing any processing. Such assistance may, at the discretion of the Controller, include:
- Z5.4.1 a systematic description of the envisaged processing operations and the purpose of the processing;
 - Z5.4.2 an assessment of the necessity and proportionality of the processing operations in relation to the Services;
 - Z5.4.3 an assessment of the risks to the rights and freedoms of Data Subjects; and
 - Z5.4.4 the measures envisaged to address the risks, including safeguards, security measures and mechanisms to ensure the protection of Personal Data.
- Z5.5 The Processor shall, in relation to any Personal Data processed in connection with its obligations under this Agreement:
- Z5.5.1 process that Personal Data only in accordance with Annex 1, unless the Processor is required to do otherwise by Law. If it is so required, the Processor shall promptly notify the Controller before processing the Personal Data unless prohibited by Law;
 - Z5.5.2 ensure that it has in place Protective Measures, which are appropriate to protect against a Data Loss Event, which the Controller may reasonably reject (but failure to reject shall not amount to approval by the Controller of the adequacy of the Protective Measures), having taken account of the:
 - Z5.5.2.1 nature of the data to be protected;
 - Z5.5.2.2 harm that might result from a Data Loss Event;
 - Z5.5.2.3 state of technological development; and
 - Z5.5.2.4 cost of implementing any measures;
 - Z5.5.3 ensure that:
 - Z5.5.3.1 the Processor Personnel do not process Personal Data except in accordance with this Agreement (and in particular Annex 1);
 - Z5.5.3.2 it takes all reasonable steps to ensure the reliability and integrity of any Processor Personnel who have access to the Personal Data and ensure that they:
 - (a) are aware of and comply with the Processor's duties under this clause;
 - (b) are subject to appropriate confidentiality undertakings with the Processor or any Sub-processor;
 - (c) are informed of the confidential nature of the Personal Data and do not publish, disclose or divulge any of the Personal Data to any third Party unless directed in writing to do so by the Controller or as otherwise permitted by this Agreement; and

Contract Data

- (d) have undergone adequate training in the use, care, protection and handling of Personal Data; and
- Z5.5.3.3 not transfer Personal Data outside of the EU unless the prior written consent of the Controller has been obtained and the following conditions are fulfilled:
 - (a) the Controller or the Processor has provided appropriate safeguards in relation to the transfer (whether in accordance with GDPR Article 46 or LED Article 37) as determined by the Controller;
 - (b) the Data Subject has enforceable rights and effective legal remedies;
 - (c) the Processor complies with its obligations under the Data Protection Legislation by providing an adequate level of protection to any Personal Data that is transferred (or, if it is not so bound, uses its best endeavors to assist the Controller in meeting its obligations); and
 - (d) the Processor complies with any reasonable instructions notified to it in advance by the Controller with respect to the processing of the Personal Data;
- Z5.5.3.4 at the written direction of the Controller, delete or return Personal Data (and any copies of it) to the Controller on termination of the Agreement unless the Processor is required by Law to retain the Personal Data.
- Z5.6 Subject to clause 14.6, the Processor shall notify the Controller immediately if it:
 - Z5.6.1 receives a Data Subject Request (or purported Data Subject Request);
 - Z5.6.2 receives a request to rectify, block or erase any Personal Data;
 - Z5.6.3 receives any other request, complaint or communication relating to either Party's obligations under the Data Protection Legislation
 - Z5.6.4 receives any communication from the Information Commissioner or any other regulatory authority in connection with Personal Data processed under this Agreement;
 - Z5.6.5 receives a request from any third Party for disclosure of Personal Data where compliance with such request is required or purported to be required by Law; or
 - Z5.6.6 becomes aware of a Data Loss Event.
- Z5.7 The Processor's obligation to notify under clause Z5.6 shall include the provision of further information to the Controller in phases, as details become available.
- Z5.8 Taking into account the nature of the processing, the Processor shall provide the Controller with full assistance in relation to either Party's obligations under Data Protection Legislation and any complaint, communication or request made under clause Z5.6 (and insofar as possible within the timescales reasonably required by the Controller) including by promptly providing:
 - Z5.8.1 the Controller with full details and copies of the complaint, communication or request;
 - Z5.8.2 such assistance as is reasonably requested by the Controller to enable the Controller to comply with a Data Subject Request within the relevant timescales set out in the Data Protection Legislation;
 - Z5.8.3 the Controller, at its request, with any Personal Data it holds in relation to a Data Subject;
 - Z5.8.4 assistance as requested by the Controller following any Data Loss Event;
 - Z5.8.5 assistance as requested by the Controller with respect to any request from the Information Commissioner's Office, or any consultation by the Controller with the Information Commissioner's Office.
- Z5.9 The Processor shall maintain complete and accurate records and information to demonstrate its compliance with this clause. This requirement does not apply where the Processor employs fewer than 250 staff, unless:
 - Z5.9.1 the Controller determines that the processing is not occasional;
 - Z5.9.2 the Controller determines the processing includes special categories of data as referred to in Article 9(1) of the GDPR or Personal Data relating to criminal convictions and offences referred to in Article 10 of the GDPR; or
 - Z5.9.3 the Controller determines that the processing is likely to result in a risk to the rights and freedoms of Data Subjects.
- Z5.10 The Processor shall allow for audits of its Data Processing activity by the Controller or the Controller's designated auditor.
- Z5.11 Each Party shall designate its own data protection officer if required by the Data Protection Legislation.
- Z5.12 Before allowing any Sub-processor to process any Personal Data related to this Agreement, the

