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**Education  
Funding  
Agency**

**Priority School Building Programme**

**PSBP**

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**Services Output Specification**

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## Services Output Specification

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## Introduction

This document is the Services Output Specification (SOS). The SOS will become Part 2 of Schedule 1 (Authority's Requirements) of the Project Agreement and will set out the requirements and standards to which the Contractor shall deliver the Services.

The objective of the SOS is to provide sufficient information for the Contractor to provide value-for-money solutions appropriate for the operation of the School. The Contractor's solution to satisfying requirements of the SOS will be contained in Schedule 2 (Contractor's Proposals) to the Project Agreement.

**Comment [HS1]:** Guidance wording highlighted

## General structure and Layout

This document sets out the Authority's Facilities Management requirements and objectives to inform the Contractor in preparation of the Contractor's Proposals. It also provides explanatory detail on how this SOS should be read and the ultimate contractual status of each part of this SOS. If there are any specific requirements for any School in the Batch, these will be set out in a School-specific Brief. However, due to the nature of the Services, these are likely to be used only in exceptional circumstances.

HM Treasury's Standardisation of PF2 Contracts (SOPC) contains a number of measures to improve the flexibility of PF2 projects (see SOPC clause 1.6, and section 7) whilst the PSBP Project Agreement and SOS has adopted the majority of these, there are some – particularly the provision of minor maintenance that are less appropriate for the batch nature of the PSBP programme and as a result have not been adopted. As a result the SOPC approach to "Authority Maintenance Obligations" is largely covered by the PSBP approach to Soft Services outlined within this SOS.

## 1. Definitions and Status of this document

### 1.1. Definitions

Unless expressly defined otherwise within this document any defined terms expressed in this document shall have the same meaning as given in clause 1 of the Project Agreement and/or the Facilities Output Specification (FOS) and/or the Payment Mechanism (Schedule 6). This paragraph identifies and explains the defined terms and acronyms used throughout this document:

**Access to Work Protocol** means the process by which the School grants access to the Contractor to perform the Services;

**Asset Lifecycle Replacement** means the programmed maintenance which involves the replacement and or renewal of elements of plant or buildings that have reached the end of their economic working life;

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**Building Control Management** means the systems and procedures employed to aid Building security, Fire safety, Health & Safety, and [Building Controls and Energy Management Systems (EMS)];

**Building Services** means gas and water services, heating, ventilation, air conditioning and electrical plant and installations including pipework, ductwork and cabling;

**Building Users' Guide** is a simple to use non-technical guide that introduces School Users to how their building operates and how the local room controls work;

**Contract Manager** means the person or persons appointed by the Authority that have overall responsibility for the management of the contract on a day to day basis;

**Consistent Financial Reporting (CFR)**<sup>1</sup> - standardises, simplifies and streamlines the reporting of School finances in all maintained Schools in England. CFR increases the level of accountability of School managers whilst prompting Schools to become more self-managing. Access to benchmarked data allows School managers to make better-informed decisions when deciding annual budgets<sup>2</sup>, thus improving overall efficiency year on year. A CFR return is required from all publicly funded Schools at the end of each financial year;

**Core Energy Hours** shall have the meaning given to it in the Payment Mechanism.

**Final Baseline Energy Model** means the model of that name included within the Contractor's Proposals;

**Final Baseline Energy Model** Once it has been demonstrated that the Initial Baseline Model meets or betters the theoretical energy performance required, the Initial Baseline Model will be adjusted to reflect: final design specifications; the actual School and Site particulars (including weather files for the actual location, actual loads of legacy and new equipment and School use patterns) to produce the Final Baseline Energy Model. This model is used by the Contractor to predict the Target Building Load during Core Energy Hours  $T_{\text{building,CEH}}$  which is used to calculate the Contractor's share of the energy payments by comparison with the Actual Building Load during Core Energy Hours. It will also be used to predict the energy consumption and carbon emissions of the School in the format of a Display Energy Certificate (DEC) rating for the School. The Contractor shall aim for this rating to be equivalent or better than a DEC Rating of C. Where this is not possible, for example due to the use of inefficient Legacy equipment, the Contractor should identify means to achieve the equivalent of a C Rating in future by implementation of efficiency measures, for example by procuring replacement equipment (where it is the Contractor's responsibility to supply) or recommending replacement items to the School to improve energy efficiency.<sup>3</sup>

The Contractor shares the volume risk on the Actual Building Load during Core Energy Hours ,  $A_{\text{building,ECH}}$  which comprises the energy end uses listed in FOS paragraph 2.9.10.10. The Authority/School shares this risk and also takes the full volume risk on the other energy end uses listed under End User Loads in FOS paragraph 2.9.10.11.

<sup>1</sup> Consistent Financial Reporting (England) Regulations 2003 (SI 2003 No. 373) is a statutory instrument that came into force on 1 April 2003.

<sup>2</sup> [DfE School Benchmarking website](http://www.education.gov.uk/schools/adminandfinance/financialmanagement/a0014737/financial-benchmarking)

<sup>3</sup> <http://www.education.gov.uk/schools/adminandfinance/financialmanagement/a0014737/financial-benchmarking>

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The Final Baseline Energy Model will allocate to the various meters to be installed in the building the anticipated energy usage values. This model and the energy consumption values attributed to each meter relevant to the Building Load, during Core Energy Hours will form part of the Payment Mechanism at Financial Close.

**Helpdesk** means a building management facility that is able to record, action, track and process requests for assistance, provision of services, shortfalls in service performance or building faults or maintenance and repairs. This is a key communication link between the Contractor and the School to inform and enhance the relationship between all the parties;

**Initial Baseline Energy Model** is produced at IPDSB stage and uses a set of default input data parameters covering, weather, standard equipment profiles and use patterns. This set of input data parameters is provided by the Authority in the *EFA Energy input parameters and modelling guide 2013*. The Contractor will input its design specifications together with the default input data parameters to demonstrate that it can meet or better the maximum energy consumption targets as set out in paragraph 2.9.10.4 and 2.9.10.13 of the FOS. This is a whole-building model using the design standards set out in the FOS;

**In-Use Energy Model** means the Model that the Contractor shall prepare pursuant to the provisions of paragraph 2.9.9 of the FOS. It is the calibrated Final Baseline Energy Model which takes into account allowable adjustments, such as weather, occupancy and hours of use. Calibration and allowable adjustments (as agreed with the Authority/School) shall be in accordance with the requirements of paragraph 2.9.9 of the FOS;

**Interface Services** means the services provided by the Contractor to ensure the integration of the Services and the Soft Services and the management of communications between the Building Contractor, Professional Team, FM Contractor, the School and other stakeholders to ensure an integrated Services solution for the Schools. This service extends for the Contract Period in that the Contractor shall remain responsible for assisting in the management of the interface between those Services provided by the Contractor and the Soft Services provided by the School. This will include, but is not limited to, training, Soft Landings, re-commissioning after 3 months, and ICT interface;

**Performance in Use (PIU) Targets** means the targets set out at Annex 1 to which the Building is required to perform;

**Post Occupancy Evaluation (POE)** means the evaluation of the School buildings and grounds monitoring both quantitative measures i.e. the technical criteria covered in the (PIU) Targets and the satisfaction of the School Users through User Satisfaction Surveys and Building Performance Evaluation to the functional performance criteria<sup>4</sup>. The POE is used to assess the technical and functional performance of the School and includes users satisfaction; environmental comfort of users in both winter and summer; functionality of learning and non-

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<sup>4</sup> The technical performance review includes energy, carbon and water use assessment against benchmarks; the environmental comfort of the users, including ventilation, heating, lighting and acoustics. The functional performance includes user satisfaction questionnaires and building walk-through. The evaluation is to form part of the on-going reporting process and includes actions in response to the POE.

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learning spaces. It is used as part of continuous improvement along with the assessment of the PIU Targets and energy monitoring;

**Performance Standards** are the key performance standards for the Services as set out at Appendix A;

**Programmed Maintenance** means Routine Maintenance and Asset Lifecycle Replacement;

**Reactive Maintenance** means maintenance that is not Programmed Maintenance but is required as a result of system or component failure, to bring it back to working order;

**Routine Maintenance** means maintenance works of a routine nature to be carried out to both Building equipment and fabric with annual costs being realistically estimated and forecast. Such maintenance is carried out annually, biannually, or at industry standard/manufacturers' recommended intervals in order to keep the building and its equipment in good working order and to avoid equipment or technical systems failures, and to ensure compliance with health and safety legislation;

**School Management Team (SMT)** means the Head teacher, the School business manager and/or any other person designated by the School as having overall responsibility for the management of the School and its Building;

**School Premises Team** - The staff and governors who have responsibility for maintenance of the School premises. This includes the caretaking staff and the School business Manager or other member of the School Management Team who has responsibility for School premises issues on a day to day basis, including health and safety and fire safety;

**School User(s)** means any person who works in, attends or uses the School or grounds;

**Services** means provision of hard facilities management to the Building and Grounds at each School including provision of Programmed Maintenance, Asset Lifecycle Replacement and Reactive Maintenance, Helpdesk, Interface Services, Performance Monitoring and Reporting and the activities more particularly described in paragraph 1.8.1.1;

**Service Delivery Proposals (SDPs)** means part of the Contractor's Proposals that set out the Contractor's solution for providing the Services in accordance with the requirements of this SOS;

**Soft Landings:** The Framework for the provision of soft landings, as published by BSRIA. It aims to ensure that operational outcomes align with design intentions. The process runs from design through construction to operation and is detailed in paragraph 2.12 of the FOS;<sup>5</sup>

**Soft Services** means Grounds Maintenance; Caretaking and Portering; Cleaning, Resource and Waste Management, and Pest Control; Catering; Health and Safety; Fire Safety Management and Security; and Management of the Soft Services.

