

Scope of Works



Title: Co-Generation Technical Design

Project Ref: EM037 – Co Generation

Date: 08/12/16

Author: Iain Paterson

Owner: David Shadwell

Client: The Pirbright Institute

Version No: 1

1 Scope of Works History

1.1 Document Location

N:\Capability Projects\Private\Operational Projects\EM037 – Co Generation\Technical Design\ Scope of works

1.2 Revision History

Version	Date	Details	Author
1	08/01/16	First Issue	IMP

Changes from previous version are highlighted **yellow**.

1.3 Approvals

This document requires the following approvals.

Name	Title	Signature	Issue Date	Version
David Shadwell	Senior site operations manager and deputy head of estates			

1.4 Issue History

In addition to the approvers, this document has been issued to:

Name	Purpose	Date of Issue	Version
Potential suppliers of design works.	For quotation.		1

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3 Introduction

3.1 Document Purpose

The primary purpose of this version of the document is to give enough information to allow potential suppliers to submit a quotation for the works.

This version of the document is intended to fulfil the client brief aspects of construction design management (CDM) regulations 2015.

For comparison only, this version of the document could be aligned with Royal Institute of British Architecture (RIBA) Plan of work 2014 Stage 1 (Preparation and Brief).

As the project progresses, this document will be updated to contain more detailed information on the proposed design and delivery.

Should changes to the scope occur, it will be re-issued to potential suppliers for re-quoting purposes.

This document details the envisaged requirements of the works but should not be seen as restrictive. All parties should advise if:

- Appropriate alternatives are available.
- Additional requirements are needed.
- Items or works are not required.

3.2 Summary Description of works

The Pirbright Institute (TPI) conducted energy assessments as part of its 2015 Energy Saving Opportunity Scheme (ESOS) compliance.

One opportunity identified that has potential for significant operation savings was for a Combined Heat & Power (CHP) plant.

Funding has been approved to contract a designer to take the project from feasibility study to technical design and costings to allow the business case for the installation of a CHP plant to be written.

The works are summarised as follows:

- Review and comment on feasibility study.
- Develop technical design (to RIBA stage 4).
- Regular attendance of project meetings at TPI.
- Any site survey works.
- Any engineering works required for the design process.
- Develop budgetary costings for installation of technical design, including principal designer role during any future installation works.

Note: the feasibility of the project in terms of technical complexity and payback should be regularly reviewed at appropriate points during the works (e.g. at the RIBA stage 2 - Concept Design and Stage 3 - Developed Design milestones). If at any stage the project becomes unfeasible it will be closed.

4 General requirements

This section describes the general requirements for delivering these works at The Pirbright Institute.

4.1 Site Host

The site host for this project is:

- Iain Paterson
- iain.paterson@pirbright.ac.uk
- 01483231469

For the purposes of TPI processes, the site host is also the Project Leader(Sponsor), Project Manager and CDM Client Representative.

The host's normal working hours are 0800h – 1630h Monday - Thursday.

4.2 Location of works

These works will take place at the following addresses:

The Pirbright Institute
Ash road,
Pirbright,
Woking,
GU24 0NF

4.3 Bio-Safety Inductions

All personnel performing works within restricted areas **only** are required to attend a Bio-Safety induction. This is then valid for 12 months. Inductions take approximately half an hour and can be arranged to take place on the 1st day of a supplier's works if appropriate notice is given.

These works do not require access to the restricted areas of site.

4.4 Site Rules for Contractors

The site rules for contractors are included in Appendix C and should be read by all contractors before coming to site.

A summary of these rules will be given to new contractors by security personnel at the gate house on their arrival.

Highlights and additional requirements are included in the following sections.

4.5 Contractor Capability

Relevant training records of all contractors, site managers and designers performing works associated with this scope should be provided to the site contact before works commence.

4.6 Supplier Capability

If appropriate, the suppliers of significant items may require a capability assessment by TPI personnel before works commence.

This may include:

- Visit to existing installation.
- Visit to proposed site of manufacture.

- Provision of quality control system details.
- Provision of insurance levels.

4.7 Health & Safety Requirements

All works should be performed in line with site Health & Safety (H&S) rules and the health and safety at work act 1974.

The following sections along with the contractor rules attached in appendix C give further relevant details for performing works at The Pirbright Institute.

4.8 RAMS

Any works on the site must be preceded by a risk assessment and method statement (RAMS). These must be submitted to the site contact at least 5 days in advance of the 1st day of works.

RAMS must not be generic or attempt to cover the scope of works as a whole, but should be task specific and include the relevant dates of the works.

The risk assessment should feature a conventional scoring system with explanation.

The method statement should be of a step by step nature.

Further details are included in the contractor's site rules included in appendix C.

4.9 PPE

Contractors should supply and ensure they use their own personal protective equipment (PPE). PPE used should be suitable for the works and should be detailed in the RAMS.

4.10 Tools & Equipment

Contractors are expected to provide all tools and equipment for both performing works and making the works safe unless specifically agreed with the client.

4.11 Lifting Equipment

Test certification for all lifting equipment should be issued to the client representative before works commence.

For Hi-Ab and crane lifting, a lift plan must be provided in addition to the RAMS 5 days in advance of the 1st day of the works.

4.12 Scaffolding and access equipment

Contractors are expected to arrange any scaffolding required to facilitate works, a preferred supplier of the institute can be used if required, arrange with engineer overseeing works as required.

Contractors are expected to provide their own temporary access equipment such as mobile platforms.

All scaffolding and access equipment should not be used without in date inspection tagging/certificates.

4.13 Asbestos

Access to the sites asbestos register is available upon request.

Note: Asbestos has not been identified in the area of the works.

4.14 Control Transfer Documents & Permits

On the 1st day of any contractor works, the contractors must report to the engineering office to be given permission to work in the form of a “control transfer document” (CTD), this gives visibility of contractor works occurring to site personnel.

This will be completed with your host and signed by the host, the lead contractor and the contractor manager.

In addition to the CTD, permits will be issued by the site contact for the following work types:

- Hot works (includes power cutting tools such as drills, saws and grinders as well as welding etc.).
- Working at height.
- Isolations.
- Excavations.
- Confined Space.

4.15 Construction Site Tool Box Talks

On the 1st day of any construction works, the contractor will be given a tool box talk by either the site host or the principal contractor for the project. This will highlight the context of the works and any known hazards associated with the works.

