

# Client Contract Data and Z Clauses to NEC4 Engineering and Construction Contract January 2023 for Chilton E Block Air Handling Unit Replacement Works

## PART ONE – DATA PROVIDED BY THE CLIENT

Completion of the data in full, according to the Options chosen, is essential to create a complete contract.

### 1 General

The *conditions of contract* are the core clauses and the clauses for the following main Option, the Option for resolving and avoiding disputes and secondary Options of the NEC4 Engineering and Construction Contract June x2017 (with amendments January 2023)

Main Option

A

Option for resolving and avoiding disputes

W2

Secondary Options

X2, X4, X5, X7, X9, X11, X16, X18 and X21

The works are

The design to RIBA4, supply, installation (including associated building works) and commissioning of a replacement air handling unit at RCE Chilton E Block, as more particularly described in scope and site information.

The Client is

Name

UK Health Security Agency

Address for communications

5<sup>th</sup> floor, 10 South Colonnade, London,  
E14 4PU

Address for electronic communications

██████████@ukhsa.gov.uk

The Project Manager is

Name

██████████

Address for communications

UKHSA Chilton, Didcot, OX11 0RQ

Address for electronic communications

██████████@ukhsa.gov.uk

The Supervisor is

Name

The Project Manager

Address for communications

As above

Address for electronic communications

As above

The Scope is in

Final-BTU-C374691-ChiltonEAHUWorks-  
AppBScope-v1.0

The Site Information is in

Final-BTU-C374691-ChiltonEAHUWorks-  
AppCWorksInf-v1.0Final-BTU-C374691-ChiltonEAHUWorks-  
AppDPreConInf-v1.0The *boundaries of the site* are

As per Site Information

The *language of the contract* is

English

The law of the contract is the law of

England and Wales

The *period for reply* is

4 weeks

except that

• The *period for reply* for

is

• The *period for reply* for

is

The following matters will be included in the Early Warning Register

All of those matters stated within document Final-BTU-C374691-ChiltonEAHUWorks-  
AppFRiskReg-v1.0

Early warning meetings are to be held at intervals no longer than

one month

## 2 The Contractor's main responsibilities

If the *Client* has identified work which is set to meet a stated *condition* by a *key date*

The *key dates* and *conditions* to be met are

condition to be met

key date

(1) Design Refresh

22<sup>nd</sup> August 2025

(2) Design Period

20<sup>th</sup> October 2025

(3) Construction Period

15<sup>th</sup> June 2026

If Option C, D, E or F is used

The *Contractor* prepares forecasts of the total Defined Cost for the whole of the *works* at intervals no longer than

Not Used

### 3 Time

The *starting date* is

August 2025

The *access dates* are

part of the Site

date

(1)

RCE Chilton E Block

Within one week of the  
starting date

(2)

(3)

The *Contractor* submits revised programmes at intervals  
no longer than

One month

If the *Client* has decided  
the *completion date* for  
the whole of the *works*

The *completion date* for the whole of the *works* is

TBC

Taking over the *works*  
before the Completion  
Date

The *Client* **is not** willing to take over the *works* before  
the Completion Date (Delete as applicable)

If no programme is  
identified in part two of the  
Contract Data

The period after the Contract Date within which the  
*Contractor* is to submit a first programme for acceptance  
is

N/A

### 4 Quality management

The period after the Contract Date within which the  
*Contractor* is to submit a quality policy statement and  
quality plan is

One month

The period between Completion of the whole of the  
*works* and the *defects date* is

Twelve months

The *defect correction period* is

Three weeks

except that

for

• The *defect correction period*

is

for

• The *defect correction period*

is

### 5 Payment

The *currency of the contract* is the

Pound Sterling (£)

The *assessment interval* is

Monthly

The *interest rate* is

2%

% per annum (not less than 2) above the

Base

rate of the

Bank of England

bank

If the period in which payments are made is not three weeks and Y(UK)2 is not used

The period within which payments are made is

The end of a calendar month

## 6 Compensation events

The place where weather is to be recorded is

Reading University, Whiteknights

The *weather measurements* to be recorded for each calendar month are

- the cumulative rainfall (mm)
- the number of days with rainfall more than 5 mm
- the number of days with minimum air temperature less than 0 degrees Celsius
- the number of days with snow lying at 12:00 hours GMT

and these measurements:

N/A

The *weather measurements* are supplied by

MET Office, Building Consultancy Group, Johnson House, London Road, Bracknell, Berkshire, RG12 2SY

The *weather data* are the records of past *weather measurements* for each calendar month which were recorded at

Reading University, Whiteknights

and which are available from

MET Office

Where no recorded data are available

Assumed values for the ten-year weather return *weather data* for each *weather measurement* for each calendar month are

N/A

If Option A or B is used

The *value engineering percentage* is 50%, unless another percentage is stated here, in which case it is

%

If there are additional compensation events

These are additional compensation events

N/A



## 8 Liabilities and insurance

If there are additional  
*Client's* liabilities

These are additional *Client's* liabilities

- (1)
- (2)
- (3)

The minimum amount of cover for insurance against loss of or damage to property (except the *works*, Plant and Materials and Equipment) and liability for bodily injury to or death of a person (not an employee of the *Contractor*) arising from or in connection with the *Contractor* Providing the Works for any one event is

£

The minimum amount of cover for insurance against death of or bodily injury to employees of the *Contractor* arising out of and in the course of their employment in connection with the contract for any one event is

£

If the *Client* is to provide Plant and Materials

The insurance against loss of or damage to the *works*, Plant and Materials is to include cover for Plant and Materials provided by the *Client* for an amount of

If the *Client* is to provide any of the insurances stated in the Insurance Table

The *Client* provides these insurances from the Insurance Table

- (1) Insurance against

If additional insurances are to be provided

The *Client* provides these additional insurances

- (1) Insurance against

The *Contractor* provides these additional insurances

- (1) Insurance against

Minimum amount of cover is

The deductibles are

- (2) Insurance against

Minimum amount of cover is

The deductibles are

- (3) Insurance against

Minimum amount of cover is

The deductibles are

Resolving and avoiding disputes

	The <i>tribunal</i> is	Arbitration
If the <i>tribunal</i> is arbitration	The <i>arbitration procedure</i> is	The London Court of International Arbitration Rules
	The place where arbitration is to be held is	London
	The person or organisation who will choose an arbitrator if the Parties cannot agree a choice or if the <i>arbitration procedure</i> does not state who selects an arbitrator is	
	The Royal Institute of Chartered Surveyors	
If Option W1 or W2 is used	The <i>Senior Representatives</i> of the <i>Client</i> are	
	Name (1)	[REDACTED]
	Address for communications	UK Health Security Agency 10 South Colonnade London E14 4PU
	Address for electronic communications	[REDACTED]@ukhsa.gov.uk
	Name (2)	[REDACTED]
	Address for communications	UK Health Security Agency 10 South Colonnade London E14 4PU
	Address for electronic communications	[REDACTED]@ukhsa.gov.uk
	The <i>Adjudicator</i> is	
	The Adjudicator is the person agreed by the Parties from the list of Adjudicators published by the Chartered Institute of Arbitrators of nominated by the Adjudicator nominating body	
	Address for communications	TBC
	Address for electronic communications	TBC
	The <i>Adjudicator nominating body</i> is	
	Royal Institute of Chartered Surveyors	

**X1: Price adjustment for inflation (used only with Options A, B, C and D)**

If Option X1 is used                      Not Used

**X3: Multiple currencies (used only with Options A and B)**

If Option X3 is used                      Not Used

**X5: Sectional Completion**

If Option X5 is used                      Not Used

**X6: Bonus for early Completion**

If Option X6 is used                      Not Used

**X7: Delay damages**

If Option X7 is used                      Delay damages for Completion of the whole of the works are  per day  
without Option X5

**X8: Undertakings to the Client or Others**

If Option X8 is used                      Not Used

**X10: Information modelling**

If Option X10 is used                      Not Used

**X12: Multiparty collaboration (not used with Option X20)**

If Option X12 is used                      Not Used

**X13: Performance bond**

If Option X13 is used                      Not Used

**X14: Advanced payment to the Contractor**

If Option X14 is used                      Not Used

X15: The Contractor’s design

If Option X15 is used                      Not Used

X16: Retention (not used with Option F)

If Option X16 is used                      The retention free amount is      Not Used

The retention percentage is      %

Retention bond                      The Contractor **may not** give the Client a retention bond. (Delete as applicable)

X17: Low performance damages

If Option X17                      Not Used

18: Limitation of liability

If Option X18 is used                      The Contractor’s liability to the Client for indirect or consequential loss is limited to      of contract value

For any one event, the Contractor’s liability to the Client for loss of or damage to the Client’s property is limited to      of contract value

The Contractor’s liability for Defects due to its design which are not listed on the Defects Certificate is limited to      of contract value

The Contractor’s total liability to the Client for all matters arising under or in connection with the contract, other than excluded matters, is limited to      Pounds  
£

The end of liability date is      10      years after the Completion of the whole of the works

X20: Key Performance Indicators (not used with Option X12)

If Option X20 is used                      Not Used

X22: Early Contractor involvement (only used with Options C and E)

If Option X23 is used                      Not Used



X29: Climate change

If Option X29 is used                      Not Used

Y(UK)1: Project Bank Account

If Option Y(UK)1 is used                      Not Used

Y(UK)2: The Housing Grants, Construction and Regeneration Act 1996

If Option Y(UK)2 is used and the final date for payment is not fourteen days after the date on which payment becomes due                      The period for payment is                      

30

 days after the date on which payment becomes due

Y(UK)3: The Contracts (Rights of Third Parties) Act 1999

If Option Y(UK)3 is used                      Not Used

Z: Additional conditions of contract

If Option Z is used                      The additional conditions of contract are

Z1, Z2, Z3, Z4, Z5, Z6, Z7, Z8, Z9, Z10, Z11, Z12, Z13 and Z14

## Option Z1 – Identified and defined terms

Insert new clause 11.3 additional defined terms.

11.3 (1) **Client Confidential Information** is all Personal Data and any information, however it is conveyed, that relates to the business, affairs, developments, trade secrets, know-how, personnel, and contractors of the *Client*, including all IPRs, together with all information derived from any of the above, and any other information clearly designated as being confidential (whether or not it is marked "confidential") or which ought reasonably be considered to be confidential.

11.3 (2) **Client Data** is the data, text, drawings, diagrams, images or sounds (together with any database made up of any of these) which are embodied in any electronic, magnetic, optical or tangible media, and

- which are supplied to the *Contractor* by or on behalf of the *Client*,
- which the *Contractor* is required to generate, process, store or transmit pursuant to this contract or
- which are any Personal Data for which the *Client* is the Data Controller to the extent that such Personal Data is held or processed by the Contractor.

11.3 (3) **Commercially Sensitive Information** is the information agreed between the Parties (if any) comprising the information of a commercially sensitive nature relating to the *Contractor*, the charges for the works, its IPR or its business or which the *Contractor* has indicated to the *Client* that, if disclosed by the *Client*, would cause the *Contractor* significant commercial disadvantage or material financial loss.

11.3 (4) **Confidential Information** is the Client's Confidential Information and/or the Contractor's Confidential Information.

11.3 (5) **Contracting Body** is any Contracting Body as defined in Regulation 5(2) of the Public Contracts (Works, Service and Supply) (Amendment) Regulations 2000 other than the Client.

11.3 (6) **Contractor's Confidential Information** is any information, however it is conveyed, that relates to the business, affairs, developments, trade secrets, know-how, personnel and contractors of the *Contractor*, including IPRs, together with all information derived from the above, and any other information clearly designated as being confidential (whether or not it is marked as "confidential") or which ought reasonably to be considered to be confidential, including the Commercially Sensitive Information.

11.3 (7) **Crown Body** is any department, office or agency of the Crown.

11.3 (8) **Data Controller** has the meaning given to it in the Data Protection Act 2018.

11.3 (9) **DOTAS** is the Disclosure of Tax avoidance Schemes rules which require a promoter of tax schemes to tell HM Revenue & Customs of any specified notable arrangements or proposals and to provide prescribed information on those arrangements or proposals within set time limits as contained in Part 7 of the Finance Act 2004 and in secondary legislation made under vires contained in Part 7 of the Finance Act 2004 and as extended to National Insurance Contributions by the National Insurance Contributions (Application of Part 7 of the Finance Act 2004) Regulations 2012, SI 2012/1868 made under s.132A Social Security Administration Act 1992.

11.3 (10) **Environmental Information Regulations** is the Environmental Information Regulations 2004, and any guidance and/or codes of practice issued by the Information Commissioner in relation to such regulations.

11.3 (11) **FOIA** is the Freedom of Information Act 2000, and any subordinate legislation made under this Act from time to time together with any guidance and/or codes of practice issued by the Information Commissioner in relation to such legislation.

11.3 (12) **General Anti-Abuse Rule** is

- the legislation in Part 5 of the Finance Act 2013 and
- any future legislation introduced into parliament to counteract tax advantages arising from abusive arrangements and to avoid national insurance contributions.

11.3 (13) **Halifax Abuse Principle** is the principle explained in the CJEU Case C-255/02 Halifax and others.

11.3 (14) **Intellectual Property Rights** or "**IPRs**" is

- copyright, rights related to or affording protection similar to copyright, rights in databases, patents and rights in inventions, semi-conductor topography rights, trademarks, rights in internet domain names and website addresses and other rights in trade names, designs, Know-How, trade secrets and other rights in Confidential Information,
- applications for registration, and the right to apply for registration, for any of the rights listed in the first bullet point that are capable of being registered in any country or jurisdiction,
- all other rights having equivalent or similar effect in any country or jurisdiction and
- all or any goodwill relating or attached thereto.

11.3 (15) **Law** is any law, statute, subordinate legislation within the meaning of section 21(1) of the Interpretation Act 1978, byelaw, enforceable right within the meaning of section 2 of the European Communities Act 1972, regulation, order, mandatory guidance or code of practice, judgment of a relevant court of law, or directives or requirements of any regulatory body with which the *Contractor* is bound to comply under the *law of the contract*.

11.3 (16) **An Occasion of Tax Non-Compliance** is

- where any tax return of the *Contractor* submitted to a Relevant Tax Authority on or after 1 October 2012 is found on or after 1 April 2013 to be incorrect as a result of
- a Relevant Tax Authority successfully challenging the *Contractor* under the General Anti-Abuse Rule or the Halifax Abuse Principle or under any tax rules or legislation that have an effect equivalent or similar to the General Anti-Abuse Rule or the Halifax Abuse Principle or
- the failure of an avoidance scheme which the *Contractor* was involved in, and which was, or should have been, notified to a Relevant Tax Authority under DOTAS or any equivalent or similar regime and

where any tax return of the *Contractor* submitted to a Relevant Tax Authority on or after 1 October 2012 gives rise, on or after 1 April 2013, to a criminal conviction in any jurisdiction for tax related offences which is not spent at the Contract Date or to a civil penalty for fraud or evasion.

11.3 (17) **Personal Data** has the meaning given to it in the Data Protection Act 2018.

11.3 (18) **Prohibited Act** is

- to directly or indirectly offer, promise or give any person working for or engaged by the *Client* or other Contracting Body or any other public body a financial or other advantage to
- induce that person to perform improperly a relevant function or activity or
- reward that person for improper performance of a relevant function or activity,
- to directly or indirectly request, agree to receive or accept any financial or other advantage as an inducement or a reward for improper performance of a relevant function or activity in connection with this contract,
- committing any offence
- under the Bribery Act 2010 (or any legislation repealed or revoked by such Act),
- under legislation or common law concerning fraudulent acts or
- defrauding, attempting to defraud or conspiring to defraud the *Client* or
- any activity, practice or conduct which would constitute one of the offences listed above if such activity, practice or conduct had been carried out in the UK.

11.3 (19) **Request for Information** is a request for information or an apparent request under the Code of Practice on Access to government Information, FOIA or the Environmental Information Regulations.

11.3 (20) **Relevant Requirements** are all applicable Laws relating to bribery, corruption and fraud, including the Bribery Act 2010 and any guidance issued by the Secretary of State for Justice pursuant to section 9 of the Bribery Act 2010.

11.3 (21) **Relevant Tax Authority** is HM Revenue & Customs, or, if applicable, a tax authority in the jurisdiction in which the *Contractor* is established.

11.3 (22) **Security Policy** means the *Client's* security policy attached as Appendix 1 to Contract Schedule J (Security Provisions) as may be updated from time to time.

#### **Option Z2 – Admittance to site**

Insert new clause 19A:

19A.1 The *Contractor* submits to the *Project Manager* details of people who are to be employed by it and its Subcontractors in Providing the Works. The details include a list of names and addresses, the capabilities in which they are employed, and other information required by the *Project Manager*.

19A.2 The *Project Manager* may instruct the *Contractor* to take measures to prevent unauthorised persons being admitted to the Site.

19A.3 Employees of the *Contractor* and its Subcontractors are to carry a *Client's* pass and comply with all conduct requirements from the *Client* whilst they are on the parts of the Site identified in the Scope.

19A.4 The *Contractor* submits to the *Project Manager* for acceptance a list of the names of the people for whom passes are required. On acceptance, the *Project Manager* issues the passes to the *Contractor*. Each pass is returned to the *Project Manager* when the person no longer requires access to that part of the Site or after the *Project Manager* has given notice that the person is not to be admitted to the Site.



19A.5 The *Contractor* does not take photographs of the Site or of work carried out in connection with the *works* unless it has obtained the acceptance of the *Project Manager*.

19A.6 The *Contractor* takes the measures needed to prevent its and its Subcontractors' people taking, publishing or otherwise circulating such photographs.

### **Option Z3 – Prevention of fraud and bribery**

Insert new clauses:

18.4.1 The *Contractor* represents and warrants that neither it, nor to the best of its knowledge any of its people, have at any time prior to the Contract Date

- committed a Prohibited Act or been formally notified that it is subject to an investigation or prosecution which relates to an alleged Prohibited Act or
- been listed by any government department or agency as being debarred, suspended, proposed for suspension or debarment, or otherwise ineligible for participation in government procurement programmes or contracts on the grounds of a Prohibited Act.

18.4.2 During the carrying out of the *works* the *Contractor* does not

- commit a Prohibited Act and
- do or suffer anything to be done which would cause the *Client* or any of the *Client's* employees, consultants, contractors, sub-contractors or agents to contravene any of the Relevant Requirements or otherwise incur any liability in relation to the Relevant Requirements.

18.4.3 In Providing the Works the *Contractor*

- establishes, maintains and enforces, and requires that its Subcontractors establish, maintain and enforce, policies and procedures which are adequate to ensure compliance with the Relevant Requirements and prevent the occurrence of a Prohibited Act,
- keeps appropriate records of its compliance with this contract and make such records available to the *Client* on request and
- provides and maintains and where appropriate enforces an anti-bribery policy (which shall be disclosed to the *Client* on request) to prevent it and any *Contractor's* people or any person acting on the *Contractor's* behalf from committing a Prohibited Act.

18.4.4 The *Contractor* immediately notifies the *Client* in writing if it becomes aware of any breach of clause 18.4.1, or has reason to believe that it has or any of its people or Subcontractors have

- been subject to an investigation or prosecution which relates to an alleged Prohibited Act,
- been listed by any government department or agency as being debarred, suspended, proposed for suspension or debarment, or otherwise ineligible for participation in government procurement programmes or contracts on the grounds of a Prohibited Act or
- received a request or demand for any undue financial or other advantage of any kind in connection with the performance of this contract or otherwise suspects that any person or party directly or indirectly connected with this contract has committed or attempted to commit a Prohibited Act.

18.4.5 If the *Contractor* makes a notification to the *Client* pursuant to clause 18.4.4, the *Contractor* responds promptly to the *Client's* enquiries, co-operates with any investigation, and allows the *Client* to audit any books, records and/or any other relevant documentation in accordance with this contract.

18.4.6 If the *Contractor* breaches Clause 18.4.3, the *Client* may by notice require the *Contractor* to remove from carrying out the *works* any person whose acts or omissions have caused the *Contractor's* breach.

#### **Option Z4 – Legislation and Official Secrets**

Insert new clauses:

20.5 The *Contractor* complies with Law in the carrying out of the *works*.

20.6 The Official Secrets Acts 1911 to 1989 and, where appropriate, the provisions of section 11 of the Atomic Energy Act 1946 apply to this contract.

20.7 The *Contractor* notifies its employees and its Subcontractors of their duties under these Acts.

#### **Option Z5 – Freedom of information**

Insert new clauses:

29.3 The *Contractor* acknowledges that unless the *Project Manager* has notified the *Contractor* that the *Client* is exempt from the provisions of the FOIA, the *Client* is subject to the requirements of the Code of Practice on Government Information, the FOIA and the Environmental Information Regulations. The *Contractor* cooperates with and assists the *Client* so as to enable the *Client* to comply with its information disclosure obligations.

29.4 The *Contractor*

- transfers to the *Project Manager* all Requests for Information that it receives as soon as practicable and in any event within two working days of receiving a Request for Information,
- provides the *Project Manager* with a copy of all information in its possession, or power in the form that the *Project Manager* requires within five working days (or such other period as the *Project Manager* may specify) of the *Project Manager's* request,
- provides all necessary assistance as reasonably requested by the *Project Manager* to enable the *Client* to respond to the Request for Information within the time for compliance set out in section 10 of the FOIA or regulation 5 of the Environmental Information Regulations and
- procures that its Subcontractors do likewise.

29.5 The *Client* is responsible for determining in its absolute discretion whether any information is exempt from disclosure in accordance with the provisions of the Code of Practice on Government Information, FOIA or the Environmental Information Regulations.

29.6 The *Contractor* does not respond directly to a Request for Information unless authorised to do so by the *Project Manager*.

29.7 The *Contractor* acknowledges that the *Client* may, acting in accordance with the Department of Constitutional Affairs' Code of Practice on the Discharge of the Functions of Public Authorities under Part 1 of the Freedom of information Act 2000, be obliged to disclose information without consulting or obtaining consent from the *Contractor* or despite the *Contractor* having expressed negative views when consulted.

29.8 The *Contractor* ensures that all information is retained for disclosure throughout the *period for retention* and permits the *Project Manager* to inspect such records as and when reasonably requested from time to time.

#### **Option Z6 – Confidentiality and Information Sharing**

Insert a new clause

29.9 Except to the extent set out in this clause or where disclosure is expressly permitted elsewhere in this contract, each Party shall

- treat the other Party's Confidential Information as confidential and safeguard it accordingly,
- not disclose the other Party's Confidential Information to any other person without prior written consent,
- immediately notify the other Party if it suspects unauthorised access, copying, use or disclosure of the Confidential Information and
- notify the Serious Fraud Office where the Party has reasonable grounds to believe that the other Party is involved in activity that may be a criminal offence under the Bribery Act 2010.

29.10 The clause above shall not apply to the extent that

- such disclosure is a requirement of the Law placed upon the party making the disclosure, including any requirements for disclosure under the FOIA or the Environmental Information Regulations pursuant to clause Z5 (Freedom of Information),
- such information was in the possession of the party making the disclosure without obligation of confidentiality prior to its disclosure by the information owner,
- such information was obtained from a third party without obligation of confidentiality,
- such information was already in the public domain at the time of disclosure otherwise than by a breach of this contract or
- it is independently developed without access to the other party's Confidential Information.

29.11 The *Contractor* may only disclose the *Client's* Confidential Information to the people who are directly involved in Providing the Works and who need to know the information, and shall ensure that such people are aware of and shall comply with these obligations as to confidentiality.

The *Contractor* shall not, and shall procure that the *Contractor's* people do not, use any of the Client Confidential Information received otherwise than for the purposes of this contract.

29.12 The *Contractor* may only disclose the Client Confidential Information to *Contractor's* people who need to know the information, and shall ensure that such people are aware of, acknowledge the importance of, and comply with these obligations as to confidentiality. In the event that any default, act or omission of any *Contractor's* people causes or contributes (or could cause or contribute) to the *Contractor* breaching its obligations as to confidentiality under or in connection with this contract, the *Contractor* shall take such action as may be appropriate in the circumstances, including the use of disciplinary procedures in serious cases. To the fullest extent permitted by its own obligations of confidentiality to any *Contractor's* people, the *Contractor* shall provide such evidence to the *Client* as the *Client* may reasonably require (though not so as to risk compromising or prejudicing the case) to demonstrate that the *Contractor* is taking appropriate steps to comply with this

clause, including copies of any written communications to and/or from *Contractor's* people, and any minutes of meetings and any other records which provide an audit trail of any discussions or exchanges with *Contractor's* people in connection with obligations as to confidentiality.

29.13 At the written request of the *Client*, the *Contractor* shall procure that those members of the *Contractor's* people identified in the *Client's* request signs a confidentiality undertaking prior to commencing any work in accordance with this contract.

29.14 Nothing in this contract shall prevent the *Client* from disclosing the *Contractor's* Confidential Information

- to any Crown Body or any other Contracting Bodies. All Crown Bodies or Contracting Bodies receiving such Confidential Information shall be entitled to further disclose the Confidential Information to other Crown Bodies or other Contracting Bodies on the basis that the information is confidential and is not to be disclosed to a third party which is not part of any Crown Body or any Contracting Body,
- to a professional adviser, contractor, consultant, supplier or other person engaged by the *Client* or any Crown Body (including any benchmarking organisation) for any purpose connected with this contract, or any person conducting an Office of Government Commerce Gateway Review,
- for the purpose of the examination and certification of the *Client's* accounts,
- for any examination pursuant to Section 6(1) of the National Audit Act 1983 of the economy, efficiency and effectiveness with which the *Client* has used its resources,
- for the purpose of the exercise of its rights under this contract or
- to a proposed successor body of the *Client* in connection with any assignment, novation or disposal of any of its rights, obligations or liabilities under this contract,

and for the purposes of the foregoing, disclosure of the *Contractor's* Confidential Information shall be on a confidential basis and subject to a confidentiality agreement or arrangement containing terms no less stringent than those placed on the *Client* under this clause 29.14.

29.15 The *Client* shall use all reasonable endeavours to ensure that any government department, Contracting Body, people, third party or subcontractor to whom the *Contractor's* Confidential Information is disclosed pursuant to the above clause is made aware of the *Client's* obligations of confidentiality.

29.16 Nothing in this clause shall prevent either party from using any techniques, ideas or know-how gained during the performance of the contract in the course of its normal business to the extent that this use does not result in a disclosure of the other party's Confidential Information or an infringement of IPR.

29.17 The *Client* may disclose the Confidential Information of the *Contractor*

- to Parliament and Parliamentary Committees or if required by any Parliamentary reporting requirement,
- to the extent that the *Client* (acting reasonably) deems disclosure necessary or appropriate in the course of carrying out its public functions,



### **Option Z7 – Security Requirements**

The *Contractor* complies with, and procures the compliance of the *Contractor's* people, with the Security Policy and the Security Management Plan produced by the *Contractor* and the *Contractor* shall ensure that the Security Management Plan fully complies with the Security Policy and Contract Schedule J.

### **Option Z8 – Tax Compliance**

Insert new clauses:

29.18 The *Contractor* represents and warrants that at the Contract Date, it has notified the *Client* in writing of any Occasions of Tax Non-Compliance or any litigation that it is involved z1

29.19 If, at any point prior to the *defects date*, an Occasion of Tax Non-Compliance occurs, the *Contractor* shall

- notify the *Client* in writing of such fact within 5 days of its occurrence and
- promptly provide to the *Client*
- details of the steps which the *Contractor* is taking to address the Occasions of Tax Non-Compliance and to prevent the same from recurring, together with any mitigating factors that it considers relevant and
- such other information in relation to the Occasion of Tax Non-Compliance as the *Client* may reasonably require.

### **Option Z9 – Fair payment**

Insert a new clause:

57.1 The *Contractor* assesses the amount due to a Subcontractor without taking into account the amount certified by the *Project Manager*.

57.2 The *Contractor* includes in the contract with each Subcontractor

- a period for payment of the amount due to the Subcontractor not greater than 5 days after the final date for payment in this contract. The amount due includes, but is not limited to, payment for work which the Subcontractor has completed from the previous assessment date up to the current assessment date in this contract,
- a provision requiring the Subcontractor to include in each subsubcontract the same requirement (including this requirement to flow down, except that the period for payment is to be not greater than 9 days after the final date for payment in this contract and
- a provision requiring the Subcontractor to assess the amount due to a subsubcontractor without taking into account the amount paid by the *Contractor*.

### **Option Z10 – Intellectual Property Rights**

Delete clause 22 and insert the following clause

In this clause 22 only:

“**Document**” means all designs, drawings, specifications, software, electronic data, photographs, plans, surveys, reports, and all other documents and/or information prepared by or on behalf of the *Contractor* in relation to this contract.

22.1 The Intellectual Property Rights in all Documents prepared by or on behalf of the *Contractor* in relation to this contract and the work executed from them remains the property of the *Contractor*. The *Contractor* hereby grants to the *Client* an irrevocable, royalty free, non-exclusive licence to use and reproduce the Documents for any and all purposes connected with the construction, use, alterations or demolition of the *works*. Such licence entitles the *Client* to grant sub-licences to third parties in the same terms as this licence provided always that the *Contractor* shall not be liable to any licensee for any use of the Documents or the Intellectual Property Rights in the Documents for purposes other than those for which the same were originally prepared by or on behalf of the *Contractor*.

22.2 The *Client* may assign novate or otherwise transfer its rights and obligations under the licence granted pursuant to 22.1 to a Crown Body or to anybody (including any private sector body) which performs or carries on any functions and/or activities that previously had been performed and/or carried on by the *Client*.

22.3 In the event that the *Contractor* does not own the copyright or any Intellectual Property Rights in any Document the *Contractor* uses all reasonable endeavours to procure the right to grant such rights to the *Client* to use any such copyright or Intellectual Property Rights from any third-party owner of the copyright or Intellectual Property Rights. In the event that the *Contractor* is unable to procure the right to grant to the *Client* in accordance with the foregoing the *Contractor* procures that the third party grants a direct licence to the *Client* on industry acceptable terms.

22.4 The *Contractor* waives any moral right to be identified as author of the Documents in accordance with section 77, Copyright Designs and Patents Acts 1988 and any right not to have the Documents subjected to derogatory treatment in accordance with section 8 of that Act as against the *Client* or any licensee or assignee of the *Client*.

22.5 In the event that any act unauthorised by the *Client* infringes a moral right of the *Contractor* in relation to the Documents the *Contractor* undertakes, if the *Client* so requests and at the *Client's* expense, to institute proceedings for infringement of the moral rights.

22.6 The *Contractor* warrants to the *Client* that it has not granted and shall not (unless authorised by the *Client*) grant any rights to any third party to use or otherwise exploit the Documents.

22.7 The *Contractor* supplies copies of the Documents to the *Project Manager* and to the *Client's* other contractors and consultants for no additional fee to the extent necessary to enable them to discharge their respective functions in relation to this contract or related works.

22.8 After the termination or conclusion of the *Contractor's* employment hereunder, the

*Contractor* supplies the *Project Manager* with copies and/or computer discs of such of the Documents as the *Project Manager* may from time-to-time request and the *Client* pays the *Contractor's* reasonable costs for producing such copies or discs.

22.9 In carrying out the *works* the *Contractor* does not infringe any Intellectual Property

Rights of any third party. The *Contractor* indemnifies the *Client* against claims, proceedings, compensation and costs arising from an infringement or alleged infringement of the Intellectual Property Rights of any third party.

#### **Option Z11 – Small and Medium Sized Enterprises (SMEs)**

Insert new clause:

26.5

The *Contractor* is required to take all reasonable steps to engage SMEs as Subcontractors and to seek to ensure that no less than the SME percentage of Subcontractors stated in the Contract Data are SMEs or that a similar proportion of the Defined Cost is undertaken by SMEs.

The *Contractor* is required to report to the *Client* in its regular contract management monthly reporting cycle the numbers of SMEs engaged as Subcontractors and the value of the Defined Cost that has been undertaken by SMEs.

Where available, the *Contractor* is required to tender its Subcontracts using the same online electronic portal as was provided by the *Client* for the purposes of tendering this contract.

The *Contractor* is to ensure that the terms and conditions used to engage Subcontractors are no less favourable than those of this contract. A reason for the *Project Manager* not accepting subcontract documents proposed by the *Contractor* is that they are unduly disadvantageous to the Subcontractor.

### **Option Z12 – Apprenticeships**

Insert new clause:

26.6

The *Contractor* takes all reasonable steps to employ apprentices, and reports to the *Client* the numbers of apprentices employed and the wider skills training provided, during the delivery of the *works*.

The *Contractor* takes all reasonable steps to ensure that no less than a percentage of its people (agreed between the Parties) are on formal apprenticeship programmes or that a similar proportion of hours worked in Providing the Works, (which may include support staff and Subcontractors) are provided by people on formal apprenticeship programmes.

The *Contractor* makes available to its people and Subcontractors working on the contract, information about the Government’s Apprenticeship programme and wider skills opportunities.

The *Contractor* provides any further skills training opportunities that are appropriate for its people engaged in Providing the Works.

The *Contractor* provides a report detailing the following measures in its regular contract management monthly reporting cycle and is prepared to discuss apprenticeships at its regular meetings with the *Project Manager*

- the number of people during the reporting period employed on the contract, including support staff and Subcontractors,
- the number of apprentices and number of new starts on apprenticeships directly initiated through this contract,
- the percentage of all people taking part in an apprenticeship programme,
- if applicable, an explanation from the *Contractor* as to why it is not managing to meet the specified percentage target,
- actions being taken to improve the take up of apprenticeships and
- other training/skills development being undertaken by people in relation to this contract, including:

- (a) work experience placements for 14- to 16-year-olds,
- (b) work experience /work trial placements for other ages,
- (c) student sandwich/gap year placements,
- (d) graduate placements,
- (e) vocational training,
- (f) basic skills training and
- (g) on-site training provision/ facilities.

**Option Z13 – GDPR**

Insert new clause Z13 as follows:

**Z13 GDPR**

The *Client* and the *Contractor* shall comply with the provisions of Schedule A

**Option Z14 – Cyber Essentials**

Insert new clause Z14 as follows:

**Z14 Cyber Essentials**

The *Client* and the *Contractor* shall comply with the provisions of schedule B



## **SCHEDULE A – GDPR**

The following definitions shall apply to this Schedule A

**Agreement:** this contract;

**Processor Personnel:** means all directors, officers, employees, agents, consultants and contractors of the Processor and/or of any Sub-Processor engaged in the performance of its obligations under this Agreement

### **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.

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 such measures adopted by it including those outlined in Schedule J (Security Provisions).

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

## **1 DATA PROTECTION**

- 1.1. The Parties acknowledge that for the purposes of the Data Protection Legislation, the *Client* is the Controller and the *Contractor* is the Processor unless otherwise specified in Schedule A. The only processing that the Processor is authorised to do is listed in Schedule A by the Controller and may not be determined by the Processor.
- 1.2. The Processor shall notify the Controller immediately if it considers that any of the Controller's instructions infringe the Data Protection Legislation.

- 1.3. 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:
- (a) a systematic description of the envisaged processing operations and the purpose of the processing;
  - (b) an assessment of the necessity and proportionality of the processing operations in relation to the *works*;
  - (c) an assessment of the risks to the rights and freedoms of Data Subjects; and
  - (d) the measures envisaged to address the risks, including safeguards, security measures and mechanisms to ensure the protection of Personal Data.
- 1.4 The Processor shall, in relation to any Personal Data processed in connection with its obligations under this Agreement:
- (a) process that Personal Data only in accordance with Schedule A, 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;
  - (b) ensure that it has in place Protective Measures, 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:
    - (i) nature of the data to be protected;
    - (ii) harm that might result from a Data Loss Event;
    - (iii) state of technological development; and
    - (iv) cost of implementing any measures;
  - (c) ensure that:
    - (i) the Processor Personnel do not process Personal Data except in accordance with this Agreement (and in particular Schedule A);
    - (ii) 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 Subprocessor;
      - (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

(D) have undergone adequate training in the use, care, protection and handling of Personal Data; and

(d) 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:

(i) 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;

(ii) the Data Subject has enforceable rights and effective legal remedies;

(iii) 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 endeavours to assist the Controller in meeting its obligations); and

(iv) the Processor complies with any reasonable instructions notified to it in advance by the Controller with respect to the processing of the Personal Data;

(e) 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.

1.5 Subject to clause 1.6, the Processor shall notify the Controller immediately if it:

(a) receives a Data Subject Request (or purported Data Subject Request);

(b) receives a request to rectify, block or erase any Personal Data;

(c) receives any other request, complaint or communication relating to either Party's obligations under the Data Protection Legislation;

(d) receives any communication from the Information Commissioner or any other regulatory authority in connection with Personal Data processed under this Agreement;

(e) 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

(f) becomes aware of a Data Loss Event.

1.6. The Processor's obligation to notify under clause 1.5 shall include the provision of further information to the Controller in phases, as details become available.

1.7. 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 1.5 (and insofar as possible within the timescales reasonably required by the Controller) including by promptly providing:

(a) the Controller with full details and copies of the complaint, communication or request;

- (b) 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;
  - (c) the Controller, at its request, with any Personal Data it holds in relation to a Data Subject;
  - (d) assistance as requested by the Controller following any Data Loss Event;
  - (e) 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.
- 1.8. 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:
  - (a) the Controller determines that the processing is not occasional;
  - (b) 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
  - (c) the Controller determines that the processing is likely to result in a risk to the rights and freedoms of Data Subjects.
- 1.9 The Processor shall allow for audits of its Data Processing activity by the Controller or the Controller's designated auditor.
- 1.10 Each Party shall designate its own data protection officer if required by the Data Protection Legislation.
- 1.11 Before allowing any Sub-processor to process any Personal Data related to this Agreement, the Processor must:
  - (a) notify the Controller in writing of the intended Sub-processor and processing;
  - (b) obtain the written consent of the Controller;
  - (c) enter into a written agreement with the Sub-processor which give effect to the terms set out in this clause 1 such that they apply to the Sub-processor; and
  - (d) provide the Controller with such information regarding the Sub-processor as the Controller may reasonably require.
- 1.12 The Processor shall remain fully liable for all acts or omissions of any of its Subprocessors.
- 1.13 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).
- 1.14 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.

**Annex A - Part 2: Schedule of Processing, Personal Data and Data Subjects****Schedule A Processing, Personal Data and Data Subjects**

This Schedule shall be completed by the Controller, who may take account of the view of the Processors, however the final decision as to the content of this Schedule shall be with the Controller at its absolute discretion.

1. The contact details of the Controller's Data Protection Officer are:

Office of the Data Protection Officer at DHSC  
[Data\\_protection@dhsc.gov.uk](mailto:Data_protection@dhsc.gov.uk)  
 Department of Health and Social Care  
 1<sup>st</sup> Floor North  
 39 Victoria Street  
 London  
 SW1H 0EU

2. The contact details of the Processor's Data Protection Officer are: [Insert Contact details]
3. The Processor shall comply with any further written instructions with respect to processing by the Controller.
4. Any such further instructions shall be incorporated into this Schedule.