## 1.2. Status of this document

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<sup>5</sup> Nb. The Soft Landings requirements in this Agreement are subject to review to ensure consistency with the principles of the recently published Government Soft Landings document

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Design guidance is included in the Facilities Output Specification. Where any incidental design guidance is included in this SOS in the event of any contradiction in relation to design, the Facilities Output Specification will take precedence.

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### 1.3. Services Specification

The Contractor shall provide the Services in order to comply with the requirements of this SOS and this Agreement.

### 1.4. School Responsibilities

For the avoidance of doubt each School will be responsible for providing its own Soft Services and ICT services.

### 1.5. Compliance

The Contractor shall deliver the Services in accordance with the requirements of this SOS. The Contractor shall ensure that the Services meet all relevant statutory requirements, are compliant with Health and Safety Regulations, all Legislation and local and national policies. All Buildings and spaces within Buildings shall be maintained in a fit for purpose state of readiness. The Contractor shall prepare Service Delivery Proposals that meet the requirements of this SOS and put contingency solutions in place to avoid Unavailability and Service Failures.

### 1.6. Overarching Requirements

1.6.1. The Contractor shall deliver the Services as required pursuant to this Agreement for the Schools from the Services Availability Date until the end of the Contract Period.

1.6.2. The Contractor shall ensure that the Services solution is efficient, sustainable, capable of being effectively monitored and measured (in accordance with the requirements of this SOS).

1.6.3. The Contractor shall deliver the Services in accordance with Legislation, relevant guidance and Good Industry Practice.

1.6.4. The Contractor shall prepare Service Delivery Proposals for each of the Services that comply with the requirements of this SOS detailing how the Services will be ramped up and delivered at each School.

1.6.5. The Contractor shall ensure that the Services are carried out using proper materials of suitable and sufficient quality (of relevant British Standard or equivalent) and not using any deleterious materials.

1.6.6. The Contractor shall adopt a continuous improvement approach to the provision of all Services and work with the Authority to identify opportunities for improving the performance, efficiency and effectiveness of the Schools and the Services. The Contractor shall carry out Contract Efficiency Reviews in accordance with the Clause 39. These shall be in addition to the regular [Monthly] and Annual Contract Reviews and shall include summary data from the Annual Review Reports.

### 1.7. Management and Resourcing of the Services

The Contractor shall resource the Services with suitable personnel with the relevant skills to deliver each Service, in accordance with this Output Specification. The Contractor shall provide a resource organogram, clearly setting out the management hierarchy and organisation of the Service provision (using both on site and remote resources (as applicable) with relevant personnel identified (including roles and responsibilities) and shall update such organogram during the Contract Period at the request of the Authority and/or a School.

### 1.8. Service Delivery Proposals

1.8.1. Without prejudice to paragraph 1.8.2 below, the Contractor shall prepare Service Delivery Proposals which shall include as a minimum the approach and proposed methodology for the provision and delivery of the Services comprising:

- 1.8.1.1. Helpdesk;
- 1.8.1.2. Quality Assurance and continuous improvement (as required by this SOS and clause 39 of this Agreement);
- 1.8.1.3. Health and Safety Management including Fire Safety Management;
- 1.8.1.4. Environmental Management;
- 1.8.1.5. Performance monitoring and reporting;
- 1.8.1.6. Interface Services;
- 1.8.1.7. Asset Maintenance Service including:
  - 1.8.1.7.1. Maintenance and Statutory Testing;
  - 1.8.1.7.2. FF&E Management Services including procedures for audit, storage and deployment of FF& E; and
  - 1.8.1.7.3. Indoor environmental conditions: To include the scope and services objectives to sustain PIU Targets as set out at Annex 1 and monitored through the Performance Standards.
- 1.8.1.8. Energy and Utilities Supply and Management Service including Energy and Water Efficiency.

1.8.2. The Service Delivery Proposals shall include the approach and proposed methodology for meeting each of the Service requirements set out in this SOS.

1.8.3. The Contractor's Service Delivery Proposals shall include details of:

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- 1.8.3.1. Overall management structure, both for the project overall and the individual School, detailing organisation charts, management roles, responsibilities and reporting structures;
  - 1.8.3.2. Job descriptions;
  - 1.8.3.3. Numbers of staff required to deliver the Services;
  - 1.8.3.4. Regular working hours and availability of managers and employees;
  - 1.8.3.5. Training of all stakeholders;
  - 1.8.3.6. Details as to which Services will be carried out in-house and which will be subcontracted with details of sub-contractors;
  - 1.8.3.7. Contract monitoring procedures;
  - 1.8.3.8. Management of sub-contractors;
  - 1.8.3.9. Helpdesk and overall management procedures;
  - 1.8.3.10. Management information systems and report production
  - 1.8.3.11. Self-monitoring procedures;
  - 1.8.3.12. Meeting details including level of attendees;
  - 1.8.3.13. User satisfaction and complaints procedures;
  - 1.8.3.14. Quality Assurance Procedures; and
  - 1.8.3.15. Inspections including condition surveys and records.
- 1.8.4. The Service Delivery Proposals shall set out:
- 1.8.4.1. the proposals for delivering the full range of maintenance requirements including Routine Maintenance, Asset Lifecycle Replacement, Statutory Testing and Reactive Maintenance. Details to include flow charts for Reactive Maintenance both general and as a result of vandalism, Change and any requests for additional work ; and
  - 1.8.4.2. mechanisms for communicating specific plans and operational structures, with clear responsibilities, accountability and effective exchange of data between multiple parties (Contract Manager, design team, Contractor, School Premises Team, School Users, SMT and governance).

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## 1.9. Contractor's Staff and Training and Development

1.9.1. In respect of Contractor's staff and training and development issues the Contractor shall:

- 1.9.1.1. Maintain appropriate records;
- 1.9.1.2. Liaise with and report to the School and Authority;
- 1.9.1.3. Carry out all necessary safety and security checks; and
- 1.9.1.4. Instigate up to date and appropriate training courses and development opportunities including where required by Legislation.

1.9.2. In keeping with the current statutory guidance for Schools, all staff who have the opportunity for contact with children on a regular and unsupervised basis must demonstrate that they are not barred from such work by the Disclosure and Barring Service. The Contractor must confirm that all staff are not barred by use of an enhanced level Disclosure and Barring check, which will also reveal any relevant spent or unspent cautions or convictions. For immigrant workers the Contractor must also obtain a certificate of good conduct from the Country of origin. (<http://www.fco.gov.uk/en/about-us/what-we-do/services-we-deliver/legal-services/local-document-search/010-certificate-of-good-conduct/>). The cost of obtaining clearances shall remain with the Contractor.

1.9.3. In the event that the Contractor brings personnel to site and the Contractor has been unable to demonstrate that they are not barred from such work by the Independent Safeguarding Authority. The Contractor shall ensure that such personnel are to be accompanied and supervised at all times by an individual who has the appropriate level of clearance.

1.9.4. The Contractor shall participate in School induction programmes as agreed with the nominated School's representative(s). Programmes will be reviewed and agreed every 12 months.

1.9.5. The Contractor shall maintain appropriate personal training records for every Contractor Related Party and for Contractor-trained School employees. Records for Contractor trained School employees shall be for School specific requirements identified in the Soft Services Interface Protocol.

1.9.6. The Contractor shall develop, maintain and operate an appropriate induction programme for the Contractor Related Parties.

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1.9.7. In carrying out the duties described in this SOS, the Contractor shall ensure all Contractor Related Parties:

- 1.9.7.1. are properly and presentably dressed in appropriate identifiable clothes and work wear (including protective clothing and footwear where required), with any uniform policies agreed with the Contract Manager;
- 1.9.7.2. maintain an appropriate standard of personal hygiene commensurate with their allocated tasks while working in the School;
- 1.9.7.3. comply with all School and Site rules and regulations such as non-smoking and safeguarding policies;
- 1.9.7.4. behave in an appropriate manner at all times when on Site;
- 1.9.7.5. have access to canteen and other School facilities at times and as agreed with the School; and
- 1.9.7.6. If more than one substantiated complaint is made against any individual member of the Contractor’s staff (including Help Desk operators) within each month, the Contractor shall investigate and action the complaint to mitigate future reoccurrence and report the complaint and action taken to the Contract Manager.

1.9.8. The Contractor shall undertake all response requirements to complaints at its own cost.

1.9.9. The Contractor shall undertake the training identified in Appendix D.

1.9.10. The Contractor shall prepare the following plans to be incorporated into their Contractor’s Proposals:

Name of category	Plans	Cross reference to requirement in SOS (or as stated)	Performance Standard link
Quality Management	Quality Management Plan	1.11.1	PS20 and PS21
	Health and Safety (including water quality management)	1.12.1	PS16 and PS17
	Fire Safety Management	1.12.9	PS18 and PS19
	Environmental management	1.13.1	PS22 and PS23
	Energy and Utilities Management	1.11.6 and 2.2.6	PS47 (PS48)
Soft Landings, Handover and		FOS [ 2.12.4.2.3]	NA (completion

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<b>Interface and Contract Management</b>	<b>Mobilisation Plan</b>		<b>requirement)</b>
	<b>Access to Work Protocol</b>	<b>1.10</b>	<b>PS11</b>
	<b>Contingency Plan</b>	<b>2.2.3</b>	<b>PS14 and PS15</b>
	<b>Building Users' Guide</b>	<b>2.2.5</b>	<b>PS26</b>
	<b>Communications Plan</b>	<b>2.2.9</b>	<b>PS13</b>
	<b>Training Plans</b>	<b>1.9.7 and 2.4.2</b>	
	<b>POE and BPE</b>	<b>2.3.9 and 2.3.29</b>	<b>PS1</b>
	<b>Soft Services and School Training Plan</b>	<b>2.4.3</b>	<b>PS7</b>
	<b>Soft Services Interface Protocol</b>	<b>2.4.5 and 2.4.6</b>	<b>PS46</b>
<b>Maintenance and Lifecycle</b>	<b>Five Year Maintenance Plan</b>	<b>2.6.8.2 and Clauses 23 and 39</b>	<b>PS36</b>
	<b>Schedule of Programmed Maintenance (including Lifecycle Schedule and Lifecycle Profile)</b>	<b>2.6.8 and clause 23</b>	<b>PS37</b>
<b>Energy Efficiency (see also Quality Management)</b>	<b>Energy and Water Efficiency Plan</b>	<b>1.11.6 and 2.2.6</b>	<b>PS47 and PS48</b>

1.9.11. The Contractor, the Authority and the School shall review the Plans and identify the need for revisions to reflect performance, changes in occupancy and use patterns and the availability of new technologies and upgrades to improve component and system efficiency.