4.16 Isolations & LOTO

All electrical & mechanical Isolations will be performed under permit by PIR engineering staff and should be verified by the contractor performing the work.

These isolations should then be secured with padlocks on a lock off tag off (LOTO) basis.

4.17 Site Access / Security Clearance

All personnel must have a visitor forms raised for them by their site host before arrival on site so gatehouse personnel are aware of their expected arrival. Therefore full names and dates of all personnel attending site must be provided at least 24h in advance.

All contractors will require photo ID to gain access to the site.

There are various classifications of site areas that effect the level of restrictions to contractor access. These are summarised below:

- Restricted areas:
 - Restricted areas refer to those within the “bio-containment” barriers and systems.
 - All contractors must be fully escorted by a member of Pirbright personnel within restricted areas.
- Non-restricted areas:
 - Non-restricted areas refers to all areas that are not “restricted areas”
 - Security cleared contractors can freely access non-restricted areas on the understanding that they will follow all site rules.
 - Contractors that are not security cleared may access non-restricted areas only if escorted by a member of Pirbright personnel or a security cleared contractor.

NOTE: None of the works in this scope are within restricted areas.

Contractors must report to the gatehouse and present photo ID when entering and exiting site on every day the works.

All contractors must report to the engineering office to receive a CTD by their site host on the 1st day of their works.

All contractors must attend a construction site specific tool box talk on the 1st day of their works..

4.18 Contractor Working hours

Normal working hours for contractors will be able to access site from 0700h – 1900h.

Works outside of these hours should be agreed with the site host.

4.19 Welfare facilities

Contractors will have access to existing site to welfare facilities during the works.

To assist completion of the works on time, at least one member of each contractor team should complete an institute security check (performed by Agenda). This could take up to 2 weeks to complete. In order to do this the contractor should supply the names and contact details of personnel to be security checked to the client representative (an e-mail address specific to the individual is required).

The site canteen is located within The Plowright Building, in order to access this each contractor will be required to read additional SOPs and complete an online test (in addition to any site induction and security checks). If this is required then please forward an e-mail address for each contractor to the site host.

4.20 Quarantine requirements

During the quarantine period locations (such as farms, zoos and safari parks) potentially housing vulnerable species (such as cattle, pigs, sheep, goats and deer) cannot be visited.

Further details of the quarantine rules will be given during the induction.

The quarantine requirements associated with this scope of works are as follows:

Personnel, tools and equipment that enter the PM Incin incinerator hall or ISO compound plant rooms will be subject to a 3 day quarantine period.

4.21 Vehicle movements

Vehicle movements on site are to be via on site roadways only. The site speed limit of 10 mph must be observed at all times and extra caution should be taken by drivers due to site pedestrians, bicycles and vehicles being present.

Vehicle access to the site is through the main entrance at the north boundary of the site.

4.22 Vehicle wash-downs

There are no wash-down requirements for these works.

4.23 Design Responsibility

Final design responsibility will always be with the principal designer or contracted project manager (where CDM does not apply or does not require a principal designer and/or principal contractor).

Detailed design for all mechanical, civil, electrical and controls works should be performed. This includes calculations such as loadings, stress and thermal expansion analysis if required. Where deemed unnecessary by the designer, statements to this effect will be required.

All relevant drawings and calculations should be issued to the client representative for review before construction works commence.

As built drawings should be issued before the project can be deemed complete.

4.24 Standards and Specifications

All equipment should be manufactured, installed, tested and commissioned in accordance with all applicable national and international standards. These should be listed for the institute in relevant documentation.

Also, the installation works should be fully compliant with the following Pirbright standards:

- No standards at this time.

See Appendix C for standards.

4.25 Supports and steelwork

Contractor works includes supply and install any necessary supports and steelwork associated with the works.

4.26 Snagging surveys

On completion of the any installation works, the works must be visually inspected by an appropriate member of the institute engineering team and signed off as complete if acceptable. Any snags identified shall be listed on a project snagging schedule by the site contact and reviewed with the principal contractor before the works are deemed complete.

4.27 Inspection, Testing and Commissioning

Any records relating to the inspection, testing and commissioning of an installation should be provided to the client representative as part of the commissioning process.

4.28 Required documentation

The following documentation should be provided before any mechanical, electrical and commissioning works commence:

- Drawings.
- Data sheets.
- RAMS.
- Relevant training Records of all contractors.
- Relevant safety certificates for equipment being used to perform the works.
- Programme of works detailing specific activities and timescales.

The following documentation should be provided following the completion of installation and commissioning works:

- As installed drawings.
- Relevant calculations or statements to confirm that they are not required.
- Inspection, testing and commissioning documentation including any certificates.
- Critical spares list.
- Details of planned preventative maintenance requirements of installed equipment.

4.29 Waste

Disposal of the existing abatement equipment needs to be discussed with the site host. Waste transfer notes will be required before this waste is removed from site.

Waste generated by the installation works should be cleared and removed from site for appropriate disposal by the contractors performing the works.

4.30 Emergency Procedures

In the event of an emergency such as a fire or medical emergency, the site gatehouse should be contacted on the emergency extension number 1000 or on radio channel 1.

In the event of a fire or fire alarm, the area should be evacuated and all personnel should go to the fire assembly point for the area they are working in. These are shown in appendix D.

If safe to do so, fire alarm call points should be activated on the way out of the area.

5 Particular Requirements

This section provides details of the envisaged work elements to be included in the scope of works and supporting information.

This is not restrictive or fully detailed and the contractor should provide additional detail where required and suggest alternatives if appropriate.

5.1 Work Element 1 – Feasibility and Concept design

Inclusions:

- Review of feasibility study.
- Site surveys and data analysis.
- Site works required to support design process.
- Development of concept design options including drawings, budgetary capital costs, operational cost analysis and delivery programme.
- Regular project meetings at TPI.
- Review of project feasibility and selection of concept design to take to next stage.

5.2 Work Element 2 – Developed Design and Technical Design.

Inclusions:

- Development of preferred concept design option to full technical design including drawings, budgetary capital costs, operational cost analysis and delivery programme.
- Site surveys and data analysis.
- Site works required to support design process.
- Development of concept design options.
- Regular project meetings at TPI.
- Final review of project feasibility.

5.3 Drawings

Relevant drawings to accompany the work element descriptions are included in Appendix A.

These drawings are intended to help clarify the scope only, and are not in any way design drawings.

5.4 Free Issue Equipment

None.