Description	Details
Identity of the Controller and Processor	The Parties acknowledge that for the purposes of the Data Protection Legislation, the <i>Client</i> is the Controller and the <i>Contractor</i> is the Processor in accordance with Clause 1.1.
Subject matter of the processing	No data processed
Duration of the processing	N/A
Nature and purposes of the processing	N/A
Type of Personal Data being Processed	N/A
Categories of Data Subject	N/A
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	N/A

## SCHEDULE J

### 1. CONTRACT SCHEDULE J - SECURITY PROVISIONS

#### 1.1 Definitions

For the purposes of this schedule the following terms shall have the meanings given below:

<b>"Affiliates"</b>	in relation to a body corporate, any other entity which directly or indirectly Controls, is Controlled by, or is under direct or indirect common Control with, that body corporate from time to time;
<b>"Breach of Security"</b>	in accordance with the Security Requirements and the Security Policy, the occurrence of: <ul style="list-style-type: none"> <li>(a) any unauthorised access to or use of the works the Client Premises, the Sites, the Contractor System and/or any ICT, information or data (including the Confidential Information and the Client Data) used by the <i>Client</i> and/or the <i>Contractor</i> in connection with this contract; and/or</li> <li>(b) the loss and/or unauthorised disclosure of any information or data (including the Confidential Information and the Client Data), including any copies of such information or data, used by the <i>Client</i> and/or the <i>Contractor</i> in connection with this contract.</li> </ul>
<b>"Clearance"</b>	means national security clearance and employment checks undertaken by and/or obtained from the Defence Vetting Agency;
<b>"Contractor Equipment"</b>	the hardware, computer and telecoms devices and equipment supplied by the <i>Contractor</i> or its Subcontractors (but not hired, leased or loaned from the <i>Client</i> ) for the carrying out of the <i>works</i> ;
<b>"Contractor Software"</b>	software which is proprietary to the <i>Contractor</i> , including software which is or will be used by the <i>Contractor</i> for the purposes of carrying out of the <i>works</i> ;
<b>"Contractor System"</b>	the information and communications technology system used by the <i>Contractor</i> in carrying out of the <i>works</i> including the Software, the <i>Contractor</i> Equipment and related cabling (but excluding the Client System);
<b>"Control"</b>	means that a person possesses, directly or indirectly, the power to direct or cause the direction of the management and policies of the other person (whether through the ownership of voting shares, by contract or otherwise) and "Controls" and "Controlled" shall be interpreted accordingly
<b>"Default"</b>	any breach of the obligations of the relevant party (including but not limited to fundamental breach or breach of a fundamental term) or any other default, act, omission, negligence or statement

	of the relevant party, its employees, servants, agents or Sub contractors in connection with or in relation to the subject-matter of this contract and in respect of which such party is liable to the other;
<b>"Dispute Resolution Procedure"</b>	the dispute resolution procedure set out in this contract (if any) or as agreed between the parties;
<b>"Client Premises"</b>	means premises owned, controlled or occupied by the <i>Client</i> or its Affiliates which are made available for use by the <i>Contractor</i> or its Subcontractors for carrying out of the <i>works</i> (or any of them) on the terms set out in this contract or any separate agreement or licence;
<b>"Client System"</b>	the <i>Client's</i> computing environment (consisting of hardware, software and/or telecommunications networks or equipment) used by the <i>Client</i> or the <i>Contractor</i> in connection with this contract which is owned by or licensed to the <i>Client</i> by a third party and which interfaces with the <i>Contractor</i> System or which is necessary for the <i>Client</i> to receive the <i>works</i> ;
<b>"Environmental Information Regulations"</b>	the Environmental Information Regulations 2004 together with any guidance and/or codes of practice issued by the Information Commissioner or relevant Government Department in relation to such regulations;
<b>"FOIA"</b>	the Freedom of Information Act 2000 and any subordinate legislation made under this Act from time to time together with any guidance and/or codes of practice issued by the Information Commissioner or relevant Government Department in relation to such legislation;
<b>"Good Industry Practice"</b>	the exercise of that degree of skill, care, prudence, efficiency, foresight and timeliness as would be expected from a leading company within the relevant industry or business sector;
<b>"ICT"</b>	information and communications technology;
<b>"ICT Environment"</b>	the Client System and the <i>Contractor</i> System;
<b>"Impact Assessment"</b>	an assessment of a Compensation Event;
<b>"Information"</b>	has the meaning given under section 84 of the Freedom of Information Act 2000;
<b>"Information Assets Register"</b>	the register of information assets to be created and maintained by the <i>Contractor</i> throughout the carrying out of the <i>works</i> as described in the contract (if any) or as otherwise agreed between the parties;
<b>"ISMS"</b>	the Information Security Management System as defined by ISO/IEC 27001. The scope of the ISMS will be as agreed by the parties and will directly reflect the scope of the <i>works</i> ;



<b>"Know-How"</b>	all ideas, concepts, schemes, information, knowledge, techniques, methodology, and anything else in the nature of know how relating to the <i>works</i> but excluding know how already in the <i>Contractor's</i> or the <i>Client's</i> possession before this contract;
<b>"List x"</b>	means, in relation to a Subcontractor, one who has been placed on List x in accordance with Ministry of Defence guidelines and procedures, due to that Sub contractor undertaking work on its premises marked as CONFIDENTIAL or above;
<b>"Malicious Software"</b>	any software program or code intended to destroy, interfere with, corrupt, or cause undesired effects on program files, data or other information, executable code or application software macros, whether or not its operation is immediate or delayed, and whether the malicious software is introduced wilfully, negligently or without knowledge of its existence;
<b>"Process"</b>	has the meaning given to it under the Data Protection Legislation but, for the purposes of this contract, it shall include both manual and automatic processing;
<b>"Protectively Marked"</b>	shall have the meaning as set out in the Security Policy Framework.
<b>"Regulatory Bodies"</b>	those government departments and regulatory, statutory and other entities, committees and bodies which, whether under statute, rules, regulations, codes of practice or otherwise, are entitled to regulate, investigate, or influence the matters dealt with in this contract or any other affairs of the <i>Client</i> and "Regulatory Body" shall be construed accordingly;
<b>"Request for Information"</b>	a request for information or an apparent request under the Code of Practice on Access to Government Information, FOIA or the Environmental Information Regulations;
<b>"Security Management Plan"</b>	the <i>Contractor's</i> security plan prepared pursuant to paragraph 1.5.3 of schedule J (Security Management Plan) an outline of which is set out in Appendix 1 of schedule J (Security Management Plan);
<b>"Security Policy Framework"</b>	means the Cabinet Office Security Policy Framework (available from the Cabinet Office Security Policy Division);
<b>"Security Requirements"</b>	means the requirements in the contract relating to security of the carrying out of the <i>works</i> (if any) or such other requirements as the <i>Client</i> may notify to the <i>Contractor</i> from time to time
<b>"Security Tests"</b>	shall have the meaning set out in Appendix 2 (Security Management Plan) [Guidance: define "Security Tests" in Security Management Plan]

<b>"Software"</b>	Specially Written Software, <i>Contractor</i> Software and Third-Party Software;
<b>"Specially Written Software"</b>	any software created by the <i>Contractor</i> (or by a third party on behalf of the <i>Contractor</i> ) specifically for the purposes of this contract;
<b>"Staff Vetting Procedures"</b>	the <i>Client's</i> procedures and departmental policies for the vetting of personnel whose role will involve the handling of information of a sensitive or confidential nature or the handling of information which is subject to any relevant security measures, including, but not limited to, the provisions of the Official Secrets Act 1911 to 1989;
<b>"Statement of Applicability"</b>	shall have the meaning set out in ISO/IEC 27001 and as agreed by the parties during the procurement phase;
<b>"Standards"</b>	the British or international standards, <i>Client's</i> internal policies and procedures, Government codes of practice and guidance together with any other specified policies or procedures referred to in this contract (if any) or as otherwise agreed by the parties;
<b>"Third Party Software"</b>	software which is proprietary to any third party other than an Affiliate of the <i>Contractor</i> which is or will be used by the <i>Contractor</i> for the purposes of carrying out of the <i>works</i> ; and

## 1.2 Introduction

### 1.2.1 This schedule covers:

- 1.2.1.1 principles of protective security to be applied in carrying out of the *works*;
- 1.2.1.2 wider aspects of security relating to carrying out of the *works*;
- 1.2.1.3 the development, implementation, operation, maintenance and continual improvement of an ISMS;
- 1.2.1.4 the creation and maintenance of the Security Management Plan;
- 1.2.1.5 audit and testing of ISMS compliance with the Security Requirements;
- 1.2.1.6 conformance to ISO/IEC 27001 (Information Security Requirements Specification) and ISO/IEC27002 (Information Security Code of Practice) and;
- 1.2.1.7 obligations in the event of actual, potential or attempted breaches of security.

## 1.3 Principles of Security

- 1.3.1 The *Contractor* acknowledges that the *Client* places great emphasis on the confidentiality, integrity and availability of information and consequently on the security provided by the ISMS.
- 1.3.2 The *Contractor* shall be responsible for the effective performance of the ISMS and shall at all times provide a level of security which:
  - 1.3.2.1 is in accordance with Good Industry Practice, the *law of the contract* and this contract;
  - 1.3.2.2 complies with the Security Policy;
  - 1.3.2.3 complies with at least the minimum set of security measures and standards as determined by the Security Policy Framework (Tiers 1-4) available from the Cabinet Office Security Policy Division (COSPD);
  - 1.3.2.4 meets any specific security threats to the ISMS; and
  - 1.3.2.5 complies with ISO/IEC27001 and ISO/IEC27002 in accordance with paragraph 1.3.2 of this schedule; 1.3.2.6 complies with the Security Requirements; and
  - 1.3.2.6 complies with the *Client's* ICT standards
- 1.3.3 The references to standards, guidance and policies set out in paragraph 1.3.2.2 shall be deemed to be references to such items as developed and updated and to any successor to or replacement for such standards, guidance and policies, from time to time.
- 1.3.4 In the event of any inconsistency in the provisions of the above standards, guidance and policies, the *Contractor* gives an early warning to the *Project Manager* of such inconsistency immediately upon becoming aware of the same, and the *Project Manager* shall, as soon as practicable, advise the *Contractor* which provision the *Contractor* shall be required to comply with.
- 1.4 ISMS and Security Management Plan
  - 1.4.1 Introduction:
    - (i) The *Contractor* shall develop, implement, operate, maintain and continuously improve and maintain an ISMS which will, without prejudice to paragraph 1.3.2, be accepted, by the *Project Manager*, tested in accordance with the provisions relating to testing as set out in the contract (if any) or as otherwise agreed between the Parties, periodically updated and audited in accordance with ISO/IEC 27001.
    - 1.4.1.1 The *Contractor* shall develop and maintain a Security Management Plan in accordance with this Schedule to apply during the carrying out of the *works*.
    - 1.4.1.2 The *Contractor* shall comply with its obligations set out in the Security Management Plan.

- 1.4.1.3 Both the ISMS and the Security Management Plan shall, unless otherwise specified by the *Client*, aim to protect all aspects of the *works* and all processes associated with carrying out of the *works*, including the construction, use, alterations or demolition of the *works*, the *Contractor* System and any ICT, information and data (including the Client Confidential Information and the Client Data) to the extent used by the *Client* or the *Contractor* in connection with this contract.

1.4.2 Development of the Security Management Plan:

- 1.4.2.1 Within 20 Working Days after the Contract Date and in accordance with paragraph 1.4.4 (Amendment and Revision), the *Contractor* will prepare and deliver to the *Project Manager* for acceptance a fully complete and up to date Security Management Plan which will be based on the draft Security Management Plan set out in Appendix 2 of this Part 2 of this Contract Schedule J.
- 1.4.2.2 If the Security Management Plan, or any subsequent revision to it in accordance with paragraph 1.4.4 (Amendment and Revision), is accepted by the *Project Manager* it will be adopted immediately and will replace the previous version of the Security Management Plan at Appendix 2 of this Part 2 of this Contract Schedule J. If the Security Management Plan is not accepted by the *Project Manager* the *Contractor* shall amend it within 10 Working Days or such other period as the parties may agree in writing of a notice of non- acceptance from the *Project Manager* and re-submit to the *Project Manager* for accepted. The parties will use all reasonable endeavours to ensure that the acceptance process takes as little time as possible and in any event no longer than 15 Working Days (or such other period as the parties may agree in writing) from the date of its first submission to the *Project Manager*. If the *Project Manager* does not accept the Security Management Plan following its resubmission, the matter will be resolved in accordance with the Dispute Resolution Procedure. No acceptance to be given by the *Project Manager* pursuant to this paragraph 1.4.2.2 of this schedule may be unreasonably withheld or delayed. However any failure to accept the Security Management Plan on the grounds that it does not comply with the requirements set out in paragraph 1.4.3.4 shall be deemed to be reasonable.

1.4.3 Content of the Security Management Plan:

- 1.4.3.1 The Security Management Plan will set out the security measures to be implemented and maintained by the *Contractor* in relation to all aspects of the *works* and all processes associated with carrying out of the *works* and shall at all times comply with and specify security measures and procedures which are sufficient to ensure that the *works* comply with the provisions of this schedule (including the principles set out in paragraph 1.3);
- 1.4.3.2 The Security Management Plan (including the draft version) should also set out the plans for transiting all security arrangements and responsibilities from those in place at the Contract Date to those incorporated in the *Contractor's* ISMS at the date notified by the *Project Manager* to the

*Contractor* for the *Contractor* to meet the full obligations of the Security Requirements.

1.4.3.3 The Security Management Plan will be structured in accordance with ISO/IEC27001 and ISO/IEC27002, cross-referencing if necessary to other schedules of this contract which cover specific areas included within that standard.

1.4.3.4 The Security Management Plan shall be written in plain English in language which is readily comprehensible to the staff of the *Contractor* and the *Client* engage in the works and shall only reference documents which are in the possession of the *Client* or whose location is otherwise specified in this schedule.

1.4.4 Amendment and Revision of the ISMS and Security Management Plan:

1.4.4.1 The ISMS and Security Management Plan will be fully reviewed and updated by the *Contractor* annually or from time to time to reflect:

- (a) emerging changes in Good Industry Practice;
- (b) any change or proposed change to the *Contractor* System, the *works* and/or associated processes;
- (c) any new perceived or changed security threats; and
- (d) any reasonable request by the *Project Manager*.

1.4.4.2 The *Contractor* will provide the *Project Manager* with the results of such reviews as soon as reasonably practicable after their completion and amend the ISMS and Security Management Plan at no additional cost to the *Client*. The results of the review should include, without limitation:

- (a) suggested improvements to the effectiveness of the ISMS;
- (b) updates to the risk assessments;
- (c) proposed modifications to the procedures and controls that effect information security to respond to events that may impact on the ISMS; and
- (d) suggested improvements in measuring the effectiveness of controls.

1.4.4.3 On receipt of the results of such reviews, the *Project Manager* will accept any amendments or revisions to the ISMS or Security Management Plan in accordance with the process set out at paragraph 1.4.2.2.

1.4.4.4 Any change or amendment which the *Contractor* proposes to make to the ISMS or Security Management Plan (as a result of a *Project Manager's* request or change to the *works* or otherwise) shall be subject to the early

warning procedure and shall not be implemented until accepted in writing by the *Project Manager*.

#### 1.4.5 Testing

1.4.5.1 The *Contractor* shall conduct Security Tests of the ISMS on an annual basis or as otherwise agreed by the parties. The date, timing, content and conduct of such Security Tests shall be agreed in advance with the *Project Manager*.

1.4.5.2 The *Project Manager* shall be entitled to witness the conduct of the Security Tests. The *Contractor* shall provide the *Project Manager* with the results of such tests (in a form accepted by the *Client* in advance) as soon as practicable after completion of each Security Test.

1.4.5.3 Without prejudice to any other right of audit or access granted to the *Client* pursuant to this contract, the *Project Manager* and/or its authorised representatives shall be entitled, at any time and without giving notice to the *Contractor*, to carry out such tests (including penetration tests) as it may deem necessary in relation to the ISMS and the *Contractor's* compliance with the ISMS and the Security Management Plan. The *Project Manager* may notify the *Contractor* of the results of such tests after completion of each such test. Security Tests shall be designed and implemented so as to minimise the impact on the carrying out of the *works*. If such tests adversely affect the *Contractor's* ability to carry out the *works* in accordance with the Scope, the *Contractor* shall be granted relief against any resultant under-performance for the period of the tests.

1.4.5.4 Where any Security Test carried out pursuant to paragraphs 1.4.5.2 or 1.4.5.3 above reveals any actual or potential Breach of Security, the *Contractor* shall promptly notify the *Project Manager* of any changes to the ISMS and to the Security Management Plan (and the implementation thereof) which the *Contractor* proposes to make in order to correct such failure or weakness. Subject to the *Project Manager's* acceptance in accordance with paragraph (i), the *Contractor* shall implement such changes to the ISMS and the Security Management Plan in accordance with the timetable agreed with the *Project Manager* or, otherwise, as soon as reasonably possible. Where the change to the ISMS or Security Management Plan is made to address a non-compliance with the Security Policy or Security Requirements, the change to the ISMS or Security Management Plan is Disallowed Cost.

#### 1.5 Compliance with ISO/IEC 27001

1.5.1 Unless otherwise agreed by the parties, the *Contractor* shall obtain independent certification of the ISMS to ISO/IEC 27001 within 12 months of the Contract Date and shall maintain such certification until the Defects Certificate or a termination certificate has been issued.

1.5.2 In the event that paragraph 1.5.1 above applies, if certain parts of the ISMS do not conform to Good Industry Practice, or controls as described in

ISO/IEC 27002 are not consistent with the Security Policy, and, as a result, the *Contractor* reasonably believes that it is not compliant with ISO/IEC 27001, the *Contractor* shall promptly notify the *Project Manager* of this and the *Client* in its absolute discretion may waive the requirement for certification in respect of the relevant parts.

1.5.3 The *Project Manager* shall be entitled to carry out such regular security audits as may be required and in accordance with Good Industry Practice, in order to ensure that the ISMS maintains compliance with the principles and practices of ISO 27001.

1.5.4 If, on the basis of evidence provided by such audits, it is the *Project Manager's* reasonable opinion that compliance with the principles and practices of ISO/IEC 27001 is not being achieved by the *Contractor*, then the *Project Manager* shall notify the *Contractor* of the same and give the *Contractor* a reasonable time (having regard to the extent and criticality of any non-compliance and any other relevant circumstances) to become compliant with the principles and practices of ISO/IEC 27001. If the *Contractor* does not become compliant within the required time then the *Project Manager* has the right to obtain an independent audit against these standards in whole or in part.

1.5.5 If, as a result of any such independent audit as described in paragraph 1.5.4 the *Contractor* is found to be non-compliant with the principles and practices of ISO/IEC 27001 then the *Contractor* shall, at its own expense, undertake those actions required in order to achieve the necessary compliance and shall reimburse in full the costs incurred by the *Client* in obtaining such audit.

## 1.6 Breach of Security

1.6.1 Either party shall give an early warning to the other in accordance with the agreed security incident management process as defined by the ISMS upon becoming aware of any Breach of Security or any potential or attempted Breach of Security.

1.6.2 Without prejudice to the security incident management process, upon becoming aware of any of the circumstances referred to in paragraph 1.6.1, the *Contractor* shall:

1.6.2.1 immediately take all reasonable steps necessary to:

- (a) remedy such breach or protect the integrity of the ISMS against any such potential or attempted breach or threat; and
- (b) prevent an equivalent breach in the future.

such steps shall include any action or changes reasonably required by the *Project Manager*; and

1.6.2.2 as soon as reasonably practicable provide to the *Project Manager* full details (using such reporting mechanism as defined by the ISMS) of the Breach of Security or the potential or attempted Breach of Security.

## Appendix 1 – Security Policy

**[Guidance Note: Append Security Policy]**

## Appendix 2 – Security Management Plan

**[Guidance Note: Append Security Management Plan]**



## SCHEDULE B – CYBER ESSENTIALS

### CYBER ESSENTIALS SCHEME

#### 1 DEFINITIONS

1.1 In this Schedule, the following words shall have the following meanings:

<b>“Cyber Essentials Scheme”</b>	the Cyber Essentials Scheme developed by the Government which provides a clear statement of the basic controls all organisations should implement to mitigate the risk from common internet-based threats (as may be amended from time to time). Details of the Cyber Essentials Scheme can be found here: <a href="https://www.gov.uk/government/publications/cyber-essentialsscheme-overview">https://www.gov.uk/government/publications/cyber-essentialsscheme-overview</a> ;
<b>“Cyber Essentials Basic Certificate”</b>	the certificate awarded on the basis of self-assessment, verified by an independent certification body, under the Cyber Essentials Scheme and is the basic level of assurance;
<b>“Cyber Essentials Certificate”</b>	Cyber Essentials Basic Certificate, the Cyber Essentials Plus Certificate or the Cyber Essential Scheme certificate equivalent to be provided by the <i>Contractor</i> as set out in the Framework Data Sheet;
<b>“Cyber Essential Scheme Data”</b>	sensitive and personal information and other relevant information as referred to in the Cyber Essentials Scheme; and
<b>“Cyber Essentials Plus Certificate”</b>	the certification awarded on the basis of external testing by an independent certification body of the <i>Contractor's</i> cyber security approach under the Cyber Essentials Scheme and is a more advanced level of assurance.

#### 2 CYBER ESSENTIALS OBLIGATIONS

- 2.1 Where the Scope requires that the *Contractor* provide a Cyber Essentials Certificate prior to the execution of the *works* the *Contractor* shall provide a valid Cyber Essentials Certificate, then on or prior to the commencement of the *works* the *Contractor* delivers to the *Client* evidence of the same. Where the *Contractor* fails to comply with this paragraph it shall be prohibited from commencing the carrying out of the *works* under any contract until such time as the *Contractor* has evidenced to the *Client* its compliance with this paragraph 2.1.
- 2.2 Where the *Contractor* continues to Process Cyber Essentials Scheme Data during the carrying out of the *works* the *Contractor* delivers to the *Client* evidence of renewal of the Cyber Essentials Certificate on each anniversary of the first applicable certificate obtained by the *Contractor* under paragraph 2.1.
- 2.3 Where the *Contractor* is due to Process Cyber Essentials Scheme Data after the commencement of the *works* but before completion of the *works* the *Contractor* delivers to the *Client* evidence of:
  - 2.3.1 a valid and current Cyber Essentials Certificate before the *Contractor* Processes any such Cyber Essentials Scheme Data; and

- 2.3.2 renewal of the valid Cyber Essentials Certificate on each anniversary of the first Cyber Essentials Scheme certificate obtained by the *Contractor* under paragraph 2.1.
- 2.4 In the event that the *Contractor* fails to comply with paragraphs 2.2 or 2.3 (as applicable), the *Client* reserves the right to terminate this contract for material Default.
- 2.5 The *Contractor* ensures that all sub-contracts with Sub-Contractors who Process Cyber Essentials Data contain provisions no less onerous on the Sub-Contractors than those imposed on the *Contractor* under this contract in respect of the Cyber Essentials Scheme under paragraph 2.1 of this Schedule
- 2.6 This Schedule shall survive termination or expiry of this contract.

# Contractor Contract Data to NEC4 Engineering and Construction Contract for Chilton E Block Air Handling Unit Replacement Laboratory Works

## PART TWO – DATA PROVIDED BY THE CONTRACTOR

Completion of the data in full, according to the Options chosen, is essential to create a complete contract.

### 1 General

The Contractor is

Name	BTU (Installation & Maintenance) Ltd
Address for communications	38 Weyside Road, Guildford, Surrey, GU1 1JB
Address for electronic communications	<a href="mailto:tenders@btu-group.com">tenders@btu-group.com</a>

The fee percentage is  %

The working areas are

The key persons are

Name (1)	<input type="text" value=""/>
Job	<input type="text" value=""/>
Responsibilities	Managing Commercial Installation Contracts, responsible for all service provision and customer services
Qualifications	SMSTS; CSCS Manager; IPAF; 3 Day First Aid at Work; NEBOSH Construction theory
Experience	<p>Since Joining BTU <input type="text" value=""/> has worked on the following projects:</p> <ul style="list-style-type: none"><li>• London's Guildhall – Ventilation project worth £1.5m</li><li>• Science Museum – Chiller renewal</li><li>• Royal Botanical Gardens Kew – Building Services Upgrade</li><li>• Queen Mary University London – Frances Bancroft Building AHUs</li></ul>

	<div>• Queen Mary University London – Joseph Priestly Building Lab Refurbishment</div>
Name (2)	<div><div></div><div></div></div>
Job	<div><div></div><div></div></div>
Responsibilities	<div>Providing support to the company development teams. Providing estimates on M&amp;E and Building Services specifications, contract variations, technical proposals and recommendations, adhering to procurement and supply chain policies. To make savings and explore possibilities for reduction on cost of delivery without compromising quality.</div>
Qualifications	<div>HNC – Building Services Engineering  PASMA ; The Health and Safety at work act 1974; The Management of Health and Safety at Work Regulations 1999;  • ROSPA Working at Height/ROSPA Fire Safety/ROSPA Manual handling/ROSPA First Aid  • ROSPA Slips, Trips and Falls/ROSPA Maintenance Safety  • ROSPA Working at Height/ROSPA Asbestos Awareness  • IOSH Managing Safely  • BSRIA, Introduction to commissioning</div>
Experience	<div><b>Watford Community Housing Trust</b> - replacement of communal heating systems across 12 care homes  <b>Chelsea Fire Station</b> - Full heating system replacement at Chelsea Fire Station.  <b>West London NHS Trust</b> – Orchard Unit Chiller Replacement  <b>Silva Homes</b> – Upgrade of HCW provision at Farningham and Glenfield House (Sheltered Accommodation)  <b>Institute of Cancer Research</b> – BLB building Freezer Upgrade</div>

The following matters will be included in the Early Warning Register

Final-BTU-C374691-ChiltonEAHUWorks-AppFRiskReg-v1.0

2 The Contractor's main responsibilities

If the Contractor is to provide Scope for its design      The Scope provided by the Contractor for its design is in

3 Time

If a programme is to be identified in the Contract Data      The programme identified in the Contract Data is 

Final-BTU-C374691-ChiltonEAHUWorks-AppGProg-v1.0

If the Contractor is to decide the completion date for the whole of the works      The completion date for the whole of the works is 

15/06/2026

5 Payment

If Option A or C is used      The activity schedule is 

Final-BTU-C374691-ChiltonEAHUWorks-AppEActSch-v1.0

If Option A, B, C or D is used      The tendered total of the Prices is 

£1,508,847.44

Resolving and avoiding disputes

If Option W1 or W2 is used      The Senior Representatives of the Contractor are

Name (1)	<div></div>
Address for communications	<div>38 Weyside Road, Guildford, Surrey, GU1 1JB</div>
Address for electronic communications	<div><div>@btu-installation.com</div></div>

Name (2)	<div></div>
Address for communications	38 Weyside Road, Guildford, Surrey, GU1 1JB
Address for electronic communications	<div>@btu-installation.com</div>

X10: Information modelling

If Option X10 is used	
If an <i>information execution plan</i> is to be identified in the Contract Data	<div>The <i>information execution plan</i> identified in the Contract Data is</div> <div>Not Used</div>

X22: Early Contractor involvement (only used with Options C and E)

If Option X22 is used      Not Used

X29: Climate change

If Option X29 is used	
If a <i>climate change plan</i> is to be identified in the Contract Data	<div>The <i>climate change plan</i> identified in the Contract Data is</div> <div>Not Used</div>

Y(UK)1: Project Bank Account

If Option Y(UK)1 is used Not Used

Data for the Short Schedule of Cost Components (only used with Options A or B)

The *people rates* are

category of person	unit	rate
Designer	Day	£
Site manager	Day	£
Tradesmen	Day	£
Semi Skilled	Day	£

The published list of Equipment is the edition current at the Contract Date of the list published by

Not applicable We have priced for the work as per the tender documents as the design is developed the equipment will be selected. We will present the equipment costs in line with the tender. Should a change occur we will provide the materials and sub-contracts costs based upon our cost plus 15% and the labour will be charged for change orders at the rate detailed above.

The percentage for adjustment for Equipment in the published list is

Cost Plus% (state plus or minus)

The rates for other Equipment are

Equipment	rate
Plant Hire	Cost Plus



The rates for Defined Cost of manufacture and fabrication outside the Working Areas by the *Contractor* are

category of person	rate
Tradesmen	£ per day

The rates for Defined Cost of design outside the Working Areas are

category of person	rate
design	£ per day

The categories of design people whose travelling expenses to and from the Working Areas are included in Defined Cost are

Signed on behalf of the Contractor as the Contractor's Offer – [Redacted] [Redacted] cken	
Signed by: [Redacted] 0917E19FA12B4E0...	
Full Name:	[Redacted]
Job Title/Role:	[Redacted]
Date Signed:	19 August 2025

Signed on behalf of the Contractor as the Contractor's Offer – [Redacted] [Redacted]	
[Redacted]	
Full Name:	[Redacted]
Job Title/Role:	[Redacted]
Date Signed:	21/08/2025

Signed on behalf of the Client, accepting the Contractor's Offer to Provide the Works	
[Redacted]	
Full Name:	[Redacted]
Job Title/Role:	[Redacted]
Date Signed:	5th September 2025

**C374691 Chilton E Block Air Handling Unit Replacement Design & Build**  
**Appendix A Contract Annexes Reference Table**

<b>Contract Document List</b>
Final-BTU-C374691-ChiltonEAHUWorks-ContractData1-v1.0
Final-BTU-C374691-ChiltonEAHUWorks-ContractData2-v1.0
Final-BTU-C374691-ChiltonEAHUWorks-AppARefTable-v1.0
Final-BTU-C374691-ChiltonEAHUWorks-AppBScope-v1.0
Final-BTU-C374691-ChiltonEAHUWorks-AppCWorksInf-v1.0
Final-BTU-C374691-ChiltonEAHUWorks-AppDPreConInf-v1.0
Final-BTU-C374691-ChiltonEAHUWorks-AppEActSch-v1.0
Final-BTU-C374691-ChiltonEAHUWorks-AppFRiskReg-v1.0
Final-BTU-C374691-ChiltonEAHUWorks-AppGProgramme-v1.0
Final-BTU-C374691-ChiltonEAHUWorks-AppHKPIs-v1.0
Final-BTU-C374691-ChiltonEAHUWorks-AppISubcontractors-v1.0
Final-BTU-C374691-ChiltonEAHUWorks-AppJClarifications-v1.0

**C374691 Chilton E Block Air Handling Unit Replacement Design &  
Build Appendix B Scope**

# **User Requirement Specification**

**UKHSA/URS/113394**

**113394 – CHILTON E BLOCK AIR  
HANDLING UNIT REPLACEMENT DESIGN  
AND BUILD**

Document Title	<b>User Requirement Specification</b>			
Document Reference	<b>UKHSA/URS/113394</b>			
Revision	Revision 01			
Project Number:	113394			
Project:	Chilton E Block Air Handling Unit Replacement Design & Build			
Client:	UK Health Security Agency, Chilton, Didcot, Oxon OX11 0RQ			
Date				
<b>Prepared By</b>				
Name	Position	Signature	Date	
<b>Approved by and On Behalf of UKHSA</b>				
Name	Position	Signature	Date	
<b>Revision History</b>				
Revision	Issued	Changes Summary	Author	Date
00		First issue for comment		XX-XX-XXXX
01		Issued for approval		XX-XX-XXXX

## About UK Health Security Agency (UKHSA)

The UK Health Security Agency (UKHSA) is a government agency in the United Kingdom, responsible for England-wide public health protection and infectious disease capability. It is an executive agency of the Department of Health and Social Care (DHSC).

UKHSA was established on 1 October 2021 to bring together public health specialists from more than 70 organisations including NHS Test and Trace, the Joint Biosecurity Centre and Public Health England into a single public health service.

UKHSA operates on a number of sites. This tender is solely in relation to the site at Chilton, Oxfordshire.

UKHSA  
5<sup>th</sup> Floor  
10 South Colonnade  
London  
E14 4PU

Prepared by  
For queries relating to this document, please contact  
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Published 27<sup>th</sup> March 2024



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## Glossary (Including Acronyms)

AP's	Appointed Persons
BSRIA	Building Services Research & Information Association
BMS	Building Management System
BS	British Standard
BS EN	British adoption of a European (EN) standard
CAD	Computed aided design
CDM	The Construction (Design and Management) Regulations

Contractor	The successful Tenderer who having been successful with their compliant bid has a valid contract with UKHSA to undertake the works. The Contractors responsibility remains in respect of all or any appointed sub-contractors. ( <i>see also Tenderer</i> ).
COSHH	The Control of Substances Hazardous to Health Regulations 2002, (as amended). The contractor should take note of the Approved Code of Practice and Guidance (L5) as published by the HSE and pay special regard to Schedule 3.
CPHSP	Construction Phase Health & Safety Plan
D&B	Design & Build
ER's	<b>Employer's Requirements</b>
GPR	Ground Penetrating Radar
HSE	The Health and Safety Executive
MCWS	Mains Cold Water Supply
NEC 3 ECC	New Engineering Contract 3 – Engineering and Construction Contract
PMC	Principal Maintenance Contractor
RAMS	Risk Assessments & Method Statements
SSOW	Safe System of Works
Tenderer	The entity preparing to submit a compliant bid in relation to the associated Invitation to Tender for the project. The Tenderer should ensure they have allowed for all activities identified as the responsibility of the Contractor. ( <i>see also Contractor</i> )
UKHSA	UK Health Security Agency
URS	User Requirement Specification

## Introduction

This document is the User Requirement Specification (URS) for the Design and Build provision for the AHU replacement and associated unit upgrade works associated with the Block E Unit at Chilton. It sets out UKHSA user requirements that must be complied with in delivering the project. It should be read in conjunction with other relevant UKHSA tender documents.

Chilton is designated under the Civil Contingencies Act 2004 as a Category 1

Responder. The duties imparted through this Act requires the Category 1 Responder to maintain plans to ensure that they can continue to exercise their functions in the event of an emergency as far as responsibly practicable. The duty relates to all functions, not just their emergency response functions.

This is a two-stage project to deliver a dedicated AHU Unit with associated plant is required, as well as electrical, mechanical and building fabric upgrades are required to replace the existing, life expired system, and fabric of the occupied areas, enable the facility to be compliant with the Home Office Code of practice for the housing and care of animals bred, supplied or used for scientific purposes.

## Regulatory and Legislative Compliance Requirements

All works shall comply with regulatory, legislative and UKHSA requirements with regards to CDM, design, construction and commissioning present or introduced during the project.

The Contractor shall comply with all current legislation applicable to the works and any subsequent amendments, or new amendments that may come into force during the period of the works.

If the contractor becomes aware of any breach of legislation, or potential breach of legislation the Contractor shall bring this to the attention of their contact within UKHSA. In addition, the following Legislation, Regulations and Health and Safety Executive guidance, should also be followed by the Contractor including any subsequent amendments, replacement, or new regulations:

- This URS document and all UKHSA current and future specification, documents and standards referred to within it.
- Code of practice for the housing and care of animals bred, supplied, or used for scientific purposes
- The Health and Safety at Work Act 1974
- Health and safety in construction (HSG150)
- Management of Health and Safety at Work Regulations 1999
- Construction (Design and Management) Regulations 2015
- Work at Height Regulations 2005
- Manufacturers stipulations and recommendations for decommissioning and disposal of existing plant and systems.
- Control of substances hazardous to health (COSHH) 2002
- Good Engineering Practice (GEP).
- BISRIA Guidance, Standards and Publications
- Local Authority By- Laws, recommendations, and planning
- Building Regulations and Approved Documents
- The Environmental Protection Act
- Any special regulations issued by the Local Supply Authority
- Current Health and Safety legislation including the latest Construction Design and Management Regulations.
- HSE HSG 264 2010 – Asbestos: A Survey Guide.
- Current Building Regulations.

- Standard UKHSA Specifications.
- British Standard Specifications and Codes of Practice
- Acts of Parliament;
- Current Government Bio/counter terrorism guidance
- Provision and Use of Work Equipment Regulations (PUWER):1998
- Water UK Standard for Security Arrangements for Operation Assets (version 2.0 June 2015)
- UKHSA Cyber Security and Cyber Policies
- UKHSA Industrial Automation and Control Systems (IACS) requirements
- HSE Lighting at Work HSG 38
- EU Lighting Efficiency Regulations 2020
- UKHSA light and lighting - Flicker recommendations

This list is not exhaustive and other Regulations/Guidance may be applied in addition.

## Statement of Decontamination

The ductwork may contain some animal dander. The ductwork is required to be cleaned as part of this project. No other decontamination of the unit is required. Asbestos is subject to an R&D inspection.

## Existing Facility Description

### Area Description

The area of works is within the existing RCE Chilton site, Block E.

### Existing System Description

#### **AHU and related M&E Services**

The AHU located within the plantroom provides conditioned fresh air to the Animal House., along with cooling coils supplied by the chiller plant. There are heating coils, frost and reheat, fed from the Low temperature hot water distribution system. There is also system a humidification plant serving the air handling unit which is fed by a water treatment plant. There are terminal re-heat units in the duct at room level providing individual reheat, also fed from the LTHW system.

The air handing unit is at least 23 years old and was installed at the same time as the chiller. The system fails to meet the room conditions required by the home office during the extreme outside weather conditions hot in summer and cold in winter with the controls also requiring manual adjustment.

From limited records the plant was installed in 2000, therefore according to CIBSE Guide M, which suggests and economic life of 15-20 years for a packaged air handing plant, it is due for replacement/refurbishment.

Heating is supplied via the LTHW system to the various heating coils in the AHU and to terminal room heater batteries via 3 port valves.

Cooling is provided by via a refrigerant based chiller which comprises of heat rejection plant located external, with compressors and expansion located on a rig arrangement within the adjacent plantroom.

The refrigeration circuit serves 4 cooling coils within the AHU, providing conditioned fresh air to the Animal House via ductwork distribution within the ceiling void.

The refrigeration plant and equipment are manufactured by KTK Klimatechnik and was installed in 2000 meaning the system is 23 years old, so is due for replacement.

The system operates on R407C refrigerant.

It is thought that there is also problem with one of the coils, resulting in lack or redundancy and lack of cooling capacity. It is problematic to investigate this without the removal of all coils.

#### **Original Chiller capacity details**

Chiller Coil Direct Expansion cooling coil 365,000BTU/h. (107KWh) \*

2 x Compressors 182,500 BTU/h (53.5KWh) \*

2 x Condensers for items 1 & 2\*

\*These may have been from the original installation in 1972 and not the current capacity.