1.9.12. The Contractor shall update each of the plans in accordance with the frequency specified in this Agreement. Each updated plan shall be submitted for approval by the Authority's Representative and School not less than twenty (20) Business Days prior to the commencement of each Contract Year or in the case of the Five Year Maintenance Plan and Schedule of Programmed Maintenance (which include the Lifecycle Schedule and Lifecycle Profile) as specified in clauses 23 and 39.

**1.10. Integration of the Services with School policies and operations**

1.10.1. In developing the Services Delivery Proposals the Contractor shall ensure that they integrate with both School, and (if relevant) Local Authority policies, concerning the following issues:

1.10.1.1. Quality Assurance and continuous improvement (as required under clause 39 of this Contract (Efficiency Reviews);

1.10.1.2. Health and Safety;

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1.10.1.3. Fire Safety Management;

1.10.1.4. Environmental Management; and

1.10.1.5. Energy Management.

**1.10.2. Co-operation with individual Schools**

The Contractor shall:

1.10.2.1. Support SMT and School governing bodies with their statutory duties e.g. each governing body usually has a premises committee and the Contractor is expected to attend such meetings or prepare relevant reports unless deemed unnecessary by the SMT;

1.10.2.2. Cooperate with and provide information for School or Authority-related inspections such as Ofsted inspections as far as these relate to the Services provided or are seen by the School and/or the Authority as contributing to raising standards;

1.10.2.3. consult with the Authority and the School regarding proposals for all new working practices, or working practices that have changed from those already agreed with the School, before any such new or revised working practices are implemented; and

1.10.2.4. In connection with the provision of the Services, consult with the following parties where applicable regarding service delivery timings, School employee involvement (including Soft Services Providers) and local working practices:

1.10.2.4.1. School departments in undertaking or preparing for the delivery of any aspect of the services which may impact upon their delivery or upon the comfort and or well-being of School related parties;

1.10.2.4.2. Schools' Representatives including union Health and Safety Representatives;

1.10.2.4.3. Statutory bodies in respect of any aspect of the Services; and

1.10.2.4.4. Soft Services Providers via the School Representative/SMT or School Premises Team as specified by the School.

The Contractor shall:

1.10.2.5. Discuss and agree the proposed Services (including how Contractor Related Parties will liaise with the Schools) with the Contract Manager and Schools' Representatives and seek agreement;

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- 1.10.2.6. Provide all information on the performance of the Buildings as required by the Contract Manager;
- 1.10.2.7. Ensure that any reasonable requirements of the Schools are taken into account in the proposed Services;
- 1.10.2.8. Carry out building related risk assessments for and on behalf of and in consultation with the School as required by Legislation;
- 1.10.2.9. Ensure that the operations of the Schools can continue unhindered, but the extent of maintenance is at the discretion of the Contractor unless governed by statutory requirements;
- 1.10.2.10. Confirm the start and completion dates and hours of working in advance with the Schools for all Services and works;
- 1.10.2.11. Initiate and maintain Access to Work systems in accordance with legislation and Good Industry Practice including hot work and asbestos work permits and agree an Access to Work Protocol with the School. The Contractor shall develop a flowchart to illustrate how the Access to Work Protocol is to be carried out and implemented;
- 1.10.2.12. Maintain a safe environment for all School Users and their belongings during such Services or works;
- 1.10.2.13. Provide advice and instructions on the use of any new equipment and/or installation;
- 1.10.2.14. Provide advice on maintenance access equipment for use by School staff particularly for roof work and working at height where identified in the Soft Services Interface Protocol;
- 1.10.2.15. Liaise with SMT on access issues, such as restrictions to areas that may be out of use including agreeing an Access to Work Protocol;
- 1.10.2.16. Maintain and make good any incidental damage caused and remove all rubbish and clean up after completing tasks at the end of each day;
- 1.10.2.17. Carry out all Works and Services in accordance with statutory requirements, insurance requirements, health and safety requirements, British Standards, manufacturers' instructions and otherwise in compliance with Good Industry Practice;

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1.10.2.18. Undertake all Statutory Testing, e.g., Portable Appliance Testing (PAT) for both the Contractor's and the Schools' portable appliances, in accordance with, HSE and Statutory Authority guidance and all Legislation; and

1.10.2.19. Test and service all plant and equipment within the responsibility of the Contractor, as required by recognised industry best practice and Legislation.

**1.11. Quality Management, Health and Safety, Energy Management and Environmental Management**

1.11.1. The Contractor shall develop, maintain and implement a Quality Management Plan for the Services that shall meet the requirements of ISO 9001 and includes quality assurance and continuous improvement.

1.11.2. The Contractor shall achieve ISO 9001 accreditation within 18 months of Service Availability Date. ISO 9001 accreditation shall be maintained throughout the Contract Period and copies of certificates shall be provided to the Authority.

1.11.3. The Contractor shall produce with inputs from the School/Authority a documented process based on the following suite of standards that are integrated into the ISO 9001 quality management system.

1.11.4. The ISO standards listed at 1.11.6 below will be used as a framework to:

1.11.4.1. establish an agreed responsibility matrix at an appropriate level of detail reflecting the skill base of the School and its Soft Services providers; and

1.11.4.2. demonstrate best practice management systems are in place and are subject to a documented continuous improvement process.

1.11.5. The management and continuous improvement approach described shall be adopted for all Services and Soft Services.

1.11.6. The intention is that there shall be consistent documented processes in place across both the Services and the Soft Services; that are agreed with the School/Authority; recorded by the Contractor; and are based on the ISO Standards. The Plan should cover:

1.11.6.1. Energy and Utilities Management ref: ISO 50001;

1.11.6.2. Occupational Health and Safety BS OHSAS 18001:2007;

1.11.6.3. Fire Safety Management ref: RRO (Fire Services) 2005; and

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1.11.6.4. Environmental Management ref ISO 14001 (including waste and water) and see paragraph 1.13.

**1.12. Health & Safety**

1.12.1. The Contractor shall maintain and implement a Health and Safety Management Plan for the Services that meets the requirements of BS OHSAS 18001:2007 Occupational health and safety management systems: requirements.

1.12.2. The Contractor shall maintain the Health and Safety Management Plan throughout the Contract Period.

1.12.3. The Contractor's Health and Safety Management Plan shall contain the approach to:

1.12.3.1. providing the Services in a safe manner; and

1.12.3.2. co-ordinating health and safety policies and processes with the School/Authority.

1.12.4. The Contractor shall implement and maintain the Health and Safety Plan with the Authority and School to demonstrate compliance with all statutory, regulatory and relevant health and safety instruction affecting the management and operation of the School, the scope and content of which is agreed with the Authority and the Schools and included within the Service Delivery Proposals. The plan shall integrate fully with all of the School's plans and procedures relating to HEALTH AND SAFETY.

1.12.5. The Contractor shall have a duty of care to notify the School of any matters in relation to the Services which the Contractor considers a hazard;

1.12.6. The Contractor shall establish systems that acknowledge the receipt from the Authority, and dissemination to the SMT and all relevant Contractor Related Parties, all warnings and safety action bulletin notices published by the DfE or HSE and ensure appropriate action is taken and recorded centrally at the Contractor's expense;

1.12.7. The Contractor shall assist in the production of an initial Health and Safety Plan based on the HEALTH AND SAFETY File as required by CDM legislation and in accordance with the CDM ACOP 2007<sup>6</sup>.

**1.12.8. Hot and cold water services**

The Contractor shall:

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<sup>6</sup> Managing health and safety in construction, Construction (Design and Management) Regulations 2007, HSE Books

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- 1.12.8.1. Produce a water quality policy document setting out the guidance and strategy for control of Legionella and maintenance of wholesome water quality that will be followed to protect employees and others who may be affected by its business operations against the risk of Legionella infection arising from plant, equipment, facilities, work or work-related activities. It shall include the framework of the procedures designed to achieve this aim, and set out the stages and objectives relevant at each stage. It shall specify the management, operational and specialist responsibilities and lay down a clear management and communication structure to ensure that it fails safe. For an example of a policy and associated standards that meet the majority of insurance requirements; see Worcestershire County Council arrangements for control of Legionella and maintenance of wholesome water quality in County Council buildings, available at <http://www.worcestershire.gov.uk/cms/community-and-living/property-services/useful-documents.aspx>. It will clearly set out which tasks are part of the School's day to day monitoring and maintenance to be included in Soft Services provided by the School and which maintenance tasks will be carried out by the Contractor;
- 1.12.8.2. Provide water service to outlet points of the correct type, sufficient rate and suitable temperature to meet the prescribed standards;
- 1.12.8.3. Supply mains water or tanked potable water direct to internal areas, including kitchens, staff/rest rooms, technology rooms, vending machines and medical rooms, as detailed in the FOS and ADS;
- 1.12.8.4. Provide water service to outlet points designed to operate in a safe condition appropriate to the process, function and specific areas being served; and
- 1.12.8.5. Provide water service to outlet points that comply with the Water Fittings Regulations BS6700 and BS6465 and are installed and commissioned in accordance with the provisions of the Health and Safety Commission Code of Practice for the Prevention and Control of Legionellosis and disinfected to comply with current standards.