5.5 Site Set up and Mobilisation

The following site works are required to facilitate works outlined above:

None.

5.6 Works Performed by Others

The following works will be performed by institute personnel:

None.

6 Management Arrangements

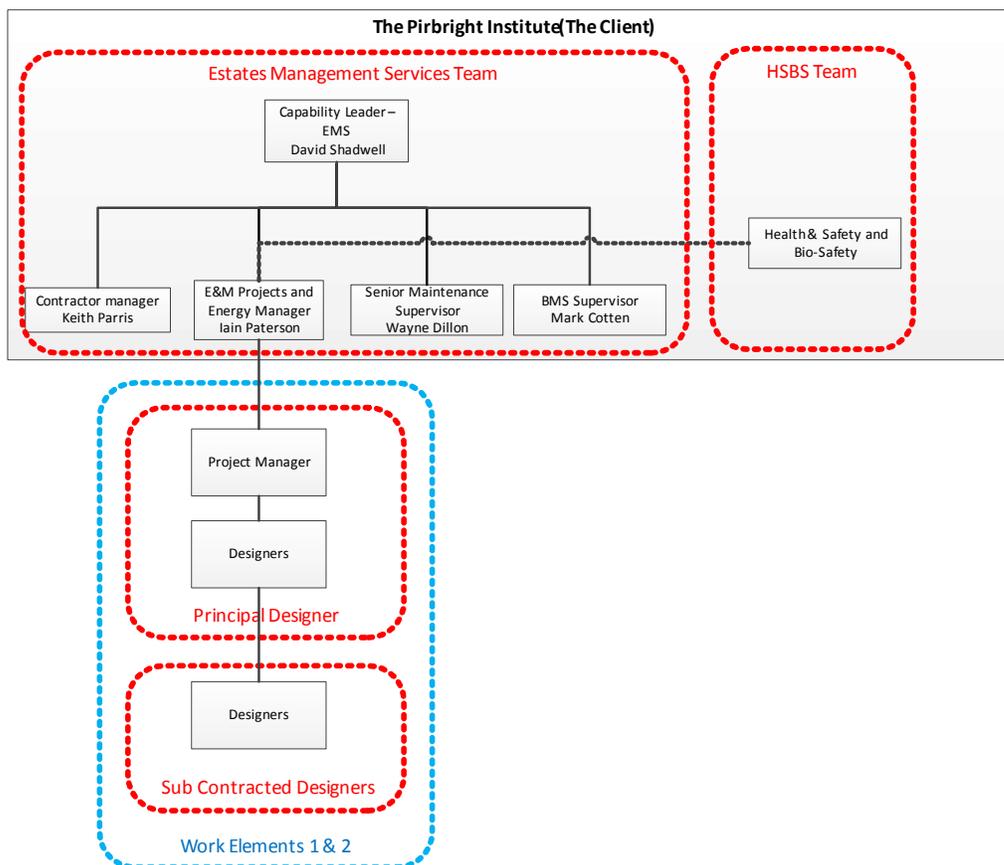
6.1 Project Co-Ordination

The following activities will take place to ensure project co-ordination:

- Regular project management meetings, primarily between the site host and the principal contractors/designers. These will take place as required but should be no more than 3 weeks apart once works have begun.
- Regular updates from the site host to the Pirbright engineering management team. These will take place as and when required, but at least every 3 weeks once the site works have begun.

6.2 Project organogram

The envisaged project organogram is shown below:



6.3 Project Risk Register

A project risk assessment will be created and maintained by the site host, with input from all parties.

The risk register should include design, project delivery (technical & commercial), H&S, operational risks associated with the project. and details of mitigation measures taken.

This should be regularly reviewed and updated at project meetings through all stages of the project and should be included in the H&S file at the end of the project.

6.4 Responsibilities

The responsibilities of each party for these works are as follows:

The Pirbright Institute site host:

- Write and update scope of works (includes client brief and pre-construction information).
- Create and maintain a project risk register.
- Raise orders.
- Co-ordinate the contractor and institute personnel to facilitate works.
- Appointment of CDM roles.
- Managing project documentation and budget.
- Facilitate site access.
- Reviewing and agreeing design before works commence.
- Arrangement of project meetings.
- Responding to contractor queries.
- Issue of permits and arrangement of isolations.
- Arrange Institute engineering works required to facilitate works.
- Ensuring works are performed in a safe manner.
- Client representative for CDM responsibilities.
- Co-ordinating snagging surveys as required.
- Produce the Project Information File for handover to engineering management team.
- Arranging training where appropriate.

Pirbright Project Team members:

- Provide information as required.
- Comment on designer and contractor information as required.
- Facilitate works as required.
- Ensuring works are performed in a safe manner.
- Highlight H&S and design risks for inclusion on the project risk register.
- Completing snagging surveys as required.
- Process commercial aspects of project.

Principal contractor, principal designer and project manager for contractor/designer works:

- Full design responsibility.

- Full responsibility for any installation works under their control.
- Management of all contractors performing works.
- Ensuring works are performed in a safe manner.
- Highlight H&S and design risks for inclusion on the project risk register.
- Supplying all required documentation and information to the institute.
- Ensuring the scope of works is met in full.
- Fulfilling CDM responsibilities.
- Providing Training where appropriate.

6.5 Project Timescale

This project is to be fully completed by the end of March 2017.

6.6 Documentation storage

All project documentation will be stored by the site host in the following location on the Pirbright server:
N:\Capability Projects\Private\Operational Projects\EM037 – Co Generation\Technical Design\ Scope of works

7 CDM requirements

This section outlines the CDM specific requirements of each party.

7.1 Application of CDM Regulations

Each project work package or element will have CDM applied as detailed below:

Work Element 1 & 2:

If multiple design contractors are to be utilised then a principal designer will be appointed.

There are no construction works associated with these work elements therefore there is no requirement for a principal contractor or HSE notification.

7.2 Client Brief

This scope document forms the client brief.

7.3 Duty Holders

Client

The client is The Pirbright Institute; represented by the site host and as such will:

- Appoint the principal contractor and principal designer in writing.
- Take reasonable steps to satisfy themselves that appointees have H&S skills, knowledge and experience.
- Complete HSE notification if required and display the notification at a location all contractors can see it.
- Update HSE notification if required.
- Provide Pre-Construction information as required.
- Ensure a construction phase plan is drawn up before works commence and ensure it is updated throughout the project.
- Ensure a health and safety file is drawn up before works commence and ensure it is updated throughout the project.
- Take reasonable steps to ensure the principal contractor and designer are fulfilling their responsibilities.