Contract Data

Processor must:

Z5.12.1 notify the Controller in writing of the intended Sub-processor and processing;

Z5.12.2 obtain the written consent of the Controller;

Z5.12.3 enter into a written agreement with the Sub-processor which give effect to the terms set out in this clause

Z5.13 such that they apply to the Sub-processor; and

Z5.14 provide the Controller with such information regarding the Sub-processor as the Controller may reasonably require.

Z5.15 The Processor shall remain fully liable for all acts or omissions of any of its Sub-processors.

Z5.16 The Controller may, at any time on not less than 30 Working Days' notice, revise this clause by replacing it with any applicable controller to processor standard clauses or similar terms forming part of an applicable certification scheme (which shall apply when incorporated by attachment to this Agreement).

Z5.17 The Parties agree to take account of any guidance issued by the Information Commissioner's Office. The Controller may on not less than 30 Working Days' notice to the Processor amend this agreement to ensure that it complies with any guidance issued by the Information Commissioner's Office.

Z5.18 Where the Parties include two or more Joint Controllers as identified in Annex 1 in accordance with GDPR Article 26, those Parties shall enter into a Joint Controller Agreement based on the terms outlined in Annex 1 in replacement of Clauses Z5 for the Personal Data under Joint Control.

Z6 Crown Commercial Service

Z6.1 The Crown Commercial Service (CCS) will be entitled to request management information from the successful supplier. This will facilitate the collection and analysis of supplier management information relating to Government contracts. This policy contributes to the Government's aim to achieve greater efficiencies in Public Sector procurement. This is a mandatory requirement that has been placed upon the Employer.

Contract Data

Annex 1

Schedule of Processing, Personal Data and Data Subjects

Description	Details
Identity of the Controller and Processor	The Parties acknowledge that for the purposes of the Data Protection Legislation, the Employer is the Controller and the Contractor is the Processor in accordance with Clause Z5.
Subject matter of the processing	The processing is needed to ensure that the Processor can effectively deliver the contract to provide a service to the agency.
Duration of the processing	The duration is for the life of the contract
Nature and purposes of the processing	Recording and storage of work contact details.
Type of Personal Data being Processed	Staff name and department, address of Agency, work telephone numbers and emails.
Categories of Data Subject	Staff
Plan for return and destruction of the data once the processing is complete UNLESS requirement under union or member state law to preserve that type of data	Data does not need to be returned. Staff lists need to be deleted from Processor database at end of contract.

The Contractor's Offer

The Contractor is
Name **Solarsense UK Ltd**
Address **Unit 1A Tweed Road Industrial Estate , Clevedon,
Bristol, BS21 6RR**
Telephone **0333 772 1800**
E-mail address **info@solarsense-uk.com**
tim.cook@solarsense-uk.com

The percentage for overheads and profit added to the Defined Cost for people is [enter %] %.

The percentage for overheads and profit added to other Defined Cost is [enter %] %.

The Contractor offers to Provide the Service in accordance with the *conditions of contract* for an amount to be determined in accordance with the *conditions of contract*.