**1.12.9. Fire Safety Management**

- 1.12.9.1. The Contractor shall develop and maintain a plan (the "Fire Safety Management Plan"), incorporating a fire and evacuation plan that shall include as a minimum:
  - 1.12.9.1.1. Fire evacuation plans; and
  - 1.12.9.1.2. Approach to fire safety including:
    - 1.12.9.1.2.1. Maintenance and testing of alarms;
    - 1.12.9.1.2.2. Roles and responsibilities;

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- 1.12.9.1.2.3. Staff training and awareness;
- 1.12.9.1.2.4. Evacuation plan testing; and
- 1.12.9.1.2.5. Post implementation review process.

1.12.9.2. The Contractor shall coordinate the Fire Safety Management Plan with the Authority, the local Fire and Rescue Service, the emergency services, and utilities providers.

1.12.9.3. The Contractor shall provide an initial Fire Safety Management Plan before the Service Commencement and updated annually thereafter, or more frequently to reflect changes in the building design, use and occupancy.

**1.13. Environmental Management Services**

1.13.1. The Contractor shall develop, maintain and implement an Environmental Management Plan for the Services that shall meet the requirements of ISO 14001.

1.13.2. The Contractor shall achieve ISO 14001 accreditation within 18 months of the Service Availability Date. ISO 14001 accreditation shall be maintained throughout the Contract Period and copies of certificates shall be provided to the Authority.

1.13.3. The Contractor's Environmental Management Plan shall contain the approach to:

- 1.13.3.1. Providing the Services in a sustainable manner;
- 1.13.3.2. Minimising waste during maintenance and operation; and
- 1.13.3.3. Co-ordinating and recording sustainable and environmental policies with the Authority and the School.

**1.13.4. Waste Management**

1.13.4.1. To the extent related to the provision of the Services the Contractor shall be responsible, and carry out appropriate risk assessments including compliance with statutory requirements, for the safe disposal of effluent and hazardous waste including, but not limited to, sewage, surface water run-off, etc;

1.13.4.2. The Contractor shall advise the School on the reduction of sewage and surface water drainage charges;

1.13.4.3. The Contractor will record waste-arisings from the School's activities in the Environmental Management Plan;

1.13.4.4. The Contractor shall include Maintenance Materials and Waste Efficiency in the Environmental Management Plan. The Contractor shall take into account

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DEFRA's Waste Hierarchy when undertaking all Programmed Maintenance and Reactive Maintenance.<sup>7</sup>

- 1.13.4.5. The Contractor shall ensure that waste information covers the level of waste materials segregation, and the destination of wastes – especially those of a hazardous nature such as Waste Electrical and Electronic Equipment (WEEE).
- 1.13.4.6. The Contractor and School shall work together to identify cost effective waste efficiency measures and to implement actions and investment and include agreed actions in the Environmental Management Plan.
- 1.13.4.7. The Contractor and the School shall agree annual targets for:
  - 1.13.4.7.1. maintenance waste arisings; and
  - 1.13.4.7.2. maintenance waste to landfill.
- 1.13.4.8. The Contractor and School shall work together to identify cost effective measures to implement to increase the sustainability of products procured – for example moving to suppliers with accredited Environmental Management Systems or certified materials such as FSC woods.
- 1.13.4.9. The Contractor shall establish effective systems for data monitoring of materials procured and materials disposed of from maintenance will be established – especially where materials are disposed of on-site and managed through another contractor.

**1.14. Design Integration**

The Contractor confirms that the Services provision is fully integrated across the Building design, space functionality and purpose, PIU Targets, lifecycle, material selection, room fit out and layout requirements as specified in the FOS. The Contractor shall demonstrate this in the Services Delivery Proposals.

**1.15. Interface Services and Individual Schools**

The Contractor shall support each individual School in the batch by providing the Interface Services. The Contractor shall work with the Authority and each School to tailor the Services to the specific needs of the School. See paragraph 2.4 - Interface Services.

**1.16. Soft Landings**

The Contractor shall comply with Soft Landings as required by the Facilities Output Specification and this SOS.

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<sup>7</sup> <http://www.defra.gov.uk/environment/waste/legislation/waste-hierarchy/>

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**1.17. Special Educational Needs (SEN) and Disabilities**

1.17.1. The Contractor shall ensure that the Services solution satisfies the requirements of the Equalities Act 2010. The Contractor, working in partnership with the School and the Authority, shall:

- 1.17.1.1. meet the General Equality Duty;
- 1.17.1.2. take account of any information published by the School, Local Authority or Authority under the Specific Equality Duties;
- 1.17.1.3. satisfy the duty to make reasonable adjustments and improvements for disabled people;
- 1.17.1.4. implement the School's Accessibility Plan and the Local Authority's Accessibility Plan.

**1.18. Specific SEN Services Requirements**

1.18.1. The Contractor shall:

- 1.18.1.1. provide for any specific requirements in relation to SEN at a particular School as required in the School-specific Brief and the ADS;
- 1.18.1.2. provide information when required or as appropriate to enable the School to be better informed of the accessibility features on site;
- 1.18.1.3. in Special Schools, agree a safe and efficient process for Pupils arriving and leaving by vehicle; and
- 1.18.1.4. assist the School in preparing Personal Emergency Egress Plans (PEEPs) for all individuals who cannot make their own way out of the Buildings in the event of a fire.

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## 2. The Specific Services Requirements

### 2.1. Helpdesk

- 2.1.1. The Contractor shall provide a Helpdesk during the School Day to allow Schools to report building faults and requests for Services.
- 2.1.2. The Contractor shall make each School aware of the Helpdesk and shall provide comprehensive instructions to the School Premises Team as to how to report issues to the Helpdesk including the level of detail required and the categorisation of priority of request. The Contractor shall also provide a flowchart detailing the operation of the Helpdesk and call out facilities including how potential reactive issues are to be managed.
- 2.1.3. The Contractor shall provide an emergency Helpdesk service outside the School Day for urgent issues requiring immediate action. A protocol for dealing with such urgent matters will be set out in the Soft Services Interface Protocol.
- 2.1.4. The Contractor shall ensure that the Helpdesk responds to notices of Service Performance Shortfalls within the time specified in the Payment Mechanism. The Contractor shall respond to all Service Requests through deployment of the correct level of support to resolve all matters in accordance with this SOS and the Payment Mechanism.
- 2.1.5. The Contractor may allow for notifications to the Helpdesk to be achieved via additional communication methods such as SMS and E-mail communications, but these shall not remove the requirement to provide a telephone helpdesk that responds to calls and communications within 20 seconds within the School Day and within 1 minute outside of the School Day.
- 2.1.6. The Contractor shall acknowledge SMS, e-mail and telephone voice recorded messages during the School Day to comply with the Response and Rectification Periods as specified in the Payment Mechanism. In the case of SMS this needs to be a mobile number held by the Helpdesk operator.
- 2.1.7. The Contractor shall comply with all notification and reporting procedures set out in the Payment Mechanism.
- 2.1.8. The Contractor shall make telephone access to the Helpdesk at local call rate charges.
- 2.1.9. The Contractor shall ensure that any notification to the Helpdesk shall as a minimum be required to record the date, time, callers name and location, detail of call and action taken.

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2.1.10. The Contractor shall undertake a monthly random audit of calls to demonstrate that the requirements of this paragraph 2.1 are complied with and report findings to the School and the Authority.

2.1.11. The Contractor shall provide the School Premises Team and the Authority with remote access "read only" facility to access Helpdesk requests, notifications, actions and task completions. This should allow the School and the Authority to download copies of information for manipulation and analysis.

2.1.12. The Contractor shall deal with all building related complaints from third parties relating to the operation of the School in consultation with the Contract Manager as appropriate.

## **2.2. Supporting Documentation**

2.2.1. The Contractor shall be responsible for providing on site to the relevant School Users all Technical Guidance relating to the School including Operating Manuals, Logbooks, Risk Assessments, [Building Management Plans], Method Statements, and other guidance as required by this SOS and Legislation. The Contractor shall be responsible for ensuring that these documents are kept up-to-date as part of the Interface Services and the Quality Management Plan. Where there are any changes to the Services Delivery Proposals affecting any of the related guidance, the Contractor shall revise and reissue the respective guidance and provide induction training for the School Premises Staff.

2.2.2. The Contractor shall take a proactive approach to resolving problems by preparing solutions for discussion with the Contract Manager and the School Premises Team and Soft Services provider as necessary.

2.2.3. The Contractor shall develop maintain and update the Contingency Plans each year, or as may be needed by changing circumstances, such as changes in School Policies, new technology and changes in Legislation etc. to ensure continued compliance with the Schools' Controls Assurance Procedures. The Controls Assurance Procedures will include, for example, handing over responsibility to third parties outside of the School Day, and will have regard to issues such as fire and evacuation plans, disaster action plans and service specific risk assessments. Contingency Plans, including in relation to for example boiler failure or power failure, shall be agreed with the Contract Manager and shall be included in the Service Delivery Proposals for each separate Service. The Contractor shall implement the Contingency Plans as and when required.

2.2.4. The Contractor shall comment on and help draft and maintain School's Building related policies and include these in relevant Management Plans e.g. The Health and Safety Management Plan, and Fire Safety Management Plan.

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2.2.5.The Contractor shall produce a Building Users’ Guide. The Building Users’ Guide shall be updated to reflect any changes or updates to the Building’s systems or local controls which have an impact on the ability of School Users to control their local environment. The Contractor shall provide additional training to support the Building Users’ Guide, when updated.

2.2.6.The Contractor shall develop the Energy and Utilities Management Plan with the schools and record the agreed plan in accordance with ISO 50001.

2.2.7.The School is responsible for reuse, recycling and disposal of all waste generated by day to day School activities. The Contractor is responsible for the waste streams arising from its maintenance activities. In addition, the Contractor shall assist the School to develop and document Maintenance Materials and Waste Management as part of the ISO 14001 Environmental Management Plan (see 1.13.4) for the School. The aim is to operate efficient maintenance regimes and to assist the School to manage its waste streams in accordance with best practice.