Principal Designer

Appointed principal designers will:

- Manage all sub-designers.
- Produce a health and safety file and update it throughout the project.
- Provide pre-construction information as required.

Principal Contractor

Appointed principal contractors will:

- Manage all sub-contractors.

- Produce a construction phase plan and update it throughout the project.
- Provide pre-construction information as required.

7.4 Pre-Construction Information

This document forms the pre-construction information.

NOTE: this section is not applicable to this scope of works.

7.5 Management Arrangements

Section 6 outlines the management arrangements for the project.

7.6 Construction Phase Plan

The construction phase plan should be issued by the principal contractor and agreed by the client representative before works begin.

The document should cover the following items as a minimum:

- The health and safety aims for the project:
- The site rules:
- Arrangements to ensure co-operation between project team members:
- Co-ordination of their work, such as regular site meetings:
- Arrangements for involving workers
- Site induction.
- Welfare facilities.
- Emergency procedures, such as fire and first aid.
- The control of any of the specific site risks relevant to the works.

This document and the project risk register will contain details required by the construction phase plan; these should be re-iterated in the construction phase plan.

7.7 Health and Safety File

The health and safety file should be issued to the client representative by the principal designer as a standalone document. The works are not deemed complete until the client representative has acknowledged that it has been received and its content is appropriate.

It should include the following information:

- Brief Description of the works being carried out.
- Project Risk Assessment.
- Key structural principals.
- Hazardous materials used.
- Information on the future removal of installed plant.
- H&S information about equipment provided for cleaning or maintaining installed plant.
- The nature, location and markings of significant services.
- Information and as built drawings of buildings, plant and equipment.

Appendix A – Drawings

Reference	Title	Version

Appendix B – Project Documents

Reference	Title	Version

Appendix C – Pirbright Documents

Reference	Title	Version
E&M-GUIDE-052	Pirbright Institute Contractor Site Rules	2-B
PI/PSP/001/FAP/FH/TP2	Fire assembly points.	T

Appendix C – Pirbright Documents

Introduction and Definitions

Introductory Statement

The Pirbright Institute has a statutory and moral duty to ensure, so far as is reasonably practicable, the health and safety at work of all its staff and to ensure that activities undertaken by the Institute and those it employs, do not endanger others.

The Pirbright Institute's Estates and Facilities Department recognises these duties and also that specific arrangements will have to be made from time to time to cater for special risks, either of a permanent or temporary nature. In view of the many and varied activities carried out by Contractors on the Institute premises, these site rules have been introduced to ensure the safety of the staff, students, Contractors and any other visitors on site.

The Pirbright Institute will as far as is as reasonably practicable ensure that all Contractors engaged to carry out work are competent and will encourage good safety practices. The Institute will plan, co-ordinate, control and monitor the activities of Contractors to minimise the risks presented to staff, students, Contractors, and other persons on site.

All Contractors are required to observe the procedures laid down in these site rules and to ensure that their supervisors and employees on site are familiar with its contents. In addition, Contractors are required to sign a declaration to say they have read the document and agree to abide by this requirement and return it to the Estates and Facilities Department (or their Contractor Host) before any work commences.

Purpose of the Site Rules

These rules have been prepared to assist Contractors and their employees to work safely and to prevent accidents and injuries to them and to Pirbright Institute staff, students and visitors to site. It also aims at assisting Contractors in complying with the Health and Safety at Work Act 1974 and any subsidiary regulations and other statutory provisions.

All Contractors working on Institute premises must conform to the provisions of these site rules. The site rules do not in any way relieve the Contractors of their legal or contractual obligations. All Contractors and their employees should be conversant with the Safety and Biosecurity Rules of the Department or Area in which they are working and the Contractor's senior on-site representative is responsible for ensuring that this is so.

In any case of doubt regarding the application of the site rules, or in any way circumstances affecting safe working not covered by the site rules, advice should be sought from the Contractor's Contractor Host, from whom additional copies of the site rules may be obtained and clarification given.

Definitions and Abbreviations

'Institute' The Pirbright Institute, Pirbright Laboratory, Ash Road, Pirbright & The Pirbright Institute Compton Laboratory, Compton.

The 'Contractor Host' is any nominated person within the Pirbright Institute acting on its behalf, who has arranged for the Contractor(s) to attend site to carry out activities; is responsible for the coordination of their activities whilst on site.

The 'Contractor' where used in this document, should be taken to include the Contractor's employees and those of any engaged sub-contractor.

'Normal working hours – Monday to Thursday, 8.30am – 5.00pm Friday 8.30am – 4.30pm

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Approved by: Paul Embleton
(See Q Pulse record for full Approval List)

Appointment and Insurance

Appointment of Contractors

The Contractor **must** inform the Pirbright Institute of the intention to use sub-contracted staff prior to work being undertaken.

The Contractor **must** ensure any sub-contracted staff comply with the requirements set out in this document and all other Institute Policies and SOPs that are relevant to the work being undertaken.

It is the Contractor's responsibility to ensure that any individual employed to work on their behalf fully understands and adheres to the standards set out in this document. The Contractor must ensure that any such individuals are aware of the nature and scope of the work and that they are competent to undertake such work.

Institute Policies and Procedures

The Institute has a number of policies and procedures that must be adhered to when working on Institute premises, the following is not an exhaustive list of procedures which may apply:

- BSEC-REG-02: Pirbright Institute Biorisk Overview.
- BSEC-REG-04: Access Control at the Pirbright Institute Laboratory
- BSEC-Reg-06: Procedure for the transfer of equipment, tools and effects into and out of the Restricted Area with special Reference to visiting Equipment Engineers.
- BSEC-Reg-10: Quarantine rules following entry to the Pirbright site.

The Contractor must ensure any sub-contracted staff comply with the requirements set out in these documents and any other Institute Policies and SOPs that are relevant to the work being undertaken, if you are unsure as to which may apply speak to your Contractor Host.

Insurance Requirements

It is the policy of the Pirbright Institute to maintain a high standard of health and safety in all of its undertakings; Part of these procedures we require all Contractors carrying out work on our premises to comply with both statutory requirements and the Code of Practice contained herein.