#### **Heating Coils.**

No details of the sizing of the heating coils can be found.

The frost coil is in poor condition due to oxidisation of the fins, which have crumbled. Other coils in the AHU have also deteriorated and require replacement.

#### **Humidifier and Water Plant**

The humidifier is relatively new, and in serviceable condition, but approaching life-cycle replacement, along with the water softener and Spectrum Reverse Osmosis unit supplying the feed water.

A design for this system has been developed which will require verification of the information given here.

Further details can be found in a condition and refurbishment RIBA stage 2 report carried out in June 2013 by RLB - Design Stage (RIBA 2) AHU

#### **AHU and System controls.**

The current BMS system is based on a trend system which is becoming obsolete.

The system can be viewed locally on the panel controls and remotely in the engineering and facilities office.

In rooms EG.03. EG.04, EG.05, EG.06, EG.07, EG.08, EG.09, EG.10, EG.12 and the corridor temperatures and humidities are controlled by individual sensors on the wall, connected to the BMS.

The system is used to log the temperatures and humidities in the room and allows for



alarm activation and alerts should the conditions go out of limits.

The BMS does not comprehensively cover all parts of the facility and plant and is not as comprehensive as is required. It has exceeded in its lifecycle and required replacement.

### **Extract fans**

There are currently 3 extract systems. One that supplies the animal rooms, one that supplies dirty extract to the dirty cage wash area and one feeding above the corridor ceiling. These extracts are not controlled and interlocked with the supply fans. They are belting driven speed controlled by local speed controllers. They are not visible on the BMS system.

There are no records of supply or extract ductwork cleaning. Despite having filters present in both systems, the ductwork appears to have a level of contamination and would benefit from cleaning. The existing ductwork also has signs of leakage which if retained will require inspection and rectification. It may not be possible to access all ductwork, and it is anticipated that this will remain largely in place.

### **Air flow and Air pressures**

The current system is expected to give 15-20 air changes per hour to the procedure rooms, which also have to be pressurised negative to the corridor. Air pressure in the dirty area should be negative to the corridor and more negative to corridor than the procedure room. The dirty area itself should be more negatively grading across the EG14/15

It is not sure how this is achieved currently as no information is provided. There are existing duct work layout drawings, although there may have been more recent minor alterations. File reference E block Ductwork Layout Mar90.pdf

### **Electrical Distribution.**

The local distribution system consists of Isolators, fused switches, and red dot distribution boards. These are all lifecycle and are in need of replacement.

There are three separate supplies into E block.

One supply comes directly from switch D7 and is labelled as such. This feed was originally the non-essential feed to the block marked as D7. The fuse boards and MCB boards from this supply generally feed the power within E block and the plant room as well as the power and lighting within the garage.

Within the main switch board there is an integral fuse board with a dual feed from switches D18 and D20. This fuse board originally provided two essential feeds located within the E block. These supplies are labelled as E1 and E2.

The fuse boards and MCB boards from the E1 supply generally feed the lighting within E block, lighting within the plant room and the mechanical power for E block as well as the power and lighting within Nano block. It also feeds some essential power supplies in E block as well. The mechanical power is provided via the essential side of the plant room MCC.

The E2 supply provides power to the existing chillers via the non-essential side of the plant room MCC.

It is worth noting that the supply arrangements have been adjusted such that the entire site is now fully generator backed and that there are no essential or non-essential supplies.

## **EG11**

EG11 is the cold room feed store. The existing facility has a problem with damp and returning mould growth such that it has currently been taken out of action.

It is used for dry pelleted food in bags, which has a requirement to be stored at 15 degrees Celsius or less. The room has cellar type cooling which is currently switched off. The room is accessed 2 –3 times a week for short periods. Mould is present in both the room and within the air cooler at the back and also in the door.

There is currently no fresh air or extract ventilation to this room.

Further details can be found in the RIBA stage 2 feasibility report carried out in May 2023 carried out by RLB – RIBA Stage 2 Feasibility Report EG11

## **Addition facility Fabric and M&E Systems**

The rest of the animal house is tired. The flooring is breached in terms of cleanliness, is coming away at the welded seams, is pitted and scratched and generally worn. It has exceeded its life cycle and needs replacing throughout the facility.

Ceilings are also tired, and some tiles damaged and/or stained and require replacement. With work anticipated within and above the ceiling and on the air grilles in the ceiling grid careful consideration should be given to their condition when the work has been completed as to reuse or renew. They should have a uniform appearance. Decoration in the unit is tired and requires damage to the fabric to be made good and repainted throughout.

## **Lighting replacement to LED lights.**

There are two sets of lights in all animal holding rooms, the Circadian lights which provide a 12:12 light cycle, with dawn and dusk phasing with a gradual change in lux levels:

0 lux between 17:00 – 04:45

Gradually increasing to 57 lux between 04:45 – 05:00

57 lux between 05:00 – 16:45

Gradually decreasing to 0 lux between 16:45 – 17:00

The second group of lights is the 'working' light which is manually operated providing additional light to the room for tasks.

This light needs to have either an external warning system to alert when lights are left on, or an automatic turn off when there is no-one in the room.

Lights in EG08 and EG10: These rooms are Phenotyping rooms, for these rooms it would be useful to have a manual dimming switch for the 'working' light, as Lux control



is required for certain behavioural testing. The Lux levels will need recording, so having a display would be ideal. Otherwise, handheld Lux-meters can be used.

The lighting system for control of the procedure rooms has failed and no longer works correctly with the integrated controls Lighting system. The system has reached its life expectancy and controls are obsolete and parts of the system run manually. The procedure rooms require low lux level during the day with dawn and dusk periods and off at night. The rooms also have full lighting manual override. Dawn and dusk are achieved currently in switching from normal room light level to secondary lower light fittings, there is no dimming as such.

## Project Description - Services to be Provided

### User Requirements

#### Room Requirements

The AHU must meet the following user requirements:

For all rooms animal rooms in the unit the temperature range should be between 20 and 24° C with a humidity range of 45-65% range.

The diet storage room EG11 will need to be at the lower end of the conditions stated above as per the recommendations that the diet store should be cool and dry at or below 21 °C with a maximum of 65% RH.

Animal Housing rooms and procedure rooms, EG03, EG04, EG05, EG06, EG07, EG08, EG09, EG10, EG12 and EG16 require 15-20 Air changes per hour.

#### Air pressure requirements

The Corridor should maintain positive pressure creating a barrier between it and the Animal housing rooms, and Procedure rooms. The Animal holding and Procedural rooms: EG03, EG04, EG05, EG06, EG07, EG08, EG09, EG10, EG12 and EG16, these should be of a negative pressure to the corridor. Dirty areas such as EG14/15 and EG11, should be of greater negative pressure to direct flow of allergens towards ventilation and outside.

#### Facility Requirements

EG11 is user for Goods-in and Waste-out area with access to the outside. It is also the designated food storage area.

Along with the removal of the current air conditioning unit, replacement of the current window covers and decontamination cleaning of the area of the mould, there is a requirement for a transparent partition be installed between the windows to create a 'clean' area and separate 'dirty' lobby area. Clean area environment controlled by E-Block AHU. Dirty area to have own system due to external door.

**Please Note: Asbestos Survey required for mould removal within the external walls**

Proposed use:

Temporary storage on bench in 'dirty' area for goods in. Small items brought in through hatch. Sizeable items moved through the door.

Waste dropped through door and collected on the other side for disposal in non-lab clothes.

Bench on 'clean' side for temporary storage of goods in.

Food storage area in 'clean' area.

Lab coat hooks and overshoe storage to be installed in clean area

There is a requirement to install a security camera and local monitor to the back door to enable viewing of the external area prior to opening the door to check for deliveries

### **EG03**

There is a requirement for the extraction fans system over the dissection bench in EG03 to be removed along with the room trunk.

There is a requirement for a change in the socket under the bench into a double socket for installation of 2 x downdraft units by others

### **EG16**

Requires new single socket under bench for a single downdraft unit

All the associated building and Fabric work related to these rooms will be required

### **Remedy of Building and Fabric defects**

The building and Fabric defects should be remedied including joints between doors and frames, skirting boards and frame, walls, ceilings, and junctions between services and penetrations in walls and ceilings. Where there is damage to walls and ceilings this should be made good before redecoration of walls ceiling skirting boards and door frames etc.

There is a requirement to replace all the flooring in the unit, all rooms, and corridors.

Tiled ceiling where disturbed by alterations or where there are existing defects must be replaced or made good. Appearance of the ceiling should remain uniform and consistent throughout the room

There is a requirement for the sinks currently installed in animal holding rooms EG04, EG05, EG06, EG07 and EG09 to be removed.

The Sink in EG08 to be replaced and pipework to be connected properly to remove open pipework.

The sink in EG14/15 to be replaced with smaller catering style sink to allow for cleaning in and around the sink area.

This internal dimension of the sink must fit a cage base of the following dimensions:  
588mm x 194mm x 395mm

All drains will need to be covered and fitted with vermin barriers.

Note: Sink EG12 to remain

There is a requirement to store large and expensive units in EG04, EG05, EG07 and EG09 out of the areas before the work is commenced. Consideration needs to be given for provision of storage. The vendor company may be able to provide. Large equipment in EG14/15 will need moving for the replacement flooring to be installed

### **Access Considerations: EG13**

Any access requirements to EG13 for any work must be supervised at all times by UKHSA approved staff due to nature of the room.

This room may be required to be used throughout the build and therefore timings involving access to this room must be outlined and approved throughout the build timeline by end users.

Access and use of the low dose-rate gamma irradiator in EG.13 will be required throughout the refurbishment to continue experimental work for projects. Pre-planning of access times and days are subject to discussion, but the room and equipment will need to remain useable. UKHSA can receive ad hoc visits from the **Environment Agency and the Counter Terrorism Police** with minimal notice, and access will be needed to EG.13 during these visits. Electricity supply will need to be maintained to keep the alarming mechanisms working. Further, monthly source checks and safety checks need to be performed as a legal requirement, necessitating the need for access (some flexibility on days/times)."

Note: New legislation for this room may come into force during this work and the requirements may change. A variation in cost may have to be allowed for.

### **Lighting replacement to LED lights.**

Animal holding room require Circadian lights to provide a 12:12 light cycle, with dawn and dusk phasing with a gradual change in lux levels:

0 lux between 17:00 – 04:45

Gradually increasing to 57 lux between 04:45 – 05:00

57 lux between 05:00 – 16:45

Gradually decreasing to 0 lux between 16:45 – 17:00

The rooms also require 'working' light which can be manually operated providing additional light to the room for tasks.

This light needs to have either an external warning system to alert when lights are left on, or an automatic turn off when there is no-one in the room.

Lights in EG08 and EG10: These rooms are Phenotyping rooms, for these rooms it would be useful to have a manual dimming function for the 'working' light, as Lux control

is required for certain behavioural testing.

The control system will require the Lux levels to be recorded recording, so a display would be required so that the level can be manually recorded, or the system provide these readings automatically.

Ideally the lighting system throughout can be one single system rather than the two systems currently installed.

**Note:** LED Light fittings along with the control system will need to pass UKHSA 'Flicker safety test' in all phases of dimming etc before they can be purchased and installed.

### **User Requirements for BMS (alarms, monitoring, logging etc.)**

There is a requirement to replace the BMS system. The system should allow for the monitoring and logging of temperatures and humidities in the rooms as well as generating alarms in and out of hours on variations outside for the prescribed limits for on-call engineers and animal staff.

There should be the ability to view the temperatures and humidities locally in the unit as well as remotely via an interface

Monitoring, recording, and alarming of the lighting levels in the procedure room could be achieved through the BMS or through the lighting control system.

Daily reporting of min/max temperature and humidity in animal rooms would be helpful for legal recording of levels, but this can be done through the TREND system user face if required.

### **Decontamination**

After completion of all work there is a requirement for a deep clean and for decontamination by fumigation, in which contract assistance may be required before the unit can be reopened.

**The full user Specification can be found in Document Ref E-Block Requirements AHU Replacement (004).pptx**

## **M&E Requirements**

The following specification provides detail and criteria, for the mechanical and electrical design associated with the partial refurbishment works.

### **Mechanical**

Key plant items that serve the E block are to be replaced in line with the following specification document.

Key mechanical items include replacement of large equipment within the plant room EG19. EG19 currently houses the existing AHU, water softener plant and water heater. See 30893(50)001 for further detail.

The existing water softener plant is to be replaced with a new reverse osmosis plant unit to provide the required clean CWS supply to new steam humidifier unit.

The existing water heater is to be replaced due to the age and condition of the unit; existing connections can be re-used where appropriate provided they are in good working condition or are to be replaced alongside the water heater as part of the scheme.

The AHU and specified parts of the existing duct work are to be replaced and relocated to maintain the existing mechanical ventilation to E block alongside providing the appropriate levels of filtration combined with a frost coil. Existing supply and extract duct work within the building is to be left in place, cleaned and re-used due to issues required to replace it. See 30893(5S)001 for further detail.

The requirement for the “E Block Extract Fan” and duct work those feeds into the corridor ceiling void removal needs to be assessed alongside the design requirements of the unit for air flow and pressure control and removed if required in line with the design

Alongside the key plant equipment replacement, the mechanical works also include modifications to the existing LTHW circuit serving the room heater batteries as well as removal/replacement of several sink/WHBs within procedure rooms.

See 30893(53)001 for further detail.

### **Electrical Works**

Due to the age of the site the existing electrical distribution fuse boards within E Block are to be replaced alongside any fuse switches and isolators etc. It is noted that these can be rationalised, if necessary, as there is no longer a distinction between essential and non- essential supplies, all supplies are currently backed up by the site generator.

See 30893(6S)002 for further detail.

Replacement lighting is a key element in the refurbishment works due to extremely specific client requirements in the procedure rooms. A lighting system is required to allow for the specific lighting timing, lux levels and controls to be achieved as detailed within the User Requirements Section See 30893(63)001 for further detail.

In line with relocation and replacement to the existing plant layout and proposed external AHU location, small power will be required/modified to suit utilising the existing incoming power feeds.

See 30893(60)002 for further detail.

D7 in the corridor is to be moved into EG5C and its associated feeds to D7/1, D7/2 and D7/3 reconfigured,

A surveillance/CCTV system shall be installed at the rear delivery entrance EG11. The contractor is to install a 24/7 CCTV system that is displayed within EG11 to ensure staff are able to see the rear entrance prior to opening the external door. The CCTV system

is connected to a local NVR system to allow connection to the local network.

In conjunction with the existing site BMS controls the new BMS panel equipment is to be integrated into the existing BMS network to allow for remote control and monitoring from other locations on the site.

### **Temporary Supplies and Enabling Works**

Where services that are to be replaced which serve critical areas, temporary services are to be installed to allow for ongoing critical projects to be maintained throughout. The sections below outline the required services used by the respective area as well as their criticality and any temporary provisions required.

#### **EG13**

Access to EG13 may be required and will require the electrical supplies, lighting, and power to be maintained for the duration of the project. Air supplies are not required. Access to this room will be restricted, and will have to be supervised at all times, therefore works in this room will need to be coordinated with the Department and the Project Manager. Due to the existing storage unit within EG13 requiring a power connection, provisions are to be made to provide temporary power to the room whilst the works are being carried out should disruption be predicted.

See 30893(6S)004 for further detail.

EG13 is fed from the local board D7/2/1. The board is to be provided with temporary power alongside the works to maintain use of room EG13 and its entry corridor.

Due to the storage unit in EG13, a shutdown to allow for the changeover of incoming power can be arranged with staff as to ensure contingency plans are put in place in the event the unit has issues following a shutdown.

#### **Block F**

The existing Compressed Air, Gas, MCWS and Power within F block is routed via E block. These services are to be maintained throughout the works, or the contractor is to provide alternate sources to ensure no loss of service.

Where changes to the electrical services are required, this area must remain operational and temporary supplies may be required during these works.

Where works are required to the existing services these works are to be carried out during out of hours or with a suitable notice period.

## **Mechanical Services Requirements**

### **Drainage**

Drainage connections are required to be modified where the removal of existing sanitaryware is being carried out.

See 30893(53)001 for further detail.

Where new mechanical equipment is being installed that require drainage connections, existing drain connections are to be utilised unless stated otherwise.

See 30893(50)001 for further detail.

### **Procedure Rooms**

Part of the works includes for the contractor to allow for the removal of 5 no WHB & sink units as detailed within the room data sheets. The room data sheets also detail which rooms are to remain.

WHB & Sink units are required to be removed along with all associated drainage and domestic pipe work as detailed within the domestic services section below.

Local connections are required to be removed back to the room perimeter and capped off for future use where existing waste stacks that serve other areas/locations are to be left in situ and capped off at the nearest "T" connection.

Where sanitaryware is being replaced as opposed to removal, the contractor shall allow for any required modifications to suit the new drain connection.

Where services are removed the building fabric must be made good or replaced to the required standard.

### **Air Handling Unit**

The contractor shall allow for 22mm PVC-U waste pipe from the AHU unit. The drain shall be complete with an in line Hepvo waterless trap.

If the location of the AHU is external the AHU drain, pipework is to be weatherproofed, and trace heated as to suit the external installation.

If the AHU location is external the drains from the AHU are to be taken to a new 100mm gulley which is to be connected to the nearest foul drainage manhole located adjacent to the bottle store).

### **AHU Humidifier**

The humidifier serving the AHU will also require local drainage which is to be installed in 2 No 32mm PVC-U waste pipe. The drain shall be complete with an in line Hepvo waterless trap.

The humidifier unit is to utilise the existing floor gulley previously used by the water softener plant.

### **External Condensers**

To account for the new external condensers serving the AHU cooling coil, local 22mm condensate drains are to be installed into all condensing units utilising the local existing chiller drain connection adjacent to the EG19 plant room.

### **Reverse Osmosis Water Treatment Plant**

To accommodate the new reverse osmosis plant, a new local drainage connection is to be taken to the existing local 100mm floor gulley within the EG19 plant room previously used by the water softener plant.

The drain is to be installed in a 50mm copper pipe work drain including a Hepvo waterless trap.

### **EG11 VRF Unit**

As part of the works includes for the replacement of the VRF unit serving EG11, a revised drainage connection is to be accommodated. The new drain connection is to connect into the existing floor gulley within the room.

To modify the existing installation the drain is to be chased into the floor to the room perimeter to allow for the new 22mm copper drain connection. A new access panel is required to be installed above the existing drain point to allow for future inspection and maintenance. The building fabric must be made good or replaced to the required standard.

### **Domestic Services**

As part of the refurbishment works, modifications to the existing domestic services are due to sanitaryware being removed as well as replacement plant equipment being installed shown on the corresponding drawings.

The installation will be installed alongside appropriate; isolation points, non-return valves and pressure relief valves where required.

All pipework shall be installed to match existing copper pipe work with Geberit Mapress fittings or similar.

All pipe work shall be insulated with foil faced Phenolic Foam thermal insulation supplied by Kingspan Kooltherm or equal.

All pipework to be installed in accordance with ACOP L8, to ensure the control of legionnaires' disease.

Where services are removed the building fabric must be made good or replaced to the required standard

For further details see drawing 30893(53)001

### **Removal of Existing Sanitaryware**

Pipe work is to be removed back to the incoming location into the room. All "T" joints are to be removed and replaced with couplers to reduce the risk of legionnaires due to dead legs in the system. Where sanitaryware is removed the building fabric must be made good or replaced to the required standard.

Due to the intended use stainless steel sinks are to be provided in replacement. Sinks are to be provided in the size, finish as detailed within the associated room data sheet. Sinks are to be provided by Pland or equal.



### **Replacement of Existing Sanitaryware**

As requested by the client, both EG08 and EG14/15 will require the existing sanitaryware to be replaced as part of the works as shown on the corresponding domestic services drawing.

### **Reverse Osmosis Water Plant**

The contractor is to allow for removal of the existing water softener and existing Spectrum RO unit. Following removal of the existing system allowance is to be made for a new reverse osmosis water treatment plant to be installed within the plant room to meet the design requirements for the supply demand of the AHU humidifier.

### **AHU Humidifier**

As noted above a new reverse osmosis unit is to be installed as part of the scheme. The reverse osmosis unit is to feed the new air handling unit humidifier.

A single pipe connection will be required to allow for operation of the steam humidifier.

The system is to be installed in a 2 N configuration to allow for continued use of the AHU in the event of a system failure or any required maintenance.

If the location of the AHU humidifier is external, all associated pipework from the internal plant room is to be insulated, trace heated and weatherproofed in line with an external installation.

### **Domestic Hot water services**

The contractor is to make an allowance as part of the works to replace the existing Albion ULTRASTEEL domestic hot water heater. The unit is to be replaced with a like for like unit utilising the existing water feed from the nearby break tank as well as the existing domestic hot water flow, return and drain connection.

### **Gas Systems**

Within E block are several sources of different gasses used within the building. All existing gas pipe work is to remain in situ unless otherwise stated, this includes natural gas, compressed air, and nitrogen. No gas works are planned for this project

### **Heating**

Heating across block E is to be carried out utilising the existing LTHW circuit around the block from the boiler house which currently serves the existing heater batteries.

For further details see drawing & schematic 30893(5S)003 & 30893(56)001

### **Heater Batteries**

Heater batteries for the existing AHU are to be removed. Allowance should be made to connect the New AHU heater batteries to the LTHW system.

Should the AHU move to an external position the existing pipe work is to be extended outside to the new AHU location to serve the frost coil and heater battery Pipe work to the new AHU frost coil and heater battery is to be installed in 40mm diameter pipe. All external LTHW pipe work to the new AHU location is to be insulated and weatherproofed suitably in accordance with external conditions.

All 3-port room heater battery valves, for the existing internal room heater batteries, are required to be replaced with new and installed, in accordance with the adjusted flow rates and heat loads within each room.

### **Mechanical ventilation**

As part of the refurbishment works, a new AHU will be installed to provide ventilation to the E block building excluding the “Nano” rooms in EG17 & EG 18 as they are served by their own individual unit mounted on the roof.

Due to the age of the site and issues replacing the existing duct work, duct work beyond that of the plant room is to be re-used and the existing header/connecting duct within the plant room will be retained and modified to suit the connection to the replacement AHU.

**The current proposed design at earlier RIBA stages allows for the AHU to be installed externally to the building, adjacent to the existing generator as shown in the corresponding drawing.**

**This was because in the preliminary stages in design the old AHU needed to be kept going through the project for a period as the unit needed to remain operation during the first phase of the work. This is not required anymore so there is an opportunity for the AHU to remain in the plant from should space allow.**

Where ventilation is installed externally, all duct work is to be insulated and weatherproofed suitably for external conditions.

Volumes have been based around an air change rate of 15 –20 per hour in procedure rooms whereas other rooms have maintained existing volumes or have volumes selected specific to room type.

See the associated drawing/calculations for further information.

The system will be complete with volume control dampers, attenuators and supply/extract new grilles where required. Duct work shall be provided as galvanised steel square ducting with the sizes shown on the corresponding drawing.

For further details see drawing 30893(5S)001 & 30893(50)001.

### **Air Handling Unit Technical Detail**

If the air handling unit is to be located externally, adjacent to the existing external concrete plinth and backup generator as shown in the corresponding plant layout drawing, the need for its own plinth needs to be determined and allowed for within the scope of the project.

For security, the area will have to be protected by a palisade security fence and access gat, to match the existing style in the area to prevent public access to the unit.

If the AHU is to be positioned externally to utilise the existing space with the duct work rising to high level to travel back to the existing duct work header located in the plant

room EG19, the AHU will require a suitable IP rating due to its external location.

The unit is to provide for an expected heating load of 65kW and cooling load of 30kW. These figures will need to be confirmed in the design stage.

Exhaust air will be part of a separate system resulting in no heat recovery.

A low temperature hot water frost coil and reheat coil is to be incorporated into the unit using the existing LTHW pipework that originates in the plant room EG19. Where LTHW pipe work is located externally, trace heating will be required in the event the system is not operating to protect the pipe work from frost damage.

A direct expansion refrigerant circuit/coil is to be installed as part of the unit. The DX circuit is to be fed via external Panasonic heat pump units.

Filtration is to be incorporated in the air handling unit, as well as a motorised inlet damper, panel filter, bag filter (F7).

System resilience is to be met by inclusion of a run/standby fan motor configuration.

### **BMS & Controls**

BMS connection from the new AHU unit to the existing system located within E Block. It is anticipated that modifications required to the BMS panel are to be carried out by the existing supplier E.ON and works carried out by the incumbent are to be included within the contractors' package.

### **Fire Alarm Connection**

A volt free contact connection to the AHU from the existing fire safety system to allow for a system shut down in the event of a fire.

### **Ductwork Modifications**

To accommodate the revised airflow rates introduced as part of the scheme, part of the existing duct work is to be modified to provide suitable volumes within E Block.

The existing corridor extract that travels at high level within the plant room is to be removed along with the vertical section where it is exhausted to atmosphere. This is to ensure that the volumes shown are achieved alongside the correct pressure differences.

Where shown on the ventilation schematic, existing ducts which were previously capped off are to be relocated/extended to the positions detailed. Areas where this is shown are EG14/15 and EG11.

Due to a large amount of duct work being left in place and re-used for the existing scheme, prior to any modifications being made, supply and extract duct work where possible is to be cleaned in line with TR19 standards.

### **Roof and Fume Cupboard Extracts**

There are currently 3 extract systems. One that supplies the animal rooms, one that supplies dirty extract to the dirty cage wash area and one feeding above the corridor

ceiling. These extracts are not controlled and interlocked with the supply fans. They are belting driven speed controlled by local speed controllers. They are not visible on the BMS system.

As part of the scheme the existing roof and fume cupboard extracts have been included within the calculated air volumes.

Individual roof extracts are utilised for extracts from EG12, EG13, EG14/15, EG16 totalling a total extract volume of 844l/s.

### **VRF/Air Conditioning**

A new roof mounted VRF unit is required for installation to EG11 delivery entrance with an internal wall mounted split unit.

See 30893(50)002 for further detail.

## **Electrical Services Requirements**

To allow for the refurbishment works to be carried out, the contractor will allow for all works listed within the sections below.

The contractor is to allow for the phasing of electrical modifications in line with the corresponding electrical schematics in order to maintain the critical sequencing of works as well as ensuring minimal downtime to critical services.

Power will be provided as shown on the corresponding drawings and schematics; 30893(6S)001, 30893(6S)002, 30893(6S)003, 30893(6S)004 & 30893(60)002.

Lighting is to be provided as shown in the corresponding drawing 30893(63)001.

### **Incoming Power Supply**

The power to E block comes directly from the main switch board for the site.

There are three separate supplies into E block.

One supply comes directly from switch D7 and is labelled as such. This feed was originally the non-essential feed to the block marked as D7. The fuse boards and MCB boards from this supply generally feed the power within E block and the plant room as well as the power and lighting within the garage.

Within the main switch board there is an integral fuse board with a dual feed from switches D18 and D20. This fuse board originally provided two essential feeds located within the E block. These supplies are labelled as E1 and E2.

The fuse boards and MCB boards from the E1 supply generally feed the lighting within E block, lighting within the plant room and the mechanical power for E block as well as the power and lighting within Nano. It also feeds some essential power supplies in E block as well. The mechanical power is provided via the essential side of the plant room

MCC.

The E2 supply provides power to the existing chillers via the non-essential side of the plant room MCC.

It is worth noting that the supply arrangements have been adjusted such that the entire site is now fully generator backed and that there are no essential or non-essential supplies.

As part of the project D7 supply in the corridor is required to be moved to EG5C and the feeds to the new D7/1, D7/2 and D7/3 boards re-cabled

### **Replacement of fuseboards**

There are currently five existing fuse boards within E block. These fuse boards shall all be replaced with new Memshield 3, Schneider Acti9, or equivalent MCB boards.

All associated isolators or switch fuses will need to be incorporated or integrated into the electrical design and replaced.

Fuse boards D7 and E1 are to be both replaced and reconfigured.

Fuse boards E1/1, D7/2/1 and E1/6 are to be a like for like replacement. The fitted fuses shall be replaced with type C MCBs of the same rating. All outgoing general small power circuits shall be fitted with suitably rated RCD/RCBO units.

The fuseboards will be complete to the latest standards incorporating surge and arc protections. Boards should have a spare capacity of at least 20% on both 3 phase and single-phase supplies.

### **C Block Extract Fan**

The extract duct within E block is served by a common large fan located within the roof top plant room on the adjacent building.

A new power supply shall be provided to this extract fan from distribution board D7.

The supply cable shall run from the supply in the plant room to the end of E block, rise within the ductwork riser to the roof then run along the covered service route to the fume extract fan. The fan should be direct drive and be inverter driven and interlocked via the BMS controls to the supply system according to the control strategy for startup, shut down, power failure, and fire strategy. This will require BMS control cabling to be installed

### **Extract fan above ceiling**

The current requirement is for this fan with associated duct work and controls is to be removed. This will need to be verified with the design.

### **Cagewash /fume hood Extract fan**

This fan is currently non-operational and needs to be reinstated and brought under BMS control. The fan should be direct drive and be inverter driven and interlocked via the BMS controls to the supply system according to the control strategy for startup, shut

down, power failure, and fire strategy. This will require BMS control cabling to be installed

### **Mechanical Power**

The contractor will allow for the provision of small power where required in line with the associated plant layout drawings and where noted within the specification.

Plant power is to be provided using a new BMS MCC panel within the EG19 plant room as detailed within the corresponding electrical schematics.

Small power is to be provided via the BMS MCC panel via, key lockable, rotary isolators adjacent to equipment where shown. Rotary isolators are to be installed with a suitable IP Rating based upon location.

### **Air Handling Unit Power**

To provide suitable power to the air handling unit, a key operated rotary isolator is to be installed which is fed from the BMS MCC panel board and located adjacent to the unit.

### **External Condenser Units**

Power to external condenser units is required to be installed into the external location of the existing chiller units. Each external condenser has an expected running current in the order of around 15A and 10A starting current. To be confirmed on design

The contractor will allow for a local key operated rotary isolator adjacent to each unit with a suitable IP rating to match the external location.

In conjunction with the with the main power input to the condensers, an on/off input will be required from the existing site BMS.

### **Humidifier**

To provide suitable power to the humidifier unit, a separate supply from the main building panel E2 supply. The humidifier has an expected running current in the order 54A and power requirement of 38kW. This needs to be confirmed on design

The contractor is to install a circuit breaker in the order of 80A, alongside a local rotary isolator adjacent to the unit which is to be located within the EG19 plant room. To be confirmed on design

### **Reverse osmosis Unit**

With the removal of the existing water softener plant and installation of a new RO treatment plant the existing associated softener power supply is to be removed, and a new power supply is required, sized appropriately

The RO unit is to be fed from the new BMS panel supplied by the BMS control company. via a local rotary isolator adjacent to the unit in the plant room.

### **BMS MCC Panel**

To provide power to the key mechanical plant items as detailed above, a new BMS MCC panel is to be installed into the plant room. The BMS controls company is to

provide the panel as well as the associated controls and signalling required in line with the existing site wide system.

The BMS MCC panel is to be fed from the existing D7 electrical feed.

For further details of the BMS MCC panel, please refer to the “BMS WORKS” section.

### **Lighting Controls**

All lighting control shall allow full control and monitoring of all luminaires and emergency luminaires.

The lighting system should incorporate light level monitoring and recording.

#### **i. General Lighting**

The corridor and toilet lighting level to be 100 lux @ floor level.

The general room lighting levels require 300 lux at the working plane of 0.8m.

The lighting shall be full PIR control only (with exception to the Animal procedure rooms as detailed below).

Within the Animal procedure rooms, the lighting shall meet the “Code of Practice for the Housing and Care of Animals Bred, Supplied or Used for Scientific Purpose.”

The lighting shall be programmed to operate on a 24-hour cycle to the lighting levels shown;

0 lux between 17:00 – 05:00

Increasing to 57 lux as slowly as possible

57 lux between 05:00 – 17:00

Decreasing to 0 lux as slowly as possible

In addition to the 24-hour cycle an absence detection switch shall also be provided to raise the lighting level within the room to 300 lux if required.

The absence detection switch shall allow the higher-level lighting level to be turned on and off manually but if the higher lighting level is accidentally left on will revert to the timed function within two minutes of the room being vacant.

#### **ii. Emergency Lighting**

Stand-alone non-maintained fittings have been selected for emergency use only to be installed as shown on the corresponding. Emergency lighting has been selected to achieve the required emergency lux levels along escape routes.

Final exit routes out of the building shall be provided with illuminated signage.

All lighting is to be powered from the lighting circuit within the room that it serves.

The emergency lighting shall be provided with an auto test function

iii. External Entrance Lighting

The contractor shall allow for external light fittings, with integral photocell control and emergency battery pack.

The external area shall be controlled by a wall mounted, IP67 rated, PIR sensor. The external circuits will have an internal emergency test secret key.

All faults shall be monitored and alarmed remotely. and power/maintenance monitoring information from individual luminaires. Monitoring can be reset by the user. Sensors to be capable of operating digital drivers.

Emergency luminaires shall be self-test.

**Note: LED Light fittings along with the control system will need to pass UKHSA 'Flicker safety test' in all phases of dimming etc before they can be purchased and installed.**

**Security**

An additional video intercom unit shall be installed outside the EG11 entrance.

The unit to be provided shall be an of the same type already in use within the building Existing camera equipment within EG08 is to be removed, safely stored and re-instated following the works.

**Fire Alarm System**

It is anticipated that the fire alarm system shall be kept in position as far as is reasonably practicable. Where this is not the case provision for any works will require prior acceptance of any changes.

The works within the contract shall consist of protection and/or removal/reinstatement of the existing fire alarm within each of the rooms dependent upon the ceiling works. The existing interface to the BMS system shall be transferred to the new system.

**BMS Works**

The contractor will include for BMS works in order to integrate any new plant equipment and the replacement AHU with the existing on site BMS system. The BMS requires to be backed up by a UPS system in the control panel.

**Input into control strategy**

In the event of a loss of supply air, the procedure rooms need to remain negative so the extract fans for E block and D Block should keep running.

In the event of a loss of extract air the supply fans need to be stopped.

Normal plant startup, the extracts should lead before supply to try and maintain negative pressure in the rooms.

Normal shutdown the supply should lead the extract.



On fire alarm the plant should shut down in the normal sequence

#### **Power failure.**

The BMS should be provided with a UPS so that on Power failure the plant controls shut down the units in a controlled manner. One normal or emergency secondary power has been established the plant will need to start up in normal fashion.

#### **Existing lighting Controls**

The existing lighting control is carried out via the existing BMS controls. The existing controls shall be removed. All control items shall be removed including all control wiring and the lighting interface box within the corridor.

#### **Containment**

The contractor will allow for new containment for all new cable installations where there is no existing containment available or limited spare capacity.

The existing containment comprises of trunking within the corridor ceiling void and at high level on both sides of the corridor. These trunkings contain the lighting and small power cabling. These trunkings shall be left in position.

The remaining cabling is just tie-wrapped within the corridor ceiling voids.

The cabling work on the project is limited. The lighting and small power final circuits are generally re-used as is the data cabling and fire alarm cabling.

The main cabling works shall consist of removal of sub-mains due to the relocation of distribution board D7 and removal of the lighting control cabling.

### **Ancillary Works**

#### **Fire Stopping**

The works shall include a survey of the existing fire stopping with an allowance to make good as well as for fire stopping any new penetrations created or existing penetrations being worked upon in the fire walls will need to be fire stopped to match existing nearby construction elements.

Firestopping including in existing blocks shall be by the Main Contractor who shall use a specialist fire engineering company who will certify fire stopping on completion.

#### **Out of Hours works**

It is envisaged that the contractor will as part of their works have to carry out activities outside normal working hours due to the operational times of the health clinic. Any out of hours works to be carried out will require an agreed shut down.

The contractor will programme the works and seek approval a minimum of 2 weeks prior to the proposed date, to ensure notification can be sent to all building users.

### **Inspection Testing and Commissioning**

All mechanical & electrical services shall be inspected, tested, and commissioned by the contractor or their Specialist Sub-Contractor.

The works shall not be deemed to be complete for the purpose of issuing a Certificate of Practical Completion until the Contractor has tested and commissioned the works to the satisfaction of the Employer's Agent and has supplied the Employer's Agent with Test Certificates, Record Drawings, Operating and Maintenance manuals.

### **General / Key points**

The UKHSA intent is for the current AHU and associated plant, supply and extract fans, cooling, humidification, water softener, and BMS to be replaced.

EG11 cold store reconfiguration, cooling and fabric works to remove mould.

Upgrade of existing switchgear, as well as limited M&E works including new lighting system, CCTV works, removal of sinks and fabric works including new flooring and decoration.

Deep clean and fumigation on completion of the works.

The successful contractor is required to act as the Principal Contractor and Temporary Works Designer for the Project and shall allow for a CDM compliant site set up (inclusive of standalone welfare).

The aim is for the design and build works to be carried out in two phases.

The contractor is made aware that the site is critical to UKHSA operation. In the event of an emergency, works on site will be required to temporarily stop until resolution. The site will comply in all cases with any UKHSA project manager or emergency response team requests.

The Contractor shall include for all works as detailed within this URS to provide a solution.

The contractor shall employ competent site-based project Manager who shall have charge of the works and who shall be accessible to receive instructions in the absence of the contractor's project engineer/manager.

UKHSA shall have the right to require the withdrawal of any such person whose general conduct or handling of the job is, in the client's opinion, not satisfactory.

The contractor shall be responsible for the co-ordination, dimensions and setting out of all work within their contract with all other services, structures & architectural features to avoid clashes etc both above and below ground. It is crucial for the success of any project that the approach to the project is well planned; the contractor must therefore carefully programme the works well in advance.

The successful contractor shall draw up a fully detailed programme, indicating the times required for the execution of the works.

The successful contractor shall be required to have an authorised representative in attendance at any site meeting which may be held and to which his attendance is requested. The costs associated with attending site meetings shall be deemed to be included within the tender sum.

The frequency of site meetings shall be at the sole discretion of the client.

The successful contractor shall seek written consent from the client of the possible transfer, assignment or subletting of any part of the work involved in this contract, and to submit any proposed subletting details when returning the tender documents at tender stage.

The contractor must take full responsibility for the co-ordination, supervision, insurance, and administration of all his sub-contractors.

Approval of sub-contracts will not relieve the contractor of his responsibilities under this contract.

## Survey/Design

The contractor will act as the principal designer including temporary works for the project.

The contractor is to confirm all works associated with the project can be executed successfully in the timescales stipulated.

Detailed logistic plans, CPHSP, drawings, equipment and plant registers, RAMS etc shall be provided by the successful contractor for review and comment as required by UKHSA to ensure that good practice has been achieved, and that operation, excavation, construction, and commissioning can be safely and effectively achieved, prior to any procurement or work taking place.