2.2.8.The Contractor shall update and maintain Area Data Sheets for all spaces within the Buildings and grounds as part of the Contractor’s Proposals. The Contractor shall make these available to the relevant School so that School Users may understand what is provided for in each space, environmental comfort criteria and means of control.

2.2.9.Communications Plan

2.2.9.1. The Contractor shall develop and maintain on an annual basis a plan (the “Communications Plan”), which shall include as a minimum:

- 2.2.9.1.1. approach to daily, planned and ad hoc communications;
- 2.2.9.1.2. agenda and attendees for Monthly Review ;
- 2.2.9.1.3. agenda and attendees for Annual Contract Review;
- 2.2.9.1.4. Meetings Schedule;
- 2.2.9.1.5. escalation plan for emergencies and significant issues;
- 2.2.9.1.6. Out-of-Hours Communications;
- 2.2.9.1.7. complaints handling; and
- 2.2.9.1.8. methodology for implementation of User Satisfaction Surveys, including Building Performance Evaluation and POE.

**2.3. Performance Monitoring, Reporting and Record Keeping**

2.3.1.The Contractor shall monitor the Services in a diligent and consistent way to ensure that the Building consistently meets the Authority’s Requirements.

2.3.2.The Contractor shall ensure that through consistent Performance Monitoring, Service Performance Shortfalls and Unavailability are minimised and where they do occur are rectified quickly and efficiently with minimal disruption to the School and the School

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Users and in accordance with the Response and Rectification Periods set out in the Payment Mechanism.

- 2.3.3. The Contractor shall prepare a Monthly Review Report containing all of the reporting information required by this Agreement and as set out in Part [ ] of the Payment Mechanism, where reports are quarterly, to include the relevant quarterly reporting information. The Contractor shall also prepare the Contractor's Annual Services Report summarising the reports and providing any additional reporting required on an annual basis.
- 2.3.4. Contractor shall respond to ad-hoc requests to prepare and supply all information relating to the Services reasonably required by the Authority or the School.
- 2.3.5. The Contractor shall monitor the Services regularly and at a minimum at the intervals specified in the Performance Standards and the reporting table as set out in the Payment Mechanism.
- 2.3.6. The Contractor shall monitor the Services in accordance with the requirements of this SOS and the Payment Mechanism to determine whether Service Failures and/or Unavailability has occurred and whether Deductions are due and shall report any Service Failure and/or Unavailability to the Helpdesk and ensure that these are recorded, actioned and remedied.
- 2.3.7. The Contractor shall carry out its own compliance checking in relation to the Building and this shall be demonstrated in the Services Delivery Proposal.
- 2.3.8. The Contractor shall produce a Services Delivery Proposal setting out how effective Performance Monitoring and Reporting will be achieved for each of the Services. This is to include a summary page highlighting key performance issues in a form of exception reporting supported by the detailed Monthly Review Report.
- 2.3.9. The Contractor shall prepare a Services Delivery Proposal in relation to the reporting requirements as required by this SOS and Schedule 6 (Payment Mechanism).
- 2.3.10. The Contractor shall notify the Authority and School (to the extent such change impacts on the School) of any changes to management structure, staffing levels, roles and responsibilities, working practices or service delivery timings not less than five (5) Business Days prior to the change being implemented.
- 2.3.11. The Contractor shall ensure that all information and records are maintained in accordance with this Agreement and are up to date, accurate, in the agreed format and available for inspection by the Authority's Representative.
- 2.3.12. The Contractor shall make summary reports available to the Authority/School on request and/or in accordance with a pre-agreed programme.

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- 2.3.13. The Contractor shall keep up to date records of all Programmed Maintenance and Reactive Maintenance undertaken in relation to the School. These records should be made available via a form of shared electronic database or any other format agreed with the Contract Manager.
- 2.3.14. The Contractor shall ensure that it employs appropriate standards of data maintenance and access in the storing of all data including compliance with the Data Protection Act 1998, such that any documentation or computer records shall be made available for inspection by the Authority as required. Such information to be provided within agreed timescales and managed as part of the Interface Services.
- 2.3.15. The Contractor shall provide such other information as is reasonably required by the Authority. This may include the provision of statistical information to allow the Authority to undertake its reporting requirements to central government and reports and supporting records reasonably required for the School to undertake its audit requirements. All information, documentation and records to be shared with and become the property of the [Authority/ relevant School] on termination or expiry of this Agreement.
- 2.3.16. The Contractor shall measure and report performance in relation to end use water analysis on a quarterly basis.
- 2.3.17. The Contractor shall attend quarterly meetings with the Contract Manager and the School and provide summary reports in a format suitable for discussion with the Contract Manager and School. For the first six (6) months of the Services Period (as part of Soft Landings) and whenever the Authority has concerns over performance these meetings shall be held on a Monthly rather than Quarterly basis. The Contractor shall also attend termly premises committee meetings, where relevant.
- 2.3.18. The Contractor shall provide information to assist the School in complying with its Consistent Financial Reporting obligations.
- 2.3.19. The Contractor shall produce quarterly reports on performance against the Quality Management Plan set out in the Contractor's Proposals.
- 2.3.20. The Contractor shall keep an up to date list of all Statutory Inspections carried out and shall include a summary in the Quarterly Report to the School and the Contract Manager. The Contractor shall maintain full reports and certification in relation to Statutory Inspections to be made available on demand and included in the Fire Safety Management Plan and other building management plans as required by legislation and best practice.
- 2.3.21. The Contractor shall monitor the performance of the building as against the Energy and Utilities Management Plan on at least a monthly basis. This shall be formally

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reported quarterly to inform the School of any excessive energy use so that corrective action can be considered and taken.

- 2.3.22. The Contractor shall produce quarterly reports of the total water consumption and percentages which are provided by rainwater harvesting and greywater recycling (if present).
- 2.3.23. The Contractor shall produce monthly on-line feedback and quarterly reports on the energy consumptions of the separate energy end uses.
- 2.3.24. Following the Services Availability Date the Contractor shall monitor energy and water using continuous monitoring, benchmarking, , and reporting protocols based on best practice tools, methodologies and reporting procedures. The Energy and Utilities Management Plan shall document changes to these protocols through the Contract Period.
- 2.3.25. Initially energy and water usage shall be monitored against the installed meters using the iSERVcmb<sup>8</sup> continuous monitoring and benchmarking service or similar on line system approved by the Authority.
- 2.3.26. Annually, the Contractor shall report actual energy end use on the Carbon Buzz<sup>9</sup> and iSERVcmb websites or similar on line systems approved by the Authority in order to benchmark the School's energy profile. The data can be anonymised with agreement from the Authority. However the Authority will expect good practice schools to be named and case studies produced.
- 2.3.27. The Contractor shall work with the SMT and the Authority using benchmark data to agree annual performance targets to achieve continuous improvement in energy efficiency related to energy end uses. This information shall be used to inform the Efficiency Reviews under clause 39 of this Agreement.
- 2.3.28. The Contractor shall provide Monthly exception reporting to identify and isolate incidences of avoidable utilities consumption regardless of who is responsible for the cost of utilities. The Contractor shall identify instances where consumption exceeds the predicted end use or established benchmarks, e.g., by more than 15% and additional utilities payments are likely to be incurred. Examples would be if the Contractor noticed that: all lights in corridors are left on all night; loads are left on during holiday periods, or there is high consumption overnight or during holiday periods.

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<sup>8</sup> iSERVcmb is a European Continuous monitoring and benchmarking web-service that PSBP will use to benchmark school energy end use consumption

<sup>9</sup> Carbon Buzz is a free web platform that collects building energy consumption data. <http://www.carbonbuzz.org/>

**2.3.29. Building Performance Evaluation and Performance in Use**

- 2.3.29.1. As part of Soft Landings, during month one (1) and month nine (9) following the Services Availability Date the Contractor shall carry out site walkabouts to observe occupation patterns and to spot emerging issues which impact on the performance of the Building. These walkabouts shall include members of the Contractor's Professional Team (where relevant but at a minimum to include the Building designer and M&E systems designer) to inform the assessment. The Contractor shall discuss findings with the School and the Contract Manager and decide whether any actions are required to improve the performance of the Building.
- 2.3.29.2. The Contractor shall carry out testing of Building Controls, metering and monitoring, and Energy Management Systems to check that settings are correct in order to inform the programmed recalibration and re-commissioning of controls and the Building Controls and Energy Management System to ensure that the Building meets the PIU Targets. See Performance Standards for frequency of tests.
- 2.3.29.3. The Contractor shall comply with the testing requirements set out in the PIU Targets at Annex 1 and the Performance Standards at Appendix A;
- 2.3.29.4. The Contractor shall carry out User Satisfaction Surveys and Building Performance Evaluations as part of POE in the format as agreed with the Authority and the Contract Manager and as required by this SOS and the Payment Mechanism. The Contractor shall carry out the first User Satisfaction Survey and Building Performance Evaluation at 8 months following the Services Availability Date to inform the 9 month walk around. The User Satisfaction Survey and Building Performance Evaluation shall be repeated annually by the Contractor (or as agreed with the Authority).
- 2.3.29.5. The Contractor shall make POE data available to the Authority and School, including the results of the User Satisfaction Survey and Building Performance Evaluations.
- 2.3.29.6. The Contractor shall upload POE energy data in accordance with the procedures for annual monitoring and reporting of energy and water consumption set out in paragraph 2.8 of this SOS.

**2.3.30. Thermal Efficiency of Domestic Hot Water systems**

- 2.3.30.1. The Contractor shall provide calculations of the annual efficiency in use of hot water systems. These should compare the energy in the hot water used to the fuel input. The Contractor shall measure by flow metering and

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providing temperature records of domestic hot water supplies and metering of fuel consumption.