The Pirbright Institute insist that Contractors working on any of our premises must have the following insurance in place as a minimum requirement:

- Employers Liability (minimum limit of £5 million is required by law)
- Public/Products Liability (with a minimum limit of £5 million)
- Contractors All Risks Insurance (where applicable)

Copies of insurance certificates are required by the Estates and Facilities Department Office before Contractors are allowed to work on site.

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Approved by: Paul Embleton
(See Q Pulse record for full Approval List)

Planning and Risk Management

Planning

The scope of work to be undertaken by the Contractor should be clearly defined. Should there be any doubt as to the scope of work clarification should be sought from your Contractor Host prior to starting work.

The Contractor is required to conduct & provide relevant risk assessments and method statements for all jobs to be undertaken, these to be submitted to their Contractor Host at least 5 working days prior to commencement of the job. A Safe System of Work is also required for activities which present a significant hazard and a more detailed assessment is required. It is the Contractor's responsibility to ensure that a Safe System of Work is followed at all times.

If the Contractor considers, at any stage, that any work is necessary out of normal working hours then sufficient notice of this must be provided to their Contractor Host for agreement of the arrangements.

The following activities need authorisation, which may be in the form of a formal permit to work, issued to the Contractor from their Contractor Host:-

- Work at height;
- Entry into any confined space;
- Hot work i.e. work involving the potential of fire e.g. welding, cutting, grinding etc;
- The Erection and striking of scaffolds of scaffolds, fixed or Mobile;
- Work involving any excavation or creation of opening; A proven and suitable method of scanning the ground for services must be undertaken prior to digging taking place and excavations must be shored if the ground is considered unstable. The excavation must be risk assessed on a continuous basis.
- Work involving the use of highly flammable liquids or gases or the use of gas cylinders;

- Work involving the use of any toxic or carcinogenic substance, any biological agent or larger volumes of any substance hazardous to health or where there is significant risk to health;
- Live electrical work;
- Work involving the removal of any safeguarding system from any machine or work equipment;
- Work involving or likely to involve the disturbance of asbestos;
- Work likely to involve high noise levels;
- Work involving mechanical lifting equipment or
- Work in any laboratory or laboratory area
- Work in any restricted area
- Work on any bio-containment system

No live working on electrical system permitted, the exception to this will be fault finding by those who have received suitable training and are qualified to do this. No single person working on live system.

If the Contractor is in any doubt as to whether any of the above are applicable this must be discussed with their Contractor Host.

Risk Management

The Contractor must ensure there are effective arrangements for safeguarding staff, students, sub-contractors, suppliers and visitors. This will include carrying out a suitable and sufficient risk assessment and if significant, a copy given to the Contractor Host.

A sub-contractor must not sub-contract anything out without informing the original Contractor.

Dust

The Contractor must take all reasonable precautions to limit and contain dust when working inside buildings.

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(See Q Pulse record for full Approval List)

Asbestos

The Pirbright Institute has taken a number of steps to ensure that Contractors will not encounter asbestos this includes:

The labelling of Asbestos Containing Materials in certain areas.

An Asbestos Register available in electronic and hard copy format.

A signing procedure indicating the Asbestos register has been checked.

However the possibility may arise where Contractors unexpectedly encounter material they suspect to be asbestos: they should stop work immediately and inform their Contractor Host for further guidance before work can continue.

Prior to any construction work being undertaken and if the building is on the Asbestos register then a pre-construction survey will be undertaken.



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Statutory Duties & Services

Statutory Duties

All Contractors must carry out their works in accordance with the appropriate legislation.

The following is not an exhaustive list of the legislation which may apply:

- Health and Safety at Work Act 1974
- Electricity at Work Regulations 1989 (and IEE Code of Practice)
- Workplace, (Health, Safety and Welfare) Regulations 1992
- Provision and Use of Work Equipment Regulations 1998
- Lifting Operations and Lifting Equipment Regulations 1998
- Control of Substances Hazardous to Health Regulations 2002 (COSHH)
- Working at Height Regulations 2005
- Control of Asbestos Regulations 2012
- Management of Health and Safety at Work regulation 1999 (amended 2006)

Services

Services such as electrical systems, compressed air systems, water, drainage, industrial gasses, air or ventilation systems, air conditioning, BMS, fire alarm, air pressure alarm systems, access control systems must not be interrupted without the prior permission of the Contractor Host.

All work must be carried out to a programme agreed by the Estates and Facilities Department trained and authorised personnel.

Appropriate Regulations and Codes of Practice (especially for gas and electricity) must be followed.

Use of live Institute services shall be allowed by the Contractor only by prior written agreement from their Contractor Host.



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Tools & Equipment

Tools and Equipment

All tools and equipment necessary for the contract will be provided by the Contractor. No Institute plant, equipment, or apparatus shall be borrowed by the Contractor unless there is written approval from their Contractor Host.

The Contractor's tools and equipment must be in good condition and appropriate for the job.

It shall be the Contractor's responsibility to ensure that all personnel who use any tools or equipment are adequately trained and competent.

The Contractor's tools and equipment must be kept secure at all times and not loaned to any Institute employees or students.

The Institute accepts no responsibility for the safe keeping of or the loan or damage to, any tools or equipment of the Contractor.

Ladders and other Access Equipment

All such work must comply with standards laid down in the Working at Height Regulations 2005 and any current HSE Guidance Notes. Unsecured ladders should only be used for inspection purposes and footed at all times.

All gangways and working platforms must be properly protected.

The Contractor should ensure that their ladders and stepladders are regularly inspected, properly secured / footed when in use and be Industrial Class 1 (Heavy Duty Type).



Electrical Equipment and Working

Use of live Institute services shall be allowed by the Contractor only by prior written agreement from their Contractor Host

All electrical work to be undertaken by the Contractor will be carried out by qualified Electricians in accordance with the IEE and Statutory Regulations.

It is a requirement that portable electrical hand tools to be used by the Contractor shall be rated at 110 volts or below, and supplied from a transformer which will have a centre tap to earth.



All electrical cables and equipment must be in good condition, and must be inspected regularly by the Contractor to ensure that defective or damaged equipment is repaired or replaced.

The Contractor should ensure that cables are protected from accidental damage, especially when they extend beyond the immediate work site, and must not present a hazard to pedestrians or vehicles.

The Contractor should ensure that all lights are switched off whenever the area is vacated unless health and safety is compromised.

Any other electrical equipment that is used by the Contractor must be switched off if possible whenever the area is vacated.

Electrical equipment brought to site for use must be supported by the relevant certification.

Test certification shall be provided for all electrical installations.