The offered total of the Prices for part of the **£662,212.61**
service in Part 1 of the Price List is

The offered total of the Prices for part of the
service in Part 2 of the Price List is

Enter the total of the Prices from the Price List. £662,212.61

Signed on behalf of the Contractor
(Solarsense Renewable Energy)

Name

Position

Signature

Date ... 01.12.2022

The Employer's Acceptance

The Employer accepts the Contractor's Offer to Provide the Service

Signed on behalf of the Employer
(MHRA)

Name:

Position:

Signature:

Date:

Price List

The Price List is in two parts. Part 1 is for work described in the Service Information not requiring the *Employer* to issue a Task Order. Part 2 is for work to be carried out within a stated period of time on a Task by Task basis and instructed by Task Order. The *service* may comprise work under Part 1 only or Part 2 only or a mix of both.

Entries in the first four columns of Part 1 of the Price List are made either by the *Employer* or the tenderer. Entries in the first four columns of Part 2 of the Price List would normally be made by the *Employer* as the Party most likely to know the kind of work which will be instructed by the issue of Task Orders. The tenderer then enters a rate for each item and multiplies it by the Expected quantity to produce the Price to be entered in the final column.

If the *Contractor* is to be paid an amount for the item which is not adjusted if the quantity of work in the item changes, the tenderer enters the amount in the Price column only, the Unit, Expected quantity and Rate columns being left blank.

If the *Contractor* is to be paid an amount for the item of work which is the rate for the work multiplied by the quantity completed, the tenderer enters a rate for each item and multiplies it by the Expected quantity to produce the Price, to be entered in the final column.

If the *Contractor* is to be paid a Price for an item proportional to the length of time for which a service is provided, a unit of time is stated in the Unit column and the expected length of time (as a quantity of the stated units of time) is stated in the Expected quantity column.

The rates and Prices entered for each item includes for all work and other things necessary to complete the item.

PART 1

Item number	Description	Unit	Quantity	Rate	Price
.....	See proposal in Annex 2
.....
.....
.....
The total of the Prices for Part 1					<input type="text"/>

PART 2

Item number	Description	Unit	Quantity	Rate	Price
.....
.....
.....
.....
The total of the Prices for Part 2					<input type="text"/>

Service Information

The Service Information should be a complete and precise statement of the *Employer's* requirements. If it is incomplete or imprecise there is a risk that the *Contractor* will interpret it differently from the *Employer's* intention. The Service Information should state clearly the part of the *service* which is to be carried out by the *Contractor* and which does not require the *Employer* to issue a Task Order. This part of the *service* is priced in Part 1 of the Price List. Information provided by the *Contractor* should be listed in the Service Information only if the *Employer* is satisfied that it is required, is part of a complete statement of the *Employer's* requirements and is consistent with the other parts of the Service Information.

1 Description of the service

Give a detailed description of what the *Contractor* is required to do. This may include drawings.

..... See Annex 3

.....
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.....
.....
.....
.....
.....

2 Specifications

List the specifications that apply to this contract.

Title	Date or revision	Tick if publicly available
..... See Annex 3
.....
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.....
.....
.....

Service Information

5 Services and other things provided by the *Employer*

Describe what the *Employer* will provide, such as services (including water and electricity) and “free issue” Plant and Materials and equipment.

Item	Date by which it will be provided
.....
.....
.....
.....
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8

Service Information

6 Property affected by the *service*

Give information about any property affected by the *service* and any other information which is likely to affect the *Contractor's* work.

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Annex 3

Project/Contract Specification

Specification

General

The MHRA has an ambition to achieve a Net Zero building estate by 2030. This includes eliminating indirect (scope 2) emissions by implementing energy saving measures and generating on site renewable energy. The proposed solar PV system should reduce our grid electricity consumption by 8% and reduce our carbon emissions by around 150 tonnes per year.

Much of the south roof space at the South Mimms site already has PV Solar panels installed. The scope of this project is to look at installing solar panels on other orientated roof space and green space areas including covering the car park areas to mount solar panels above.

Our current 500kWp array supplies approximately 6%-8% of our electricity and gives us the added benefit of Feed-in Tariff (FiT) payments. To take advantage of the significant advances in solar panel technology, we are now looking to install a new PV system onto the remaining roof space at South Mimms, install solar carports over some of our current parking area.

