***Project: Replacement and reconfiguration fuel storage and dispensing arrangement at Wakehurst***

***PERFORMANCE SPECIFICATION***

***KEW PROCUREMENT REF NO. RBGKEW/148***

### APPENDIX 3B: PERFORMANCE SPECIFICATION

# ROYAL BOTANICAL GARDENS KEW – WAKEHURST ARDINGLY

ESTATE S DEPARTMENT (PROJECTS)

**Project:** Replacement and re-configuration fuel storage and suspension arrangement at Wakehurst

**Activity:** Appointment specialist design and build Contractor for implementation of the project

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**1.0 INTRODUCTION**

**Site and installation Details**

Wakehurst is owned by the National Trust but leased to and operated by the Royal Botanic Gardens, Kew (RBG). The site includes petroleum storage and dispensing equipment used for the refuelling of equipment and vehicles. The Environment Agency has visited site last year and found inconsistencies in the circulation of quantities of fuel. The fuel tanks were tested for leaks in September 2014 and found to be leak free. In broad terms the installation comprises a 5000L underground storage tank for petrol and a 5000L tank for diesel with outdoor dispensers.

**Current situation, procedures, protocols and proceedings**

Daily wet stock reconciliation (manually on a sheet of paper) is carried out to reduce the risk of an undetected leak. An electronic fuel management system with user ID must be installed to bring the desired improvement and accuracy. The diesel and petrol tanks are 38 years old and in several respects do not meet current standards.

Petroleum storage at the site was licensed in 1976 by West Sussex County Council Trading Standards Service under the Petroleum (Consolidation) Act 1928. The existing license for this site expires on 31st May 2016 and will remain in force until then. It is anticipated that the current arrangement will be replaced and improved in its entirety as soon as possible , and has been accelerated to take place summer 2015, well ahead of the expiry date.

Under the new (PCR) regulations the fuel license will be replaced by a storage certificate automatically when there are no changes (prescribed material changes) to the configuration. However as the current installation will be changed there will be a requirement to apply for a new storage certificate. Application for the new certificate will form part of the Contractors works in relation to this brief. Prescribed material changes must be notified to the petroleum enforcement authority at least 28 days before commencement.

**The next step**

RBG Kew seeks to appoint a Design and Build Contractor to undertake implementation of this replacement project in full including management, detailed design and specification for replacement of the current installation with new. The appointment includes any studies, appraisals, investigations, contract administration and construction monitoring.

The scope of the project includes for the design and construction of a replacement fuel dispensing facility (petrol and diesel) to the north east of the tractor sheds on site. The new arrangement will be installed in approximately the same area as the existing. It is envisaged that the existing tanks and dispensing systems will be removed and discarded of as part of this project. The current tank arrangement comprises two separate tanks for diesel and petrol. The new tank will be a double skin tank with an internal partition to separate both fuel types and will be fitted with a class 1 leak detection system. Each fuel type will have a 3500litre capacity in the new configuration. The new combined tank will be fitted subsoil as per the existing. Discussion have been had with Wakehurst management regarding the interim period when the installation is taken out of use.It is anticipated that this can be managed through alternative means. Confirmation will be provided in the pre-contract meeting.

The works to be tendered are to meet the objectives of the project which are as follows:

1. To install a fuel storage arrangement that is robust, and in full compliance with the latest regulations in regard to health and safety, and fuel management legislation, regulations and recommendations, both in relation to installation (APEA Blue Book) and management (PELG Red Guide)
2. Controlled dispensing and re-filling (circulation) of the system through data tags and through connection of the new equipment to the existing BMS, such that management of the system can be carried out remotely through the Internet (allow for supply and installation of the infrastructure; final connection to be arranged by the Kew appointed BMS Contractor.
3. Ensure that the current drainage interceptor tanks are adequate for the new arrangement, if not to increase / modify the tanks to the required standard.
4. Modify the existing forecourt drainage system to be in full compliance with current regulations applicable.
5. Replacement of the existing electrical installation associated with the dispensing system

 Additional duties under this appointment will be the application for-, and arrangement of all required approvals, inspections and licenses, as well as the associated communication with relevant authorities in relation to replacement and putting in use of the facilities after completion of the replacement works.