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PPE & Site Housekeeping

Personal Protective Equipment (PPE)

The Contractor is responsible for providing its own employees with personal protective equipment (PPE) as may be required for the work in hand, for example, eye protection, head protection, respirators and breathing apparatus, etc.



The Contractor must also ensure that if a type of PPE is described as a control measure in any risk assessment that the person/s undertaking the work wear the PPE at all times.

The Institute will provide any specialist equipment that may be required when working in specific areas, for example, lab coats, disposable gloves when working in a laboratory area.



All Contractors will be required to wear high visibility jackets whilst working on Institute sites or suitable high visibility equipment for the working location.



Site Housekeeping

If any goods are to be delivered to the Institute for the Contractor's use, then prior warning must be given to the Contractor's Contractor Host. Goods should state the Institute contract order number, the Contractor's name and their Contractor Host.

It is the Contractors sole responsibility to ensure that materials and equipment are safely, securely, and neatly stored while on site. In no cases must they block gangways, roadways or exits.

All equipment and materials used at the Institute must conform to the relevant British Standard and be installed according to the manufacturer's instructions.

Breakages of glass e.g. windows or light bulbs/fluorescent tubes must be reported promptly to their Contractor Host.

Building work: Prior to commencement of any work which generates building dust, and or liquid waste, an assessment must be carried out by the Contractor, their Contractor Host and area user representative or member of the Health and Safety Department, to determine the potential contamination risk and suitable working practices agreed with the Contractor in writing.

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Site Housekeeping, Waste & Pollution Prevention

Waste and Pollution Prevention

No harmful or polluting substances may be discharged into the drains or unsurfaced ground. In the event that contamination does occur, the Contractor's Contractor Host and the Institute Environmental Advisor must be informed immediately.



Where a project or activity presents a risk of pollution, the Contractor must show that risk has been mitigated via a risk assessment. If liquids for example paints, oils or petrol are being used spill kits must be provided and a means of safe disposal identified.

Plant such as generators or pumps which are fuel driven must be bunded or have a built in bund system.

Disposal of waste is the responsibility of the Contractor. The Contractor is not permitted to use any Institute bins or skips for the disposal of waste associated with the project or activity, unless written authorisation is received from the Contractor's Contractor Host.

If working in containment then the waste generated must be clearly segregated and bagged accordingly, the Institute will arrange the necessary treatment of this waste once the work is completed or during the works if the project is extensive.

It is the Contractor's responsibility, under the Environmental Protection Act 1990, to ensure that your waste is:

- handed to a licensed waste carrier;
- accompanied by a waste transfer note
- disposed of at a licensed or exempt recycling/transfer facility or landfill.

Where a project or activity produces Hazardous Waste as defined by the Hazardous Waste Regulations, 2005 it is the responsibility of the Contractor to dispose of the waste. The Contractor will identify the appropriate SIC code as producer and request the Institute premise code from the Environmental Advisor prior to disposal. A hazardous waste consignment note must be completed when handing waste to a carrier. Copies of all waste handling paperwork to be given to TPI host on completion for audit records.

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Facilities, Hygiene and Conduct

Site Facilities

Welfare facilities may be available for Contractor use. The Contractor Host will inform the Contractor of their location. These facilities must be respected at all times; no dirty clothing to be worn at any time! Further to this, the facilities must be left in a clean condition after use.

Temporary or portable buildings for use by the Contractor will only be allowed by prior written agreement with their Contractor Host. Mains services will not normally be provided.

The Contractor must at all times comply with Institute notices and statutory signage.

Personal Hygiene

The Contractor must follow Institute procedures with regards to hygiene; in particular when working in laboratory areas, hands must be washed prior to leaving the area.

Smoking is not permitted on the Institute Premises except in specially designated areas.

Food and drink must never be taken into work areas, and must only be consumed in the canteen area or site welfare cabins.



No alcoholic drinks are to be consumed or brought onto the Institute premises.

Conduct

The Contractor must ensure that their employees behave in a courteous manner when working on Institute premises. Bad language, unnecessarily raised voices and language or behaviour that could be offensive on the grounds of age, physical appearance, gender, sexuality, disability, ethnicity or religion are all forbidden.

Care should be taken to ensure that access routes, **for example dropped kerb, needed for disabled access and egress are not blocked by vehicles, skips, plant or materials.**

Radios or other media devices are not permitted on site.



Examples of unacceptable conduct are:

- verbal abuse, or insulting behaviour
- sexist jokes, racist jokes, jokes about an individual's sexual orientation or jokes about disability
- unwanted physical contact ranging from touching to serious assault
- display or circulation of sexually suggestive or racially abusive material
- bullying, coercive or menacing behaviour
- ridicule or exclusion of an individual for cultural or religious differences
- obscene slogans on T-shirts

Any Contractor who causes offence by his/her actions or creates an unsafe situation may be prohibited from the Institute estate and may be required to leave immediately when instructed by the Contractor Host or a member of the Estates and Facilities Department.

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Incidents, Accidents & Vehicles on Site

Incidents and Accidents

The Contractor must ensure all accidents, however minor, are reported to their Contractor Host immediately. Further to this if the accident is serious it must be reported to the Institute Security staff located at the Security Gatehouse at each site; either by radio, telephoning 1000 from an Institute telephone or 01483 231200 from a mobile phone, if on the Pirbright Laboratory Site; or if on the Compton Laboratory Site either by radio, telephoning 2600 from an Institute telephone or 01635 579375 from a mobile phone; as per the Institute Emergency procedures.

This report does not, however, remove the Contractor's legal obligations to report relevant accidents or incidents to the Enforcing Authorities, as required by the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR) 2013

First Aid boxes are available in a number of locations for emergency use. A number of personnel with a current First Aid certificate have access to the First Aid Boxes - their names are displayed in prominent locations.

However, where work is carried out on a site, it is the Contractor's responsibility to provide First Aid boxes and where applicable suitably trained personnel as identified by the Contractor's First Aid Assessment.

Vehicles on Site

Driving of any vehicles by the Contractor on Institute premises shall be undertaken with due care and attention and within the speed limits as indicated, following all direction signs. The Contractor shall be considerate to other road users, and particular care should be taken with regards to pedestrians on site who should be given priority at all times and in particular at marked crossing points.

Vehicles belonging to the Contractor shall be parked in the designated parking bays, exceptions shall be for loading/unloading and arranged with your Contractor Host. No vehicle shall be left unattended whilst unloading/loading.