Note: it shall be considered that all requirements have been costed for in the tender return. This includes where applicable:

- Feasibility and suitability
- Design consultation
- System verification
- Utility verification
- Updating record drawings
- Temporary works calculations
- Logistic strategies
- Provisional sums
- Contingency sums

Prior to award the contractors proposed programme and construction / commissioning strategy will be submitted for review by UKHSA complete with a method statement and

outline proposal to demonstrate their understanding of the works, including all supporting documentation.

The proposal presentation must demonstrate that the Principal Contractor is competent to deliver the works to the required standard. UKHSA's decision as to appointment shall be final.

The successful contractor will provide information to a level suitable for execution and in full compliance with the URS. The contractor is expected to undertake this as part of the contract and submitted cost.

The latest iteration of this URS document will take precedence over any previous or preliminary information, but in cases of doubt or conflict, the matter should be referred to the client immediately for a decision.

## Security

Adequate security to be in place during construction to ensure no access to site to general public. Temporary internal walls may have to be constructed to limit access to construction areas to UKHSA staff on site.

Note the principal contractor is to allow for all necessary dust and noise screening during construction works (examples below).

## Privacy / Dust Screening Acoustic Quilt

The contractor is to allow for the duration of the project a security cabin and associated temporaries for the site booking in / out process and management of construction related activities like material bookings and banks man works etc.

## Construction

This includes but is not limited to the commissioning, safe / responsible connection to existing services and materials, builder's work including making good, fire stopping, integrity testing, installation, testing and putting into operation new services and associated systems.

## Permit to Work, Risk Assessments & Method Statements

The contractor and all sub-let contractors thereafter shall comply with any management procedures that the site has in place and must obtain an isolation permit to work prior to commencement of any physical construction work.

Where isolation permits to work are required there must be sufficient consultation, exchange of information and planning between all parties concerned prior to the work commencing, in order to facilitate the permit to work process and minimise disruption to both the normal operation of the main UKHSA site and Principal Contractors programmed project works.

In general, the area of works / site will be under the control of the successful Principal Contractors Safe System of Works (SSOW) under their CDM responsibilities.

Where there are local UKHSA processes that involve works on Fire Systems, HVAC, LEV, BMS & Water an isolation request and transfer of control should be sort by the Principal Contractor via their UKHSA Project Manager.

Exception to point 108 are activities involving “High Risk Activities” where UKHSA PMC (CBRE) input will be required for activities such as the following:

- a. Electrical systems (HV/LV)
- b. Pressure systems (Steam, Liquid Nitrogen, Compressed Air)
- c. Hot Works
- d. Confined Space
- e. Excavation

The contractor shall issue detailed / project specific risk assessments and method statements for each project activity as part of their Construction Phase Health and Safety Plan (CPHSP). Such documentation should be site and work specific, relevant (not generic), succinct and submitted to UKHSA and/or Department Manager prior to work commencing. In the event of the need to deviate from the stated method statement, no further work is to be carried out until a revised method statement and risk assessment has been prepared and submitted.

In all cases the Principal Contractor will maintain a live Construction Phase Health & Safety Plan containing all approved and signed RAMS, permits, temporary work designs etc for review by UKHSA at any time requested.

## Enabling works

Given the importance of the site the construction area needs to maintain good first impressions, the project is expected to always keep all working areas and access routes clean and tidy with waste, dust and debris minimised and cleared up as works progress (including road cleanliness) as opposed to end of day. All protection agreed temporary signage and the like are expected to be maintained in correct order and reasonable condition for the duration of the project.

All necessary quality and safety precautions shall be applied by the project to protect the operational nature of UKHSA Chilton.

Isolations of incoming utilities and live services that could affect the main site operation (i.e.: fire alarms / water etc) must be completed as part of enabling works or clearly identified. Unless required to remain to enable the contractor to complete a section of work that may require that utility (i.e.: Water for continued site operation). In which case the contractor will advise UKHSA of their planned works beforehand and required date for isolation post completion.

## Access

All temporary access equipment, lighting, power, fuel, plant, equipment, and self-contained welfare required to complete the works are to be provided by the contractor.

## Removal of Redundant Materials

The project shall remove and correctly dispose of all redundant materials associated with the works and associated surrounding areas.

A waste management report will be provided at the completion of works by the Principal Contractor providing a breakdown of how the waste was managed and recycled.

## Construction Waste

Before commencement, the contractor must provide a site waste management plan. Redundant services, materials, including waste produced by the project, shall be safely removed from the workplace by the contractor in line with waste hierarchy.

The contractor undertaking works shall provide to UKHSA copies of all relevant waste carriers licences and full copies of permits for waste facilities prior to waste removal from site. Waste disposal documentation shall be available for UKHSA inspection.

The contractor shall safely remove and dispose of all redundant and disused materials and equipment strictly in accordance with the requirements of the Environmental Protection Act.

If applicable - Before removal, any existing plant or materials shall be offered to the client for retention.

## Protection

The contractor shall ensure they fully protect surrounding UKHSA property, equipment, plant, services, and people not part of the project from their works and work-related activities.

Should any damage result from the negligence of the Principal Contractor's employees or those of their sub-contractors or suppliers etc., the contractor shall be responsible for making it good or meeting the cost thereof, to the satisfaction of the client.

It is the Principal Contractor's responsibility to conduct a photographic survey and to lodge the images with the client, before works commence. In particular the routes to and from the working area.

## Noise

Noise levels within all areas should be kept to a minimum.

Persistently noisy activities shall be undertaken out of normal UKHSA working hours (08-00 to 16-00 Mon / Fri). Intermittent noisy activities may be undertaken during normal working hours by prior arrangement and agreement with UKHSA.

There are certain activities within the vicinity of the works that cannot be disturbed by noise. Reasonable notice of noisy activities must be given to UKHSA so that UKHSA can investigate the potential impact of the noise in relation to operations and allow the contractor to rearrange activities without affecting the programme of works.

## Dust and Fumes

It is not acceptable for dust and fumes however innocuous, from construction activities, to enter UKHSA working areas.

## Making Good

Upon completion of works the site and systems will be offered to the client for snagging and subsequent making good.

Hard standing areas (E.g.: paths, car parks, roads etc) will be cleaned of any soil, debris, or demolition related particles / objects.

## Miscellaneous

### General

All appropriate signage and markings (both temporary and permanent) shall comply with the requirements of the UKHSA Standard Specifications and industry standards and regulations. These shall include safety, identification, and directional labelling.

An enduring site goal is to improve the overall standards of working conditions at UKHSA RCE Chilton. As such project works should be delivered to the highest standard practically achievable.

All visitors must report to reception in the main building upon arrival and must be escorted. Operatives will be required to book in & out of site daily at the Site project office, after receiving site induction & to be escorted until they have received a UKHSA site induction.

## Working Times

Site working times are Monday to Friday 0800 to 1600  
Out of hours working is subject to agreement.

## Site Logistics

Logistics will be as per the site wide logistics strategy.

The contractor is to also provide a copy of their proposed projects logistics strategy for UKHSA review and joint agreement before implementation.

No large plant deliveries will be allowed without the logistics strategy being in place nor prior UKHSA agreement.

## Office, Storage & Welfare Areas

Space for the contractor to bring in their own temporary self-contained facilities is previously detailed in Area Description.

## Parking

Limited parking on site, with contractors parking area to be agreed with UKHSA staff.

## Programme

When considering the construction programme each isolation and its impact must be understood, and a sequence must be agreed with UKHSA prior to undertaking (minimum 48 hrs advance notice required). If any weekend works are required at least two weeks' notice must be given.

## Technical Data

As part of this specification, assumptions may have been made. The contractor should review and check the supplied data to ensure accuracy prior to undertaking any works. All intellectual property for documents provided by the contractor is not to be restricted and UKHSA always reserves the right to their access. All designs provided by UKHSA are the property of the UKHSA and may not be used without written consent.

## Security / Access

Site security is CTC level; therefore, contractors may need to undergo security checks.

General site access is controlled by UKHSA. All contractors working on site must have undertaken a UKHSA site induction. Request for access to site must be given at least 48 hours prior to arrival. Once inducted, passes may be drawn and returned daily at the security gatehouse at the site entrance by prior arrangement.

Direct access into the main building is possible through E-Block. Therefore, any out of hours works must be supervised by UKHSA staff.

Contractor needs to maintain security in E-Block to ensure that access into the main building is restricted. As well as securing the build site from third parties.

Security of any external installations needs to be maintained once all work is finished. i.e. secure compound surrounding an external AHU.



The contractor is to provide all equipment and plant required to access, power and light any areas during the works to deliver the project.

## On-going Site Operations and Maintenance

There may be other on-going projects or maintenance activities which the contract may be made aware of during the course of the project. The contractor should where possible and where able, co-operate to allow these to allow these activities to continue.

## Asbestos

A Site Wide Asbestos report available upon valid request from the tendering parties / principal contractor. A full R&D survey will be required before work is commenced.

Under the Control of Asbestos Regulations 2012, it is a legal requirement that Asbestos Awareness Training be given to all operatives whose work could foreseeably expose them to asbestos containing materials. This requirement shall apply to the contractor (and all operatives and sub-contractors) tendering for the works.

## Practical Completion & Documentation

### Practical Completion

Practical completion will not be accepted or awarded without completed documentation or final account agreement in place.

Upon receipt of satisfactory documentation and completion of works a UKHSA practical completion certificate will confirm completion. For the avoidance of doubt if no UKHSA practical completion certificate is issued, practical completion will not have been achieved.

The successful Principal Contract will work with UKHSA to ensure all assets are captured and the register provided is correct or updated to be corrected prior to demolition. So, the UKHSA project manager can log deactivations as necessary via Planet.

Upon award of practical completion, a 12-month defects period will commence.

12 months after practical completion a snagging review will be undertaken, actions agreed and completed by the Principal Contractor to the satisfaction of UKHSA before the release of remaining retentions.

Failure to complete the snagging works after issue will result in UKHSA withholding retention and engaging third parties to complete the snags on the behalf of the Principal Contractor, the costs incurred will be deducted from the remaining retentions.

## Documentation

The documentation required to be produced by the contractor during the project are scheduled in the appendices.

The contractor shall produce and supply a completed project health & safety file including updated record drawings for the works, fully indexed and cross-referenced incorporating electronic copies of all record drawings. The manual shall include full details of all the construction and commissioning works undertaken and include all finalised waste management reports. The manual shall be in the form of an interactive PDF document. The manual shall be in accordance with the BSRIA Building Manual and Building User Guide. Including a technical memorandum for these works, the details of which are within the appendices.

The contractor shall offer a review of the proposed project health and safety file 4 weeks prior to practical completion to allow UKHSA comment.

The contractor shall supply the finalised project health and safety file including all updated record drawings (DWG format) and sub-contracted works etc 1 week prior to practical completion. Following approval two hard copies and one electronic copy shall be supplied to the UKHSA.

NB. Practical completion will not be given without receipt of the project health and safety file that are both completed to the satisfaction of UKHSA.

Any remaining equipment or cabling should be correctly and permanently labelled and cross referenced appropriately within the manual. Labelling to be agreed with UKHSA Engineering and CAD offices and presented as a labelling schedule.

All drawings shall also be provided on an encrypted memory stick compatible with AutoCAD Release 2023.

'Record' Drawings shall include the services adapted and the systems that they are connected to, whether existing or new.

Drawings shall be clearly marked as 'Record' drawings with the prints coloured with distinctive colours for different services etc.

**C374691 Chilton E Block Air Handling Unit Replacement Design &  
Build Appendix C Works Information**

## **WORKS INFORMATION GENERAL PRELIMINARIES**

### **Contents**

WI 100 Description of the works  
WI 200 General constraints on how the Contractor Provides the Works  
WI 300 Contractor's design  
WI 400 Completion  
WI 500 Programme  
WI 600 Quality assurance  
WI 700 Tests and inspections  
WI 800 Management of the works  
WI 900 Working with the Employer and Others  
WI 1000 Services and other things to be provided  
WI 1100 Health and safety  
WI 1200 Subcontracting  
WI 1300 Title  
WI 1400 Accounts and records  
WI 1500 Employer's work specifications and drawings

## **WI 100 DESCRIPTIONS OF THE WORKS**

### **WI 110 PROJECT OBJECTIVES**

The project philosophy listed below will provide the ethos by which the project team, comprising the Employer, Contractor, Project Manager, Supervisor, designers, quantity surveyor, CDM Coordinator and end users work together to a successful conclusion.

The philosophy for this project is that the Contractor takes responsibility for the construction of all works in accordance with the scope and standards as defined within the Works Information and is required to provide the finished works implicit in this contract.

In order to clarify the understanding of the parties to this contract, it is the intention that the Contractor's responsibility encompasses such items as the following:

- Carry out all necessary surveys and investigations to be satisfied of the physical conditions of the Site.
- Achieve zero defects instituting a procedure in co-operation with the Project Manager and the Supervisor to achieve this aim in respect of each activity. No payment will be made until the Supervisor is satisfied that an activity is complete and free of Defects.
- Involve the Employer in decisions and ensure that he is given choices in sufficient time for him to influence any event effecting cost, quality and time.
- Promote the Employer's aims and objectives of:
  - creating a project team based on mutual trust, co-operation and best practice.
  - instilling a "right first time" and "don't mess it up" attitude on all the project team.
  - commitment to incorporating good environmental practices of resource and energy efficiency, healthy buildings and materials, ecologically, socially and aesthetically sensitive without compromising functionality, quality, or cost performance.

### **WI 105 DESCRIPTION OF THE WORKS**

The scope of works is defined in the User Requirement Specification (URS)

Subject to the conditions of contract, the Contractor will provide the Works in accordance with the Works Information.

The project is the Design and Build provision for a replacement air handling unit in RCE Chilton E Block.

## **WI 200 GENERAL CONSTRAINTS ON HOW THE CONTRACTOR PROVIDES THE WORKS**

### **WI 205 GENERAL CONSTRAINTS**

#### **SITE VISIT:**

The Contractor shall be deemed to have visited the site and acquainted himself with the restrictions and other matters, which may affect the works.

#### **METHOD/SEQUENCE OF WORK:**

The limitations described in this section are supplementary to limitations described or implicit in information given in other sections or on the drawings.

The Contractor is to note the following limitations on method/sequence of works which must be taken into account when planning/pricing this project:

- Services are to be maintained as much as physically possible to the facility to limit disruption and downtime.
- Until an S1 form and the relevant isolation permits are in place, no work will be allowed to commence without the agreement of the Project Manager. The agreement shall be dependent upon agreement with the end user and shutdown allowances within the facility.

- Any works that will prevent the use of other facilities on the site will need to be strictly agreed in advance, and the contractor should allow for this within his tender.

The notification procedure to obtain prior written consent from the Project Manager is to be followed.

**THE SITE:**

The works are situated at UK Health Security Agency (UKHSA), Chilton, Didcot, OX11 0RQ.

The Contractor is to be restricted to the working areas required to carry out the works.

**SITE BOUNDARIES:**

The Contractor's operations and personnel movements will be confined to the Site and Working Areas together with the areas allocated by the Project Manager for the erection of temporary buildings and storage of materials.

**ACCESS TO THE SITE:**

Refer to Pre-Construction Information within the Site Information for details of access arrangements.

Access to the site for construction and delivery vehicles shall be from the A34, The Contractor is required to ensure that access and public rights of way inside and outside the site are always maintained for the duration of the project and kept clean and clear of mud and debris.

The site operates a one-way system which will be maintained and adhered to.

Where this access route will be affected due to the works UKHSA will be informed and alternative signing will be arranged and agreed with the Project Manager.

**ACCESS TO EXISTING ADJACENT BUILDINGS:**

The Contractor's attention is drawn to the adjacent and close proximity of existing buildings, many of which include facilities of a sensitive nature and the access and working limitations of the restricted site.

There is to be no access for the Contractor's personnel, including his subcontractors', to existing buildings unless specific site works are to be carried out and subject to the prior written consent of the Project Manager.

**USE OF THE SITE:**

Do not use the site for any purpose other than carrying out the Works.

The Contractor's operations and personnel movements will be confined to the site and working areas together with the area allocated by the Project Manager for the erection of temporary buildings, parking and storage of materials.

The Contractor shall obtain the approval of the Project Manager for the erection of all temporary structures, temporary paths and roads, spoil heaps, material dumps, plant, machinery and the like which are necessary for the execution of the works.

Do not display or permit advertisements to be displayed on site without the consent of the Project Manager.

Ensure that no material or equipment is brought onto site except that required for the works.

The Contractor shall exercise proper control over workpeople whether in his own employ or that of his Subcontractors and prevent their trespassing beyond the immediate vicinity of the work in hand and he shall immediately dismiss or replace any workpeople trespassing.

The final position of the Contractor's compound, accommodation, storage areas, craneage and other such temporary arrangements and/or structures on site will be the subject of a prior submission to and approval of the Project Manager prior to commencing the works on site.

The Contractor will be responsible for clearance of any areas required for the Contractor's compound, accommodation, storage areas, craneage and other such temporary arrangements and/or structures prior to commencement of the works.

These areas are to be reinstated by the Contractor on completion to the satisfaction of the Project Manager.

**THE EXISTING BUILDING(S):**

Refer to Pre-Construction Information Pack within the Works Information.

The existing buildings, plant, equipment and paved areas adjacent to this site will be in constant use throughout the contract period and access to all areas surrounding the Contractor's site must be maintained free from all obstructions at all times for the use of the Employer's staff and other authorised personnel, emergency services and the Contractor is to liaise with all others working within the site on the mutual use of access routes and any necessary diversions.

The Contractor shall ensure the compound; storage and parking areas and all other existing areas are reinstated at his expense to the same condition as at the time of possession.

**OCCUPIED PREMISES:**

Surrounding buildings will be occupied and/or used during the contract.

The Contractor must allow access to all non-work areas throughout the construction period.

Carry out the Works without undue inconvenience and nuisance and without danger to occupants and users.

The Contractor shall provide, erect, maintain, adapt and on completion remove protective barriers, walkways, screens, tarpaulins, dust sheets, etc. required for the protection of the occupants and users, general public and employees, agents or servants of the Employer and any other person upon the Employer's property.

If it transpires that compliance with this clause requires certain operations to be carried out during overtime, and such overtime is not required for any other reason, the extra cost will be paid to the Contractor, provided that such overtime is authorised by the Project Manager in advance.

**SITE INVESTIGATION:**

The Contractor shall be responsible for all additional site investigation works required as necessary and include all such costs within his Contract Sum.

No variation will be issued through the Contractor's lack of knowledge of the existing building, its structure, services, ground conditions etc.

**SCAFFOLDING:**

Ensure that standing scaffolding is erected early enough and/or dismantled late enough to suit the programmes of all subcontractors.

Ensure that no scaffolding encroaches into access routes which must be kept clear for the fire brigade, etc.

All scaffolding, hoists and hoarding are to be secure to prevent access to the site.

The use of scaffold fanning is considered appropriate on key access points as well as the use of additional scaffolding 'impact' protection may also be required.

The contractor shall ensure there is no unauthorised access to the site or building via the scaffold or any contractor temporary measures.

**WORKING HOURS:**

The Contractor must restrict his work on site to within the hours of 8:00am and 4:00pm Monday to Friday inclusive except Bank Holidays.

Subject to the constraints and requirements detailed elsewhere within the contract, the Contractor will be entitled to work continuously without interruption within the site during these working hours.

Apart from works required to be carried out "out of hours" as stated elsewhere, no construction work will take place outside these hours on weekends or Bank Holidays, except with the prior written consent of the Project Manager.

Subject to the above restrictions, the Contractor may work the hours required in order to meet the completion date and no claim for out of hours working or overtime working will be entertained.

**WORKS OUTSIDE NORMAL WORKING HOURS:**

Any works that will prevent the use of other facilities on the site will need to be strictly agreed in advance, and the contractor should allow for this within his tender.

The notification procedure to obtain prior written consent from the Project Manager is to be followed.

**OVERTIME WORKING:**

Whenever overtime is permitted to be worked and subject to availability of supervision by UKHSA, give the Project Manager not less than 5 working days' notice, specifying times, types and locations of work to be done.

Concealed work executed during overtime for which notice has not been given may be required to be opened up for inspection and reinstated at the Contractor's expense.

**DELIVERIES:**

The Contractor must maintain clear access for deliveries to the existing buildings in the vicinity at all times.

Movement times for heavy equipment will be agreed in advance with the Project Manager.

The Contractor is to adopt a "just in time" policy with respect to deliveries to ensure that access is not restricted by waiting lorries and the like.

The Contractor is to ensure that appropriate site personnel are present to receive all deliveries.

The Contractor is to liaise with the Project Manager and provide notification 24 hours in advance of any intended deliveries to ensure the details are registered at the security gatehouse.

The Contractor shall bear any costs incurred if deliveries are turned away from the site from failure to observe the above.

**CAR PARKING:**

The Contractor should note that parking will be provided in UKHSA car park.

**FLOODLIGHTS:**

Any floodlighting used in the Contractor's compound or anywhere else on the Site will be as approved by the Project Manager.

**RADIOS:**

Transistor radios and other sound reproducing devices will not be used.

**FACILITIES:**

The Contractor shall not enter or carry out work in the existing facilities without prior approval by the Project Manager.

**EXPLOSIVES:**

Do not use.

**NOISE:**



Comply generally with the recommendations of BS 5228: Part 1, clause 9.3 for minimising noise levels during the execution of the works.

Noise levels from the works are to be kept within acceptable limits dictated by the Local Authority.

Fit all compressors, percussion tools and vehicles with effective silencers of a type recommended by manufacturers of the compressors, tools or vehicles.

Do not use pneumatic drills and other noisy appliances without consent of the Project Manager.

Do not use or permit employees to use radios or other audio equipment in ways or at times which may cause nuisance.

**STORAGE OF FUEL AND CHEMICALS:**

The Contractor shall identify to the Project Manager the intention to store fuel or chemicals on site as part of the construction works. Method statements/risk assessments shall be provided, and all materials stored in an appropriate manner.

**EMPLOYER SPECIFIC POLICIES:**

The Contractor shall comply with the Employers "Health Safety and Security Guidance Notes for Contractors" contained within the Construction Information Pack at Section C Part 2.4.

BURNING ON SITE of materials arising from the work will not be permitted.

**SMOKING ON SITE:**

Smoking on site is strictly prohibited in any building or area within the security fence other than the designated smoking shelter adjacent to the site incinerator building.

**INSURANCE CLAIMS:**

If any event occurs which may give rise to any claim or proceeding in respect of loss or damage to the Works or injury or damage to persons or property arising out of the Works, forthwith give notice in writing to the Employer and the Project Manager.

Indemnify the Employer against any loss which may be caused by failure to give such notice.

**WORKS OF EMERGENCY:**

In the event of works of emergency being required the Contractor is to notify the Project Manager immediately such works are commenced otherwise no claim for additional payments will be entertained.

**WI 210 CONFIDENTIALITY**

**INFORMATION RESTRICTIONS:**

The Contractor will not publish any information or drawing concerning this Contract nor take photographs or use the works or the Site for advertising except with the written consent of the Project Manager.

This restriction shall not apply to disclosures required by Law except that in such event the parties shall co-ordinate to the extent possible with respect to the wording of such announcements

**WI 215 SECURITY AND PROTECTION OF THE SITE**

**SECURITY:**

The site is outside the main campus security fence.

Security must be maintained at all times, the Contractor shall liaise with UKHSA security personnel to ensure this requirement is fulfilled. See Pre-Construction Information Pack for UKHSA Health, Safety and Security Guidance Notes.

**PHOTOGRAPHS:**

Photographs can only be taken with the express permission of the Project Manager in writing.

All images are to be taken using a UKHSA camera and all photographs shall be vetted prior to release by the UKHSA Head of Security.

All images shall be treated as Private and Confidential.

No guarantee is provided that permission for taking photographs will be given, any person found to be taking photographs without permission will be instructed to leave site immediately.

This shall not form part of a compensation event.

## **WI 220 SECURITY AND IDENTIFICATION OF PEOPLE**

### **SECURITY:**

#### **SECURITY CHECKING:**

All Contractors and external parties working on the Project will be expected to undergo a Baseline Standards Check and sign a declaration under the Official Secrets Act.

This will reinforce that they are not at liberty to discuss the detail of any sensitive aspects.

This will not replace any confidentiality agreements that their organizations are asked to enter into with the UKHSA, which will continue to remain in force.

Any persons failing to provide the required data or failing the security checks will not be permitted to engage on the project.

In a small number of instances, National Security Vetting may be required. In these cases, the individual is likely to have a comprehensive understanding of the zone 4, and/or a thorough understanding of the site security system, and /or have knowledge of the greater site detail.

These individuals will be identified by the UKHSA Management with input from the UKHSA Head of Security.

The Contractor is to closely liaise with the Project Manager and the Employer at all times during the contract and completely satisfy them that all matters raised are dealt with quickly and effectively.

The Contractor shall notify the security gate 24 hours in advance, the names of all site personnel expected to be working on the site and notifying in advance any deliveries scheduled to take place.

All Contractors personnel must sign in at the gatehouse before entering site and sign out when leaving. Security identity passes must be worn at all times when on site.

The Contractor will be required to keep records of all site operatives and have a security briefing and identity card system as part of the overall site induction process.

The Employer will from time to time ask the Contractor for the site operatives' records and this information will not be withheld.

Adequately safeguard the site, the Works, products, materials, plant, and any existing buildings affected by the Works from damage and theft.

Take all reasonable precautions to prevent unauthorised access to the site, the Works and adjoining property.

The Contractor must ensure that the site is secure at the end of each working day, and that any opening in the external envelope of the building under the control of the Contractor is adequately blocked up including the re-connection of intruder alarms disturbed.

The Contractor must also ensure that the occupied sections of the building remain secure during, and at the end of the working day.

## **WI 225 PROTECTION OF EXISTING STRUCTURES AND SERVICES**

### **EXISTING BUILDINGS ON/ADJACENT TO THE SITE:**

The existing buildings on the site are shown within the Pre-Construction Information. As well as specifically identified within the Works Information drawings and specifications.

### **PROTECTION TO EXISTING BUILDING:**

The Contractor is to provide complete internal and external protection as necessary to the existing buildings and services, in particular, the external facades, roof areas and any external plant. If damaged, the Contractor shall be liable for and shall indemnify the Employer against any expense, liability, loss, claim or proceedings provided always that the damage is due to any negligence, omission or default of the Contractor's workpeople or those of his subcontractors.

The Contractor must protect, uphold and maintain all existing structures, live drainage, ducts, water, gas and other mains or power services and if any such items are damaged he shall be liable for and shall indemnify the Employer against any expense, liability, loss, claim or proceedings provided always that the damage is due to any negligence, omission or default of the Contractor's workpeople or those of his subcontractors.

The Contractor shall ensure there is no unauthorised access to the site or building.

The Contractor must not make connections or interfere with the operation of existing services, such as live drainage, water, gas or other mains or power services without the written permission of the Project Manager/Employer.

The Contractor is to comply in all respects with the UKHSA Permit to Work Policy.

The Contractor must give two weeks' notice before any service is interrupted except by agreement in accordance with the Permit to Work Procedure.

### **EXISTING MAINS/SERVICES:**

The Contractor must undertake his own investigations to ascertain the service positions or positions of other unknown services.

Prior to any construction taking place the Contractor is to confirm in writing that through his own investigations of the area has been undertaken and that the service utilities have been consulted.

No claim for additional costs will be accepted due to information being inaccurate or incomplete.

The Contractor is responsible for taking all necessary precautions for protecting the services during the building operation and ensures that these are not damaged in any way.

Any such damage must be made good to the satisfaction of the Project Manager, the Employer any Statutory Authority, and adjoining owners or occupiers at the Contractors expense.

No diversion of any of the existing services, etc. other than works expressly shown in the Works Information shall be carried out without the prior written approval of the Project Manager.

All services that affect the work areas, electrical and piped that will require isolation during the works must be carried out by the site maintenance team under the direction of the client's construction supervisor and the successful contractor.

The Contractors attention is drawn to the presence of existing services crossing the proposed site access route. This includes a concrete service duct with a weight limit of 6.5 tonnes. Appropriate protection measures are to be agreed with the Project Manager.

### **EXISTING SERVICES:**

The contractor shall ensure that all the existing services to be retained are protected.

Any necessary disruption to existing services or other areas not forming part of the works must

be agreed with the Project Manager.

**PROTECT AGAINST THE FOLLOWING:**

**NUISANCE:**

Take all necessary precautions to prevent nuisance from smoke, dust, rubbish, vermin and other causes.

**DUST CONTROL:**

Contractor is to take all necessary steps to minimise dust transfer to all occupied areas outside the boundary of the works.

A number of the adjacent buildings include cleanroom type facilities and care must be taken to ensure the ingress of dust does not affect the clean room air quality within adjacent buildings.

**ASBESTOS BASED MATERIALS:**

Should any asbestos based materials be discovered, report immediately to the Project Manager any such discovery.

Avoid disturbing such materials. Agree with the Project Manager methods for safe removal or encapsulation.

**FIRE PREVENTION:**

Take all necessary precautions to prevent personal injury, death, and damage to the Works or other property from fire. Comply with Joint Code of Practice 'Fire Prevention on Construction Sites' published by the Building Employers Confederation and the Loss Prevention Council. Maintain fire escape routes.

Comply with the Employer's emergency procedures, fire precautions, fire alarm systems, means of escape and broadcast message system.

The Contractor must take all reasonable precautions to avoid the outbreak of fire, particularly in work involving the use of naked flames. Such work should be examined at short intervals following its completion.

The Contractor must draw the attention of all workpeople on the site to the dangers involved in the careless use of naked flames in proximity to combustible materials, disposal of matches, cigarettes, tobacco ash, etc. and of the accumulation of rubbish must be fully impressed on them.

Fire protection compartments must be maintained, and fire escape routes must remain unobstructed and, where necessary illuminated. The Contractor must provide and maintain suitable fire extinguishers. A fire alarm system(s) must be maintained to the working areas by the Contractor at all times.

The attention of the Contractor is drawn to the current HMSO Publication 'Standard Fire Precautions P5 - to be taken by Contractors engaged on building and engineering works and maintenance for the Department of the Environment' and its recommendations where relevant to the Works.

Fire extinguishers and hydrants must not be obstructed and access to them must be maintained at all times.

**MANAGEMENT OF FIRE PRECAUTIONS:**

The Contractor shall appoint a site fire safety co-ordinator who will be responsible for all the fire precautions for the complete duration of the work.

The named person will normally be present on site until the work is completed and shall liaise with the Project Manager and UKHSA Health and Safety Department.

**WATER:**

Prevent damage from storm and surface water.

**MOISTURE:**

Prevent the work from becoming wet or damp where this may cause damage.

Dry out the Works thoroughly. Control the drying out and humidity of the Works and the application of heat to prevent:

- Blistering and failure of adhesion.
- Damage due to trapped moisture.
- Excessive movement.

**INFECTED TIMBER:**

Where instructed to remove timber affected by fungal/insect attack from the building, do so in a way which will minimise the risk of infecting other parts of the building.

**ELECTROMAGNETIC INTERFERENCE:**

Take all necessary precautions to avoid excessive electromagnetic disturbance of apparatus and seek clarity from the Employer of the sensitivity of equipment that may be affected by the Works.

**LASER EQUIPMENT:**

Install, use and store construction laser equipment in accordance with BS EN 60825-1 and the manufacturer's instructions.

**PROTECT THE FOLLOWING:**

**WORK IN ALL SECTIONS:**

Adequately protect all types of work and all parts of the Works, including work carried out by others, throughout the Contract.

Wherever work is of an especially vulnerable nature or is exposed to abnormal risks provide special protection to ensure that damage does not occur.

**EXISTING SERVICES:**

Notify all service authorities and/or adjacent owners of the proposed works not less than one week before commencing site operations.

Before starting work check and mark positions of existing mains/ services. Where positions are not shown on drawings obtain relevant details from service authorities or other owners.

Observe service authority's recommendations for work adjacent to existing services. Adequately protect, and prevent damage to all services. Do not interfere with their operation without consent of the service authorities or other owners.

Identify below ground services with signboards, giving type and depth, and overhead services with headroom markers.

If any damage to services results from the execution of the Works, immediately notify the Project Manager and appropriate service authority.

Make arrangements for the work to be made good without delay to the satisfaction of the service authority or other owner as appropriate.

Any measures taken by the Project Manager to deal with an emergency will not affect the extent of the Contractor's liability.

Replace marker tapes or protective covers disturbed during site operations to the service authority's recommendations.

**ROADS AND FOOTPATHS:**

Adequately protect roads and footpaths within and adjacent to the site.

Any damage to roads and footpaths caused by site traffic or otherwise consequent upon the Works must be made good to the satisfaction of the Project Manager. The contractor is to bear any costs arising.

It is the responsibility of the contractor to obtain any necessary permits for road or footpath closures.

**BUILDING INTERIORS:**

Protect building interiors exposed to weather during the course of alteration work with temporary enclosures of sufficient size to permit execution of the work and which will remain weather tight in severe weather.

**EXISTING WORK:**

Prevent damage to existing property undergoing alteration or extension and make good to match existing any defects so caused.

Cut away and strip out the minimum necessary and with care to reduce the amount of making good to a minimum.

**ADJOINING PROPERTY:**

Prevent trespass of workpeople.

Take all reasonable precautions to prevent damage to adjoining property.

Obtain permission as necessary from the owners if requiring erecting scaffolding on or otherwise using adjoining property, and paying all charges.

Remove and make good on completion or when directed.

Bear the cost of repairing any damage arising from execution of the Works.

The Contractor shall ensure that the Project Manager is kept fully informed of any matters arising with respect to adjoining properties and neighbours and shall ideally be the point of contact between them and the Employer.

**EXISTING STRUCTURES:**

Check proposed methods of work for effects on adjacent structures inside and outside the site boundary.

Provide and maintain during the execution of the Works all incidental shoring, strutting, needling and other supports as may be necessary to preserve the stability of existing structures on the site or adjoining, which may be endangered or affected by the Works.

Support existing structure as necessary during cutting of new openings or replacement of structural parts.

Monitor adjacent structures and immediately report excessive movement to the Project Manager.

Do not remove supports until new work is strong enough to support the existing structure. Prevent overstressing of completed work when removing supports.

**RETAINED TREES/ SHRUBS/ GRASSED AREAS:**

**Protection:**

Prevent damage and preserve, except those not required. Protect trees and roots with tree preservation orders as indicated on NPA's drawings and specification.

**Replacement:**

Mature trees and shrubs if uprooted, destroyed, or damaged beyond reasonable chance of survival in their original shape, as a consequence of the Contractor's negligence, must be replaced with those of a similar type and age at the Contractor's expense.

**TREES TO BE RETAINED:**

Unless agreed otherwise by the Project Manager, do not:

- Dump soil or rubbish, excavate or disturb topsoil, park vehicles or plant, store materials or place temporary accommodation within the branch spread.
- Sever roots exceeding 25mm in diameter. If unintentionally severed give notice and seek advice.
- Change level of ground within area 3m beyond the branch spread. Branches of existing trees which are likely to interfere with the execution of the works must be carefully tied back or with the prior written approval of the Project Manager removed by a specialist using sound arboricultural practice at the Contractor's expense.
- Any damage caused to trees must be immediately reported in writing to the Project Manager and any remedial treatment subsequently directed by the Project Manager, including replacement of the affected trees if necessary, must be carried out by a specialist, to sound arboricultural practice at the Contractor's expense.

#### TEMPORARY WORKS:

On completion of the Works, the Contractor must remove from the site all temporary works, plant, surplus materials etc., and make good any disturbance or damage including damage to the ground or structures, to the satisfaction of the Project Manager.

### **WI 230 PROTECTION OF THE WORKS**

#### PROTECTION OF PRODUCTS:

Prevent over-stressing, distortion and any other type of physical damage.

Keep clean and free from contamination.

Prevent staining, chipping, scratching or other disfigurement, particularly of products exposed to view in the finished work.

Keep dry and in a suitably low humidity atmosphere to prevent premature setting, moisture movement and similar defects.

Where appropriate store off the ground and allow free air movement around and between stored products.

Prevent excessively high or low temperatures and rapid changes of temperature in the products.

Protect adequately from rain, damp, frost, sun and other elements as appropriate.

Ensure that products are at a suitable temperature and moisture content at time of use.

Ensure that sheds and covers are of ample size, in good weatherproof condition and well secured.

Keep different types and grades of products separately and adequately identified.

So far as possible keep products in their original wrappings, packaging or containers, until immediately before they are used.

Wherever possible retain protective wrappings after fixing and until shortly before Practical Completion.

Ensure that protective measures are fully compatible with and not prejudicial to the products/materials.

#### STABILITY:

Accept responsibility for the stability and structural integrity of the Works during the Contract, and support as necessary. Prevent overloading: details of design loads may be obtained from the Project Manager.

## **WI 235 CLEANLINESS OF ROADS**

### **ROADS AND FOOTPATHS:**

Duty: Maintain roads and footpaths within and adjacent to the site and keep clear of mud and debris.

## **WI 240 TRAFFIC/PEDESTRIAN MANAGEMENT**

### **TRAFFIC/PEDESTRIAN MANAGEMENT:**

Any activities that will restrict access to the existing site roads will be identified in advance to the Project Manager.

A suitable method of controlling vehicular and pedestrian access will be developed and approved by the Project Manager.

It is essential that all vehicular and pedestrian access ways are kept clear at all times, owing to the restricted nature of the access, especially for emergency service vehicles. Special care must be exercised when traffic enters and leaves the site.

## **WI 245 CONDITION SURVEY**

### **CONDITION SURVEY:**

The Contractor shall provide a condition survey of the existing buildings and internal areas and surrounding roads, footpaths, fences and external areas etc.

Such survey shall be conducted with the Clerk of Works and Project Manager prior to commencing work on site.

This should include all necessary photographs and video surveys as required, subject to express permission from the Project Manager and in accordance with WI 215.

The Contractor is to forward copies of the Condition Survey to the Project Manager.

The Contractor is responsible for making good any damage caused by him or his operatives.

## **WI 250 CONSIDERATION OF OTHERS**

### **SURROUNDING LAND/BUILDING USES:**

The adjacent areas are primarily used for research and storage purposes, with some used for administration functions, these will remain in constant use over the duration of the contract.

The contractor must ascertain for himself any information he may require to ensure the safety of all persons and the works.

Do not use the surrounding land or building(s) for any purpose other than carrying out the Works.

The Contractor's operations must be confined to within the boundaries of the site.

The Contractor shall not obstruct adjacent roads with plant, materials or unattended vehicles.

Nor shall the Contractor disrupt activities in the other adjacent buildings, except with prior agreement with UKHSA /Project Manager.

The Contractor must ensure that the works are carried out in such a manner as to ensure, as far as possible, that adjacent buildings are not interfered with.

Where such interference is unavoidable, the Contractor must inform the Project Manager, before taking any action, and will comply with such instructions issued in regard thereto by the Project Manager.

