# Section 1 Specification

**Contract Ref: NLS161104**

**Title: Refurbishment of Laboratory Air Handling System - NLS Nottingham Laboratory**

1. **Background**

The Environment Agency site at Meadow Lane Nottingham, houses a modern well equipped analytical laboratory specialising in the chemical analysis of environmental samples.

The laboratory includes dedicated local exhaust ventilation systems which allow our analysis to be performed safely, protecting the health and wellbeing of our scientists.

To enable these extraction systems to work effectively the building is equipped with an air handling system which was designed to provide conditioned make up air to replace that lost as part of the exhaust ventilation.

The existing air handling system does not function effectively and provides more air than is required. The gas fired air heating unit included in the system is ineffective and inefficient compared to modern heater units and requires replacement.

The Environment Agency is seeking a competent supplier to upgrade the existing system and bring it back into operational condition whilst improving its efficiency and effectiveness.

1. Scope of Works

The supplier will be expected to undertake all activities detailed in the specification below including the provision of all materials and equipment.

In outline the works will include;

* Removal and disposal of the existing air handling system and associated and heater
* Providing replacement windows as required
* Us an existing small window in the stairwell to act as the feed air grill
* Using the existing concrete plinth to house a new air handling unit with a modern gas fired heater

You will be expected to provide the following services as part of the works

All craneage of plant and equipment into position, and access equipment as required.

Project management during the works to ensure agreed timescale for completion are met.

On completion to provide all ‘as fitted’ information and operation and maintenance manuals.

1. Specification of Works
   1. Removal and remodelling of existing Air Handler

The supplier will be expected to carry out the following works to the existing air handling unit

* Removal of existing steel cladding and dismantling of the steel structure
* Remove all plant/equipment inside structure
* Demolition down to upper side of ground floor plinth
* Removal of all waste materials and disposal in line with relevant legislation and regulations
* Provision of welfare facilities required under current legislation
* Provision of ‘Heras’ type temporary fencing to form an exclusion zone around the demolition area during the demolition phase of the works
* Undertake Local Authority Notification (Demolition work requires a minimum 28 day notice to the Local Authority under the 1984 Building Control Act, Section 80).
* Provision of fully trained CSCS/CCDO and CPCS workforce
* Site to be left clean and tidy site upon completion
  1. Installation and Building Works

The following installation and building works will be required;

Provision, installation and commissioning of a new air handling unit capable of providing fresh air input at a rate of 5400m3 per hour. Provide a gas fired heater rated at 54kw of heating capacity which will allow for input at 28 centigrade when the external air temperature is -6 centigrade.

Installation of a new UPVC white window glazed with Pilkington opti-white toughened, fully reinforced. Size 2,000mm x 3,400mm.

To provide all new ductwork services as required to connect to the new fresh air discharge grille within the new opening. Fresh air ductwork to have thermal insulation. New ductwork to be installed in galvanised steel ductwork to DW144 standard.

To provide mechanical services controls and associated outlying controls of the heating system and air handling unit.

To modify the existing mains power supplies as required to suit the new AHU. All works to be based on the existing electrical installation being in line with current 17th edition electrical IEE wiring regulations.

On completion fully test and provide NICEIC certification.

Create an opening to the outside of the building to allow for the passage of the new fresh air input ductwork.

Make good and decorate internal walls surrounding the new window and new fresh air input duct.

Fully commission the new installation on completion of works and after installation of the power supplies.

Provide user instructions to the site representative(s) at the same time.

1. Health and Safety

The successful suppler must provide a full and comprehensive method statement and risk assessment for all aspects of the works, including any works carried out by any sub-contractor used by the supplier. These must be provided prior to the works commencement.

Compliance with CDM regulation and the responsibilities of Principal Contractor must be included in your proposal.

The successful supplier will be accredited to BS EN ISO 9001 2008 No A 12161 & BS EN 1090-1+A1

1. Other Information

All works must be completed and invoiced before March 10th 2017.

Full and free access to the areas to be worked will be available during normal working hours (08:30-16:30 Monday – Friday) and during Saturdays if required.

Full use of on-site welfare facilities will be available to the Contractor

Power will be made available for any lighting or handtools used.