The types of work that occur within this facility and the strict standards required to meet current regulations mean that any work must be carried out in a specific way. This is to comply with site rules, minimise disruption to the users and meet specification, budget & timescales required.

Once the contractor has made their site inspection which is a compulsory phase on this project, they will be deemed to have satisfied themselves about the conditions of access & site rules relating to the MHRA at South Mimms. They will also be deemed to have understood the full concept of the nature of the project work which will also include labour, affecting conditions, unloading of materials and tools, conveniences, need for specialist equipment, safety, and anything else which could or will influence their tender for carrying out the planned project works. The lack of storage should be taken into consideration although limited storage can be accommodated. All contractors who come onto the MHRA site at South Mimms will be inducted to the site rules and current safety requirements by authorised MHRA staff. Contractors must allow for this in their programme. The security check can take up to two weeks and is conducted by the MHRA (contact details required for each contractor). Site inductions take about 20 minutes and are conducted on the first day on site and last a year.

MHRA operates a permit to work system. These permits include General permits, Electrical works and Hot-works, Work at Height, Confined Spaces, which are always required while on site. All permits will be issued as necessary by authorised MHRA Staff. Contractors are to give 24 hr notices for required permits.

As part of the project's management, the appointed contractor will ensure that all workers, personnel, and any sub-contractors have received the correct safety inductions, are aware of Risk Assessments & Method Statements which have been agreed and have all the correct and necessary materials, tools, PPE, plant & equipment, and all associated test certificates and have the training and experience to carry out the works.

Storage space is very limited on the MHRA South Mimms site arrangements may be agreed with the Project Engineer, a section of car park will be cordoned off and provided for the duration of the project.

Suggestions for saving cost, timescale and value engineering are to be included in the tender return. This will count in tenderers favour if included.

The contractor shall be responsible for the removal and disposal/recycling of all waste materials. Waste materials shall be removed from site or put into skips at the end of each day by the contractor, and areas left safe, secure & accessible to staff during the day and night.

Scope of Works

1. Phase 1, installation of Solar PV Panels to predominantly non-south facing roofs including associated cabling, controls, metering and required electrical equipment and certification.
2. Lightning Protection for installed PVs to include testing and certification of any alterations.
3. All access equipment requirements to allow safe working on roofs. Covering document to detail climbing and working on roof space methodology and why it has been chosen.
4. Integration of the existing software system into the new installation, the new solar system will be independent of the old system, but both systems will be maintained by the same company and ideally all data will be captured by one online portal. We cannot change the existing system without losing the FiT. Therefore, up to date data collection and analysis software tools must be provided, if it can additionally communicate with the Trend BMS system this would be seen as an advantage. Data Cabling and connection to the BMS to be provided by MHRA for the Inverters and meters.
5. Carry out all certifications and permissions required prior to installation, including DNO checks and support for MHRA during planning process application.
6. Include annual servicing and maintenance costs. Add provision for covering the servicing and maintenance of the current and existing system.
7. The guarantee/warranty duration for all aspects to be as detailed by the supplier quotation.
8. Costs must be broken down for each area to allow budgeting where necessary.

The Project will be carried out by a Contractor who will either be a specialist Solar Panel Installation company or a Main contractor who will manage the supply and installation of the Solar PV Panel system using a Specialist Company's knowledge in this field. These works are to be carried out by suitably qualified contractors experienced in similar commercial projects which include laboratories.

MHRA criteria for selection of contractor will not necessarily be the cheapest but will also look at experience in that field of work on commercial sites, experience in working on sites similar to MHRA which contain laboratories, experience working on similar sized solar PV installations, trading history, Safety Records, sufficient resources to meet quality and programme requirements, track record of working with other contractors and ability to give MHRA value for money in the long term, and ensure any long term warranties can be honoured.

Part of the selection criteria will include but not limited to verifiable site visits for the final selection to be made.