- 2.3.30.2. The Contractor shall ensure that the overall hot water service operating efficiency (defined as energy contained in the hot water exiting from outlets such as taps and shower heads, related to the supply side energy used for hot water generation) shall not be less than 45% on an annual basis.

**2.3.31. Annual tests of boiler plant and direct fired hot water generators and their flue systems**

- 2.3.31.1. For all boiler plant and direct fired hot water generators of output greater than 4kW the Contractor shall carry out annual performance tests for emissions and combustion efficiency in accordance with the following requirements to provide an independent check on the system's efficiency and its emissions.

- 2.3.31.2. The Contractor shall test the boiler/flue system once the boiler has been brought up to full fire for a sustained period as follows:

- 2.3.31.2.1. by Flue Gas Analysis with an EN 50379:2 compliant instrument;
- 2.3.31.2.2. at full fire and at low fire;
- 2.3.31.2.3. for O<sub>2</sub>, CO, CO<sub>2</sub>, HC measured in mg/m<sup>3</sup>;
- 2.3.31.2.4. to record the temperature of the incoming combustion air and of the flue gases;
- 2.3.31.2.5. for pressure differential to verify the performance of the flue. The flue system must be tested to ensure that its leakage rate does not exceed that designated according to EN1443 for the particular flue type; and
- 2.3.31.2.6. the flue gas loss % (i.e. - % energy loss up flue [Siegert Formula]), lambda (the degree to which the fuel air mix approaches the ideal); boiler efficiency and dew point shall be recorded.

- 2.3.31.3. The Contractor shall record the results from the annual performance tests alongside the results from initial commissioning.

**2.4. Interface Services**

- 2.4.1. The Contractor shall provide help and assistance to the Authority and School to ensure that the Services are fully integrated with the Soft Services and ICT solution that is adopted by the School. This Service shall include training, attendance at Site meetings and provision of support to the School to manage its operations.

- 2.4.2. Using the principles of the Soft Landings Framework the Contractor shall provide the following:

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- 2.4.2.1. General Training to the School Users;
  - 2.4.2.2. training of the School Users to ensure optimisation of the Building's performance following the Services Availability Date; and
  - 2.4.2.3. post-occupancy checks and controls adjustment to optimise the performance, energy efficiency and occupant satisfaction in the School.
- 2.4.3. The Contractor shall provide a Soft Services and School Training Plan which will include:
- 2.4.3.1. details of the training to be given by the Contractor to each individual School (and its relevant Soft Services providers) prior and following the Services Availability Date including as a minimum the training requirements in Appendix D;
  - 2.4.3.2. frequency and timing of training;
  - 2.4.3.3. details of how the Soft Services and School Training Plan complies with the requirements of the Soft Landings Framework and the requirements of paragraph 2.4.2; and
  - 2.4.3.4. details of how the training will assist the School and School Users to optimise the Building's Performance in Use.
- 2.4.4. The Contractor's training shall explain all controls and where there is lack of clarity additional user friendly guidance and labelling of the controls shall be provided by the Contractor. Additional training shall be provided when any refinements to the Building's systems and local controls are made.
- 2.4.5. The Contractor shall prepare a Soft Services Interface Protocol to be agreed with the Authority/School, which sets out the allocation of responsibilities between the School, its providers and the Contractor. Appendix B to this SOS sets out a framework for some of the interface issues that may arise. Starting one month prior to and to be completed one month after the Services Availability Date (or as agreed with the School), the Contractor shall provide training for the School staff on all relevant aspects of the Building to enable the School Premises Team to effectively manage the elements of operation and maintenance which it is the School's responsibility to fulfil. Refresher training shall be provided at around 9 months co-ordinated with the User Satisfaction Survey and the 9 month walk around described in paragraph 2.3.26.4.
- 2.4.6. The Contractor shall prepare a Services Delivery Proposal for the Interface Services which shall include the Soft Services and School Training Plan and the Soft Services Interface Protocol.

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## **2.5. Access and Building Security**

- 2.5.1. The security system will be operated by the School. The Contractor shall provide training, a user guide and a logbook to the relevant School Users to ensure that the security system is understood.
- 2.5.2. Updates to security systems for reasonably foreseeable needs, for example number plate recognition shall be provided as required at reasonable cost.
- 2.5.3. For deliveries and collections from site, appertaining to the execution of Services, the Contractor shall produce, as part of the Access to Work Protocol (See paragraph 1.10.2.15), and comply with a monitored process of entry and exit agreed with the Schools, either through security or physical barriers to entry or exit with acknowledgement and authorisation processes. Contractor deliveries to Site and collections from Site must be managed so as not to interfere with the delivery of education at the School or the Pupil movement of School Users about the Site.

## **2.6. Asset Maintenance Service - General**

- 2.6.1. The Contractor shall develop and implement an integrated solution for both Programmed Maintenance and Reactive Maintenance and which demonstrates that the Building design and component selection supports the Contractor's Asset Lifecycle Replacement strategy.
- 2.6.2. The Contractor shall maintain and ensure visibility of signs on internal rooms and annually update for staff changes.
- 2.6.3. The Contractor shall ensure that internal spaces and engineering systems shall meet the Availability and Services Requirements including the PIU requirements for light levels, temperatures, ventilation and indoor air quality, acoustics, described in Annex 1, energy efficiency and functionality so that all spaces are available and fit for purpose.
- 2.6.4. The Contractor shall produce comprehensive maintenance solutions for specialist all weather pitches (where provided) within the Service Delivery Proposal as required pursuant to the School Specific Brief.
- 2.6.5. As part of its obligations under clause 39 of this Agreement, the Contractor shall provide 'invest to save' proposals to reduce utilities consumption, materials use and associated waste production based on estimated capital and Lifecycle Asset Replacement costs of the recommended works, with the allocation of costs and benefits between all parties.

#### 2.6.6. Statutory Testing

2.6.6.1. The Contractor shall carry out Statutory Testing as required by Legislation, Good Industry Practice and as expressly required by this Agreement.

2.6.6.2. Appendix C provides a list of the Statutory Inspections, testing and maintenance requirements. Further information on compliance monitoring can be found at [http://www.fedps.org.uk/compliance\\_monitoring.pdf](http://www.fedps.org.uk/compliance_monitoring.pdf)

#### 2.6.7. Maintenance

2.6.7.1. The Contractor shall be responsible for maintenance, service contracts, repairs, replacements & preventative regimes to all Buildings. Where there is an overlap in responsibility for certain systems and installations inspections, monitoring and adjustments between the Contractor and the School Premises Team the responsibilities of each party will be clearly set out by the Contractor in the Soft Services Interface Protocol and agreed with the Authority and School.

2.6.7.2. The Contractor shall carry out Programmed Maintenance and Reactive Maintenance in accordance with Good Industry Practice, such that at the end of the Contract Period, the remaining life of each element is in line with its anticipated life from new, running from the date of actual replacement.

2.6.7.3. The Contractor shall provide maintenance to, all elements of the Buildings and grounds structure, fabric, mechanical and electrical services, as well as fixtures, fittings signage and specialist installations and educational equipment including ICT Infrastructure, specifically:

2.6.7.3.1. Building's external fabric, including roofing, walls/external envelope, window, door and ventilation opening mechanisms and seals, glass and glazing, services penetrations;

2.6.7.3.2. Building superstructure, including structural floors, walls;

2.6.7.3.3. Lifts;

2.6.7.3.4. Environmental systems, including mechanical services, electrical services, water and drainage systems, environmental controls, Building Management Systems;

2.6.7.3.5. ICT wired infrastructure (See PSBP ICT responsibilities matrix in paragraph 4 of FOS) ;

2.6.7.3.6. Communication systems, including PA, audio systems, TV and telephones etc;

2.6.7.3.7. Internal finishes including walls, ceilings, doors, glazed screens, flooring, ceilings;

2.6.7.3.8. Finishes/decorations including Internal fixtures, acoustic absorption and signage;

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- 2.6.7.3.9. Specialist installations (e.g., hoists, aerials, and lightning protection);
  - 2.6.7.3.10. Safety and security and systems and equipment;
  - 2.6.7.3.11. Group 1 FF&E including Catering Equipment (to include annual deep clean of catering equipment);
  - 2.6.7.3.12. Testing including periodic re-commissioning of systems and statutory testing;
  - 2.6.7.3.13. Maintenance and upkeep of Play equipment, e.g., swings, climbing frames, etc;
  - 2.6.7.3.14. Artificial synthetic grass or rubberised surfaces;
  - 2.6.7.3.15. Walls, fences, cycle storage and shelters retaining structures and similar;
  - 2.6.7.3.16. Internal roads, car park surfaces and marking and paths;
  - 2.6.7.3.17. Hard surfacing, paths, roadways, steps, ramps, general paving, kerbs;
  - 2.6.7.3.18. Lifecycle maintenance of drainage features including gullies, grating, frames and covers;
  - 2.6.7.3.19. Balustrades and all external furniture including seating;
  - 2.6.7.3.20. Sheltered provision;
- 2.6.7.4. The Contractor shall carry out the Buildings and Grounds Asset Management Service to ensure:
- 2.6.7.4.1. That the Buildings and grounds are Available;
  - 2.6.7.4.2. The efficient delivery of the curriculum in line with the School's objectives;
  - 2.6.7.4.3. The Buildings and grounds provide full operational functionality and meet the operational requirements of the School Users, staff and Pupils
  - 2.6.7.4.4. All Buildings, services and controls equipment meet the PIU Targets;
  - 2.6.7.4.5. The Building elements are kept in good repair;
  - 2.6.7.4.6. The Buildings and grounds do not deteriorate beyond that required to ensure Availability and compliance with the Service Quality Standards and that Programmed Maintenance and Reactive Maintenance are performed and statutory requirements are adhered to in order to achieve resource, energy and water efficiencies;
  - 2.6.7.4.7. Avoidance of pollutants, both internally and externally, which are known to have a long term negative impact on occupants or the natural environment;
- 2.6.7.5. The Contractor shall ensure that maintenance is carried out by appropriately qualified and/or skilled staff and in accordance with any relevant codes of practice or statutory provisions.