Once the timing of the works and the limits of the area have been agreed and defined they must be strictly adhered to.



If, for any reason, such adherence should become impossible, the Project Manager must be kept fully informed and additional instructions obtained and complied with.

## **WI 255 INDUSTRIAL RELATIONS**

Not Applicable

## **WI 260 CONTROL OF SITE PERSONNEL**

### **PERMIT TO WORK:**

A Permit to Work (PTW) system is in operation across the UKHSA site for the following activities:

- 'S1' Permit prior to any works in or associated with the laboratories and plant rooms.
- Hot Trades e.g., welding etc.
- Work in confined spaces
- Working with pressurised systems
- Electrical works
- Excavations
- Working on roof spaces (at height)
- Working in plantrooms controlled by UKHSA Site Maintenance Team. (S1 Permit)
- Isolation of services certification

The Contractor's PTW procedures shall be reviewed and approved by the Project Manager regarding the application of UKHSA PTW requirements prior to works commencing.

The Contractor is reminded that failure to comply with these procedures may result in suspension of the works in that area.

All time and costs incurred as a result of the suspension will be the responsibility of the Contractor for non-compliance with the Permit to Work protocol.

### **SUPERVISION:**

In addition to the constant management and supervision of the works provided by the Contractor's person in charge, all significant types of work must be under the close control of competent trade supervisors to ensure maintenance of satisfactory quality and progress.

The Contractor is responsible for co-ordination, supervision and administration to provide the Works, including all subcontracts.

Arrange and monitor a programme with each subcontractor, supplier, local authority and statutory undertaker, and obtain and supply information as necessary for the co-ordination of the work.

## **WI 265 SITE CLEANLINESS**

### **CONTRACTORS WORK AREA:**

The Contractor shall remove rubbish and debris as it arises and immediately on substantially completing shall clean the Works, including all surrounding areas, access ways and existing works affected by the alterations, internally and externally and leave for occupation to the satisfaction of the Project Manager

### **SURROUNDING AREAS:**

The Contractor shall ensure that all surrounding areas are kept free from dirt and debris at all times.

## **WI 270 WASTE MATERIALS**

### **WASTE:**

The Contractor shall produce and issue to the Project Manager for approval a Site Waste Management Plan (SWMP) prior to Construction Works commencing.

The Contractor shall be responsible for:

- obtaining relevant information from sub-contractors
- updating the SWMP at least every three months as the project progresses
- keeping all legal documentation for the movement, treatment and disposal of waste within the SWMP
- keeping the SWMP on site during the project
- ensuring that other contractors know where the SWMP is kept
- allowing other contractors and the client access to the SWMP during the project
- handing the completed SWMP back to the client at the end of the project
- keeping a copy of the SWMP in accordance with legislation.

The Contractor will be expected to apply the waste hierarchy and must ensure that all waste contractors used have the relevant licences, permits and/or exemptions to produce, carry, keep, treat or dispose of all waste produced as part of the project. Information on how the Contractor will achieve these requirements and all documentation associated with the movement of waste must be included within the SWMP.

Contractors have a duty to comply with all applicable waste legislation. Contractors working at UKHSA Chilton must take the waste they generate off-site with them or arrange for their own waste facilities to be brought to site. The delivery of contractor's facilities must be agreed in advance with the Project Manager and the position on site agreed.

All waste stored on site must be appropriately segregated and securely stored to prevent contamination and litter.

All rubbish, dirt and residues must be removed from voids and cavities in the construction before closing in.

## **WI 275 DELETERIOUS AND HAZARDOUS MATERIALS**

### **DELETERIOUS MATERIALS:**

The Contractor shall not use or specify for use in the Works any Materials which contravene any British Standard Specification or Code of Practice or European Union Equivalent relevant at the date of specification or use which are generally known to be deleterious to health and safety and / or to the durability of the Works.

### **STORAGE AND USE OF HAZARDOUS MATERIALS:**

The Contractor shall comply with the requirements of the COSHH regulations.

All data sheets and the register of substances shall be issued to the Project Manager prior to substances delivered to site.

The Contractor shall provide Risk Assessments and Method Statements for all work involving hazardous materials and ensure their operatives are fully trained in their use.

### **POLLUTION:**

Take all reasonable precautions to prevent pollution of the site, the Works and the general environment including streams and waterways.

If pollution occurs, inform the appropriate Authorities and the Project Manager without delay and provide them with all relevant information.

### **USE OF PESTICIDES:**

Use only where specified or approved by the Project Manager and then only suitable products as listed in the UK Pesticide Guide.

Where work is near water, drainage ditches or land drains, comply with the latest DEFRA 'Guidelines for the use of herbicides on weeds in or near water courses and lakes'

Observe all precautions recommended by the manufacturer and remove containers from site immediately they have been emptied or are no longer required.

Operatives must hold a BASIS Certificate of Competence, or work under the supervision of a Certificate holder.

## **WI 300 CONTRACTOR'S DESIGN**

### **WI 305 DESIGN RESPONSIBILITY**

#### **DESIGN AND PRODUCTION INFORMATION**

The Contractor will thoroughly check based on the information available, that dimensions are correct, that account is taken of all related work and that construction is practicable.

#### **CONTRACTORS DESIGN/PERFORMANCE SPECIFIED WORK:**

The Contractor shall submit all information in accordance with the Works Information.

The Contractor is responsible for the final design and detailing of all works.

The Contractor is required to provide the PM with detailed drawings for all of the above.

Such drawings shall be provided as paper and electronic copies

Where required complete the detailed design and the detailing of the work and provide complete production information (including, as appropriate, fabrication/installation drawings, design calculations, specifications, etc.) based on the drawings, specification and other Works Information provided liaising with the Project Manager and others as necessary to ensure co-ordination of the work with related building elements and services.

Request additional information as necessary from the Project Manager and provide information as necessary in time to meet the programme.

When preparing the programme make reasonable allowance for completing design/production information, inspection by the Supervisor, and any subsequent amendment(s), resubmission(s) and re-inspection(s).

Submit when required to the Project Manager the requested number of copies of design/production information.

Ensure that any necessary amendments are made without delay.

Unless and until the Project Manager confirms that resubmission is not required, submit copies of amended drawings etc. to Project Manager, and ensure incorporation of necessary amendments all as before.

If submitted design/production information differs from the contract documents, each such difference must be the subject of a request for substitution or change, supported by all relevant information.

Carefully check all manufacturers' drawings to ensure accuracy, completeness of the information and compliance with the Works Information.

Ensure that any amendments necessary to manufacturer's drawings are made prior to submission of the drawing for review by the Project Manager.

The Contractor will be responsible for the production of shop drawings/ workings/ fabrications for each element of work within the contract.

He will be responsible for the accuracy of these drawings and for the equipment shown thereon being suitable for the purpose for which it is intended and in accordance with the Works Information.

Production information must include:

- Builder's work information
- Installation drawings
- Shop drawings
- Equipment drawings
- As built drawings
- All other information listed in the specifications

Maintain on site, for regular inspection by the Project Manager and Supervisor, one set of drawings showing the progress of the work, with all modifications or revisions clearly indicated.

The drawn and other information must comply with standards agreed in advance with the Employer in respect of:

- Scales
- Notation
- Registration system

It is the Contractor's responsibility to confirm and amplify any information provided by the Employer.

#### CONTRACTOR'S CO-ORDINATION

The Contractor shall be responsible for detailed coordination of the works.

The Contractor will be responsible for establishing target dates for provision of construction information, samples, any necessary approvals and installation start dates, advising on timescales for production of maintenance information and manuals monitoring programmes, modifying and updating details to reflect commissioning results; assisting the Employer in developing an operating and maintenance strategy, making recommendations for commencing and executing maintenance during the defects correction period, providing as built drawings and information and ensuring such are updated to cover all alterations to the installations.

#### PRODUCT GUARANTEES:

The Contractor is to provide all product guarantees as applicable to the equipment and materials as installed as part of the project.

#### TECHNICAL LITERATURE:

The Contractor is to keep copies of the following on site, readily accessible for reference by all supervisory personnel:

- Manufacturers' current literature relating to all products to be used in the Works.
- BSI Handbook No.3, with all current revision sheets included and superseded sheets removed.
- Relevant BS Codes of Practice.
- Those parts of BS.80000 'Workmanship on building sites' which are invoked in the specification.

#### MAINTENANCE INSTRUCTIONS AND GUARANTEES:

Retain copies delivered with components and equipment (failing which, obtain), register with manufacturer as necessary and hand over to the Project Manager on or before the Completion

Date.

Notify the Project Manager of telephone numbers for emergency services by Subcontractors after the Completion Date.

The Contractor will keep one complete set of the Contract Drawings, and one copy of the Drawings referred to in the Contract, Contract Data, Works Information, Site Information, schedules, Shop Drawings or other like documents at the Site in good order available to the Employer, Project Manager and the Supervisor.

Such documents will be kept up-to-date by replacing obsolete sheets with revised sheets as they are prepared.

## **WI 310 DESIGN SUBMISSION PROCEDURES**

### **DRAWING/DOCUMENT ACCEPTANCE**

Drawings/documents are to be submitted to the Project Manager for acceptance.

The Contractor is responsible for ensuring conformity with the scope and standards within the Works Information.

Acceptance will not be construed to mean that the Project Manager accepts the detailed design inherent in the drawings/documents, responsibility for which will remain with the Contractor.

The Contractor is responsible for any errors or omissions in the drawings/documents.

The Project Manager will confirm acceptance or otherwise of the drawings/documents within 10 working days of receipt.

Any comments must be incorporated and resubmitted within 5 working days of receipt, following which acceptance will be confirmed or otherwise within a further 5 working days.

The acceptance of design proposals will not relieve the Contractor of his responsibilities for design under the contract.

## **WI 320 EMPLOYER'S REQUIREMENTS**

### **DEFINITIONS AND INTERPRETATIONS**

#### **DEFINITIONS:**

The meaning of terms, derived terms and synonyms used in the preliminaries/general conditions and specification is as defined below or in the appropriate British Standard or British Standard glossary.

PM means the Project Manager.

IN WRITING: When required to advise, notify, inform, instruct, agree, confirm, obtain information, obtain approval or obtain instructions do so in writing.

APPROVAL (and words derived there from) means the approval in writing of the PM unless specified otherwise.

SUBMIT (and words derived there from) means to the PM unless otherwise instructed.

PRODUCTS means materials (including naturally occurring materials) and goods (including components, equipment and accessories) intended for permanent incorporation in the Works.

ALTERNATIVE MANUFACTURERS/SUPPLIERS of mechanical and electrical plant and materials: Where the specification permits selection of an alternative manufacturer/supplier for mechanical and electrical plant and materials, those highlighted in bold indicate the manufacturer/suppliers upon which the M&E design and specification has been based.

Where selection of one of the alternatives is desired, the Contractor shall satisfy themselves that the alternative product is fully equivalent in all respects including quality, operation, space requirements, safety, reliability, function, compatibility with adjacent construction, and, where relevant, appearance and shall make full allowance for any necessary modifications to the design to accommodate the alternative product, including such modifications to the structure and fabric of the building.

#### CROSS-REFERENCES TO THE SPECIFICATION:

Where a numerical cross-reference to a specification section or clause is given on drawings or in any other document the Contractor must verify its accuracy by checking the remainder of the annotation or item description against the terminology used in the referred to section or clause.

Where a numerical cross-reference is not given the relevant section(s) and clause(s) of the specification will apply, cross-reference thereto being by means of related terminology.

Where a cross-reference for a particular type of work, feature, material or product is given, relevant clause(s) elsewhere in the referred to specification section dealing with general matters, ancillary products and workmanship also apply.

The Contractor must, before proceeding, obtain clarification or instructions in relation to any discrepancy or ambiguity which may be discovered.

#### REFERENCED DOCUMENTS:

Where and to the extent that this specification conflicts with referenced documents, this specification prevails.

#### EQUIVALENT PRODUCTS:

Where the specification permits substitution of a product of different manufacture to that specified and such substitution is desired, the Contractor will request the consent of the Project Manager for such substitution and before ordering the product notify the Project Manager and when requested submit documentary evidence that the alternative product is equivalent in all respects including materials safety, reliability, function, compatibility with adjacent construction, availability of compatible accessories and, where relevant, appearance. Submit certified English translations of any foreign language documents.

Any such request must be submitted sufficiently in advance (and in any event a minimum of 20 working days ahead) of the date for order required by the Contractor's programme so as to allow adequate time for the Project Manager to properly appraise the information submitted and make all checks and consultations as may be necessary prior to sanction of the substitution.

If the substitution is not deemed to be equivalent by the Project Manager following review of the information submitted it will not be sanctioned and the specified product will be used.

Any proposal for use of an alternative product must also include proposals for substitution of compatible accessory products and variation of details as necessary, with evidence of equivalent durability, function and appearance of the construction as a whole.

If such substitution is sanctioned and before ordering products provide revised drawings, specification and manufacturer's guarantees as required by the Project Manager.

#### SUBSTITUTION OF STANDARDS:

Where any product is specified to comply with a British Standard for which there is no equivalent European Standard it may be substituted by a product complying with a grade or category within a national standard of another Member State of the European Community or an international standard recognised in the UK specifying equivalent requirements and assurances in respect of material, safety, reliability, function, compatibility with adjacent construction, availability of compatible accessories and, where relevant, appearance. In advance of ordering submit notification of all such substitutions and, when requested, submit for verification documentary evidence confirming that the products comply with the specified requirements.

Any submitted foreign language documents must be accompanied by certified translations into English.

**CURRENCY OF DOCUMENTS:**

References to standards, type approval certificates, catalogues, codes of practice and the like are to the editions, revisions, versions and amendments current at the time of tender.

References to BSI documents are to the versions and amendments listed in the BSI Standards Catalogue, including updates, current at the time of tender.

**MANUFACTURER AND REFERENCE:**

Where used in this combination:

'Manufacturer' means:

- The firm under whose name the particular product is marketed.

'Reference' means:

- The proprietary brand name and/or reference by which the particular product is identified.

**SIZES:**

Unless otherwise stated:

- Products are specified by their coordinating sizes.
- Cross section dimensions of timber shown on drawings are nominal sizes before any required planning.

PROVIDE means: providing, erecting, maintaining, adapting, clearing away and making good any disturbance or damage including damage to ground or structures to the entire satisfaction of the Project Manager.

FIX ONLY means all labours in unloading, handling, storing and fixing in position, including use of all plant.

**SUPPLY AND FIX:**

Unless stated otherwise all items given in the schedule of work and/or on the drawings are to be supplied and fixed complete.

**TERMS USED IN REFURBISHMENT/ALTERATION**

REMOVE means:

- Disconnect, dismantle as necessary and remove the stated element, work or component and all associated accessories, fastenings, supports, linings and bedding materials, and dispose of unwanted materials.

It does not include:

- Removing associated pipework, wiring, ducting or other services.

KEEP FOR REUSE means:

- During removal prevent damage to the stated components or materials and clean off bedding and jointing materials.
- Stack neatly, adequately protect and store until required by the Employer or for use in the Works as instructed.

REPLACE means:

- Remove the stated existing components, features and finishes.

- Provide and fit in lieu new components, features or finishes which, unless specified otherwise, must match those which have been removed.
- Make good as necessary.

REPAIR means:

- Carry out local remedial work to components, features and finishes as found in the existing building.
- Re-secure or re-fix as necessary and leave in sound and neat condition.

It does not include:

- Replacement of components or parts of components.
- Redecoration.

MAKE GOOD means carry out local remedial work to components, features and finishes which have been disturbed by other, previous work under this Contract and leave in a sound and neat condition.

It does not include:

- Replacement of components or parts of components.
- Redecoration.

The meaning of the term shall not be limited by this definition where used in connection with the defect's liability provisions of the Contract.

EASE means make minor adjustments to moving parts of the stated component to achieve good fit in both open and closed positions and ensure free movement in relation to fixed surrounds. Make good as necessary.

TO MATCH EXISTING means use products, materials and methods to match closely all visual characteristics and features of the existing work, with joints between existing and new work as inconspicuous as possible, all to approval of appearance.

#### DOCUMENTS PROVIDED ON BEHALF OF THE EMPLOYER

OMISSIONS OR ERRORS in the Specification and/or Drawings shall not vitiate the Contract nor release the Contractor from any obligations or liabilities under the Contract.

#### ADDITIONAL COPIES OF THE DRAWINGS/ DOCUMENTS:

The Contractor is to allow for undertaking the copying of all drawings and specifications required.

#### THE SPECIFICATION/DRAWINGS:

The accuracy of dimensions scaled from the drawings is not guaranteed.

Obtain from the Employer any dimensions required but not given in figures on the drawings nor calculable from figures on the drawings.

All sections of the specification must be read in conjunction with the Contract Data, Works Information and Site Information.

### WI 330 REQUIREMENTS OF OTHERS

Statutory authorities:

If necessary, the Contractor is responsible for compliance with the planning conditions and for taking any measures necessary to obtain their full discharge by the planning authority. The Employer is responsible for the payment of the planning fees.



If necessary, the Contractor must ascertain from all relevant Statutory Authorities what requirements or restrictions, if any, shall apply to the Works. The restrictions may relate to the type of plant to be used, the methods of working to be adopted, the hours of working permissible and may in addition impose a maximum noise level limit at the site boundary.

### **WI 335 COPYRIGHT/LICENCE**

#### **COPYRIGHT/Licence:**

The Contractor grants to the Employer, with immediate effect, an irrevocable, non-exclusive, non-terminable, royalty-free licence to copy and make full use of any Design Material prepared by, or on behalf of, the Contractor for any purpose relating to the Works

This licence allows the Beneficiary to use the Design Material in connection with any extension of the Works, but not to reproduce the designs contained in the Material in any such extension.

This licence carries the right to grant sub-licences and is transferable to third parties without the consent of the Contractor.

The Contractor shall not be liable for use of the Design Material for any purpose other than that for which it was prepared and/or provided.

The Employer may request a copy (or copies) of some or all of the Design Material from the Contractor.

On the Employers payment of the Contractor's reasonable charges for providing the copy (or copies), the Contractor shall provide the copy (or copies) to the Employer.

#### **DEFINITION:**

##### **Design Material:**

All designs, drawings, models, plans, specifications, design details, photographs, brochures, reports, notes of meetings, CAD materials, calculations, schedules, programmes, bills of quantities, budgets and any other materials provided in connection with the Works and all updates, amendments, additions and revisions to them and any works, designs, or inventions incorporated or referred to in them for any purpose relating to the Works.

##### **Permitted Uses:**

The design, construction, completion, reconstruction, modification, refurbishment, development, maintenance, funding, disposal, letting, fitting-out, advertisement, demolition, reinstatement, [extension] and repair of the Property and the Works.

### **WI 340 ACCESS TO INFORMATION FOLLOWING COMPLETION**

The Contractor retains all documents relating to the design of the Works and Services for a period of no less than 12 years after Completion and upon written request from the Employer shall provide the Employer copies of such documents provided that if this request is made after the issue of the Defects certificate, the Employer pays the Contractor a defined cost and fee for providing such documents.

### **WI 400 COMPLETION**

### **WI 405 COMPLETION DEFINITION**

#### **COMPLETION:**

Upon completion, allow to professionally clean all surfaces (including access routes) affected by the works on completion using suitable cleaning products, all to the satisfaction of the PM. At the end of the works the Contractor must make adequate allowance within the programme for the completion of all snagging works. These elements of work must be clearly shown on the Contractors programme.

Where the demise is considered unworthy of Practical Completion at that time, the contractor will be charged for the Project Manager's/ Employer's additional time for each subsequent site inspection at £500 per visit including administration over and above any claim for liquidated damages which may arise under the contract.

Completion shall be certified by the Project Manager only when the Contractor has provided all the Works as stated in the Works Information including all equipment Site Acceptance Tests as applicable and undertaken all Validation activities as specified to the satisfaction of the Project Manager.

**OPERATION AND MAINTENANCE MANUALS:**

As a condition precedent to certification of overall Completion, supply the Project Manager with the completed O&M manuals in the format as described within the Works Information

**WI 410 SECTIONAL COMPLETION DEFINITION**

No sectional completion is envisaged

**WI 415 TRAINING**

**TRAINING OF EMPLOYER'S STAFF:**

After completion of final commissioning the contractor shall provide satisfactory and sufficient training in the form of demonstration and explanation to all UKHSA users, engineering and maintenance staff ensuring all AP's have signed and understood the installation.

Where specialist equipment is installed, the manufacturer's representative or sub-contractor shall be in attendance to assist with the training.

**WI 420 FINAL CLEAN**

On completion of the Works and prior to hand over the Contractor shall thoroughly clean all areas after removal of all equipment, tools, temporary works, materials, protective coverings leaving the Works in a condition acceptable to the Project Manager.

Cleaning materials and methods to be as recommended by manufacturers of products being cleaned, and to be such that there is no damage or disfigurement to other materials or construction.

Obtain COSHH dated data sheets for all materials used for cleaning and ensure they are used only as recommended by their manufacturers.

**WI 425 SECURITY**

**SECURITY AT COMPLETION:**

Leave the Works secure with all accesses locked. Account for and adequately label all keys and hand over to Project Manager with itemised schedule, retaining duplicate schedule signed by Project Manager as a receipt.

**WI 430 CORRECTING DEFECTS**

**MAKING GOOD DEFECTS:**

Make arrangements with the Project Manager and give reasonable notice of the precise dates for access to the various parts of the Works for purposes of making good defects. Inform the Project Manager when remedial works to the various parts of the Works are completed.

**WI 435 PRE-COMPLETION ARRANGEMENTS**

**WORK AT OR AFTER COMPLETION**

**GENERALLY:**

Make good all damage consequent upon the work.

Touch up minor faults in newly painted/repainted work, carefully matching colour, and brushing out edges.

Repaint badly marked areas back to suitable breaks or junctions

#### EMERGENCY CONTACT NUMBERS:

Notify Project Manager of telephone numbers for emergency services by Sub-contractors after the Completion Date.

### **WI 440 HEALTH AND SAFETY FILE**

See Pre-Construction Information for the requirements of the Health and Safety File

#### THE BUILDING MANUAL:

The Building Manual (incorporating the Health and Safety File and subtitled accordingly) is to be a comprehensive information source and guide for the Employer and end users providing a complete understanding of the building and its systems and enabling it to be operated and maintained efficiently and safely. The Contractor is required to obtain or prepare all the information to be included in the Manual, produce the required number of copies of the Manual and submit them to the Review Panel

The Building Manual incorporates the documents listed below and any reference to 'The Building Manual' shall mean the whole document.

- Master Control Manual
- Health & Safety File,
- Operation & Maintenance Manuals

#### BUILDING LOG-BOOK:

A Building Log-Book is already in place for the building

#### PRESENTATION OF BUILDING MANUAL:

Format: A4 size, plastics covered, loose leaf, four-ring binders with hard covers, each indexed, divided and appropriately cover titled.

The Employer also requires an electronic version of all Building Manual documents including all drawings etc., note, original copies of test and commissioning certificates are required in the paper version.

Selected drawings needed to illustrate or locate items mentioned in the Manual:

Where larger than A4, to be folded and accommodated in the binders so that they may be unfolded without being detached from the rings.

As-built drawings: The main sets may form annexes to the Manual.

### **WI 500 PROGRAMME**

#### **WI 505 PROGRAMME REQUIREMENTS**

The Contractor shall familiarise himself with the contents of the URS, Scope of Work and Works Information and allow for any float time, time risk allowances as appropriate in accordance with the Contract.

The Contractor shall identify the following additional specific information on each issue of the programme:

- Design delivery dates
- Sectional works completion dates
- Employer approval periods in accordance with the timescales of the Contract
- Date for submission of the draft Health & Safety File
- Date for submission of the final Health & Safety File

The Critical path activities shall be clearly marked.

## **WI 510 PROGRAMME ARRANGEMENT**

Submit two paper copies and one electronic copy (MS Project 2016 format and PDF in format, showing all required information in accordance with the Contract) to the Project Manager.

## **WI 515 METHODOLOGY STATEMENT**

The contractor's attention is drawn to the following programme constraints.

- No weekend working except by arrangement only
- No Bank Holiday working except by arrangement only.

The Contractor is to programme/cost for any noisy works that would affect the usual occupation of the other users, which must be undertaken outside of normal working hours. Noise levels must be in accordance with Local Authority regulations. The Project Manager must be made aware of any noisy works in advance.

The contractor is to appoint a fully qualified and competent site manager who shall be responsible for all works under the contract and will liaise with the Project Manager on all matters arising out of the works. The contractor must provide proof of their competence, experience and training prior to commencement. The site manager is to be identified within the submitted tender package. The contractor is to ensure that the site manager is in attendance at all times. No trades or works are to be undertaken without the site manager being in attendance. The manager shall be available to attend periodic inspections and valuations by the PM and shall not be a working foreman.

Allow to submit a progress report to the PM on a bi-weekly basis to update on progress, programme and issues on site. The format is to be submitted by the contractor for approval.

The contractor shall allow for providing all necessary plant and equipment to carry out the works to the satisfaction of the PM. This is to involve all necessary internal and external temporary lighting in order for the works to be safely undertaken, Health and Safety signage, PPE and the like.

Hours of working permitted under this contract are set out below:

Monday - Friday: 08.00am to 16.00pm

Saturday - Sunday and Bank Holidays: By arrangement only

Normal working hours can only be extended by prior agreement with PM and site security. Sufficient advance request of out of hours works must be provided and approved before commencement.

The contractor is to ensure that the site is left in a safe, clear, clean and tidy condition at the end of each working day, suitable for occupation by the employer's staff. The contractor is to provide a method statement as to how this is to be achieved with their tender submission.

The contractor shall erect, maintain and subsequently strike all necessary access platforms, ladders etc. as necessary to enable the proper and safe execution of the works.

## **WI 520 WORK OF THE EMPLOYER AND OTHERS**

There are no works carried out by others envisaged for the project

## **WI 525 INFORMATION REQUIRED**

The Contractor shall produce a separate schedule detailing the information to be provided / required by to complete the Works. The document shall state who it shall be provided by and to whom as well as the anticipated dates and durations for review in order to maintain the critical path of the Works.

## **WI 530 REVISED PROGRAMME**

### **RECORD PROGRESS:**

Record progress on a copy of the programme kept on site. If any circumstances arise which may affect the progress of the Works, put forward proposals or take other action as appropriate to minimise any delay and to recover any lost time.

All revised programmes issued for acceptance must be accompanied by a narrative identifying the Critical Path operations and schedule the changes since the last programme.

Any programme issued to the Project Manager shall be rescheduled to indicate any revised completion date and include any Compensation Events implications.

## **WI 600 QUALITY ASSURANCE**

### **WI 605 SAMPLES**

#### **SAMPLES/APPROVALS**

##### **SAMPLES:**

Where samples of finished work are specified, or required to obtain statutory consent, obtain approval of stated characteristic(s) before proceeding with the works.

Retain approved samples in good, clean condition on site for comparison with the works.

Remove samples which are not part of the finished works when no longer required.

The Contractor is required to provide the samples identified within the Works Information.

##### **APPROVAL OF PRODUCTS:**

Where approval of a product is specified the requirement for approval relates to a sample of the product and not to the product as used in the Works.

Submit a sample or other evidence of suitability.

Do not confirm orders or use the product until approval of the sample has been obtained.

Retain approved sample in good, clean condition on site.

Ensure that the product used in the Works matches the approved sample.

Remove when no longer required.

##### **SAMPLES OF FINISHED WORK:**

Where a sample of finished work is specified for approval, the requirement for approval relates to the sample itself (if approval of the finished work as a whole is required this is specified separately).

Obtain approval of the stated characteristic(s) of the sample before proceeding with the Works.

Retain approved samples in good, clean condition on site.

Ensure that the relevant characteristic(s) of the Works match the approved characteristic(s) of the sample.

Remove samples which are not part of the finished Works when no longer required.

The Contractor is required to provide the samples identified within the Specifications in and as required to discharge the planning conditions.

##### **APPROVALS:**

Where and to the extent that products or work are specified to be approved or the Project Manager instructs or requires that they are to be approved, the same must be supplied and

executed to comply with all other requirements and in respect of the stated or implied characteristics either:

- To the express approval of the Project Manager or
- To match a sample expressly approved by the Project Manager as a standard for the purpose.

The Supervisor will confirm acceptance or otherwise of the samples within 10 working days of receipt.

Any comments must be incorporated and resubmitted within 5 working days of receipt, following which acceptance will be confirmed or otherwise within a further 5 working days.

**APPROVALS:**

Inspection or any other action by the Project Manager must not be taken as approval of products or work unless the Project Manager so confirms in writing in express terms referring to:

- Date of inspection
- Part of the work inspected
- Respects or characteristics which are approved
- Extent and purpose of the approval
- Any associated conditions.

**WI 610 QUALITY STATEMENT**

The Contractor shall provide a quality statement setting out their proposals for covering the following aspects:

- Management and resources proposed to ensure compliance with the Works Information.
- Samples of plant materials and workmanship
- Acceptance of Goods
- Compliance with recognised good practice applicable to the scope of works identified within the Works Information
- Ordering and supply of Goods
- Handling / Storage
- Management of Sub Contractors and Suppliers

**WI 615 QUALITY MANAGEMENT SYSTEM**

The Contractor shall operate a quality management system which complies with the relevant parts of BS EN ISO 9001 and 9002 and has a third-party certification from an approved accreditation body. Prior to the Starting date the Contractor prepares a quality plan and submits it to the Project Manager for acceptance. The quality plan incorporates:

- The Quality Statement
- Details of the Contractors Quality Management Systems
- Quality requirements stated in the Works Information

Any Subcontractor / Supplier appointed by the Contractor will operate a quality system enabling them to comply with the Contractors quality management system.

**WI 620 QUALITY AUDITS**

The Contractor and subcontractors may be subject to Audits carried out by the Employer.

The Contract will be placed subject to the successful completion of these audits.

## **WI 625 MATERIALS AND WORK GENERALLY**

### **GOOD PRACTICE:**

Where and to the extent that equipment, plant, materials, products and workmanship are not fully detailed or specified they are to be:

- Of a standard appropriate to the Works and suitable for the functions stated in or reasonably to be inferred from the project documents, and
- In accordance with relevant good building practice.

### **GENERAL QUALITY OF PRODUCTS:**

Products to be new unless otherwise specified.

For products specified to a British or European Standard obtain certificates of compliance from manufacturers when requested by the Project Manager.

Where a choice of manufacturer or source of supply is allowed for any particular product, the whole quantity required to complete the work must be of the same type, manufacture and/or source unless otherwise approved.

Produce written evidence of sources of supply when requested by the Project Manager.

Ensure that the whole quantity of each product required to complete the work is of consistent kind, size, quality and overall appearance.

Where consistency of appearance is desirable ensure consistency of supply from the same source.

Unless otherwise approved do not use different colour batches where they can be seen together.

If products are prone to deterioration or have a limited shelf life, order in suitable quantities to a programme and use in appropriate sequence. Do not use if there are any signs of deterioration, setting or other unsatisfactory condition.

### **PROPRIETARY PRODUCTS:**

Handle, store, prepare and use or fix each product in accordance with its manufacturer's current printed or written recommendations/instructions. Inform the Project Manager if these conflict with any other specified requirement. Submit copies to the Project Manager when requested.

Ancillary products and accessories to be of a type recommended by the main product manufacturer, unless otherwise specified.

The contract will be deemed to be based on the products specified and recommendations on their use as described in the manufacturer's literature current the time of tender.

Obtain confirmation from manufacturers that the products specified and recommendations on their use have not been changed since that time. Where such change has occurred, inform the Project Manager and do not place orders for or use the affected products without further instructions.

Where British Board of Agrément certified products are used, comply with the limitations, recommendations and requirements of the relevant valid certificates.

### **CHECKING COMPLIANCE OF PRODUCTS/MATERIALS:**

Check all delivery tickets, labels, identification marks and, where appropriate, the products themselves to ensure that all products comply with the project documents. Where different types of any product are specified, check to ensure that the correct type is being used in each location. In particular, check that:

- The sources, types, qualities, finishes and colours are correct, and match any approved samples.
- All accessories and fixings which should be supplied with the goods have been supplied.
- Sizes and dimensions are correct. Where tolerances of components are critical, measure a sufficient quantity to ensure compliance.
- The delivered quantities are correct, to ensure that shortages do not cause delays in the work.
- The products are clean, undamaged and otherwise in good condition.
- Any products which have a limited shelf life are not out of date.

#### **SUITABILITY OF RELATED WORK AND CONDITIONS:**

Ensure that all trades are provided with necessary details of related types of work. Before starting each new type or section of work, ensure that:

- Previous, related work is appropriately complete, in accordance with the project documents, to a suitable standard and in a suitable condition to receive the new work.
- All necessary preparatory work has been carried out, including provision for services, openings, supports, fixings, damp proofing, priming and sealing.
- The environmental conditions are suitable, particularly that the building is suitably weather tight when internal components, services and finishes are installed.

Protection measures to sensitive and specialist equipment are to be agreed with the Project Manager,

#### **GENERAL QUALITY OF WORKMANSHIP:**

Operatives must be appropriately skilled and experienced for the type and quality of work.

Take all necessary precautions to prevent damage to the work from frost, rain and other hazards.

Inspect components and products carefully before fixing or using and reject any which are defective.

Fix or lay securely, accurately and in alignment.

Where not specified otherwise, select fixing and jointing methods and types, sizes and spacings of fastenings in compliance with section Z20. Fastenings to comply with relevant British Standards.

Provide suitable, tight packings at screwed and bolted fixing points to take up tolerances and prevent distortion.

Do not over tighten fixings.

Adjust location and fixing of components and products so that joints which are to be finished with mortar or sealant or otherwise left open to view are even and regular.

Ensure that all moving parts operate properly and freely.

Do not cut, grind or plane prefinished components and products to remedy binding or poor fit without approval.

#### **ACCURACY/SETTING OUT GENERALLY**

##### **ACCURACY OF INSTRUMENTS:**

Use instruments and methods described in BS 5606 to give accuracy in measurement.



**SETTING OUT:**

Submit details of methods and equipment to be used in setting out the Works.

**SETTING OUT:**

Check the levels and dimensions of the site against those shown on the drawings and record the results on a copy of the drawings.

Notify Project Manager in writing of any discrepancies and obtain instructions before proceeding.

**SETTING OUT:**

Inform Project Manager when overall setting out is complete and before commencing construction.

**APPEARANCE AND FIT:**

Arrange the setting out, erection, juxtaposition of components and application of finishes (working within the practical limits of the design and the specification) to ensure that there is satisfactory fit at junctions, that there are no practically or visually unacceptable changes in plane, line or level and that the finished work has a true and regular appearance.

Wherever satisfactory accuracy, fit and/or appearance of the work are likely to be critical or difficult to achieve, obtain approval of proposals or of the appearance of the relevant aspects of the partially finished work as early as possible.

Without prejudice to the above and unless specified otherwise, tolerances will (where applicable) be not greater than those given in BS 5606, Tables 1 and 2.

**CRITICAL DIMENSIONS:**

Certain dimensions on the following drawings are noted as 'critical'; set out and construct the works to ensure compliance with the tolerances stated on the drawings.

**DIMENSIONING:**

The Contractor shall be responsible for the co-ordination and precise location of terminals, outlets, drainage points and fittings where not dimensioned on the drawings and schedules and shall mark them out for approval by the Project Manager prior to chasing/installation.

**LEVELS OF STRUCTURAL FLOORS:**

Maximum tolerances will be as stated in the appropriate specifications or maximum tolerances for designed levels.

**SERVICES GENERALLY**

**SERVICE RUNS:**

Make adequate provision for services, including unobstructed routes and fixings. Wherever possible ducts, chases and holes are to be formed during construction rather than cut.

**WATER FOR THE WORKS:**

Clean and uncontaminated. If other than mains supply is proposed provide evidence of suitability. Test to BS 3148 if instructed.

**WI 700 TESTS AND INSPECTIONS**

**WI 705 TESTS AND INSPECTIONS**

**TEST AND INSPECTION REQUIREMENTS ARE DEFINED WITHIN THE SCOPE OF WORKS**

**TESTING:**

Testing of all newly installed services and systems is required.

**ACCESS FOR INSPECTION:**

Give the Supervisor not less than 5 working days' notice before removing scaffolding or other facilities for access.

#### PROPOSALS FOR RECTIFICATION OF DEFECTIVE WORK/PRODUCTS:

Defects in construction are to be reported to the Supervisor without delay.

Obtain instructions before proceeding with work which may:

- Cover up or otherwise hinder access to the defective construction, or
- Be rendered abortive by the carrying out of remedial work.

As soon as possible after any part(s) of the work or any products are known to be not in accordance with the Contract or appear that they may not be in accordance, then the Contractor or Supervisor may submit proposals to the other for opening up, inspection, testing, making good, or removal and re-execution.

Such proposals may be unacceptable to the Supervisor, and he may issue other instructions.

#### MEASURES TO ESTABLISH ACCEPTABILITY:

Wherever inspection or testing shows that the work, materials or goods are not in accordance with the Contract and measures (e.g. testing, opening up, experimental making good) are taken to help in establishing whether or not the work is acceptable, such measures:

- will be at the expense of the Contractor
- will not be considered as grounds for extension of time.

#### QUALITY CONTROL:

Establish and maintain procedures to ensure that the Works, including the work of all subcontractors, comply with specified requirements.

Maintain full records, keep copies on site for inspection by the Project Manager, and submit copies of particular parts of the records on request. The records must include:

- Identification of the element, item, batch or lot including location in the Works.
- The nature and dates of inspections by the Contractor or the Project Manager, tests and approvals.
- The nature and extent of any nonconforming work found.
- Details of any corrective action.

#### **WI 707 VALIDATION (NOT APPLICABLE TO THIS TENDER)**

No Validation of any of the equipment / installation is required

#### **WI 710 MANAGEMENT OF TESTS AND INSPECTIONS**

The Contractor shall provide a test and inspection plan as part of their quality management system, detailing how the Contractor will control the Works and Equipment in line with any test and inspection schedule. This plan must be approved by the Project Manager.

The Test and Inspection Plan must include:

- Procedures and method statements etc. needed to carry out the work
- Acceptance standards such as specifications, national standards and legislation
- Requirements for samples, benchmarks, trials and prototypes.
- Records and other deliverables generated as part of any test process.
- Who is responsible for the implementing the planned arrangements.
- Who is responsible for certifying that compliance with the requirements has been achieved.

## **WI 720 SUPERVISOR'S PROCEDURES FOR INSPECTIONS AND WATCHING TESTS**

### **TIMING OF TESTS AND INSPECTIONS:**

The Contractor will ensure that tests and inspections are carried out before doing any work which would obstruct the test or inspection and in any event the Contractor will give the Supervisor 14 day's prior notice to allow the Supervisor to be present. On the day before the test or inspection is due to be carried out the Contractor will advise the Supervisor whether or not the work or samples will be ready.