The Contractor will be responsible for: -

- Supplying & coordinating the scaffold access around the buildings for all aspects of the project. Scaffold to be to Relevant British Standards, and NASC Technical Guidance TG20 and designed access and working platform suitable for loading/ unloading Solar PV Panels and working for prolonged periods installing onto the roof space. Whilst scaffolding is erected the Maintenance team may require use of it to inspect, repair or clean guttering or other systems, this will be done with the co-operation of the Supplier and will not interfere or impact or delay any PV installation work.
- Engage a suitably qualified experienced contractor to carry out repairs and alterations to the existing Lightning Protection system
- Coordinating the solar PV panel installation. Liaising with the Project Engineer to determine when areas will be made available by the Users & programming the works to suit.
- MHRA South Mimms Site has some Asbestos on site, mainly to external facades & soffits. The Contractor is responsible for consulting the Site Asbestos Register & checking all areas before starting work. If there is any concern, then the Contractor is to seek advice from the Project Engineer. Any suspected material is to be checked &, if necessary, removed & disposed of by registered specialist in accordance with current regulations by the MHRA
- The refurbishment requires several different specialities, therefore a list of trusted contractors for specific elements of the works has been provided within this specification.
- Tender documentation must include a comprehensive specification of proposed materials & installation details to confirm units meet BS/EN standards, CE markings, quality & performance details. Samples of solar PV panels proposed are to be provided, free of charge, if requested for approval, prior to fabrication and installation. Installers must be members of recognised and professional trade organisations, experienced in commercial works like this project. They must be able to provide references from previous clients.
- The programme must include timescales required for design, approval, fabrication, supply & installation of solar panels, associated works, and any removals. Allow for areas to be released in phases to minimise disruption to Users.
- During installation of the solar panels any damage caused to the existing building fabric, site roads or landscaped areas must be made good by the contractor. Any issues found prior or during the installation must be reported immediately.
- Because of the length of time this project will take to complete it will be governed by The Construction (Design & Management) Regulations in force (CDM) during tendering. MHRA will appoint a CDM Co-ordinator to carry out duties relating to the regulations.
- The CDM Coordinator will check competence of all contractors, ensure there are suitable management arrangements for the project welfare facilities, allow for sufficient time & resources for all stages & provide Pre-Construction information to the contractors. The CDM Coordinator will require the main contractor to submit agreed Programme of Works, comprehensive risk assessments and method statements which are to explain how all aspects of the work will be carried out, including: -
 - the Installation of PV panel supporting grid,
 - lifting & installation of PV Panels & associated equipment.

- Trench work including additional spare ways, connection to grid & connection to site supply without disrupting day-to-day site activities
 - Investigate the possibility of using the energy produced by the panels in the event of a generator run during a power outage or controlled running of the generators. If this is not possible automatic restoration of the panels once mains power is restored. It has been agreed that reconnection of the panels after power outages will be via a manual key switch similar to the existing system.
- The Contractor will be responsible for producing a coordinated Construction Phase H&S Plan for all the works before commencement on site. They will also be required to assist in completion of the H&S File at the end of the project. This must be completed before the project is handed over.
 - The Contractor will be responsible for supplying & coordinating external and internal scaffold access to all areas, for all the contractors, liaising with the Project Engineer to find when areas become available from the Users.
 - The Contractor will produce an overall programme for the works, updated as necessary, throughout the works.
 - All Contractors are to allow for a full time On- Site Supervisor of their works, responsible for ensuring work complies with specification, coordination with other works, safety & risk management. The site supervisor shall report any changes in scope or method of works to the MHRA project engineer.
 - The Contractor will gather information during the project and attend regular meetings with the Project team relating to Progress, Costing, Quality Control, and Risk Management
 - Completed works will include As Built drawings, Commissioning & Test Certificates, G99 grid connection. Equipment supplied shall include Manufacturer's data sheets, including operating & maintenance procedures & spares documents.
 - Training will be provided to Maintenance Engineers, the Energy, Environment & Sustainability Lead, and other selected personnel as required and must be costed for. A half day training course will be included
 - Warranties clearly outlined for main components.
 - Any servicing or maintenance delivery included as part of the installation
 - Any penetrations through the building fabric must be fire stopped to the correct standard

Solar PV Panels

Solar PV Panel providers/ installers must be registered members of a Trade organisation such as MCS & BPVA. They must demonstrate previous experience in similar commercial installations.

The Solar PV Panel supply & installation will include: -

- A Full survey is to be carried out to confirm suitable location & configuration of PV panels to maximise power generation. Calculations are required to indicate power output of the system. A Structural survey of the existing roofs is to be carried out to ensure that they can accommodate the additional loading of the

solar panels and ballast. Detailed design submitted and approved before fabrication or installation commences.