 The scope of the project includes the forecourt area and associated drainage as the existing arrangement may not be in compliance with current regulations.

The new installation and surrounding areas must be in full compliance with regulations including but not limited to:

1. The Petroleum Consolidation Regulations 2014

 <http://www.legislation.gov.uk/uksi/2014/1637/contents/made>

1. DSEAR 2002 <http://www.legislation.gov.uk/uksi/2002/2776/contents/made>
2. All current HSE guidance with regard to fuel storage and dispensing as relevant to installation
3. Appropriate area classification
4. Guidance for the design, construction, modification and maintenance of petrol filling stations (Blue Book), 1999, ISBN 0 85293 217 0: Association for Petroleum and Explosives Administration/Institute of Petroleum, latest editionBuilding and Planning regulations
5. Groundwater protection code for petrol stations and other fuel dispensing facilities involving underground storage tanks, 2001: Department for Environment, Food and Rural Affairs (DEFRA), [www.defra.gov.uk/environment/consult/ground-petrol.index.htm](http://www.defra.gov.uk/environment/consult/ground-petrol.index.htm)
6. PPG27: Installation, decommissioning and removal of underground storage tanks
7. PPG7 : Fuelling stations construction and operation
8. PPG8: Safe storage and disposal of used oils
9. Guidance document on risk assessment for the water environment at operational fuel storage and dispensing facilities, 1999, ISBN 0 85293 256 1: Institute of Petroleum
10. Policy and practice for the protection of groundwater, 1998, ISBN 011 3101457: Environment Agency, The Stationery Office
11. TI/134 Installing oil supply pipes underground: Oil Firing Technical Association for the Petroleum Industry (OFTEC), Tel: 01737 373311
12. A Guide to the Special Waste Regulations 1996: Environment Agency

The new installation must be equipped with a remotely accessible fuel management system (in and out), and a class 1 leak detection system (tanks and associated pipework).

In signing the Form of Tender the Contractor confirms that this programme can be met based on the information provided in all sections of the ITT to this project, and his visit to site prior to submitting his tender

**2.0 INFORMATION TO BE PROVIDED BY RBG KEW**

As indicated in Appendix 3A and Works Information W08.02

**3.0 SERVICES REQUIRED**

The appointed Contractor will be required to provide a complete and comprehensive design for the proposed new installation as outlined in and in consideration of all sections of the Contract

The successful Contractor must provide an electronic copy of the Guidance for the design, construction, modification and maintenance of petrol filling stations (Blue Book), 1999, ISBN 0 85293 217 0: Association for Petroleum and Explosives Administration/Institute of Petroleum, latest edition, as part of this contract. The copy must be forwarded via e-mail immediately after receipt of written instruction to commence with the contract

The successful Contractor will be requested, as part of the design process, to provide a report regarding options and alternatives, associated advantages and disadvantages of the various options, and the impact they have on use and maintenance, as well as the financial implications of each option, both directly, as well as for the period the anticipated technical life of the design and its vital components.

The Employer will review the report within a week from receipt and give the contractor direction as to which options, if any, will be included as part of the project

 The Contractor will require written approval from the Employer indicating the preferred proposal at the end of stage C3 below, prior to commencing the next stage.

Once approved the Contractor can commence with stages C4 to C7. At the end of stage C7 there will be a brief review between the employer and the Contractor of the status quo (design, programme, costs) of the project. Subject to consensus, the employer will authorize commencement of the works on site.

 The following services / stages are deemed to be included:

 C1 appraisal

 ~~C2 strategic briefing~~ (not used)

 C3 outline proposals and options

 C4 detailed proposals

 C5 final proposals and

 C6 production information

 C7 procurement activities

 C8 construction, completion

 C9 general duties

 C10 additional services as relevant to the project

 and include the following specifically:

 - Application for a new Storage Certificate for use at completion of the new installation

 - Attend all meetings as required for this project both with the client organisation as well as with

 relevant authorities