If the work or samples will not be ready the Contractor will arrange a new time and date for the testing or inspection to be carried out. The Contractor will notify the Supervisor of the results of all tests and inspections.

### **TEST CERTIFICATES:**

Submit a copy of each certificate to Supervisor as soon as practicable and keep copies of all certificates on site.

## **WI 800 MANAGEMENT OF THE WORKS**

### **DOCUMENTS:**

The Contractor is required to keep copies of the following on the Site, readily accessible for reference by the Project Manager and Supervisor:

- Manufacturers' current literature relating to all products to be used in the Works.
- Relevant BS Codes of Practice.
- Those parts of BS.8000 'Workmanship on building sites' which are invoked in the specification.
- Completed Site Waste Management Plan.

Retain copies of maintenance instructions and guarantees delivered with components and equipment (failing which, obtain), register with manufacturer as necessary and hand over to the CDM Coordinator on or before the Completion Date.

### **SUPERVISOR (CONSTRUCTION MANAGER):**

The Employer will appoint a general Supervisor (Clerk of Works) to monitor the Contractors activities on site and adherence to design drawings and specifications. This general role may be supported where required by discipline specific supervisors employed by UKHSA.

## **WI 805 PROJECT TEAM – OTHERS**

### **DESIGNERS:**

Contractor Design

### **PRINCIPAL DESIGNER FOR CDM:**

Contractor

### **QUANTITY SURVEYOR:**

UKHSA

## **WI 810 COMMUNICATIONS**

### **CONTRACTOR'S SITE MEETINGS:**

The Contractor must hold such regular site meetings as are necessary for the proper management and co-ordination of the Contract. The Contractor must arrange for representatives of sub-contractors to attend when necessary and allow for all expenses of his own attendance and provision of suitable accommodation. The Contractor will be responsible for the production and circulation of agendas, minutes of meetings. Minutes to be circulated within 48hrs of meeting.

**PM'S EARLY WARNING MEETINGS:**

The Project Manager will hold Early Warning meetings to review progress and other matters. Meetings will normally be held every two weeks.

Ensure the availability of accommodation and attend all such meetings. The Contractor's senior representatives shall attend all meetings to report on progress, contract and all other matters.

The Project Manager will chair the meetings and take and distribute minutes.

**CONTRACTOR'S PROGRESS REPORT:**

The Contractor shall submit a progress report to the Project Manager two days prior to each site meeting. Notwithstanding the Contractor's obligations under the Contract the report must include:

- A progress statement by reference to the master programme for the works
- Details of any matters materially affecting the regular progress of the Works
- Any requirements for further drawings or details or instructions to enable the Project Manager to fulfil his obligations under the Conditions of Contract.
- Health and Safety Issues.

**WI 900 WORKING WITH THE EMPLOYER AND OTHERS**

**WI 905 SHARING THE WORKING AREAS WITH THE EMPLOYER AND OTHERS**

**WORKS BY OTHERS:**

**The Contractor must liaise with UKHSA Site Maintenance for the following services currently maintained by them:**

**Access Control  
Fire Alarm  
Security  
Utilities**

**GENERALLY:**

The Contractor will co-ordinate the works to incorporate the above direct contractor's works and the Contractor will include for the following co-ordination and attendance items:

- (i) Arrange and co-ordinate programme dates with the Project Manager.
- (ii) Meet with the Project Manager to agree detail of working practices while both parties are on site.
- (iii) Whilst each direct contractor is on site the following factors will need to be allowed for:
  - Ready access will be required to the direct contractor's defined working areas
  - Deliverance of materials to the working areas will need to be co-ordinated
  - Temporary electrical power will be required
  - Permanent services will be provided to allow for commissioning
  - Secure weatherproof site storage
  - Access to welfare facilities
  - Use of Contractor's access scaffolding if available.

**WI 920 AUTHORITIES AND UTILITIES PROVIDERS**

**SERVICES REGULATIONS:**

Any work carried out to or which affects new or existing services must be in accordance with the By Laws or Regulations of the relevant Statutory Authority.

**WATER REGULATIONS/BYELAWS NOTIFICATION:**

Notify Water Undertaker or any work carried out to or which affects new or existing services and submit any required plans, diagrams and details.

Allow adequate time to receive Undertaker's consent before starting work. Inform immediately if consent is withheld or is granted subject to significant conditions.

**WATER REGULATIONS/BYELAWS CONTRACTOR'S CERTIFICATE:**

On completion of the work, submit to the Project Manager (and where required also to the Water Undertaker) a certificate including:

- The address of the premises.
- A brief description of the new installation and/or work carried out to an existing installation.
- The Contractor's name and address.
- A statement that the installation complies with the relevant Water Regulations or Byelaws.
- The name and signature of the individual responsible for checking compliance.
- The date on which the installation was checked.

**WI 1000 SERVICES AND OTHER THINGS TO BE PROVIDED**

**WI 1005 SERVICES AND OTHER THINGS FOR THE USE OF THE EMPLOYER, PROJECT MANAGER OR OTHERS TO BE PROVIDED BY THE CONTRACTOR**

**GENERALLY**

**LOCATIONS:**

Inform the Project Manager of the intended siting of all spoil heaps, temporary works and services.

Maintain, alter, adapt and move temporary works and services as necessary.  
Remove when no longer required and make good.

**ACCOMMODATION**

**SITE OFFICES:**

The Contractor's and his Sub-contractor's temporary buildings, mess room, equipment, working materials and building operations will be confined to the Site and Working Areas. The Contractor's staff will not be permitted beyond the boundary of these areas.

**ROOM FOR MEETINGS:**

Meetings will be held in the main Employer's complex. The Contractor shall liaise with the Project Manager for booking meeting rooms.

**SANITARY ACCOMMODATION:**

Provide and maintain in a clean condition sanitary accommodation and drying room.  
The accommodation must include an adequate number of appliances, wash hand basin(s) with hot and cold supply, with adequate heating, lighting and ventilation, to comply with the construction Health and Safety and Welfare Regulations.

Under no circumstances will the Contractor be allowed to use welfare facilities within the adjacent buildings.

**CANTEEN/MESS FACILITIES:**

The Contractor may use the main UKHSA canteen if overalls, dirty clothing or boots are not worn in the canteen. The Contractor shall not be entitled to use other welfare facilities within the building.

## **EQUIPMENT, SMALL TOOLS AND OTHER TEMPORARY WORK**

### **EQUIPMENT:**

The Contractor will provide and maintain all necessary equipment such as temporary fencing, hoardings, planked footways, guard rails, gantries, warning signs and the like for the proper execution of the works, for the protection of the Employer's staff, and other authorised personnel and for meeting the requirements of any Local or other Authority and alter, adapt and shift from time to time as necessary.

### **SMALL PLANT AND TOOLS:**

The Contractor shall provide and maintain all necessary small tools for the proper execution of the works.

### **EQUIPMENT:**

Provide all Equipment such as scaffolding, craneage, plant, tools, vehicles, implements and machinery necessary to Provide the Works.

## **TEMPORARY WORK**

### **TEMPORARY FENCING, HOARDINGS ETC:**

The Contractor shall provide, adapt and maintain as required by the work temporary screens to ensure that noise, dust and access from/to the contractors working areas are restricted.

Should the screen be located across a designated fire escape route then access will have to be maintained by the Contractor. All other necessary equipment such as temporary fencing, hoardings, screens, roofs, fans, planked footways, guardrails, gantries warning signs and similar items as may be necessary for protecting the public and others from the execution of the Works and for meeting the requirements of any Local Authority or other Statutory body and other, adapt and shift from time to time as necessary.

The Contractor must provide all necessary lighting (see also clause Lighting and Power for the Works).

## **WI 1010 SERVICES AND OTHER THINGS TO BE PROVIDED BY THE EMPLOYER**

### **LIGHTING AND POWER:**

The Employer's power supplies may be used by the Contractor to carry out the Works. The location of the supply connection is to be confirmed by the Project Manager. The Contractor shall allow for all alterations, adaptations and maintain as necessary, remove and make good on completion.

### **WATER:**

The Employer's water supplies may be used by the Contractor to carry out the Works. The location of the supply connection is to be confirmed by the Project Manager. The Contractor shall allow for all alterations, adaptations and maintain as necessary, remove and make good on completion.

### **TELEPHONE LINE**

A permanent land line installation will only be considered for projects lasting over 1 year

## **WI 1100 HEALTH AND SAFETY**

### **WI 1105 HEALTH AND SAFETY REQUIREMENTS**

#### **RISKS TO HEALTH AND SAFETY:**

See Pre-Construction Information

The nature and condition of the site cannot be fully and certainly ascertained before it is opened up.

Risks have been identified within the Pre-Construction Information.

The accuracy and sufficiency of this information is not guaranteed by the Employer or the Project Manager and the Contractor must ascertain for himself any information he may require to ensure the safety of all persons and the works.

The CONSTRUCTION PHASE HEALTH AND SAFETY PLAN developed from the Outline Construction Phase Health and Safety Plan must be submitted to the CDM Coordinator not less than 15 days before the proposed date for start of construction work. Do not start construction work until the CDM Coordinator/Project Manager has confirmed in writing that the Construction Phase Health and Safety Plan includes the procedures and arrangements required by CDM Regulation 15(4).

**EMPLOYER'S REPRESENTATIVE SITE VISITS:**

Submit details in advance, of safety provisions and procedures (including those relating to materials, which may be deleterious), which will require their compliance when visiting the site.

Provide protective clothing and/ or equipment on site for the Employer, the Employer's representatives and other visitors to the site.

**WI 1200 SUBCONTRACTING**

**WI 1205 RESTRICTIONS OR REQUIREMENTS FOR SUBCONTRACTING**

For reasons that are confidential to the Employer, certain contractors are not permitted to work on site at the UKHSA Site Chilton.

During the Tender process the Contractor was requested to advise the sub-contractors that he intends to use for this project. Any prohibited Sub Contractors will have been advised by the Project Manager and a request made to select an alternative Sub Contractor.

Should a prohibited contractor be brought on site by the successful Tenderer that had not been advised at the pre-contract award meeting, the Employer will not be liable for any cost whatsoever incurred by the Contractor in replacing the prohibited contractor.

**WI 1300 TITLE**

**WI 1310 MARKING**

Subject to the agreement of the Project Manager and identified on the approved Activity Schedule the payment for any material or equipment stored away from the Employers site shall only be made subject to completion of a "Vesting Certificate".

Materials or equipment shall be:

- In accordance with the Contract
- Insured
- Set apart and marked to identify they are the property of UKHSA, with the Job name and number.
- Stored as to prevent damage / degradation
- Available for inspection

**WI 1320 MATERIALS FROM EXCAVATION AND DEMOLITION**

**MATERIALS FOUND:**

Any materials or objects of value found on the Site will remain the property of the Employer and will only be sold or removed as the Project Manager will direct; access will be allowed to any authorised person instructed to remove same.

**OWNERSHIP:**

Materials arising from the alteration work are to become the property of the Contractor except where otherwise stated. Remove from site as work proceeds.

**DISPOSAL**

All copies of waste disposal certificates will be issued to UKHSA to confirm that all materials

have been disposed of in accordance with the UKHSA waste management policy.

## **WI 1400 ACCOUNTS AND RECORDS**

### **CONTROL OF COST**

#### **CASH FLOW FORECAST:**

As soon as possible and before starting work on site submit to the Project Manager a forecast showing the Price for Work Done to Date at each assessment date throughout the Contract period and based upon the programme for the works and the accepted Activity Schedules.

This will be required to be updated as work progresses to reflect the revised program and the impact of any Compensation Events.

#### **MEASUREMENTS:**

Give reasonable notice to the Project Manager before covering up work which the Project Manager requires to be measured.

#### **LABOUR AND PLANT RETURNS:**

At the beginning of each week provide for verification by the Project Manager records showing, for each day of the previous week:

- The number and description of craftsmen, labourers and other persons employed on or in connection with the Works, including those employed by subcontractors.
- The number, type and capacity of all mechanical and power-operated plant employed on the Works.

## **WI 1500 EMPLOYER'S WORK SPECIFICATIONS AND DRAWINGS**

The Contractor is to develop the design in accordance with WI300, its sub-clauses and the URS detailing the Scope of Work

**END**



**C374691 Chilton E Block Air Handling Unit Replacement Design &  
Build Appendix D Pre-Construction Information**



**PRE-CONSTRUCTION INFORMATION**

**Chilton E Block Air Handling Unit Replacement Design & Build  
113394**

Prepared By			
Name	Signature	Date	Issue
		4.12.24	1
Reviewed By			
		__.12.24	1

Approved By			
Discipline	Name	Signature	Date

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## 1 INTRODUCTION

The purpose of the Pre-Tender Health & Safety Plan is:

- To pass safety related information to prospective Principal Contractors so that they can prepare outline submissions that would demonstrate to the client their competence and resource allocation to meet the health and safety issues associated with this project.
- To provide a document for the Principal Contractor to develop into the Construction Phase Health & Safety Plan.

## 2 DESCRIPTION OF PROJECT

**2.1 Project Title:** Chilton E Block AHU Works

**2.2 Project Location:** UK Health Security Agency (UKHSA)  
Chilton  
Didcot  
OX11 0RQ

**2.3 Client:** UK Health Security Agency (UKHSA)

**Address:** UK Health Security Agency (UKHSA)  
Chilton  
Didcot  
OX11 0RQ

**2.4 Client's Representative:** Facilities Department

**Address:** UK Health Security Agency (UKHSA)  
Chilton  
Didcot  
OX11 0RQ

**Contacts:** TBA

Tel: TBA  
E-mail: TBA

**2.5 Designer:** Successful contractor

**2.6 Principal Contractor:** Successful contractor

**2.7 Principal Designer:** Successful contractor

## 2.8 Nature of Project:

### Replacement of existing AHU and the addressing of the following requirements

#### Room Requirements

The AHU must meet the following user requirements

- For all rooms animal rooms in the unit the temperature range should be between 20 and 24° C with a humidity range of 45-65% range.
- The diet storage room EG11 will need to be at the lower end of the conditions stated above as per the recommendations that the diet store should be cool and dry at or below 21 °C with a maximum of 65% RH.
- Animal Housing rooms and procedure rooms, require 15-20 Air changes per hour.

#### Air pressure requirements

- The Corridor should maintain positive pressure creating a barrier between it and the Animal housing rooms, and Procedure rooms. The Animal holding and Procedural rooms these should be of a negative pressure to the corridor. Dirty areas should be of greater negative pressure to direct flow of allergens towards ventilation and outside.

#### Facility Requirements

- **Goods-in and Waste-out area** with access to the outside. It is also our designated food storage area.
  - Replacement of current room air conditioning unit.
  - Replacement of the current window covers and decontamination cleaning of the area of the mould,
  - Install a transparent partition to be installed to create a 'clean' area and separate 'dirty' lobby area. Clean area environment controlled by E-Block AHU. Dirty area to have own system due to external door.
  - **Please Note: Asbestos Survey required for mould removal within the external walls**
  - **Proposed use:**
  - Temporary storage on bench in 'dirty' area for goods in. Small items brought in through hatch. Sizeable items moved through the door.
  - Waste dropped through door and collected on the other side for disposal in non-lab clothes.
  - Bench on 'clean' side for temporary storage of goods in.
  - Food storage area in 'clean' area.
  - Lab coat hooks and overshoe storage to be installed in clean area
  - There is a requirement to install a security camera and local monitor to the back door to enable viewing of the external area prior to opening the door to check for deliveries
- **EG03 Lab**
  - Remove extraction fans elephant's trunk system over the dissection bench.
  - Install double socket for installation of 2 x downdraft units by others.
- **EG16 Lab**
  - Install single socket under bench for a single downdraft unit & fabric work related to these rooms will be required & remedy of Building and fabric defects.
  - Remove sinks in animal holding rooms EG04, EG05, EG06, EG07 and EG09.
  - Replace the sink in EG08 to be replaced and pipework
  - Replace the sink in EG14/15 to be replaced with smaller catering style sink the following dimensions: 588mm x 194mm x 395mm
  - All drains will need to be covered and fitted with vermin barriers.

- Note: Sink EG12 to remain
- Storage of large and expensive units in EG04, EG05, EG07 and EG09 out of the areas before the work is commenced. Consideration needs to be given for provision of storage. The vendor company may be able to provide. Large equipment in EG14/15 will need moving for the replacement flooring to be installed.

#### **Access Considerations: EG13**

- Any access requirements to EG13 for any work must be supervised at all times by UKHSA approved staff due to nature of the room.
- This room may be required to be used throughout the build and therefore timings involving access to this room must be outlined and approved throughout the build timeline by end users.
- Access and use of the low dose-rate gamma irradiator in EG.13 will be required throughout the refurbishment to continue experimental work for projects – we can have some pre-planning of access times and days with further discussion, but the room and equipment will need to remain useable. UKHSA can receive ad hoc visits from the Environment Agency and the Counter Terrorism police with minimal notice, and access will be needed to EG.13 during these visits. Electricity supply will need to be maintained to keep the alarming mechanisms working. Further, monthly source checks and safety checks need to be performed as a legal requirement, necessitating the need for access (some flexibility on days/times)."
- Note: New legislation for this room may come into force during this work and the requirements may change. A variation in cost may have to be allowed for.

#### **Lighting replacement to LED lights.**

- Animal holding room require Circadian lights to provide a 12:12 light cycle, with dawn and dusk phasing with a gradual change in lux levels:
- The rooms also require 'working' light which can be manually operated providing additional light to the room for tasks. with external warning system to alert when lights are left on, or an automatic turn off when there is no-one in the room.
- Note: LED Light fittings along with the control system will need to pass UKHSA 'Flicker safety test' in all phases of dimming etc before they can be purchased and installed.
- User Requirements for BMS (alarms, monitoring, logging etc.)

#### **Replacement of the BMS system.**

- The system should allow for the monitoring and logging of temperatures and humidities in the rooms as well as generating alarms in and out of hours on variations outside for the prescribed limits for on-call engineers and animal staff.

#### **Decontamination**

- After completion of all work there is a requirement for a deep clean and for decontamination by fumigation, in which contract assistance may be required before the unit can be reopened.

#### **Security Considerations**

- Site security CTC level, contractors may need to undergo security checks.
- Direct access into the main building is possible through E-Block. Therefore, any out of hours works must be supervised by UKHSA staff.
- Contractor needs to maintain security in E-Block to ensure that access into the main building is restricted. As well as securing the build site from third parties.
- Security of any external installations needs to be maintained once all work is finished. i.e. secure compound surrounding an external AHU.

**The project objectives to be achieved as a result of undertaking this project are:**

a) As above.

## **2.9 Existing Records and Drawings**

A number of drawings are held by UKHSA. The security arrangements for the site means that not all are freely available, but they can be viewed on site. The Principal Contractor is to satisfy himself with regards to the accuracy of the information contained therein.

## **2.10 Timescale for Completion**

The commencement date is expected to be January 2025 with completion TBC, The duration of the construction works is expected TBC. There will be a lead in time of TBC prior to commencement of construction works.

## **3 EXISTING SITE DESCRIPTION**

UK Health Security Agency was established to prepare for, prevent and respond to health threats, save lives and protect livelihoods

Radiation, Chemical and Environmental (RCE) Chilton is part of UK Health Security Agency and is the UK's primary authority on radiation, chemicals and environmental hazards.

On site there are office and multiple laboratories.

### **3.1 Surrounding Site Uses and Restrictions**

The surrounding areas are occupied and will remain in use during the project.

It is essential that all vehicular and pedestrian access ways are always kept clear, owing to the restricted nature of the access, especially for emergency service vehicles. Special care must be exercised when traffic enters and leaves the site.

The site and surrounding buildings are used for research and the production of pharmaceutical products. An Overall Site Plan and Site Access Routes are attached in Appendix I. All buildings will be live during the project so weekend and out of hours working maybe required.

Waste materials will be disposed of in covered skips prior to removal from site via the appropriate regulatory waste streams. (Skip and storage of waste material locations to be agreed on site). All waste materials must be removed from site by the contractor.

There are no schools, housing or similar properties in the vicinity of the site.



### 3.2 Existing Site Services

Any services that affect the work, electrical, mechanical, and piped, that require isolation, will be isolated prior to works commencing. This will be carried out as above by UKHSA.

Any isolations required must be authorised by the UKHSA site maintenance team prior to execution. Contractors should not commence work until certificates of isolation have been issued / agreed by the UKHSA site maintenance team.

**IMPORTANT - Works must not commence on any isolated service until a certificate of isolation has been issued by the respective UKHSA site maintenance teams following at least 48 hours working hours notification period.**

## 4 CLIENT'S CONSIDERATIONS AND MANAGEMENT REQUIREMENTS

### 4.1 Structure and Organisation

All communications with UKHSA shall be via the Principal Contractors nominated representative to the Client's representative: TBA.

### 4.2 Safety Goals

The UKHSA Health & Safety person responsible for construction works on site will make regular inspections during the works to establish conformance with the Site Rules and both local and regulatory Health & Safety requirements.

Subject to these findings a non-compliance notice may be issued requiring corrective action(s). The issue of three non-compliance notices could result in the contractor being removed from site.

The Principal Contractor is required to complete the Health and Safety Questionnaire for Principal Contractors/Contractors attached in Appendix VII. This will not be necessary if it has been completed within the last 2 years, or there are no significant changes to the contractor's circumstances.

### 4.3 Site Access

UKHSA is one of several occupants of the Harwell campus which is to the west of the A34 dual carriageway, 14 miles south of Oxford and 14 miles north of Newbury. Visitors travelling north or south should leave the A34 at the A4185 intersection and follow signs to the Rutherford Appleton Laboratory or Harwell Campus. UKHSA is on Fermi Avenue, on the south side of the Harwell campus, beyond the Atlas Centre and the Rutherford Appleton Laboratory. The road continues round past the Medical Research Council (MRC) units where additional parking is available at the back of CRCE.

All visitors requiring access to UKHSA must be notified to security 24 hours in advance of their appointment and on arrival are required to report to security prior to entering the site. Visitors are issued with a visitor pass and must be always escorted by a UKHSA employee / agent.

#### 4.4 Permits and Authorisation Requirements

A Permit to Work (PTW) system is in operation across the UKHSA site for the following activities:

- 'S1' Permit prior to any works in or associated with the laboratories and plant rooms.
- Hot Trades e.g. welding etc.
- Work in confined spaces
- Working with pressurised systems
- Electrical works
- Excavations
- Working on roof spaces (at height)
- Working in plantrooms controlled by UKHSA's site maintenance team. (S1 Permit)
- Isolation of services certification

The Principal Contractor's PTW procedures shall be reviewed and agreement reached regarding the application of UKHSA's PTW requirements.

#### 4.5 Emergency Procedures

The Principal Contractor shall instigate an evacuation procedure to ensure that:

- A register of site personnel is maintained at all times.
- The existing egress routes through emergency exit doors are maintained throughout the works.
- In the event of an alarm, evacuation is immediate from all areas within the project limits.
- An independent roll call is carried out in the event of an emergency evacuation.

Muster arrangements will be at the Assembly point for F block at the front of the building by the flagpole, is designated for all contractors and visitors to site.

In the event of an emergency, the Principal Contractor will advise the details concerning the event to facilities or reception.

UKHSA carry out fire alarm testing every Thursday morning at 10.00 am, at which time the alert system will be heard throughout the site.

#### 4.6 First Aid

The Principal Contractor will be responsible for First Aid provision in relation to the construction works, as required by The First Aid at Work Regulations 1981.

#### 4.7 Site Rules

The Principal Contractor's proposals for management of the construction site shall ensure adherence to the *'Health, Safety and Security Guidance Notes for Contractors Carrying Out Work at UKHSA- Chilton'*. This document is included in Appendix II.

In particular, the Principal Contractor shall note that smoking, including e-cigarettes, is prohibited in any building or area within the security fence, other than the designated smoking shelter adjacent to the site incinerator building and various vaping shelters around the site.

#### **4.8 Site Inductions**

All personnel required to work at the site must complete the UKHSA and Facilities Management Site Inductions after which they will be issued with a contractor's pass. Personnel who have completed the induction do not require an escort. Site inductions are carried out daily at 09.30 hours and last approximately 30 minutes.

The Principal Contractor will be responsible for carrying out inductions for all operatives specific to the construction works including access to and use of the area designated for the project.

#### **4.9 Working Hours**

Normal contractor working hours are 08.00 to 16.00 Monday through Friday. Prior arrangements need to be made if contractor working is required outside of these hours and at weekends and bank holidays.

#### **4.10 Accident and Incident Reporting**

Any dangerous occurrence or condition and all incidents resulting in injury or damage to property shall be reported to the Client's representative. In accordance with The Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013 (RIDDOR).

#### **4.11 Project Area Access & Welfare**

- Where possible, the contractor's storage and work area (to be agreed on site) should be used for offloading and storage of construction material prior to being taken into the works area / removed off site. All storage and works compounds / areas must be made secure with perimeter fencing i.e. Heras type fence, ply board hoardings.
- Maintenance staff and Operational Staff will require regular access to existing buildings and adjacent plant room to complete routine maintenance operations on a 24-hour basis. Where this will be difficult because of for example an asbestos enclosure the contractor will be required to work with UKHSA to agree an effective and reasonable solution.
- Every effort is to be made by the contractor to fully segregate the construction area from those areas where UKHSA personnel are present or in close proximity. Access is to be prevented between areas by physical barriers, although some emergency egress may be required.
- UKHSA personnel must not enter the segregated construction areas without being accompanied by a representative from the Principal Contractor.
- Access for emergency service vehicles must be maintained at all times.

- Every effort must be made to ensure that the emergency escape routes adjacent to the works area always remain accessible. The Principal Contractor will devise a plan to show how this will be achieved.
- The Principal Contractor will be responsible for the site security of his goods, materials, and tools.
- Contractor's personnel are permitted to use the main UKHSA canteen (after removing dirty outer work clothes) as well as using available toilets and changing facilities (within the contractor's compound). The use of these facilities will be under continuous review and will be withdrawn if abused. The principal contractor is to provide all other welfare facilities. Eating and drinking is not permitted on the site of the works except for in designated welfare facilities.
- Access to the works area will be via the contractor's car park located adjacent to the site, which is used by other contractors and is not to be obstructed. (See appendix 1). Contractor's vehicles must be parked in designated parking areas, car park, and not adjacent to existing buildings. Unloading will be permitted adjacent to the works, after which vehicles must be parked in the contractor's car park. All emergency access routes and doors must be always kept clear.

## 5 PROJECT LIAISON PROVISIONS

### 5.1 Meetings

Regular on-site project review meetings will be held by the Client's representative where the Principal Contractor will be required to report on progress against programme, budget and all issues related to Health and Safety.

### 5.2 Design Changes

The following procedure is to be utilised for dealing with substantial design changes:

- No major design changes shall be undertaken before submission of a Designers report as required by Regulation 9 of the '*Construction (Design and Management) (CDM) Regulations 2015*' for client review.
- The Principal Contractor / Designer shall provide the Client with the Designers report or Principal Contractors proposals in reasonable time before a commitment to the design change is made.
- The Principal Contractor / Designer shall notify the Client immediately when it becomes apparent that substantial design changes will or may prejudice his resources.

### 5.3 Communications

The Principal Contractor / Designer shall notify the Client of all modifications to the approved design and resultant changes to the Health and Safety Plan. The following procedures are to be followed by the Principal Contractor:

- The Principal Contractor shall take all steps to reduce significant risks and hazards communicate the additional steps and precautions necessary for dealing with them.
- The Principal Contractor shall, in writing, notify all sub-contractors (including self-employed) of the following:

- The Principal Contractor
- The Principal Designer
- The Designer
- The contents of both Health & Safety Plans
- All notices as required by Regulation 13 & 14 of the CDM Regulations 2015.

## **6 ENVIRONMENTAL RESTRICTIONS AND EXISTING ON-SITE RISKS**

### **6.1 Boundaries and Access**

Refer to Section 4 above.

### **6.2 Adjacent Land Uses**

The working area is located at the southwest corner of site, inside the secure perimeter fencing. The land is owned by UKHSA. There are no adjacent land uses which are expected to have any impact on the works.

### **6.3 Existing Storage of Hazardous Materials**

There are no known hazardous materials other than asbestos (see below) which are currently stored within the bounds of the works site.

During the works if an unknown substance or material is discovered, works must cease, and the client's representative notified immediately

### **6.4 Location of Existing Services**

All service positions are to be identified prior to commencement of work and are to be isolated prior to associated work, as required. This is to be carried out in conjunction with UKHSA site maintenance team. Refer also to 3.2 and URS.

### **6.5 Ground Conditions**

Outside storage areas and access to the works area is via existing roadways and car parks. The contractor is to review temporary access requirements and undertake a pre-condition survey prior to the commencement of works.

### **6.6 Existing Structures**

There are existing services within E block below ground which are critical to site operation including Block F. care must be exercised regarding working around these areas. E block is fed via C block from A block.

### **6.7 Asbestos Including Results of Surveys**

Asbestos is present in many areas within the UKHSA site and its known presence and locations are recorded in the asbestos register. UKHSA have a contract in place for the removal / containment of all asbestos. However, areas which may be otherwise inaccessible and exposed by construction work may contain asbestos. Given the area

of works asbestos is not anticipated, however the site asbestos registers are available for review by the Principal Contractor at any point upon request.

## **6.8 Existing Storage of Hazardous Materials**

Proprietary cleaning agents and chemicals of various natures are stored in the existing surrounding buildings and are kept in secure appropriately designed locations. There are none that will have an impact on these works.

## **6.9 Contaminated Land Including Results of Surveys**

No land contamination is known to exist in the areas of proposed works. If, however during the works an unknown substance or material is discovered, works must cease, and the client's representative notified immediately.

## **6.10 Existing Structures Hazardous Materials**

Apart from asbestos the other hazardous material will include dust, MMMF and respirable crystalline silica

## **6.11 Health Risks Arising from Client's Activities**

Traffic and pedestrian movements are ongoing on site throughout each day. Care should be taken with this in mind.

Access to laboratory and plant room areas will only be permitted once UKHSA issue an S1-transfer control document for the area. Access to these areas is not permitted under any circumstances without an S1 in place.

Other construction works are likely to be ongoing in areas adjacent to these works, but they should not have an impact on these proposed works.

# **7 Significant Design and Construction Hazards**

## **7.1 Design Assumptions and Control Measures**

- When working at height, appropriate scaffolds or platforms will be used complete with appropriate hand railing and kick boards. Fall arrest restraints shall be worn when working on unprotected roofs.
- Lifting of and movement of heavy equipment into/out of and within the building shall be done using the correct type and rating of certified lifting gear/craneage in accordance with H&SE Codes of Practice. Personnel responsible for such equipment shall be appropriately certified.
- Hot work, including welding, soldering, and brazing of pipework may be carried out. Hot work permits will only be issued when suitable fire protection devices are available locally. Appropriate face and body protection must be worn, and adequate protection must be provided to prevent arc eye on others.
- Temporary lighting will be used in areas where general lighting is inadequate for installation procedures.

- The release of grinding debris and construction dust must be kept to a minimum; the Principal Contractor shall advise UKHSA how this will be achieved.
- Interruption to the fire alarm system will be required to prevent false activation. The Principal Contractor is to include for temporary provision.
- Construction noise is to be kept to a minimum, particularly when working within and adjacent to laboratories.
- The Principal Contractor will be responsible for the safety, control and management of the Construction areas and shall advise UKHSA how this is to be achieved.

## **7.2 Arrangements for Co-Ordination of On-Going Design Work and Handling Design Changes**

See Section 5.2

## **7.3 Information on Significant Risks Identified During Design (Health and Safety Risks)**

See Section 7.1

## **7.4 Materials Requiring Particular Precautions**

All construction materials shall be subject to the limitations in use and precautions advised as part of the COSHH data supplied by the manufacturer.

Burning, welding, installing, and removing MMMF insulation and drilling into blockwork and concrete may all create elevated levels of substances that are hazardous to health.

All packing and waste materials will be removed from site as and when produced to maintain good working conditions and reduce fire hazards. UKHSA operates and encourages segregation of waste disposal and encourages contractors to do likewise.

## **8 Health and Safety File**

The Principal Contractor is required to provide the data identified below for collation by the Principal Designer when assembling the Health and Safety file:

### **Section A: General Project Information**

- A brief description of the work carried out.
- Details of project parties.

### **Section B: Residual Risk Information**

- Residual hazards and how they have been dealt with (for example, surveys or other information concerning asbestos, contaminated land, water bearing strata, buried services).
- Any hazards associated with the materials used (for example, hazardous substances, lead paint, special coatings which should not be burnt off).

### **Section C: Design Information**

- Key structural principles incorporated in the design of the structure (for example brackets).

### **Section D: Operating and Maintenance Information**

- Information regarding the maintenance, removal or dismantling of installed plant and equipment (for example lifting arrangements).
- Health and safety information about equipment provided for cleaning or maintaining the structure.

#### **Section E: As Built Records**

- The nature, location, and markings of significant services, including firefighting services.
- Information and as-built drawings of the laboratory, its plant and equipment (e.g. the means of safe access to and from service voids, fire doors and compartments

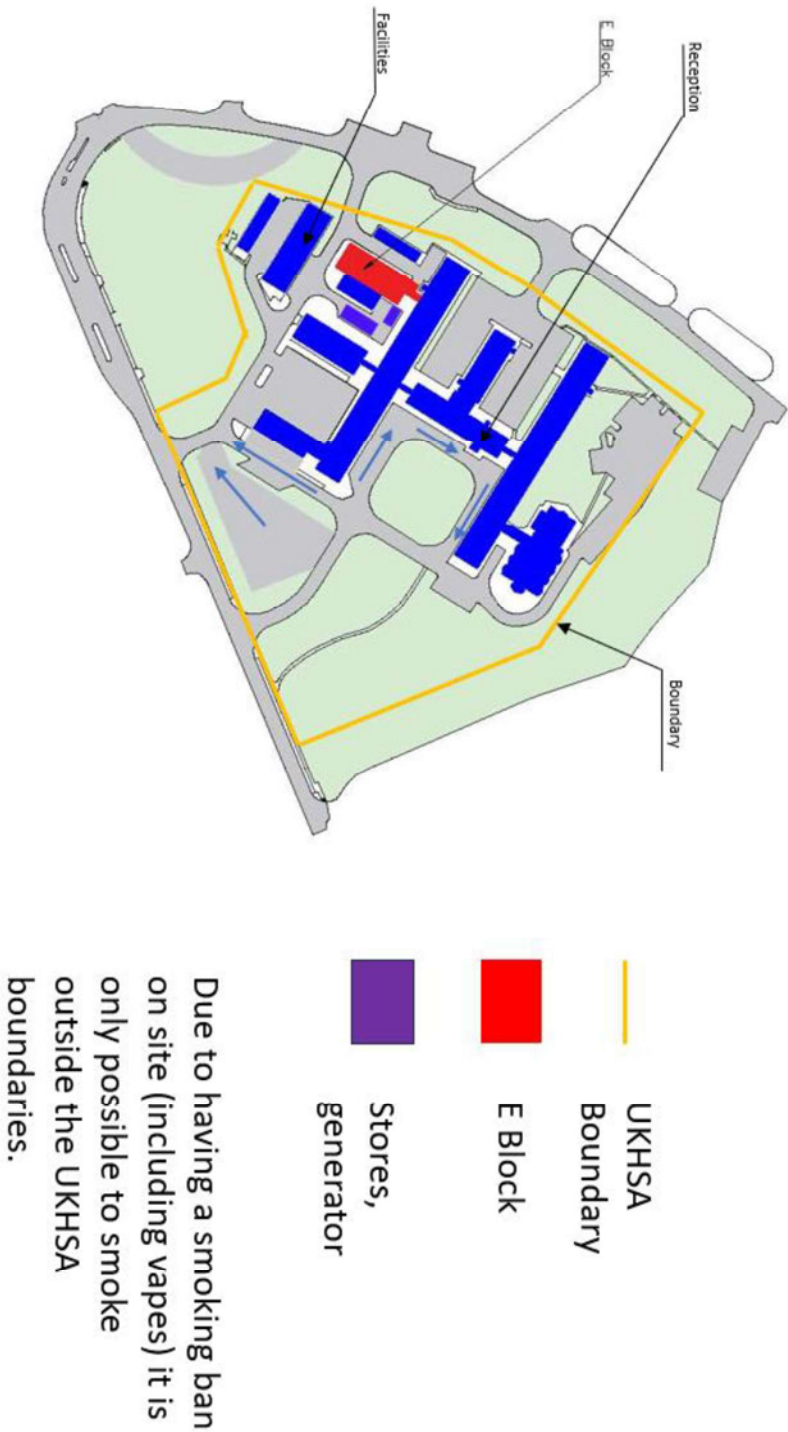
#### **Section F: Appendices**

- Directory of materials used in the project, including suppliers and manufacturers addresses and contact numbers.
- COSHH assessments / safety data sheets of materials used in the construction of the project.