The Contractor must ensure that fire exits are kept clear at all times!

When reversing, the Contractor must ensure all large goods vehicles and plant are watched by and under the control of a banksman.

It is not permitted to use a mobile phone whilst driving a vehicle on Institute premises.

Any incidents involving damage by the Contractor to property or causing injury no matter how minor must be reported to the Institute Security Staff and their Contractor Host as soon as practicable after the event.

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Fire and Fire Alarm System

Fire and Fire Alarm System

The Contractor must make themselves fully aware of and adhere to, the fire and evacuation procedures in operation within the Institute.

It is the Contractor's responsibility to satisfy themselves that their work creates no fire or explosion risk.

Fire doors and smoke stop doors may only be propped or wedged open by the Contractor for the immediate passage of plant and materials and with personnel in attendance to close if necessary. Under no circumstances are fire doors to be permanently wedged open.

Where it is intended to carry out any work on any exit route, the Contractor must inform their Contractor Host in advance, and gain approval before commencement.

Where Contractor's work requires breaking fire separation, particularly in occupied buildings, this must be kept to a minimum and the breach made good as soon as is practical. Where permanent reinstatement is not practical in the short term, temporary means must be used such as the use of intumescent pillows, temporary fire screening, etc.

Heat detectors, smoke detectors and portable extinguishers are installed in most areas throughout the site.

Prior to the start of any works, the Contractor shall liaise with their Contractor Host and the Estates and Facilities Department, Health and Safety/Risk Supervisor to ensure that the works do not affect the system functionality or in any way reduce the effectiveness of the system. Any alteration or amendments to the fire alarm system shall be recorded in the Institute fire logbook. Any additions to the fire alarm system are to be provided on the Contractor's Operating and Maintenance Manuals.

The Contractor carrying out work in these areas must be agreed in advance with their Contractor Host. An isolation permit must be issued if the fire alarm is to be isolated for any reason. The permit must be closed at the end of the working day or alternative means put in place for adequate building protection

Any cable/equipment damage or false alarms caused by the Contractor's failure to comply with this requirement shall result in the Institute seeking costs for such damages or business disruption as it deems appropriate.

Where there is a dust explosion risk, any work by the Contractor to be carried out in these areas must be agreed in advance with their Contractor Host.

Procedure in the Event of Fire

Raise the alarm immediately in the event of a fire, by hitting the nearest fire alarm call point or calling the emergency number.

On hearing the fire alarm the Contractor must stop work immediately and follow the fire evacuation procedure leaving the building by the nearest safe exit route and then proceed to the closest fire assembly point. Once at the fire assembly you must wait for further instructions from a member of The Pirbright Institute's staff.

The Contractor must close all doors behind themselves and Must Not use lifts.

The Contractor is not to return to work or re-enter any building until instructed it is safe to do so by the Fire Warden in attendance.

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Security and Access

Security

The Institute runs an 'Approved Contractor' scheme whereby all Contractors working on the Institute premises must undergo a security screening prior to gaining authorised access to the Institute; all individuals must consent to, and subsequently complete the screening process to work at the Institute.

In addition to the screening process mentioned above all individuals must successfully complete an induction/training programme to gain access to Restricted Areas or areas subject to quarantine restrictions.

The Contractor must provide photographic identification to gain access to the Pirbright Institute site; this will be checked at the security gatehouse upon arrival at site; all individuals that are not an 'Approved Contractor' will be issued with a temporary visitor pass, this pass and any 'Approved Contractor' pass must be worn visibly at all times whilst on site.

All Contractors must at all times sign in at the Contractor Office once they have been granted access through the gatehouse, and also sign out prior to leaving site.

The Institute reserves the right to search any vehicle, person or property entering, leaving or present on Institute premises, the Contractor will be deemed to have consented to this requirement prior to arrival at The Pirbright Institute.

No photographs can be taken of any part of the site, or any equipment on the site, without written permission from the Head of Security.

Contractors are not authorised to be in any other part of site apart from that area they have been authorised to work in.

Upon any reasonable request, the Contractor must comply with any instruction given by the Institute Security Department.

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Acceptance Form

This form must be completed and signed by every Contractor prior to undertaking any construction, maintenance or other similar works on The Pirbright Institute estate.

The completed form should be sent to:

The Pirbright Institute
Estates and Facilities Department
Ash Road
Woking Surrey
GU24 0NF

I/we have received a copy of the Institute's Site Rules for Contractors undertaking work on the Institute estate.

I/we have read and understood the Rules referred to above and briefed our employees of the requirements and contents.

I/we agree to comply with all current legislation governing construction works and associated activities and the specific rules and procedures detailed in the Institute's Site Rules.

I/we understand that any contravention/breach of relevant health and safety legislation and the specific rules and procedures detailed in the Institute's Site Rules may lead to termination of the contract and removal from the Institute's approved list of Contractors.

Signed:

.....

Designation:

.....

On behalf of:

.....