- Support with Local authority planning permission
- Permit to connect application with Distribution Network Operator (DNO)
- The PV Panels & associated installation shall comply with all current British Standards, Codes of Practice, Statutory Requirements & Building Regulations.
- All working and calculations to be shown including:
 - External Consumption savings (£)(Use 28p/kWh inclusive rate for electricity)
 - Maintenance costs PA (£)
 - Array size, kWp
 - Daylight calculations PA
 - Estimated kWh generation PA
 - TCO₂ savings
- Panels are to have a minimum efficiency of 20% Details to be supplied confirming performance output, efficiency, guarantees for panels & system installed.
- Structural calculations & drawings showing connection of the grid system to the existing roof structure proving it will support dead loads, live loads, wind & snow loads. Construction details are to be provided showing flashing detail/weather protection of all roof penetrations.
- The work is to be carried out in sequence, coordinated with users as areas become available. Programme for the works to be agreed before commencement. The programme will be subject to regular review as the work progresses. Allowance must be made for changes arising from weather and other works being carried out. MHRA will not accept any claims for delays or additional costs.
- Supply full details, including schematic diagrams of electrical connection of the system to the building distribution system. Include for all containment, cable trays & builders work to install the cabling, inverters, isolation switches & PV generation meters. MCCB or breaker onto each point of connection to be provided by MHRA
- The Solar array must be connected to the existing building lightning protection systems. Details must be submitted for approval and compliance with current legislation. Surge protection will be looked at separately to this contract
- ~~• Include details of connection of the system to the existing "Trend" BMS to indicate power generation of the array & indication of faults in the system.~~
- Confirm the country of origin, make & model of all equipment & that it has CE certification & complies with current BS/ EN standards.
- All materials & installers are to be registered with Microgeneration Certification Scheme. Installers must demonstrate experience in fitting the equipment specified.

- Full details are to be supplied for the Maintenance & Repair of the solar panels. This will include a set of “As Installed” record drawings, calculations, and O&M Manuals for the system plus a complete list of components & suppliers’ details. A detailed description of the maintenance procedure and interval will be supplied. Details for cleaning the PV panel units are to be supplied. The Contractor will also include for hand over and training sessions with MHRA Maintenance Engineers to demonstrate operation of the systems & ~~their integration with the existing Trend system.~~
- Details/recommendations are required showing access to & system isolation of the arrays for future maintenance, cleaning & repairs.
- The Solar PV Panel installations shall be guaranteed in line with specification in appendix 2.

Tender Returns

As well as considering all the criteria above and in order for tenders to be compared fairly it is requested that the costs are detailed in the following way:

- Phase 1, roof mounted panels detailing roof areas chosen as suitable and not compromised by partial or full shading. Broken down into a cost for each roof installation with a total cost for the complete install. Please also provide the Watts peak power for each panel, total number of panels, total capacity, and average cost per panel. It is expected that the PV generator output will be in the region of 600 kWp.
- Phase 2, Solar car port PVs, it is recognised that car ports present an opportunity to mount PVs in an area that would otherwise be unavailable, because of the location of the South Mimms site extensive car parking has had to be provided and could be used to allow PV installation. The installation must include all costs up to and including connection and testing from the LV switch.

Please provide the Watts peak power for each panel, total number of panels, total capacity, and average cost per panel. Please also give an average cost per car port. It is expected that the PV generator output will be in the region of 200 kWp.
- Phase 3, ground mounted PVs, areas of open ground have been identified that could potentially serve as an area for ground mounted panels. The panels should not have a detrimental effect on any buildings in the proximity and how this will be accomplished should be detailed. Please provide the Watts peak power for each panel, total number of panels, total capacity, and average cost per panel. It is expected that the PV generator output will be in the region of 350 kWp. This system install may not happen as part of this project but should be priced to allow decisions to be made.
- Service and Maintenance costs per annum for a 5-year period plus one plus one, to include the scope of works for PVs and software, callout and response times, and a day rate for any other work. Any software updates to be included. The Agency must have an admin account and password for control of the software. The service contract should cover the existing system as well. The above criteria is ideal but any award will be on the basis of a quote. – To be priced separately.
- It is expected that all work will be carried out in normal site hours, if MHRA require hours to be worked outside of agreed normal hours between supplier and MHRA there will be an additional cost and agreed with the Project Engineer. If the supplier wishes to work outside normal hours this will be at the expense of the supplier.