## **APPENDIX I**

### **OVERALL SITE PLAN and SITE ACCESS ROUTES**





UKHSA UK Health Security Agency  
Harwell Campus, Didcot,  
Oxon OX11 0RQ  
Tel: 01235 831 600  
Fax: 01235 833 891

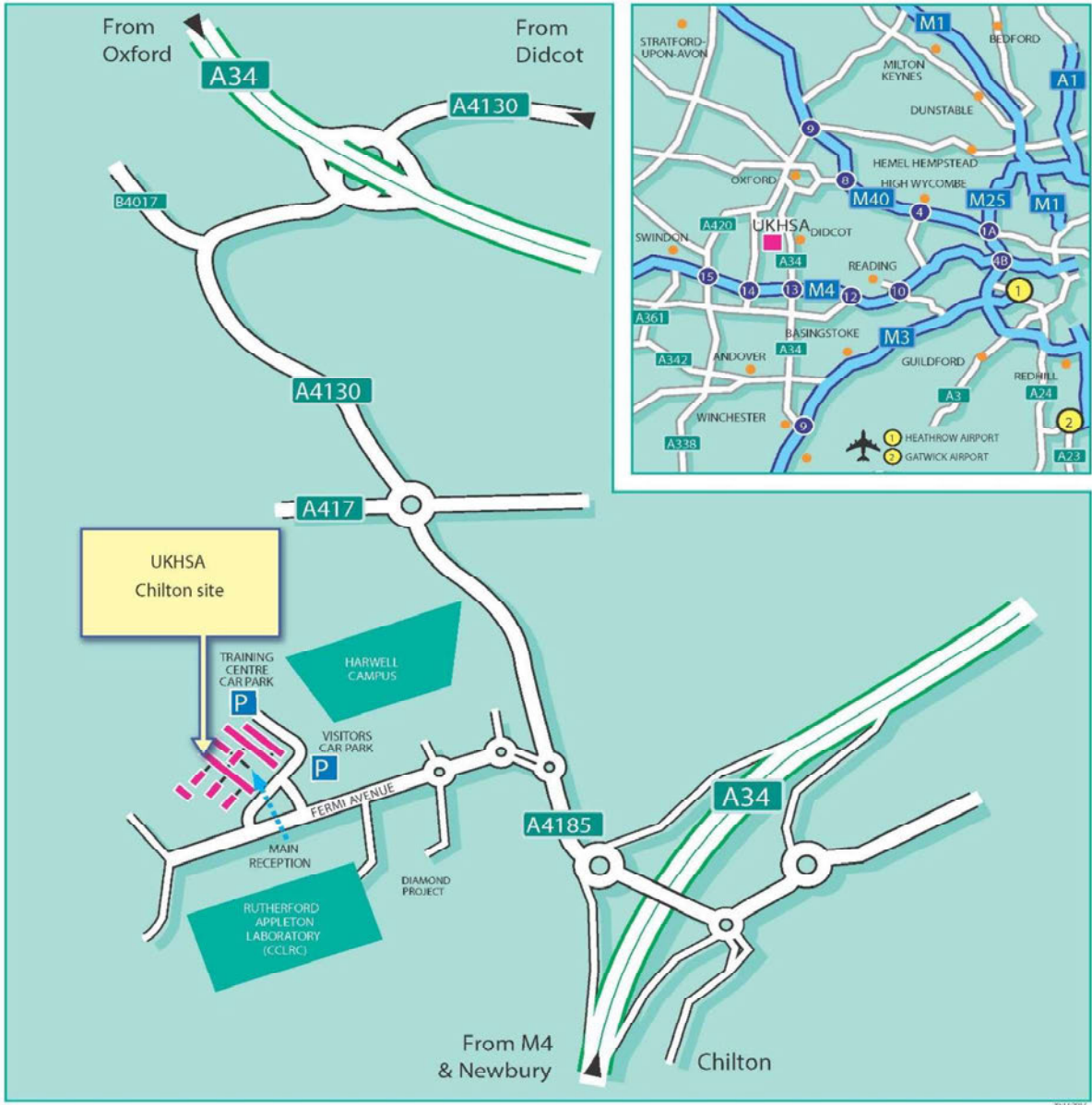
Transport



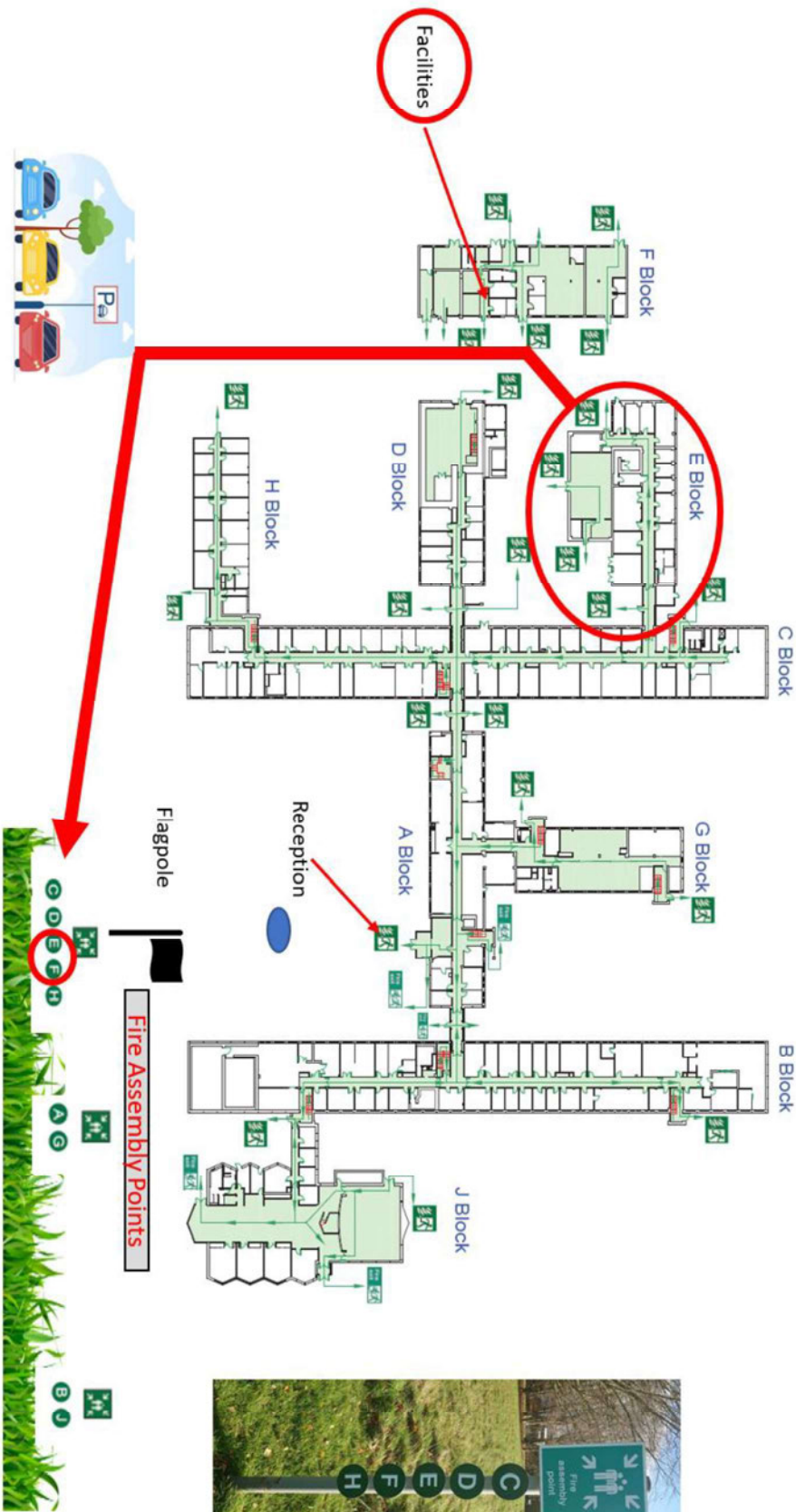
Road  
UKHSA is one of several occupants of the Harwell campus which is to the west of the A34 dual carriageway, 14 miles south of Oxford and 14 miles north of Newbury.  
  
Visitors travelling north or south should leave the A34 at the A4185 intersection and follow signs to the Rutherford Appleton Laboratory or Harwell Campus.  
  
UKHAS is on Fermi Avenue, on the south side of the Harwell campus, beyond the Atlas Centre and the Rutherford Appleton Laboratory. The road continues round past the Medical Research Council (MRC) units where additional parking is available at the back of



Rail  
UKHSA is about 7 miles from Didcot Parkway station, which has frequent connections with London (Paddington), Birmingham, the west of England and South Wales. Taxi services are available from the station.  
  
Bus  
The bus services to the Harwell site are run by Stagecoach.  
  
Air  
UKHSA is one hour from London (Heathrow) Airport: there is a RailAir link service to Didcot Parkway station, via Reading.



# Fire assembly points



## **APPENDIX II**

### **HEALTH SAFETY & SECURITY GUIDANCE NOTES FOR CONTRACTORS CARRYING OUT WORK AT UKHSA – CHILTON**

## **HEALTH, SAFETY AND SECURITY GUIDANCE NOTES FOR CONTRACTORS CARRYING OUT WORK AT UKHSA– Chilton**

### **1.0 Definitions**

- 1.1 “Contractor” means any person, firm or company, or any sub-contractor of such person, firm or company or any employee or agent of either, who or which undertakes construction and/or maintenance work and has access to UKHSA Chilton site for the purpose of performing work or services for UKHSA-Chilton
- 1.2 “Construction and maintenance work” includes building, civil engineering, installation, maintenance and servicing of all electrical, plumbing, refrigeration, mechanical plant systems and equipment (whether fixed or loose), decoration, minor repairs, servicing, maintenance to the buildings and site as required by UKHSA Chilton.
- 1.3 “Project Manager” means the responsible person authorised to act on behalf of UKHSA-Chilton in the administration of the works being carried out.

### **2.0 General**

- 2.1 These Guidance Notes are provided in order to ensure that Contractors are aware of their statutory duties on Health and Safety and that by signing this note, they recognise the importance of ensuring compliance with current legislation in the carrying out of their activities and will comply with the site rules contained herein.
- 2.2 UKHSA-Porton Down expects a high standard of safe working from its Contractors to ensure the safety of all those working and visiting the site and the Contractor will be expected to contribute to maintaining a safe working and operational environment. Contractors are recommended to acquaint themselves with all construction related best practice guides published by the HMSO and National Federation of Building Trades Employers to which they must comply.
- 2.3 If any Contractors are unsure of their legal obligations or what particular Health and Safety measures need to be adopted to ensure the safety of people and the operational environment, they must seek the advice of the Project Manager prior to commencing an activity.
- 2.4 Contractors must retain valid insurances to meet the requirements of the Employers Liability (Compulsory by the Contract) and will be asked by the Project Manager to provide evidence of validity.
- 2.5 Contractors must retain a valid Contractors All-Risks insurance policy to a value as determined by the contract and will be asked by the Project Manager to provide evidence of validity.
- 2.6 In accordance with the requirements of the Health and Safety at Work Etc, Act 1974, Contractors are required to provide a Policy Statement on Health and Safety, their responsible person for safety and methodology for ensuring compliance with the policy. Full details must be made available for inspection by UKHSA-Chilton. For minor Contractors (less than 5 employees), a written policy is not mandatory, but they must be able to satisfy the Project Manager that they will perform their duties in a safe and workman-like manner and will take all necessary precautions to ensure the safety of all the people at the site.
- 2.7 The Contractor must prepare method statements and risk assessments to show how he proposes to carry out the works and what arrangements are in place to minimise any Health and Safety risks and work that is likely to present potential hazards. Production of this documentation will not absolve the Contractors from their overall Health & Safety responsibilities

### **3.0 Site Access**

- 3.1 Contractors must give at least 24 hrs notice in advance of their visit to the Project Manager who will arrange for a pass to be issued upon arrival at reception. At the discretion of the Project Manager, either a Visitor pass, or after a UKHSA induction, a contractor pass allowing unescorted will be issued daily. The muster point for all Contractors is F, adjacent to the flagpole at the front of the building, where personal will be accounted for in the event of an evacuation.
- 3.2 Passes must be worn at all times.
- 3.3 All Contractors must be signed in and out of the site daily at the Site office.
- 3.4 Contractors with a Visitors pass must be always escorted; those with a contractor pass need not be accompanied.
- 3.5 Contractor pass holders will be required to attend a short UKHSA Site Safety Induction Course that will be arranged by the Project Manager.

### **4.0 Work Area Access**

- 4.1 Contractors must not stray from their work area or enter any other area or room without the express permission of the Project Manager. On no account must the Contractor enter rooms exhibiting Biohazard or Radioactive warning signs unaccompanied.

- 4.2 Access to certain Equipment/ Areas including laboratories, plant rooms, service floors and roofs, is controlled via 'S1 Form' (Control Transfer Document). Further to this, certain specific activities that may form part of the contracted work require a 'Permit to Work'. Both the 'S1 Form' and 'Permit to Work' will be arranged by the Project Manager, (refer to 19 for details).
- 4.3 Contractors must make themselves aware of emergency evacuation procedures and listen for broadcast messages. Contractors must comply with emergency instructions issued.

#### 5.0 **Compliance with Statutory Regulations**

Contractors are required to carry out their work in compliance with all Health and Safety Legislation, the following although not exhaustive, are the most applicable:

The Health and Safety at Work Etc, Act 1974  
 The Management of Health & Safety at Work Regulations 1999  
 The Construction (Design and Management) Regulations 2015  
 The Health & Safety (Consultation with Employees) Regulations 1996  
 The Health & Safety (Training for Employment) Regulations 1990  
 The Working Time (Amendment) Regulations 2002  
 The Safety Representatives and Safety Committees Regulations 1977  
 The Electricity at Work Regulations 1989  
 The Low Voltage Electrical Equipment (Safety) Regulations 1989  
 The Electrical Safety, Quality & Continuity Regulations 2002  
 The Electrical (Overhead Lines) Regulations 1970  
 The Control of Asbestos at Work Regulations 2012  
 The Asbestos (Licensing) Regulations 1998  
 The Asbestos Products (Safety) Regulations 1987/1999  
 The Asbestos (Prohibition) Regulations 1992  
 The Control of Substances Hazardous to Health 2004  
 The Dangerous Substances (Notification and Marking of Sites) Regulations 1990  
 The Chemicals (Hazard Information and Packaging) Regulations 2005  
 The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2005  
 The Regulatory Reform (Fire Safety) Order 2005  
 The Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995  
 The Social Security (Industrial Injuries) (Prescribed Diseases) Regulations 1993 (amended)  
 The Control of Pollution Amendment Act 1989  
 The Control of Pollution Regulations 2001  
 The Health and Safety (First Aid) Regulations 1981  
 The Dangerous Substances & Explosive Atmosphere Regulations 2002  
 The Gas Safety (Installation and Use) Regulations 1998  
 The Pressure Systems Safety Regulations 2000  
 The Control of Explosives at Work Regulations 1991  
 The Control of Major Accident Hazards Regulations (Amended) 2005  
 The Confined Spaces Regulations 1997  
 The Supply of Machinery Safety Regulations (Amended) 1994  
 The Lifting Operations and Lifting Equipment Regulations 1998  
 The Health & Safety (Safety Signs and Signals) Regulations 1996  
 The Control of Lead at Work Regulations 2002  
 The Provision and Use of Work Equipment Regulations 1998  
 The Control of Noise at Work Regulations 2005  
 The Environment Act 1995  
 The Environmental Protection Act 1990  
 The Clean Air Act 1993  
 The Water Industry Act 1991  
 The Water Resources Act 1991  
 The Wildlife and Countryside Act 1991  
 The Control of Pollution (Oil Storage) (England) Regulations 2001  
 The Hazardous Waste (England & Wales) (Amended) Regulations 2005  
 The Waste (England & Wales) (Amended) Regulations 2011  
 The Environmental Permitting (England & Wales) Regulations 2016  
 The Builders Skips (Markings) Regulations 1984  
 Personal Protective Equipment at Work Regulations 1992  
 Management of Health and Safety at Work Regulations 1999  
 Workplace (Health, Safety and Welfare) Regulations 1992  
 The Manual Handling Operations Regulations 1992  
 The Working at Height Regulations 2005

#### 6.0 **Reporting of Injuries, Diseases and Dangerous Occurrences**

- 6.1 Contractors must fully comply with the requirements of RIDDOR and advise the Project Manager immediately of the circumstances of any injury or dangerous occurrence which has occurred in the course of carrying out works. An Incident Report Form, obtainable from the Project Manager, must be completed.
- 6.2 If any injury or dangerous occurrence has been notified to the HSE, the Contractor must notify the Project Manager and UKHSA's Construction Safety Advisor immediately.

#### 7.0 **Personal Protective Equipment**

- 7.1 Contractors must provide adequate and suitable personal protective equipment appropriate to the activity being undertaken and take all necessary action to ensure their use, which should be clearly stated within the method statement. This additionally applies to all visitors to the site works.

#### 8.0 **Fire Precautions**

- 8.1 Contractors must be fully aware of UKHSA Chilton's emergency procedures, fire precautions, fire alarm systems, means of escape and broadcast message system. Fire doors must not be obstructed or wedged open under any circumstances

Smoking is strictly prohibited within any part of UKHSA-Chilton's estate, smoking is only possible outside the UKHSA boundary.

- 8.2 At the end of the working day, or at the completion of a particular activity, the Contractor must appoint a responsible person to ensure that any naked lights, burners and the like are extinguished and all electrical apparatus is switched off, unless the nature of the work demands it should be kept on.
- 8.3 The Contractor must ensure that there are adequate means of firefighting equipment in serviceable condition within the work area and that these are clearly identifiable.
- 8.4 The use of highly flammable liquids, petroleum spirit, liquefied petroleum gas, oxygen, naked lights, blow torches, burners, welding, flame and arc cutting and any equipment that produces sparks is strictly prohibited without the issue of an appropriate Hot Work Permit, arranged through the Project Manager.
- 8.5 Storage of highly flammable liquids, petroleum spirit, liquefied petroleum gas, oxygen and the like is strictly prohibited within any of the buildings on the site. The Project Manager will allocate storage areas as required. All spills/leaks to be reported immediately to the Project Manager.

#### 9 **Storage and Use of Substances Hazardous to Health**

- 9.1 The Contractor will fully comply with the requirements of COSHH. All data sheets and the register of substances will need to be issued to the Project Manager prior to any substances being delivered to site.
- 9.2 Contractors must provide a risk assessment and method statement for all work involving hazardous substances and ensure their operatives are fully trained in their use.

#### 10 **Electricity**

- 10.1 Contractors must comply with the Construction (Health, Safety & Welfare) Regulations 1996, the Electricity at Work Regulations 1989 and the current edition of the Institution of Electrical Engineers Regulations for the Electrical Equipment of the Buildings.
- 10.2 All portable electrical equipment and apparatus used in carrying out construction work including temporary lighting must be operated at 110 volts by means of a mains isolation transformer with secondary winding centre tapped to earth. The Contractor must ensure that all portable electrical appliances are regularly tested (PAT) and is able to provide proof to the Project Manager upon demand.
- 10.3 All temporary cables, particularly where they cross people or vehicle thoroughfares must be appropriately secured, marked with hazard tape, protected by suitable buffers or if at high level, duly marked with warning screening and signage.

#### 11.0 **Scaffold and Temporary Access**

- 11.1 All fixed scaffold, mobile scaffold towers and ladders must comply with the Working at Heights Regulations 2005. All such equipment must be properly secured, operationally sound and fit for the intended purpose. The Contractor must be able to provide evidence, if requested, that any such equipment has been inspected to confirm its safe for use, including the maintenance of a ladder register.
- 11.2 All scaffolds must be inspected, certificated, and tagged prior to use. A Register of Inspection of Scaffolds must be available for inspection by the Project Manager or HSE.



## **12.0 Lifting Operations – Hoists and Cranes**

- 12.1 **All lifting operations** must be carried out in compliance with the Lifting Operations & Lifting Equipment Regulations 1998.
- 12.2 Examination Certificates of lifting appliances, ropes, pulleys and chains etc. must be made available for inspection by the Project Manager.
- 12.3 Contractors must ensure that the ground conditions permit the safe operation of craneage.

## **13.0 Excavations**

- 13.1 Contractors must satisfy themselves of the nature of the ground conditions and information in respect of underground services before commencement of work.
- 13.2 All excavation work must comply with the requirements of all current legislation, ensuring all excavation work is suitably fenced off and protected to prevent access by unauthorised people.
- 13.3 All excavations must be inspected and duly registered using Form F91 (Part 1, Section B) register of Examination of Excavations.

## **14.0 Protection of Work Areas**

- 14.1 The Contractor must ensure that all work areas are suitably screened off or secured to prevent unauthorised access, including the provision of signage to warn of any potential hazards.

## **15.0 Machinery Guards**

- 15.1 Contractors must ensure that all dangerous parts of machinery used by them are operated with designed safety guards in place and operatives are trained in the use of such equipment.

## **16.0 Cartridge Operated Fixing Tools**

- 16.1 Cartridge operated fixing tools can only be used with the permission of the Project Manager. Where permission is granted, these tools and their use must conform to the relevant British Standard and operated strictly in accordance with the manufacturer's instructions. Cartridges must be securely stored when not in use and strictly in accordance with the Project Manager's instructions.
- 16.2 Operators, (who must be over 18 years of age) must be fully trained in the operation of such equipment.

## **17.0 Noise and Environmental Pollution**

- 17.1 Contractors must carry out their work in a manner having due regard to minimise disturbance to adjacent operational areas, this includes noise and dust and as such will be required to submit a Method Statement to the Project Manager as to how he proposes to minimise disturbance.
- 17.2 In particular, the Contractor must comply with:
  - Control of Pollution Act 1989 (Amended) and BS 5228
  - Code of Practice for Noise Control on Construction and Demolition Sites 1975
  - Environmental Protection (Duty of Care) Regulations 1991
  - Noise at Work Regulations 1989
  - Control of Noise at Work Regulations 2005

## **18.0 Asbestos**

- 18.1 Contractors must carry out their work in a manner having due regard to minimise disturbance to adjacent operational areas, this includes noise and dust and as such will be required to submit a Method Statement to the Project Manager as to how he proposes to minimise disturbance.
- 18.2 The Project Manager will provide the Contractor with information concerning the existence of asbestos within the work area from the Asbestos Register. If asbestos is known to be present, the Project Manager will issue instructions to deal with the matter.
- 18.3 If asbestos is not found until after the work has started, Contractors must notify the Project Manager and cease work immediately. The Project Manager will issue further instructions.

## **19.0 Access Control and Work Permits**

- 19.1 Any activity on site that may put people or the process/environmental operations at risk are controlled by a strict Permit to Work System. Access to risk or hazardous equipment or areas, including Plant Areas, Roof Areas and Laboratories, is controlled by an 'S1 Form' (Control Transfer Document).
- 19.2 The Contractors must be in possession of a valid Permit to Work, arranged by the Project Manager and detailed below:

Working in Confined Space  
Working at Height  
High Voltage Electrical Systems  
Low Voltage Electrical Systems  
Hot Works  
Excavation  
Pressure Systems  
Service Isolations  
Fire and Security Installations

#### **20.0 CDM Regulations**

20.1 Where the construction work falls within the remit of the CDM Regulations, the Contractor must fully comply with their legal obligations, prepare method statements and risk assessments within a timely manner for inclusion in the Health & Safety File and fully co-operate with the appointed Principal Contractor and Principal Designer.

#### **21.0 Contractors Competency**

21.1 Contractors will be expected to provide suitably trained and experienced operatives for the activity/task in hand. Evidence of such competency will need to be provided, upon request, to the Project Manager.

#### **22.0 Considerate Contractor Scheme**

22.1 Whilst not compulsory, Contractors are recommended to subscribe to the “Considerate Contractors Scheme” and abide by their code of conduct.

#### **23.0 Waste**

23.1 The Contractor must ensure all surplus materials are appropriately stored in a designated area and receptacles suitable for the purpose. Carting away off site must be in accordance with all current legislation. Waste segregation is to be encouraged

23.2 On no account must surplus materials and packaging be discarded around the site.

23.3 Designated waste storage areas must be always kept tidy.

#### **24.0 Welfare Facilities**

24.1 Eating and drinking are forbidden in all buildings at the site, except in clearly defined rooms and areas.

24.2 Contractors may use the staff canteen facilities if overalls, dirty clothing or boots are not worn in the canteen.

24.3 Drinking water must be obtained from the canteen or other clearly identified source. It should not be taken from any other source.

24.4 Contractors must not use the UKHSA staff toilets. Contractors working externally may use the toilets situated in the contractor’s compound.

24.5 Smoking is strictly prohibited other than in a designated external area on the Employer’s site. This regulation is rigidly enforced and any breach of this policy will involve the offender being removed from the site

24.6 Contractors must make their own arrangements regarding first aid provision as required by the Health & Safety (First Aid at Work) Regulations 1981.

Emergency first aid is available around the building, but the principal contractor is expected to provide first aid provision

#### **25.0 Prohibited Articles**

25.1 Animals must not be brought on to the site, including being carried in vehicle cabs.

25.2 Radios, CB radios, cameras and personal stereos.

25.3 Mobile phones with digital cameras are not permitted on site. Other mobile phones are permitted on site but must not be used within the buildings or canteen.

#### **26.0 Vehicles**

26.1 Contractors vehicles must be parked in Carpark or the contractor’s compound, and are not permitted to park in any of the perimeter roads unless unloading.

26.2 All Contractors deliveries and storage areas will need to be agreed at the start of a contract with the Project Manager.

27.0 **Audits/Non-Compliance**

27.1 All work areas and sites will be liable to a Site Safety Audit undertaken by UKHSA without prior warning given to the Contractor. UKHSA will issue Non-Conformance Notices where the Contractor is in breach of Health & Safety Regulations and the Contractor will be expected to rectify any breaches in accordance with the notice issued. Failure to rectify within the period allocated may require the Contractor to cease operations and/or leave site.

28.0 **Use of UKHSA Telephone System**

28.1 Contractors are not permitted to use the UKHSA telephone system for outgoing external calls, without prior agreement.

29.0 **Emergencies**

**ACCIDENTS SHOULD IMMEDIATELY BE REPORTED TO THE PROJECT MANAGER & UKHSA**

**CONTRACTORS MUST ACQUAINT THEMSELVES WITH THE FIRE ALARM SYSTEM AND EVACUATION PROCEDURES**

30.0 **Typical Warning Signs (see 4.1)**

**Biohazard**



**Radiation**



**Data Protection Act 1998**

The above information will be held on file at UKHSA Chilton. It will be used only for the purpose for which it was provided and will not be passed to any third parties.

**APPENDIX III**  
**F10 NOTIFICATION TO H.S.E.**  
**(To Follow)**

**APPENDIX IV**  
**DRAWING REGISTER**  
(To be completed by Principal Contractor)

Document Number	Issue No/Date	Title

**APPENDIX V**  
**DESIGNER RISK ASSESSMENT**  
(To be completed by Principal Contractor)

**APPENDIX VI**  
**ASBESTOS SURVEY**  
(Available Upon Request)



## **Appendix E - Activity Schedule**

### **C374691 - UKHSA Chilton E Block Air Handling Unit Replacement Design and Build**

#### **1 Introduction**

- 1.1 The purpose of this document is to provide guidance and instruction for the Tenderer to complete the Commercial (Pricing) section of the UKHSA Chilton E Block Air Handling Unit Replacement Design and Build Tender.

#### **2 Sections to be Completed**

- 2.1 The Tenderer is to complete all sections of the Activity Schedule and are to include for everything necessary to complete the RIBA4 design and works element of the requirement.
- 2.2 The Activity Schedule will be included as part of the Contract for the Design and Build and should align with the programme for the purposes of payment of completed Activities in accordance with the Contract.

#### **3 Currency**

- 3.1 The Tender is to be priced throughout in GBP.

#### **4 Price Build Up**

- 4.1 The Tenderer is to complete each tab of the Activity Schedule to give a full price breakdown for the design and build detailed, in line with NEC contracts.
- 4.2 Instructions are included at the top of each tab to help ensure the Activity Schedule is completed correctly.
- 4.3 All items in the Activity Schedule should be priced ex VAT.
- 4.4 All items in the Activity Schedule shall have a value rounded to the nearest £0.01.
- 4.5 For the avoidance of doubt, this Activity Schedule should be read in conjunction with the User Requirements Specifications, and other Tender Documents, included within the Tender pack.

#### **5 Inflation**

- 5.1 Inflation should not be included as part of the prices entered into the tables on the Activity Schedule due to short timeframe for the completion of the requirements.

#### **6 1. Design & Professional Services**

- 6.1 The Design & PS tab contains a table tenderers are required to complete to provide a detailed breakdown of the disciplines and grades required to fully review the current design and scope, complete the RIBA Stage 4 design and the professional services required during RIBA Stages 5-7 of the build programme. This is split into two cost types, fixed cost for design review and RIBA Stage 4 and provisional cost for RIBA Stages 5-7.
- 6.2 The following definitions shall apply:
- 6.3 "Fixed Cost" means the total cost to provide all services required to complete the Design Review and RIBA Stage 4.
- 6.4 "Provisional Cost" means the estimate cost to provide all services to complete RIBA Stages 5-7.
- 6.5 Tenderers should complete the coloured highlighted cells to provide details on Discipline, Grade, Day Rate, Number of Personnel and Number of Days for each discipline and grade required to complete the Design Review and RIBA Stage.



**7 2. Phase 1 Works**

- 7.1 The Phase 1 Works tab contains a table that should be used as a template for each activity required to complete the Phase 1 build element of the requirement.
- 7.2 Each activity table will produce a detailed breakdown of the price and quantity for the Labour, Plant and Materials and Equipemnt required to complete the activity.
- 7.3 The price of each activity will be added together to provide the Total of the Prices for the requirement. The Total of the Prices will then be used as part of the commercial evaluation and the contract price for the Phase 1 build element of the requirement.
- 7.4 Tenderers should complete the coloured highlighted cells to provide details on the Activity Item, Unit of Measure (UoM), Unit Price, Overhead Percentage, Fee Percentage, and Quantity required to complete the Activity.

**8 3. Phase 2 Works**

- 8.1 The Phase 2 Works tab contains a table that should be used as a template for each activity required to complete the Phase 2 build element of the requirement.
- 8.2 Each activity table will produce a detailed breakdown of the price and quantity for the Labour, Plant and Materials and Equipemnt required to complete the activity.
- 8.3 The price of each activity will be added together to provide the Total of the Prices for the requirement. The Total of the Prices will then be used as part of the commercial evaluation and the contract price for the Phase 2 build element of the requirement.
- 8.4 Tenderers should complete the coloured highlighted cells to provide details on the Activity Item, Unit of Measure (UoM), Unit Price, Overhead Percentage, Fee Percentage, and Quantity required to complete the Activity.

**9 4. Expenses**

- 9.1 The Expenses tab contains the Client Stated Expenses table from Contract Data Part 1 and a Tenderer Stated Expenses table as per Contract Data Part 2.
- 9.2 The Tenderer is required to complete the Tenderer Stated Expenses table for expenses that are not included within the Employer Stated Expenses table.

Price Summary

Requirement	Description	Total of the Prices	
1	Design & Professional Services	£	
2	Phase 1 Works	£	
3	Phase 2 Works	£	
4	Total preliminaries	£	
5	Total provisional Sums	£	
Total Contract Price ex VAT		£	1,508,847.44

## 1. Design & Professional Services

### Instructions

1 - UKHSA requires tenderers to complete the below table to advise the cost of the design review, design to RIBA Stage 4 and ongoing Professional Services required through RIBA Stages 5-7 as per the Scope.

2 - Data should be entered in yellow highlighted cells only, the other cells contain formula.

3 - The prices in the below tables will be used as part of the commercial evaluation and the contract price for the design element of the requirement

Number	Discipline	Grade	Contract Day Rate	Current Design Review			
				Number of Personnel	Number of Days	Total Days	Total Cost
1	Mechanical					0	
2	Electrical					0	£
3	Fabric					0	
4	Design Manager					0	
<b>Subtotal</b>				<b>0</b>		<b>0</b>	

Number	Discipline	Grade	Contract Day Rate	RIBA Stage 4 - Firm Price			
				Number of Personnel	Number of Days	Total Days	Total Cost
1	Mechanical					0	£
2	Electrical					0	£
3	Fabric					0	
4	Design Manager					0	£
<b>Subtotal</b>				<b>0</b>		<b>0</b>	£

Number	Discipline	Grade	Contract Day Rate	Firm Price Totals			
				Total Personnel		Total Days	Total Cost
1	Mechanical			0		0	£
2	Electrical			0		0	
3	Fabric			0		0	£
4	Design Manager			0		0	£
<b>Subtotal</b>				<b>0</b>		<b>0</b>	

Number	Discipline	Grade	Contract Day Rate	RIBA Stage 5 - Provisional Price			
				Number of Personnel	Number of Days	Total Days	Total Cost
1	Mechanical					0	
2	Electrical					0	£
3	Fabric					0	£
4	Design Manager					0	
<b>Subtotal</b>				<b>0</b>		<b>0</b>	£

Number	Discipline	Grade	Contract Day Rate	RIBA Stage 6 - Provisional Price			
				Number of Personnel	Number of Days	Total Days	Total Cost
1	Mechanical					0	£
2	Electrical					0	£
3	Fabric					0	
4	Design Manager					0	£
<b>Subtotal</b>				<b>0</b>		<b>0</b>	£

Number	Discipline	Grade	Contract Day Rate	RIBA Stage 7 - Provisional Price			
				Number of Personnel	Number of Days	Total Days	Total Cost
1	Mechanical					0	£
2	Electrical					0	
3	Fabric					0	£
4	Design Manager					0	£
Subtotal				0		0	

Number	Discipline	Grade	Contract Day Rate	Provisional Price Totals			
				Total Personnel		Total Days	Total Cost
1	Mechanical			0		0	
2	Electrical			0		0	£
3	Fabric			0		0	£
4	Design Manager			0		0	
Subtotal				0		0	

Number	Discipline	Grade	Contract Day Rate	Overall Totals			
				Total Personnel		Total Days	Total Cost
1	Mechanical			0		0	£
2	Electrical			0		0	£
3	Fabric			0		0	
4	Design Manager			0		0	£
Subtotal				0		0	£

Client Cost Component Notes

This should include all services that will be carried out by a Project Manager

2. Phase 1 Works

Instructions											
1 - UKHSA requires the below table to be complete for each activity required to complete the Phase 1 build element of the requirement.											
2 - Data should be entered in yellow highlighted cells only, the other cells contain formula.											
3 - For each activity copy from cell A12 to N48 and paste below the last activity											
4 - The prices in the below tables will be used as part of the commercial evaluation and the contract price for the Phase 1 build element of the requirement											
Total of the Prices										£	

Required Activities											
<Supplier Input Activity>											
Labour	Unit of Measure	Quantity	Lab Unit	Unit Price	Sub Price (Excluding Overhead)	Overhead Type	Overhead Percentage	Overhead Price	Sub Total Price (Excluding Fee)	Fee Type	Fee Percentage
Asbestos R&D Surveys		1				Central				Profit	
Escort the surveyor											
Building services to food store / delivery (EG11) (cooling only)											
Fabric works											
Clean mould growth		9				Central				Profit	
Insulate walls		36				Central				Profit	
Insulate the ceiling		9				Central				Profit	
Allow for lab coat hooks ect		1				Central				Profit	
Cooling											
Degas and strip out existing cellar cooling system		1		£	£	Central		£	£	Profit	£
Dirty Area Ventilation											
Fan		1				Central				Profit	
Louvre		1				Central				Profit	
Form opening and make good		1				Central				Profit	
Install new AHU served by air source heat pump with LTHW battery back up and humidifier.											
RO Plant											
RO plant supply, install and		1				Central				Profit	
Pipe services connection to the RO		1				Central				Profit	
Pipe services connection to the RO		1				Central				Profit	
Electrode Boiler											
Mounting of the electrode boiler		1				Central				Profit	
Steam delivery pipework		1				Central				Profit	
Insulation of steam pipework											
AHU positioning											
Crane AHU		1				Central				Profit	
Crane Ef		1				Central				Profit	
Condenser											
Condensate		1				Central				Profit	
Plant room											
50mm BK Tube		15				Central				Profit	
50mm fittings		2.5				Central				Profit	
50mm Gate Valve		2				Central				Profit	
50mm Commissioning Valve		1				Central				Profit	
20mm Drain Cock		2				Central				Profit	
15mm Lever Ballvalve		1				Central				Profit	
15mm A.A.V. Complete (small)		1				Central				Profit	
Brackery		1				Central				Profit	
Labels		1				Central				Profit	
Heating pump		1				Central				Profit	





**Strip Out Existing AHU, do gas chillers etc**











2. Phase 1 Works

Instructions											
1 - UKHSA requires the below table to be complete for each activity required to complete the Phase 2 build element of the requirement.											
2 - Data should be entered in yellow highlighted cells only, the other cells contain formula.											
3 - For each activity copy from cell A12 to N48 and paste below the last activity											
4 - The prices in the below tables will be used as part of the commercial evaluation and the contract price for the Phase 2 build element of the requirement											

Total of the Prices											£
---------------------	--	--	--	--	--	--	--	--	--	--	---

Required Activities														
<Supplier Input Activity>														
Labour	Unit of Measure	Quantity	Lab Unit	Unit Price	Sub Price (Excluding Overhead)	Overhead Type	Overhead Percentage	Overhead Price	Sub Total Price (Excluding Fee)	Fee Type	Fee Percentage	Fee Price	Total Price (Including Fee)	Activity Price
New Block E boilers -rno oil	Strip													
	Drain down LTHW			£	£	Central		£	£	Profit		£		
	Strip out boiler and flue base		1											
	Minor repairs to existing base			£	£	Central		£	£	Profit				
	Boiler		1		£	Central		£	£	Profit		£		
	Supply new Boiler													
	Flue		1		£	Central		£	£	Profit		£		
	Alterations to flue													
	Piped Servies		1		£	£	Central		£	£	Profit		£	
	Flow													
	Return		1		£	£	Central		£	£	Profit		£	
	Condensate													
	Allow for changes		1		£	£	Central		£	£	Profit		£	
	Oil Line													
	new Oil line connection		1		£	£	Central		£	£	Profit		£	
	Commission													
Allow		1		£	£	Central		£	£	Profit		£		
Remove existing sinks from EG04, 05, 06 and 07 and make good domestic services and drainage. New sink in EG 08														
	EG04, EG05,EG06, EG07 and EG09	Sink removal and associated pipe services		5		£	Central		£	£	Profit		£	
EG08		Strip out existing		1		£	Central		£	£	Profit		£	
	New Sink													
	New Taps		1		£	Central		£	£	Profit		£		
	Piped Services		3		£	Central		£	£	Profit		£		
	EG14/15	Strip out existing		1		£	Central		£	£	Profit		£	
New Sink			1		£	Central		£	£	Profit		£		
New Taps			1		£	Central		£	£	Profit		£		
Piped Services			3		£	Central		£	£	Profit		£		
Allow for vermin barriers			1		£	Central		£	£	Profit		£		
Above ground drainage works in labs			1		£	Central		£	£	Profit		£		
BWIC		Protect, move, store, re-position, unpack												
	Allow to wrap and move equipment at		1		£	Central		£	£	Profit		£		
	Allow to unwrap and move equipment at completion		1		£	Central		£	£	profit		£		
	EG13	Electrical work provision		1		£	Central		£	£	Profit		£	
Inefficient working			1		£	Central		£	£	Profit		£		
Maintaining existing services			1		£	Central		£	£	Profit		£		
General BWIC in connection allowance			6		£	Central		£	£	Profit		£		
Subtotal					£				£			£		£