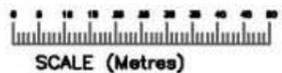
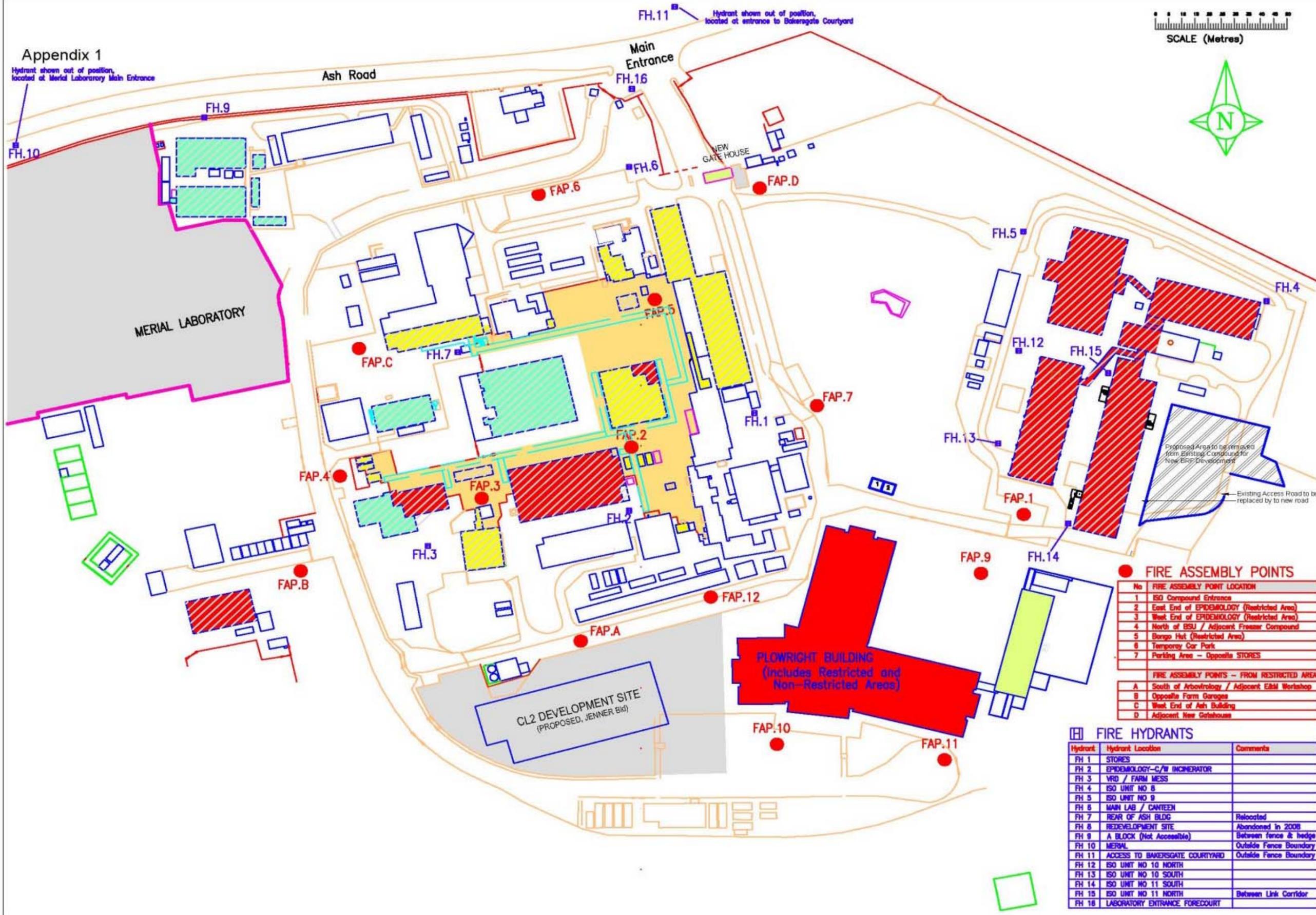
Dated:

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Appendix 1

Hydrant shown out of position, located at Meril Laboratory Main Entrance



NOTES
 1. THIS PLAN IS FOR INFORMATION ONLY. IT IS NOT TO BE USED AS A BASIS FOR DESIGN OR CONSTRUCTION.
 2. THE LOCATION OF FIRE ASSEMBLY POINTS IS SUBJECT TO CHANGE. THE LOCATION OF FIRE ASSEMBLY POINTS IS SUBJECT TO CHANGE. THE LOCATION OF FIRE ASSEMBLY POINTS IS SUBJECT TO CHANGE.

- RESTRICTED AREAS**
- RESTRICTED AREA (EXTERNAL)
 - RESTRICTED BUILDINGS
 - RESTRICTED AREAS (OTHER INTERNAL)
 - EXTERNAL LABORATORY BUILDINGS
 - BUILDINGS ADDED (NOTIONAL POSITIONS)

FIRE ASSEMBLY POINTS

No	FIRE ASSEMBLY POINT LOCATION
1	ISO Compound Entrance
2	East End of EPIDEMIOLOGY (Restricted Area)
3	West End of EPIDEMIOLOGY (Restricted Area)
4	North of BSU / Adjacent Freezer Compound
5	Bongo Hut (Restricted Area)
6	Temporary Car Park
7	Parking Area - Opposite STORES

FIRE ASSEMBLY POINTS - FROM RESTRICTED AREA

A	South of Arbovirology / Adjacent EAM Workshop
B	Opposite Farm Garages
C	West End of Ash Building
D	Adjacent New Gatehouse

FIRE HYDRANTS

Hydrant	Hydrant Location	Comments
FH 1	STORES	
FH 2	EPIDEMIOLOGY-C/W INCINERATOR	
FH 3	VRD / FARM MESS	
FH 4	ISO UNIT NO 8	
FH 5	ISO UNIT NO 9	
FH 6	MAIN LAB / CANTEEN	
FH 7	REAR OF ASH BLDG	Relocated
FH 8	REDEVELOPMENT SITE	Abandoned in 2008
FH 9	A BLOCK (Not Accessible)	Between fence & hedge
FH 10	MERIL	Outside Fence Boundary
FH 11	ACCESS TO BAKERSGATE COURTYARD	Outside Fence Boundary
FH 12	ISO UNIT NO 10 NORTH	
FH 13	ISO UNIT NO 10 SOUTH	
FH 14	ISO UNIT NO 11 SOUTH	
FH 15	ISO UNIT NO 11 NORTH	Between Link Corridor
FH 16	LABORATORY ENTRANCE FORECOURT	

No	Description	Initials	Date
1	Issue of P.F.P. Plan		
2	Issue of P.F.P. Plan		
3	Issue of P.F.P. Plan		
4	Issue of P.F.P. Plan		
5	Issue of P.F.P. Plan		
6	Issue of P.F.P. Plan		
7	Issue of P.F.P. Plan		
8	Issue of P.F.P. Plan		
9	Issue of P.F.P. Plan		
10	Issue of P.F.P. Plan		
11	Issue of P.F.P. Plan		
12	Issue of P.F.P. Plan		
13	Issue of P.F.P. Plan		
14	Issue of P.F.P. Plan		
15	Issue of P.F.P. Plan		
16	Issue of P.F.P. Plan		
17	Issue of P.F.P. Plan		
18	Issue of P.F.P. Plan		
19	Issue of P.F.P. Plan		
20	Issue of P.F.P. Plan		

THE Pirbright INSTITUTE

Director:
 PROFESSOR JOHN FAZAKERLEY
 BSc, MSc, PhD, FRS, FRCPath

Site:
 THE PIRBRIGHT INSTITUTE

Drawing title:
 PIRBRIGHT SITE PLAN
 FIRE ASSEMBLY POINTS
 & FIRE HYDRANTS

Date:
 18/03/2008

Scale:
 Not to Scale

Drawing no:
 PI/PSP/001/FAP/FH/TP2