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- 2.6.7.6. The Contractor shall respond to breakdowns and ad hoc repairs in order to ensure Availability, compliance with performance and Service Quality Standards, manufacturer's requirements and warranties, Law and Good Industry Practice.
- 2.6.7.7. The Contractor shall ensure that Asset Lifecycle Replacement is carried out at times and in a manner which minimises the impact on the delivery of educational services and any extra curricula activities whilst still meeting the Contractor's obligations in respect of Programmed Maintenance as set out in this SOS.
- 2.6.7.8. The Contractor shall provide details of how it intends to manage the provision of and where necessary storage of spare parts for each School.

**2.6.8. Schedule of Programmed Maintenance**

- 2.6.8.1. The Contractor shall prepare and agree an annual plan of maintenance activities with the Authority and the School.
- 2.6.8.2. The Contractor shall produce a Five Year Maintenance Plan. The plan will be a five year rolling plan and shall include all Programmed Maintenance activities and acknowledge Reactive Maintenance to the extent that it has affected future Programmed Maintenance. The Contractor shall update the Five Year Maintenance Plan on a regular basis as maintenance is undertaken, and as Asset Lifecycle Replacement items are brought forward or delayed due to worse or better than expected performance. The Contractor shall comply with the provisions of clause 39 Annual Contract Reviews and Efficiency Reviews.
- 2.6.8.3. The Contractor shall prepare a Schedule of Programmed Maintenance in accordance with the provisions of clause 23 to be agreed with the Authority and School.
- 2.6.8.4. The Contractor shall submit any modifications to the Schedule of Programmed Maintenance to the Authority/School for approval, providing at least four weeks term time notice;
- 2.6.8.5. Contractor shall adopt a proactive approach to maintenance and inspections such that breakdowns and failures are minimised.

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**2.6.9. Lifecycle Survey Requirements**

- 2.6.9.1. In accordance with the Project Agreement, the Contractor shall survey the condition of the Building no less than 3 months prior to the Lifecycle Review Date to allow reporting on the following information:
  - 2.6.9.1.1. Building condition;
  - 2.6.9.1.2. Hazards;
  - 2.6.9.1.3. Remaining elemental life of building elements;
  - 2.6.9.1.4. Status of the Building Services.
- 2.6.9.2. All surveys should be conducted prior to the preparation of the Five Year Maintenance Plan in order that the findings can inform the Schedule of Programmed Maintenance and the Lifecycle Report;
- 2.6.9.3. The Contractor shall be responsible for carrying out a Lifecycle Review and producing the Lifecycle Report in accordance with clause 23.6 of this Agreement and for keeping records of Lifecycle Spend and Lifecycle Surplus and for monitoring the actual Lifecycle Replacement and comparing this against the Lifecycle Efficiencies Plan and Lifecycle Schedule.
- 2.6.9.4. The Contractor shall endeavour to carry out Programmed Maintenance outside Term where performing such activities within Term would have an adverse impact on educational delivery.

**2.6.10. Replacement materials**

- 2.6.10.1. The Contractor shall ensure that replacement materials used must be of the same quality as the specification for New Buildings with an equivalent life span, taking into account advancements in materials development and Good Industry Practice at the time of replacement.
- 2.6.10.2. Where the Contractor can demonstrate that re-used or reconditioned parts or replacements have at least equivalent life expectancy and performance capability of a new replacement item, the Contractor shall endeavour to use re-used or reconditioned parts or replacements.

**2.6.11. Handback Requirements**

- 2.6.11.1. At the end of the Contract Period, the Contractor shall hand back to the Authority, the School Buildings, plant, FF&E (Group 1) in a state of good repair. Under clause 47 The Authority will arrange for an independent condition survey (final survey) to be carried out prior to the Expiry Date, which will identify any rectification or maintenance work to be undertaken.

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The rectification or maintenance work shall be such that the School Buildings, grounds, plant, FF&E, meet the Minimum Life and Residual Life Expectancy Requirements as set out at Appendix [E] of this SOS and paragraph 1.4.4 of the FOS.

- 2.6.11.2. Where the Authority has agreed pursuant to clause 47.9 to relax any of these Hand back Requirements the Contractor shall prepare (for agreement with the Authority) a schedule of the relaxations in these Hand back Requirements setting out which specific elements have been relaxed and the associated savings (where relevant).
- 2.6.11.3. The Contractor shall ensure that prior to the Expiry Date or Termination Date the Authority is in receipt of all effective O&M Manuals, 'As-built' drawings, Energy Efficiency Plan supporting Models, Simulations and Data, supplier and Contractor details, the Independent Certifier reports, Building Performance Evaluation reports and the building test results.

## 2.7. Energy and Utilities Management Plan

- 2.7.1. The Contractor shall develop an Energy and Utilities Management Plan which will initially form part of the Environmental Strategy Report at IPDSB stage. It is a tool to measure and benchmark the energy and water efficiency of the as-built installations and to compare performance in use with design predictions. It shall form part of the Contractor's Proposals and be developed and improved throughout the Contract Period.
- 2.7.2. The Contractor shall ensure that the Energy and Utilities Management Plan includes energy and water end use analyses and shall measure and report performance on a quarterly basis. Reports should include energy and water consumption data based on meter readings split by readily identifiable zones to the full range of sub-metered areas, including major uses and lettable areas, e.g., catering.
- 2.7.3. The Contractor shall ensure the efficient, effective, safe and timely supply of energy and utilities (electricity, gas and water, etc.) in order to ensure continued operation of the School.
- 2.7.4. The Contractor shall prepare options within the Services Delivery Proposals for the management of this risk. These options shall prioritise the maintenance of utility supplies to kitchen and dining areas, toilets, ICT servers and essential hygiene facilities.
- 2.7.5. The Contractor shall provide constant supplies of:
  - 2.7.5.1. water;

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- 2.7.5.2. gas to boilers, hot water generators, outlets and equipment; and
- 2.7.5.3. mains electricity to all power outlet sockets and equipment.
- 2.7.6. The Contractor shall make arrangements for the removal of all mains, storm and foul water from the premises, including the emptying of interceptors. The arrangements may vary from School to School and the Contractor should establish how the cost will be calculated for each School.
- 2.7.7. The Contractor shall maintain sanitary appliances, plumbing, fittings and associated drainage systems.
- 2.7.8. The Contractor shall maintain electric distribution systems within the site and buildings.
- 2.7.9. In line with the Lifecycle Schedule within the Schedule of Programmed Maintenance the Contractor shall ensure that all utilities services consuming plant is maintained to operate at optimum efficiency and every effort is made to ensure that all fuels, gas, electricity and water are used economically, in accordance with any operational policies issued by the School.
- 2.7.10. The Contractor shall ensure that combustion equipment complies with legislation with regard to emission of the products of combustion including particulates, NO<sub>x</sub> and other pollutants.
- 2.7.11. The Contractor shall:
  - 2.7.11.1. maintain the meters to enable effective metering of energy and water consumption throughout the School;
  - 2.7.11.2. carry out analyses of separate energy end uses;
  - 2.7.11.3. monitor energy meters and energy end uses and provide exception reporting on them to the School;
  - 2.7.11.4. provide effective management of energy and water consumption (including giving support to the School in respect of the energy end uses the School is responsible for), and payment of utility bills and all statutory charges;
  - 2.7.11.5. provide advice to the schools on ways to reduce utility charges including standing charges; and

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- 2.7.11.6. provide and maintain emergency/back up supplies and surge protection where required to ensure services continuity including uninterruptible power supplies (UPS) for alarms and ICT servers.

**2.7.12. Energy and water efficiency**

- 2.7.12.1. The Contractor shall work with the School and Authority to reduce the energy and water consumption and carbon emissions of the School.
- 2.7.12.2. The Contractor and the Authority will agree and set a target for annual water consumption which should be compared with national benchmarks<sup>10</sup>.
- 2.7.12.3. The Contractor, the Authority and School will annually review the Energy and Utilities Management plan and identify the need for revisions to reflect performance, changes in occupancy and use patterns and the availability of new technologies and upgrades to improve component and system efficiency.
- 2.7.12.4. The Energy and Utilities Management plan shall include the:
  - 2.7.12.4.1. Design stage energy and water end use analyses;
  - 2.7.12.4.2. A Measurement and Verification Plan<sup>11</sup> which includes details of all sub-meters, a meter and loads schematic diagram, commissioning, data collection, storage and transmission of data and the mechanisms for dealing with any loss of data, e.g., assumptions or interpolations made in the case of missing or incomplete data;
  - 2.7.12.4.3. Final Baseline Energy Model (produced at Financial Close);
  - 2.7.12.4.4. Actions to be taken to reduce water and energy consumption and carbon emissions and ensure effective implementation, with clearly identified responsibilities of relevant parties;
  - 2.7.12.4.5. Completed iSERVcmb facility and services description spread sheet detailing activity zones, meters and equipment installed;
  - 2.7.12.4.6. Record drawings showing all meters and connected loads and details of means of data storage and transmission to iSERVcmb database and annual upload to Carbon Buzz;
  - 2.7.12.4.7. Predicted water use and predicted energy use and associated carbon emissions for the School site in a format similar to a DEC rating (including regulated and unregulated emissions);
  - 2.7.12.4.8. The Contractor shall maintain the Building logbooks as required by AD L and its associated guidance 'Non-Domestic Building Services Compliance Guide', 2010 edition. The Contractor shall supply Display Energy Certificates as required by The Energy Performance

<sup>10</sup> 2.8 m<sup>3</sup>/person/annum(2800L) is regarded as 'Good Practice' for Schools (without pools) based on the Watermark project<sup>10</sup>.

<sup>11</sup> See Chapter 3.2 of IPMVP Volume III.