Preferred Contractors

CAT7a Data Cabling Installation and Testing, Civils, Scaffolding:

Contractor's name can be supplied if required

MHRA (BMS) Building Management System (Trend):

DDE (Detail Design Engineering Ltd) are the recommended and preferred contractor for this type of work on the MHRA site and can be employed for this section of the project during the Installation process.

Please see below contact information:

Jon Kilpatrick (JKilpatrick@detail-design.co.uk)

Hampshire House

Wynnstay Road

Sale

Cheshire

M33 7DW

Tel: 0161 905 3198

Fax: 0161 905 3290

Email: info@detail-design.co.uk

Website: www.detail-design.co.uk

Constraints on how the Contractor Provides the Works

Permit to Work

The Employer operates a permit to work system these include the following as required by the work: -

- Authorization to access
- General Permit to work

All permits will be issued as necessary by authorized staff. No work is to commence without the possession of the relevant permit to work. These must be returned to the issuer on completion of the works for filing.

There are no health risks to contractors' personnel from the Employers activities if the Employers controls are complied with fully.

Design Change Post Contract Award

Any change to this specification after the tender has been received and the contract awarded will be controlled using the MHRA's Design Change form that is signed by both the Institute's project leader and the contractor's representative. The form will identify the change and its effect on costs and timescales. An example of this form can be found in the attachments

Site Access

Mon- Fri 08:00 to 17:15 (other hours by agreement with the Project Engineer)

Sat & Sun With the permission of the Project Engineer

Access to the site will be via the main access to MHRA, which is shared with the client's employees, and visitors. All vehicles will be stopped at the security cabin and all drivers will be required to comply with the client's security arrangements.

Any work outside of the above hours can be facilitated with agreement of the Project Engineer.

After 7pm no work can take place unless security and PE have agreed to this.

House Keeping

Due to the clean environment required for the work of the Scientists, good housekeeping is always required. All waste material must be removed from site daily.

Confidentiality

Contractors are expected to keep any information about the work of the MHRA or staff details totally confidential. The contractor is requested to sign a Confidentiality Agreement as attached and return with the Tender.

The contractor is always to comply with the Institute's H & S guidelines while on site.

All contractor employees will be given the site induction when attending site for the first time. There will be further inductions for specific specialist areas as and when required. Prior to attending site there will be a one-off baseline Personal Security Standard check, this will be organized by the Project Engineer responsible for the work.

Should, because of the contract, an incident or accident occur to either a member of MHRA staff, property or contractor's employees, the person responsible for you on site (generally the Project Engineer) must be informed as soon as possible after the immediate emergency has been dealt with. The responsible person will then inform the H&S team.

Site rules, practices, and procedures to be established and enforced will include but not necessarily be limited to the following: -

- Contractors' personnel must comply fully with the client's security arrangements and procedures
- Operatives and visitors report to the site supervisor are inducted and sign in and sign out
- Smoking is not permitted on the site except in defined areas
- Radios and personal stereos are not permitted
- Personal protective equipment must be worn as required by their risk assessment
- Correctly rated and inspected electrical equipment are used where applicable

- Site Fire precautions and procedures must be adhered to by Contractor's personnel.

The Employer will continue to operate normally in the building. However, it will be necessary for some operational areas to be vacated for periods of time to allow works to be carried out. The Contractor will be required to liaise with MHRA so that a program can be established to suit operational requirements. Access to all areas for Employer's maintenance personnel must always be maintained unless alternative arrangements have been made with the Project Engineer.

The Contractor must ensure that his operations do not pose any risk to the Employers personnel or visitors to the complex.

There are no health risks to contractors' personnel from the Employers activities if the Employers security controls are complied with fully.

Storage of materials and tools

MHRA is very limited on internal space and therefore all material and tools will need to be stored in an area designated by the Project Engineer.

Welfare facilities

The site has toilets, power and water which will be provided to contractors with the Employer's permission. The site also has a staff restaurant that the Contractors staff may use subject to persons being properly dressed (no bare torsos or shorts) and in clean and tidy clothing. We have first aiders on site.