Plant, Materials and Equipments	Unit of Measure	Quantity	Purchase Unit	Unit Price	Sub Price (Excluding Overhead)	Overhead Type	Overhead Percentage	Overhead Price	Sub Total Price (Excluding Fee)	Fee Type	Fee Percentage	Fee Price	Total Price (Including Fee)	Activity Price
New lighting throughout reusing existing cabling, containment etc to provide 12 hrs bright, 12 hrs dim for Circadian rhythms and Infra red in animal rooms. Circadian lighting system and working														
		1		£	£	Central		£	£	Profit		£	£	
		1		£	£	Central		£	£	Profit		£	£	
Consider new generator and main switchgear. Check to be made to see how EG18 etc power is supplied.														
Temporary supplies  As part of the project D7 supply in the corridor is required to be moved to EG5C and the feeds to the new D7/1, D7/2 and D7/3 boards re-cabled  As part of the project the incoming supplies are to be rationalised such that the D7 feed will be used to provide power to all mechanical plant and that the E1 supply will be used to feed the lighting and power throughout E block. All distribution boards currently fed from D7 will now be fed from E1. Schematic drawings detailing the changes to be made have been provided. The E2 supply will be used to provide temporary power to the area during the works. This is covered in a previous, separate specification section.														
		1		£	£	Central		£	£	Profit		£	£	
Kitchen price														
		1		£	£	Central		£	£	Profit		£	£	
Review installation of new temporary emergency generator connection point and interlock in event of mains power loss.														
Mobile generator supply														
		1		£	£	Central		£	£	Profit		£	£	
New Block E boilers->no oil  Strip  base  Boiler  Flue  Supply new Boiler  Alterations to flue  Piped Services  Flow  Return  Condensate  Allow for changes  Oil Line  new Oil line connection  Thermal insulation  Allow for repairs  Commission  Allow														
		1		£	£	Central		£	£	Profit		£	£	
		1		£	£	Central		£	£	Profit		£	£	
		1		£	£	Central		£	£	Profit		£	£	
		1		£	£	Central		£	£	Profit		£	£	
		1		£	£	Central		£	£	Profit		£	£	
		1		£	£	Central		£	£	Profit		£	£	
		1		£	£	Central		£	£	Profit		£	£	
		1		£	£	Central		£	£	Profit		£	£	
		1		£	£	Central		£	£	Profit		£	£	
	1		£	£	Central		£	£	Profit		£	£		
	1		£	£	Central		£	£	Profit		£	£		
	1		£	£	Central		£	£	Profit		£	£		
	1		£	£	Central		£	£	Profit		£	£		
	1		£	£	Central		£	£	Profit		£	£		
	1		£	£	Central		£	£	Profit		£	£		
	1		£	£	Central		£	£	Profit		£	£		
	1		£	£	Central		£	£	Profit		£	£		
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	1		£	£	Central		£	£	Profit		£	£		
	1		£	£	Central		£	£	Profit		£	£		
	1		£	£	Central		£	£	Profit		£	£		
	1		£	£	Central		£	£	Profit		£	£		
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	1		£	£	Central		£	£	Profit		£	£		
	1		£	£	Central		£	£	Profit		£	£		
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	1		£	£	Central		£	£	Profit		£	£		
	1		£	£	Central		£	£	Profit		£	£		
	1		£	£	Central		£	£	Profit		£	£		
	1		£	£	Central		£	£	Profit		£	£		
	1		£	£	Central		£	£	Profit		£	£		





4. Expenses

Instructions	
Item	Detail
1	UKHSA requires tenderers to complete the below table to advise the Consultant stated expenses as per Contract Data Part 2
2	Enter data into coloured highlighted cells, all other cells are locked.
3	The expenses in the below tables will not be used as part of the Commercial (Price) Calculation / Evaluation
4	The expenses in the below tables will be used for information in the operation of the Contract

Table 3.1: Employer Stated Expenses - Contract Data Part 1		
Number	Expense Type	Expense Amount (£)
1	Accommodation - London	Up to £130 per night
2	Accommodation - Rest of UK	Up to £85 per night
3	Subsistence > 5 hours	Up to £5
4	Subsistence >10 hours	Up to £10
5	Subsistence >12 hours (after 7pm)	Up to £15
6	Evening Meal	Up to £22.50
7	Mileage <10,000 (per mile)	£0.45 per mile
8	Mileage >10,000 (per mile)	£0.25 per mile
9	Passenger Rate (1st passenger per mile)	£0.05 per mile
10	Passenger Rate (subsequent passenger per mile)	£0.02 per mile

Table 3.2: Consultant Stated Expenses - Contract Data Part 2		
Number	Expense Type	Expense Amount (£)
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		



Preliminary costs from BoQ - E Block Document as part of BTU tender pack

**PRELIMINARIES**

**MANAGEMENT**

**DESIGN**

	Quantity	Unit	Unit Cost	Total Cost
Design (Electrical, Mechanical, Fabric, Coordinat	1	item		

Item Sub Total £

**CONTRACTS / PROJECT MANAGER**

	Quantity	Unit	Unit Cost	Total Cost
Commissioning Management	15	Weeks	£	

Item Sub Total £

**SITE MANAGER**

	Quantity	Unit	Unit Cost	Total Cost
Rate	0	weeks	£	-
Out of town allowance	0	weeks	£	-
Overtime	0	hrs	£	-
Subsistence	0	weeks	£	-

Item Sub Total £

**SITE SUPERVISOR**

	Quantity	Unit	Unit Cost	Total Cost
Supervision	28	weeks	£	
Assistant	26	weeks	£	
Travel Cost	26	weeks	£	
Plant Hire	26	weeks	£	

Item Sub Total £

**QUANTITY SURVEYOR**

	Quantity	Unit	Unit Cost	Total Cost
Rate	0	days	£	-
Out of town allowance	0	days	£	-
Overtime	0	hrs	£	-
Subsistence	0	days	£	-

Item Sub Total £

HEALTH & SAFETY OFFICER						
Rate	Quantity	Unit	Unit Cost	Total Cost		
Out of town allowance	0	days	£ -	£ -		
Overtime	0	hrs	£ -	£ -		
Subsistence	0	days	£ -	£ -		
				Item Sub Total	£ -	
WEEKEND MANAGEMENT						
Existing staff on rotation basis	Quantity	Unit	Unit Cost	Total Cost		
Overtime	0	hrs	£ -	£ -		
Subsistence	0	days	£ -	£ -		
				Item Sub Total	£ -	
					MANAGEMENT SUB-TOTAL	£ -
LABOUR						
FOREMAN						
Rate	Quantity	Unit	Unit Cost	Total Cost		
Out of town allowance	0	weeks	£ -	£ -		
Overtime	0	hrs	£ -	£ -		
Subsistence	0	weeks	£ -	£ -		
				Item Sub Total	£ -	
WORKING FOREMAN						
Rate	Quantity	Unit	Unit Cost	Total Cost		
Out of town allowance	0	weeks	£ -	£ -		
Overtime	0	day	£ -	£ -		
Subsistence	0	day	£ -	£ -		
				Item Sub Total	£ -	
LABOURER(S)						
LABOURER(S)	Quantity	Unit	Unit Cost	Total Cost		
Rate	0	weeks	£ -	£ -		
Rate	0	weeks	£ -	£ -		
Rate	0	weeks	£ -	£ -		
Rate	0	weeks	£ -	£ -		
				Item Sub Total	£ -	
CLEANERS						
Cleaning cabins (3 days per week)	Quantity	Unit	Unit Cost	Total Cost		
	0	weeks	£ -	£ -		
				Item Sub Total	£ -	
					LABOUR SUB-TOTAL	£ -

**TEMPORARY SERVICES**

<b>TELEPHONE</b>					
	Quantity	Unit	Unit Cost	Total Cost	
Connection (System)	0	item	£ -	£ -	-
Rental - Line (Based on System)	0	weeks	£ -	£ -	-
Rental - Equipment	0	weeks	£ -	£ -	-
Calls	0	weeks	£ -	£ -	-
System Installation	0	item	£ -	£ -	-
Sundries	0	item	£ -	£ -	-
				Item Sub Total	£ -

<b>ISDN LINE</b>					
	Quantity	Unit	Unit Cost	Total Cost	
Connection	0	item	£ -	£ -	-
Rental - Line (90/3mths)	0	weeks	£ -	£ -	-
Calls (Avg 2000 /500/500) per 3 mths	0	weeks	£ -	£ -	-
				Item Sub Total	£ -

<b>ELECTRICITY - COMPOUND</b>					
	Quantity	Unit	Unit Cost	Total Cost	
Emergency Lighting	1	item	£ 924.00	£ -	-
Consumption	0	weeks	£ -	£ -	-
Wiring installation / fittings - power	0	item	£ -	£ -	-
Wiring installation / fittings - lighting	0	item	£ -	£ -	-
Generator - hire	0	weeks	£ -	£ -	-
Generator - delivery & collection	0	item	£ -	£ -	-
Generator - fuel	0	weeks	£ -	£ -	-
Generator - fuel tank	0	item	£ -	£ -	-
				Item Sub Total	£ -

<b>ELECTRICITY - SITE</b>					
	Quantity	Unit	Unit Cost	Total Cost	
Temporary connection	0	item	£ -	£ -	-
Consumption	0	weeks	£ -	£ -	-
Wiring installation / fittings - power	0	item	£ -	£ -	-
Wiring installation / fittings - lighting	0	item	£ -	£ -	-
Wiring installation / fittings - hoarding	0	item	£ -	£ -	-
Wiring installation / fittings - flood lights	0	item	£ -	£ -	-
Generator - hire	0	weeks	£ -	£ -	-
Generator - delivery & collection	0	item	£ -	£ -	-
Generator - fuel	0	weeks	£ -	£ -	-
Generator - fuel tank	0	item	£ -	£ -	-
				Item Sub Total	£ -

WATER				Quantity	Unit	Unit Cost	Total Cost
Connection (ASSUME USE EXISTING)				0	item	£ -	£ -
Consumption				0	weeks	£ -	£ -
Distribution				0	weeks	£ -	£ -
Standpipe				0	item	£ -	£ -
Temporary connection to cabins				0	item	£ -	£ -
Item Sub Total							£ -

DRAINAGE				Quantity	Unit	Unit Cost	Total Cost
Connection				0	item	£ -	£ -
Temporary drainage to cabins				0	item	£ -	£ -
Septic tank installation				0	item	£ -	£ -
Emptying tank 2 per week				0	item	£ -	£ -
Item Sub Total							£ -

PHOTOCOPIER				Quantity	Unit	Unit Cost	Total Cost
Purchase / rental				0	weeks	£ -	£ -
Paper				0	weeks	£ -	£ -
Charges				0	item	£ -	£ -
Item Sub Total							£ -

DRAWING PLOTTER				Quantity	Unit	Unit Cost	Total Cost
Purchase / rental				0	weeks	£ -	£ -
Paper				0	weeks	£ -	£ -
Charges				0	item	£ -	£ -
Item Sub Total							£ -

COMPUTER SYSTEM				Quantity	Unit	Unit Cost	Total Cost
Purchase / rental				0	item	£ -	£ -
Software				0	item	£ -	£ -
Support				0	item	£ -	£ -
Hub / Portal System				0	item	£ -	£ -
Item Sub Total							£ -

TEMPORARY SERVICES SUB-TOTAL    £

SITE EQUIPMENT

FENCING / HOARDINGS / GATES

	Quantity	Unit	Unit Cost	Total Cost
Temporary Walls	1	Item	£	
Screens	1	Item	£	
2.00m heras fencing - removal	0	m	£	
E.O. for heras fence gates	0	sum	£	
Walkways	0	Item	£	
Maintenance of hoarding / fences	0	item	£	
Temporary protection - generally	0	item	£	
Temporary protection - winter working	0	item	£	
Signage	1	item	£	

Item Sub Total £

SECURITY

	Quantity	Unit	Unit Cost	Total Cost
Site Security	1	Item	£	
E/O B Hols	0	Item	£	

Item Sub Total £

PPE & EQUIPMENT

	Quantity	Unit	Unit Cost	Total Cost
Protective Clothing - Coats	0	item	£	
Protective Clothing - Boots	0	item	£	
H Vis Vests	0	item	£	
Protective Clothing - Hard Hats	0	item	£	
Surveying instruments - Level	0	weeks	£	
Surveying instruments - EDM	0	weeks	£	
Surveying instruments - Total Station	0	weeks	£	
Surveying instruments / materials	0	item	£	
Noise Meter	0	item	£	
Photographs / Camera	0	item	£	
Fire fighting equipment	0	No	£	
Consumables	26	weeks	£	
Protections	1	item	£	

Item Sub Total £



**SITE ACCOMMODATION**

Space for the contractor to bring in their own temporary self-contained facilities is previously detailed in Area Description.	26	weeks	£ 538.04	£ 13,989.15
Office, Canteen, Induction Room	0	weeks	£ -	£ -
Steel Container	0	weeks	£ -	£ -
Staircase / gantries	0	item	£ -	£ -
Delivery & erection	0	item	£ -	£ -
Removal from site	0	item	£ -	£ -
Stationary & Postage	0	item	£ -	£ -
Furniture	0	item	£ -	£ -
Item Sub Total			£	£

**DOCUMENTATION**

O&M Manual	1	item	£ -	£ -
Item Sub Total			£	£

**TRANSPORT**

Cars (inc fuel etc)	0	weeks	£ -	£ -
Item Sub Total			£	£

**PLANT**

Loading and Unloading	0	item	£ -	£ -
Small Tools	0	weeks	£ -	£ -
Consumables	0	weeks	£ -	£ -
Skips (fit out only)	15	item	£ -	£ -
Item Sub Total			£	£

SITE EQUIPMENT SUB-TOTAL

£

**POST COMPLETION WORKS**

**FINAL CLEAN**

Final Cleaning	26	weeks	£ -	£ -
Forklift	0	weeks	£ -	£ -
JCB & Driver	0	weeks	£ -	£ -
Roadsweeper : 6 nr visits per week 18 weeks	0	visits	£ -	£ -
Item Sub Total			£	£

**ADDITIONALS**

Remedial Works	0	Item	£ -	£ -
Defects Post Practical Completion	0	Item	£ -	£ -
Sundries	0	Item	£ -	£ -
Item Sub Total			£	£

POST COMPLETION WORKS SUB-TOTAL

£

PRELIMINARIES TOTAL

£

Pricing Schedule costs from BoQ - E Block Document as part of BTU tender pack

### Pricing Schedule

Item Ref	Description	Qty	Unit	(Labour+ Material)	notes	Material Cost (K/t)	Labour Cost (Install)
1.00	General						
1	Asbestos R&D Surveys	1	item				
2	Building services to food store/ delivery (EG11) (cooling only)	1	item		AC Cooling		
3	Install new AHU served by air source heat pump with LTHW battery back up and humidifier.	1	item				
4	EG06 stand alone services - ventilation and power -	1	item		Nuaire and DX AC cooling		
5	Retain all internal ductwork with some modifications.	0	item				
6	Replace Trend BMS system. E On current maintainers.	1	item		EON		
7	Replace all supply and extract grilles/ diffusers. May require ceiling replacement.	1	item				
8	Replace main extract fan in block D plant room.	1	item				
9	New softener plant/water heater	1	item		Rennai/Merck		
10	Rebalance all air systems	1	LM				
11	Remove redundant above ceiling services.	0	lm				
12	Rebalance LTHW system and install new 3 port control valves on local heater batteries.	1	item		Supplied free issue from BMS		
13	Make good fire stopping around duct work and services.	0	item				
14	Replace extract system from corridor.	1	item				
15	Strip Out Existing AHU, de gas chillers etc	1	m2		Transport and Craneage inc		
16	New lighting throughout reusing existing cabling, containment etc to provide 12 hrs bright, 12 hrs dim for Circadian rhythms and Infra red in animal rooms.	1	item		Thorlux		
17	Consider new generator and main switchgear. Check to be made to see how EG18 etc power is supplied.	1	item		Evopower UKC275ECO 3-Phase Diesel Generator/Schneider		
18	Review installation of new temporary emergency generator connection point and interlock in event of mains power loss.	1	item				
19	New Block E boilers.-1no oil	1	item		inc commissioning		

20	Replace Red Dot Switch Gear (4no to be changed)	1	Item
21	Remove existing sinks from EG04, 05, 06 and 07 and make good domestic services and drainage. New sink in EG 08	1	Item
22	Supply new ceilings	604	m2
23	Supply new Flooring	651.9	m2
24	Decoration (Supply paint only)	2287.52	m2
25	BWIC		1 Item
26	Secure Palisade fencing to house new AHU		1 Item
27	Fire Alarms (provisional sum)		1 Item
28	Mold removal in EG11		1 Item
29	Asbestos removal in EG11		1 Item
30	RIBA Stage 5-7		1 Item
31	Contractor provisional Sum - Decontamination clean		1 Item
32	Contractor provisional sum - existing services alterations ( gas, specialist gases etc )		1 Item
33	Contractor Provisional sum - Out of hours working		1 Item
34	Contractor provisional sum for Asbestos		1 Item
35	Contractor provisional Sum 1 - Facility Reliability Testing		1 Item

Schneider Isobar Act19	
Pland Stainless	
Zenita Blobloc	
Tarckett Eclipse	
Johnsons anti-bacterial	
Any exterior penetrations, door seals to existing doors.	
Palisade/ Galvanised	
Provisional Sum	
Unknown costs at tender therefore included as a provisional sum	
Unknown costs at tender therefore included as a provisional sum	
Unknown costs at tender therefore included as a provisional sum	
Unknown costs at tender therefore included as a provisional sum	
This is a cost of attendance post PC for facility reliability testing, this is not specified, however this has been completed by BTU at other BSU ( animal house ) sites where Homeoffice approval of the facility is required. Therefore we have included as provisional sum pending finalisation of the required scope	

Provisional Sum
Provisional Sum
Provisional Sum
Provisional Sum
Provisional Sum
Contractor Provisional Sum
Contractor Provisional Sum
Contractor Provisional Sum
Contractor Provisional Sum
Contractor Provisional Sum

Labour Total	
Material Total	
Provisional Sum Total	
SUB TOTAL (Exc Prelims)	

Cost excludes risk register items that have been identified by BTU as client to include items  
See risk register tab



**C374691 Chilton E Block Air Handling Unit Replacement Design &  
Build Appendix F Risk Register**

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Children & Adult Air Handling Unit Replacement Design & Build  
Project Reference: 1.394  
Date: 10/2/24

Employer Project Risk Register

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Children's Block Air Handling Unit Replacement Design & Build  
Project Reference: 13384  
Date: 10/22/24

Employer Project Risk Register

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LIKELIHOOD AND IMPACT SCALES

LIKELIHOOD

Description	Scenario	Code Letter	Code Nr	Risk Rating Value	Guide Probability %
Very High	Almost certain to occur	VH	5	16	90
High	More likely to occur than not	H	4	12	75
Medium	Fairly likely to happen	M	3	8	50
Low	Low but not impossible	L	2	4	25
Very Low	Extremely unlikely to happen	VL	1	2	5

IMPACT

Score	Description	Scenario	Code Letter	Code Nr	Risk Rating Value	Cost Min £'000	Cost Most likely £'000	Cost Max £'000	Time	Reputation	Science
5	Very High	Critical impact on the achievement of objectives and overall performance. Huge impact on costs and/or reputation. Very difficult and possibly long-term to recover.	VH	5	1000				20 weeks	News	Unable to do any research,
4	High	Major impact on costs, objectives. Serious impact on output and/or quality and reputation. Medium to long-term effect and expensive to recover.	H	4	500				10 week	Local	No longer considered on world stage as a partner for science
3	Medium	Reduces viability significant waste of time and resources and impact on operational efficiency, output, and quality. Medium term effect, which may be expensive to recover.	M	3	50				5 week	Company wide	Unable to bid for future science
2	Low	Minor loss, delay, inconvenience or interruption. Short to medium term effect.	L	2	5				2 week	Dept	Significant change to schedule
1	Very Low	Minimal loss, delay, inconvenience or interruption. Can be easily and quickly remedied.	VL	1	1				1 week	Colleagues	Minor Change to planned science schedule

**C374691 Chilton E Block Air Handling Unit Replacement Design &  
Build Appendix G Programme**





# Tender Programme

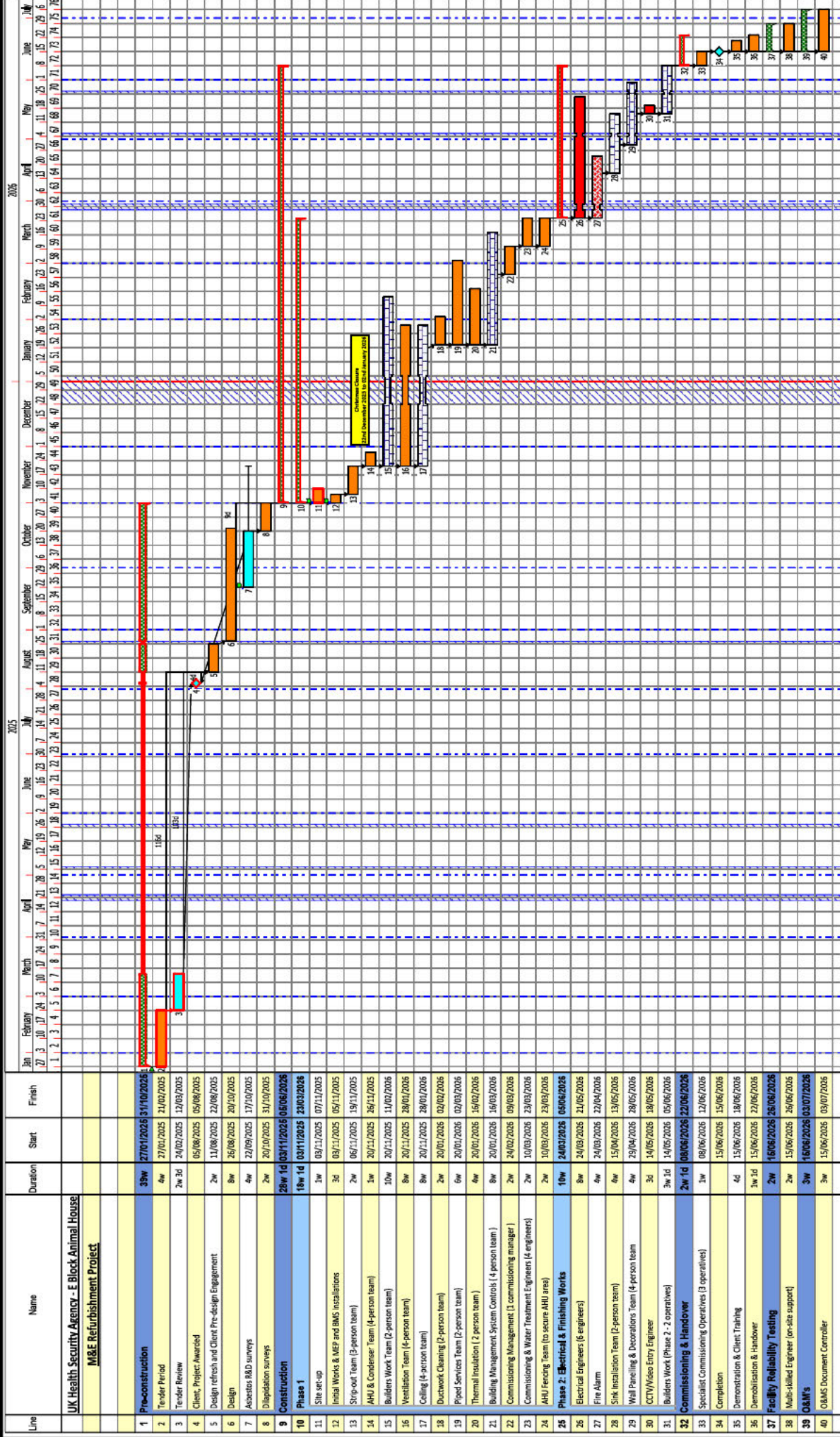
## UK Health Security Agency

E Block Animal House



Richard Warner - Senior Contracts Manager

30th July 2025 - REV A



Trades Contractor/Procurement Stages UKHSA

Milestone Appearances

Start Milestone

Builders Works

Electrical

Fire Alarm

**C374691 Chilton E Block Air Handling Unit Replacement Design &  
Build Appendix H KPIs**



Key Performance Indicators

KPI Used	KPI Owner (If applicable)	KPI Measure	Purpose	Performance Measure	Typical Baseline Example	Actual Baseline Adopted (Insert number only)
Project Delivery Measurement Riddor report & Safety	Project Manager	Number of hazards identified in the month	It has been demonstrated that increasing the number of hazards identified leads to a greater number of accidents being prevented	Number of Hazards identified during the month / Number of operative weeks worked during the month	0	1
	Project Manager	Number of hours worked since the last "RIDDOR incident"	Measures of safe working performance	Total site hours worked since last RIDDOR incident or over 3 day incapacitation / Total site hours worked	0	
	Project Manager	Accident Frequency Rate	Measure of safe working performance	AFR No. of lost time accidents x 100,000 / No of man hours worked	0	
Project Delivery Measurement TIME	KPI Owner (If applicable)	KPI Measure	Purpose	Performance Measure	Typical Baseline Example	Actual Baseline Adopted (Insert number only)
	Project Manager	Meeting Project programme	Regular provision and agreement of contract programme has been shown to lead to more predictable outcome of completion date. Are they meeting project milestones/ work packages	Number of months an updated programme has been agreed / the number of months since project commencement. A score below 1 is below the required and expected performance level.	3 to 5	
	Project Manager	Early Warnings (1) Quantity of Early Warnings issued to the client that are prior to an event occurring during project delivery Early Warnings (2) - Time taken, on average, between agreeing action from Early Warning event occurring	Early started viability of issues has been shown to improve contract performance. Issue prior to the event allows full range of mitigation measures to be applied. The sooner that a mitigation is agreed, the better the outcome for the Additional Client and project	Number of early warnings issued prior to event occurring / Number of early warnings issued after the event occurring Average time taken to agree mitigation action following submission of an early warning(s)	3 to 5 21 Days (Subject to specific form of contract)	
Project Delivery Measurement Cost	KPI Owner (If applicable)	KPI Measure	Purpose	Performance Measure	Typical Baseline	Actual Baseline
	Project Manager	Cost Predictability	Accurate early cost forecasting by Contractor indicates positive and collaborative commercial behaviour	Organization and supplier working collaboratively to ensure that value for money is being met and evaluation against works are submitted accurately and fairly	3	
	Project Manager	Average time to agree time and cost impact of change	Additional costs agreed as soon as possible after the change event, have been shown to be more accurate and allow for better final cost for existing	Average time taken to agree cost of changes following issue of variation instructions	30 days	
Project Delivery Measurement Quality	KPI Owner (If applicable)	KPI Measure	Purpose	Performance Measure	Typical Baseline	Actual Baseline
	Project Manager	Number of defect notices issued	Number of defects notices identified and issued in relation to project or programme	Number of defects notices identified and issued in relation to project or programme	1 to 5	
	Project Manager	Average time to correct notified defect	This drives compliance with contract requirements to rectify defects within set timescale.	Percentage of notified defects rectified within the contract timescale	1 to 5	
Additional	KPI Owner (If applicable)	KPI Measure	Purpose	Performance Measure	Typical Baseline	Actual Baseline
	Project Manager	Waste report	To ensure contractor completes waste report as per our requirements	Report Submitted Monthly	Yes or No	
		Post-construction documentation provided on time and to a satisfactory standard (to include as a minimum asset register, O&M manuals, as-built drawings, health and safety file and final account).	Ensure Post-Construction Documents are provided	All post-construction documentation provided to a satisfactory standard within 4 weeks of work being accepted as satisfactory and complete.	100%	

**C304148 Chilton E Block Air Handling Unit Replacement Design & Build**  
**Appendix I Subcontractor List**

<b>Subcontractor</b>	<b>Works Package</b>
Birmingham Air Conditioning Limited	AHU supplier, condenser supplier and installation, humidifier supplier
Eon Controls Limited	BMS
Merck Life Sciences UK Limited	RO Plant
Harrison Hayes Ventilation Ltd., (HHV)	Ductwork
Economic Insulation (Portsmouth) Ltd	Ductwork and pipework thermal insulation
Control Descent	Flooring and builders work in connection
Nationwide Industrial Services	Strip out works
Overclean	Ductwork cleaning
Graham Services Ltd	Commissioning
Ashford Environmental Services Ltd	Commissioning Management
G A Robertson Building Services Ltd	General Builders work
Itchen Electrical Services Ltd	Electrical Installation
Beveridge Associates Partnership Limited	Designers

**C374691 Chilton E Block Air Handling Unit Replacement Design & Build  
Appendix J Clarifications**

# Integrated M&E Building Engineering Solutions



UK Health Security Agency  
Chilton  
Didcot  
Oxon  
OX11 0RQ

**Commercial | Industrial | Domestic  
Facilities Management**

38 Weyside Road  
Guildford. GU1 1JB  
W: [www.btu-group.com](http://www.btu-group.com)  
T: 01483 590690

25 March 2025

Dear Sirs,

**UKHSA Chilton Block E AHU Replacement Design & Build - E20532**

We refer to the post tender questions and respond as follows

<p><i>While carrying out the commercial evaluation it was noted there were some items that had a Central fee percentage of [REDACTED] and Profit percentage of [REDACTED], giving a total percentage of [REDACTED]. In the Contract Data Part 2 document it states the fee percentage is [REDACTED]. Can you confirm if these percentages are all correct?</i></p>	<p>The tender sum we have presented is correct in the sum of £1,508,847.44 + VAT. We have attempted to complete the breakdown of prices in accordance with the two price breakdown documents that have been prepared.</p> <p>Dependent upon the type of cost centre will depend upon the uplift that we have applied. In some instances the uplift is [REDACTED] plus [REDACTED]. In other instances the uplift is [REDACTED].</p> <p>We therefore confirm the percentages are all correct and this reflects the base uplifts of different cost groups.</p>
<p><i>Can you also complete the rates section of the Contract Data Part 2 document submitted as part of the bid?</i></p>	<p>This is completed and accompanies this letter.</p>

We trust that the above will be of interest and we are committed to providing you with the highest level of service.

Yours faithfully,  
**BTU (Installation & Maintenance) Limited**

**Andrew McCracken  
Managing Director**



Certificate No: 0022  
ISO 14001



1. Our tender includes for the Birmingham Air conditioning (BAC) AHU and condenser proposal. As part of this proposal BAC have confirmed the air volume duty for the AHU as 2.3m<sup>3</sup>/s. We have validated that this air change rate applies to the labs at a rate of 15 air changes per hour. We have noted that the specification requires 15-20 ACH per hour. We would like to confirm should 20 Air changes be selected this will vary the plant selection and vary the cost of the AHU, any costs associated with this change will need to be formally instructed.
2. As part of the technical stage 4 design we will assess the requirement for air to provide a positive pressure to the corridor and a negative pressure to the lab spaces should this vary the AHU duties costs for this change will be subject to a client instruction.
3. We have identified that Birmingham AC have included for a humidifier, they have confirmed the humidifier is rated at 50 kg/h. We believe the peak humidifier load will be the winter and we have assessed the outside air condition as -5°C, fully saturated air and a supply condition of 28°C at 65% RH. Our preliminary calculations show that a humidifier rated at 126 kg/h will be required. At this stage we have not included for the cost for increasing this humidifier. Upon questioning BAC they have confirmed the selection was made against available on site power rather than demand. This will need to be addressed during the technical design stage and any variation to cost will need to be identified and instructed. Please refer to the risk register.
4. We have question BAC on the type of humidifier selected. They have not confirmed a manufacturer and they have stated the type to be an electrode type humidifier, although in the supporting technical submission their proposal refers to an evaporative type humidifier.

We believe the type included is an electrode type as they refer to vessels within their technical proposal and these are only part of an electrode type unit. In this regard we would not routinely install an RO plant to serve this type of humidifier. This type of humidifier requires minerals to be present in the water to generate the steam, removal of the minerals through RO water treatment will impact the output of the humidifier negatively.

If electrode is to be used routinely these are feed from a raw water supply and a maintenance and operation plan to swap out the vessels as scale develops will be necessary.

Please note electrode humidifiers operate within the control tolerance for the labs however due to drain cycles there will be periods when room conditions will not be met as the humidifier will be off line. This will be reduced if N + 1 is provided but not eliminated. Whilst the BAC quote confirms a 50 kg/h humidifier is provided they have noted that there are 2 vessels, two steam lances and two condensate drains in their proposal. So whilst there are two these will have to run simultaneously to meet the demand and under winter conditions the plant will not offer N + 1 operation in the current configuration.

RO plants are routinely required where resistive humidifiers are installed. At this time we have included the cost for Merck to supply and install the RO plant and BAC price for the AHU and humidifier package.

5. Dehumidification, we would normally expect the AHU to be configured with a frost coil, a cooling coil and reheat coil to provide a dehumidification cycle. The AHU that has been included from the BAC pricing includes for the LTHW frost coil and for a DX coil to be feed from 6 condensers to provide cooling and reheat. We have asked the BAC to confirm how the coil can provide de-humidification.

They have confirmed the following :-

- There are two DX coils in the AHU, arranged for run and standby operation.
- There are three heat pump units connected to an interlaced coil
- Each coil has 3 fridge circuits.

This suggests that the AHU has been provided with two coils for duty and standby and 3 condensers serve each coil. It is our understand that this arrangement is provided for N + 1.

BAC have suggested that one coil could be used for cooling and one coil could be used for reheating. This sounds like a possible solution however this designs out the run and standby operation when the both systems

are required to operate simultaneously.

Our own experience when using DX for heating and cooling within AHU is that close control of environments is more difficult to achieve and often there is some conflict between the BMS control of the supply air condition and the heat pump operation controlling via a different set of air mounted controls.

BAC have also noted that more accurate control would be achieved if a reheat AHU coil was feed from the LTHW system and the DX is cooling only.

In short whilst we have included for the BAC pricing we have concerns that the present design will need further consideration to provide the client with the best solution.

Whilst we have included the cost to develop this design any design work which result in changes to the AHU, humidifier, dehumidifier cycle, heating, cooling and BMS have not been costed and these would be subject to a further client instruction.

6. No allowance for fire and smoke dampers has been included in the tender at this stage as they are not identified with the new scope drawings.
7. Ventilation ductwork, we have included for the installation of the new AHU ductwork, modifications for the new grilles (supply and extract) and modifications for the new heater batteries. We have assumed that the provisional sum will cover all other ductwork modifications.
8. Ductwork attenuators are not shown on the drawing and have not been included in the BAC offer. At this stage we have elected to make no provision for duct mounted attenuators. Should this be determined as required during the detailed design stage the cost of the attenuators would be subject to instruction from the client.
9. The specification and pricing document refers to a water softener being required for the project. It goes on to explain that the water softener is an RO plant which will serve the humidifier. However the pricing document refers to a water softener and HWS cylinder replacement. In short we have included for the cost of an RO plant by Merck which we understand will serve the humidifier only and a separate water softener that will serve the Hot Water Cylinder. The hot water cylinder is not N +1 therefore we have included for a simplex water softener only.
10. No costs have been included for heat recovery from the extract system. This would routinely be required with any new ventilation system. We have assumed that special dispensation from building control officers has been sought by the client and approved.
11. No allowance for asbestos removal works have been included within the tender. We have included for the client provisional sum for EG 11 room and we have set aside a further contractor provisional sum for additional asbestos removal that may be discovered following the asbestos R & D survey.
12. We have noted that there are two versions of the Hulley Kirkwood specification C05 contained within the tender documents. One document includes comments from DRI which are unresolved. At tender stage whilst we have reviewed the two specifications as the document is titled unresolved we have not at this stage incorporated the comments within the pricing. The comments identify that certain aspects of the scope are no longer required. We confirm our bid will include for these works and therefore if they are not required the costs can be omitted from the pricing document, we would be pleased to work with the client to omit these costs when required.
13. The risk register includes certain client costs that we have not included in our tender submission.



14. We have included the Thorlux lighting quote in our tender. We have challenged Thorlux to confirm that there lighting control system includes all aspects that are specified. They have confirmed ( the day before the tender is due to be submitted ) that they will have a problem meeting the specification. They confirm their lighting control system

*"Slight problems with our system working to this specification.*

*We do not have a feature in place with slowly increasing/decreasing light levels throughout the day. We can commission them to work at certain light levels but not with a slow increase/decrease.*

*We can use the time clocks to set a specific scene (For example, all lights set to 57 lux), the next problem is using an override switch to increase the lux level of a specific room. There is no possible way with our lighting to change to full brightness and then revert back to the slow increase/decrease."*

Whilst we have included the cost for Thorlux it is clear that this may need to be developed and perhaps an alternative system and control system included. For a recent BSU the have completed the system utilised Astral lighting with Littledown controls. There is a system therefore that can provide the required solution although the cost of this system is as of now not included in the pricing of this tender. This is contained within the Risk Register.

15. The tender included the E-on quote in the value of £[REDACTED] We have asked a series of questions to E- on to confirm that they have included for the scope. Principally because they have not provided a detailed point schedule of the work included. We asked them to confirm have they included for

Have you included for the new controls associated with block E extract fan mounted in block C if so what has been included?

Have you included for controls to EG11 VRV and dirty extract ?

Have you included for controls to EG14/15 cage wash area extract fan ?

Please can you confirm what's included for lighting control we want to avoid duplication

E-on Controls have confirmed a revised price in the sum of £[REDACTED] k incorporating the above items which has been included in our tender. **We would like to ensure that you are aware of these changes and to ensure that all parties have included this.**

They have confirmed in respect of the lighting controls

*"With regard to the lighting we have allowed a Trend controller to interface at high level with which ever lighting system is to be selected which at the time was not specified we have assumed it will be Dali or similar.*

*The BMS will monitor the task lighting as well as the Dali"*

There is no provision for an external light outside the lab to say the lighting has been inadvertently left on included in either the BMS controls package or the Thorlux package and therefore this is not included in our tender at this stage. Any monitoring is via the software only.

16. Variations will be charged on a time and material basis The following rates will apply.

Provisional sum costs will be priced by the project QS utilising these rates.

Designer	£[REDACTED]	Per day or part of
Site manager	£[REDACTED]	Per day or part of
Tradesmen	£[REDACTED]	Per day or part of
Semi Skilled	£[REDACTED]	Per day or part of

Specialist Sub - contractor	Cost	Plus	
Materials	Cost	Plus	
Plant Hire	Cost	Plus	
Out of hours	Rates	Plus	

17. Decontamination / fumigation clean. We have included a provisional sum for this cost
18. Out of hours working, We have included to complete the work during normal working hours. We have shown a provisional sum for out of hours working only.
19. Moving existing services that are unknown and not shown on a drawing, the specification refers to services that may feed F block and run through E block and these will need to be kept functioning. We have no knowledge of the extent of this and have therefore provided a provisional sum only.
20. RIBA stage 5 costs shown in the pricing document where present when we received the pricing document these costs are included as a client provisional sum.
21. A provisional sum has been included for BTU multi skilled engineers to remain on site post hand over for a period of facility reliability testing
22. We have measured the ceiling for removal and renewal in the labs and the corridor to be circa 280m<sup>2</sup>, the pricing document requires us to include for 604m<sup>2</sup>. At tender stage the pricing document measurement has been included.
23. We have measured the flooring for removal and renewal in the labs and the corridor to be circa 315m<sup>2</sup>, the pricing document requires us to include for 652m<sup>2</sup>. At tender stage the pricing document measurement has been included.
24. We note that the pricing document has confirmed we are to supply the paint for decoration only. The pricing in the tender summary reflects this requirement. No labour associated with painting doors, walls, skirting , ect. Is included in favour of providing the paint only that is specified within the pricing summary. Should this change we will provide an updated cost.
25. Our tender includes for a replacement oil fired boiler.