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of Buildings Directive for regulated and unregulated emissions. It is acknowledged that this can only be done after a year's worth of meter readings. The Contractor shall also provide energy reports as required by the Directive and then discuss with the School means to implement the recommendations including as part of Invest to Save measures; and

- 2.7.12.4.9. The Contractor shall monitor the hot water service operating efficiency as described in paragraph 2.3.29.

## 2.8. Energy and Utilities Modelling and Payment

### 2.8.1. Energy Payment Mechanism - Consumption Risk

The volume risk lies with the Contractor or the Authority/School based on who is best placed to manage particular energy end uses. For example the Authority/School will be responsible for gas and electricity used in catering, domestic hot water and for external lighting used for security and sports pitches. The Payment Mechanism encourages the School and the Contractor to cooperate.

- 2.8.1.1. The Contractor shall share the volume risk on the actual consumption of the Building Load (as defined in paragraph 2.8.1.9) during Core Energy Hours  $A_{\text{building,CEH}}$  to the extent that it is greater or less than the Contractor's predicted Target energy consumption for the Building Load during Core Energy Hours  $T_{\text{building,CEH}}$ . The Contractor's predicted consumption  $T_{\text{building,CEH}}$  shall be based initially on the Final Baseline Energy Model; and then on the In-Use Energy Model once it has been agreed with the Authority, taking account of allowable adjustments, e.g. for weather or changes to Core Energy Hours.
- 2.8.1.2. As soon as practicably possible following the Services Availability Date, but in any event by the end of the third (3<sup>rd</sup>) year following the Services Availability Date, the Contractor shall use recorded data including actual metered energy consumption data to calibrate the Final Baseline Energy Model and hence provide the In-Use Energy Model used to predict Building Load,  $T_{\text{building,CEH}}$  which takes into account allowable adjustments. Calibration and allowable adjustments shall be in accordance with best practice for measuring and reporting on energy and water consumption, and agreed with the Authority.

Allowable adjustments that can be made to the Final Baseline Model include: changes to Buildings, plant and equipment; weather; and hours of use. For example: excess lighting energy consumption due to operation of blinds, e.g. due to poor visibility of legacy data projectors; requests from the school to increase temperature set points above the normal maintained air temperatures given in Annex 1, paragraph 2.2.2; and changes to equipment loads and operating hours.

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2.8.1.3. The Contractor’s Initial Baseline Energy Model prediction of the Target Building Load during Core Energy Hours  $T_{\text{building,CEH}}$  must be less than the energy cap of 56 kWhe for both Primary and Secondary Schools without pools.

2.8.1.4. Where kWhe is the equivalent electrical kWh calculated by multiplying the different fuel kWh consumptions for different energy sources by the following standard energy weighting factors:

Category	Description	Energy Weighting Factor
Electricity	includes mains electricity, electricity from combined heat and power and renewable energy	1.0
All Fuels	includes, gas, oil, and biofuels	0.4
Thermal Energy	includes geothermal, district heat and heat from combined heat and power and solar thermal	0.5

2.8.1.5. Any costs or savings compared with the Building Load during Core Energy Hours  $T_{\text{building, CEH}}$  will be shared equally between the Authority/School and the Contractor up to a figure of 20% above the Contractor’s predicted consumption  $T_{\text{building, CEH}}$ , or the energy cap  $C_{\text{building,CEH}}$  after allowable adjustments have been made. The Contractor will take 100% risk on the volume exceeding this figure and will pay for the extra energy consumed.

2.8.1.6. At the annual review meeting the School and the Contractor should agree that the in use model end use systems targets are achievable and realistic for the schools operation. During the meeting, the Contractor shall document, so that both the Authority and the School can understand, the discrepancies, if any, between the final baseline model, the in-use model, iSERV benchmarks and the actual energy consumption of the School so that the energy consumption may be improved the following year as incorporated into the Energy and Utilities Management Plan. The Contractor shall report annually to the Authority on the total fuel consumption figures. At the annual review meeting the Contractor shall report on the actual energy consumption figures as compared with the target predicted consumption figures in accordance with Section 8 of the Payment Mechanism.

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2.8.1.7. Where the Contractor and the Authority cannot agree the Contractor's proposed adjustments to produce the Target Building Load during Core Energy Hours,  $T_{\text{building,CEH}}$  that determines the Energy Payments, the Authority will employ a suitably qualified independent third party energy assessor, to be agreed with the Contractor, to review the Contractor's proposals, iSERVcmb or other benchmarks and the energy and weather data to determine payments. The International Performance and Measurement Protocol (IPMVP) and ASHRAE Guideline 14<sup>12</sup> will be used to resolve any disputes about adjustments to energy payments. The Contractor shall subject to clause 68 (Dispute Resolution Procedure) of this Agreement be bound by the findings of such independent third party. The Contractor shall upon written request permit the Authority and/or such independent third party energy assessor to inspect any part of the Buildings and/or access to all the Contractor's records, receipts, invoices, reports, drawings, technical specifications and performance logs relating to the Building Load  $E_{\text{building}}$  energy consumption figures, so as to enable the Authority and/or such independent third party energy assessor to obtain an accurate assessment of any of the figures quoted. The Contractor shall provide all reasonable co-operation and assistance to the Authority and any independent third party energy assessor and shall allow them access to such documents and information and shall in a bona fide manner respond promptly to all reasonable requests for further documents and information made by the Authority and/or any independent third party energy assessor in respect of the Building Load  $E_{\text{building}}$  energy consumption figures, the Contractor's proposals and the projected Energy Payments.

2.8.1.8. The Building Load,  $E_{\text{building}}$  on which the Contractor and the School shall the volume risk during Core Energy Hours comprises:

2.8.1.8.1. Space Heating - the temperatures to be used for predicting the initial baseline heating consumption are the normal maintained air temperatures given in the table in paragraph 2.2.2 of Annex 1 of this SOS. The minimum room temperature in any serviced area shall be 5°C at which temperature the heating system will be automatically switched on for a

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<sup>12</sup> See the International Performance and Measurement Protocol (IPMVP) published by the Efficiency Valuation Organization and freely available from [www.evo-world.org](http://www.evo-world.org). Volume I, 2012 Edition describes the methodology and Volume III Part I gives examples of some current applications of IPMVP to new build construction projects.

IPMVP is a framework of definitions and broad approaches whereas ASHRAE Guideline 14 provides detail on implementing M&V plans with the framework.

IPMVP makes a provision for limited metering under Option A whereas ASHRAE requires metering for all options. IPMVP's discussions on balancing of Uncertainty and Cost (Volume 1 Chapter 4.11) are enhanced by ASHRAE's definition of ways to quantify uncertainty so that M&V design decisions can consider costs in light of the best available methods for quantifying uncertainty.

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minimum of 30 minutes for frost protection. Adjustments can be made where the School chooses to run parts of the building at higher temperatures. This energy end use shall be separately metered.

- 2.8.1.8.2. Internal lighting and emergency lighting excluding security lighting - this energy end use shall be separately metered. Hours of use are those in the input parameter data set for the type of school, but can be adjusted for actual hours of use where the School chooses to use the lighting out of hours, for example, they may leave all the corridor lights on all night for security purposes.
- 2.8.1.8.3. Swimming and Hydrotherapy Pool heating - including pump and water treatment, and pool related ventilation and air conditioning loads.
- 2.8.1.8.4. Building related services –including protection systems, fire alarms, sprinkler systems and intruder alarms – lifts - major ventilation plant including that serving changing rooms, toilets and kitchen, boiler plant and pumps and other plant and any air conditioning loads to server room or teaching areas – the Contractor shall meter the total electrical load/s for these energy end uses.
- 2.8.1.9. The End User Loads, on which the School will take 100% volume risk are:
  - 2.8.1.9.1. External Sports and Flood Lighting – This energy end use shall be separately metered;
  - 2.8.1.9.2. External Security Lighting – This energy end use shall be separately metered;
  - 2.8.1.9.3. Hot water consumption – The domestic hot water loads shall be metered;
  - 2.8.1.9.4. Catering gas, electricity and water consumptions – These end uses shall be separately metered;
  - 2.8.1.9.5. Server and hub room loads including all ICT equipment but excluding internal lighting and heating, ventilation and any air conditioning equipment required to achieve the conditions specified in paragraphs 2.8.18 of the FOS. Electrical loads to server rooms shall be separately metered; and
  - 2.8.1.9.6. Miscellaneous power loads - including local exhaust ventilation, dust and fume extract (including fume cupboards), ICT equipment outside server rooms and power and equipment loads such as hand driers, kilns, and theatre lighting including small power, Legacy equipment and equipment provided by the Contractor.
- 2.8.1.10. The School is permitted to bring additional power consuming equipment into the School. The changes must be notified to the Contractor who may need to adjust the In-Use Energy Model accordingly.

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2.8.1.11. The Contractor and School shall work together to achieve an Initial Baseline Energy Model design energy target in electricity equivalent kilowatt hours, KWhe for  $E_{\text{building}} + E_{\text{hot water}} + E_{\text{small power}}$  Core Hours of less than the following figures depending on the type of School:

- 2.8.1.11.1. Secondary School with no pool 75 KWhe; Primary School with no pool 61 KWhe; and
- 2.8.1.11.2. a carbon rating for the School's energy consumption equivalent to a DEC rating of C

2.8.1.12. The Contractor and School shall also work together to limit all energy end uses to best practice benchmarks. These benchmarks for large (>10,000m<sup>2</sup>) secondary schools are currently:

- 2.8.1.12.1. Internal Lighting 12 kWh/m<sup>2</sup>/annum;
- 2.8.1.12.2. External Lighting 2-12 kWh/m<sup>2</sup>/annum;
- 2.8.1.12.3. Heating 52 kWh/m<sup>2</sup>/annum;
- 2.8.1.12.4. Hot water 10 kWh/m<sup>2</sup>/annum;
- 2.8.1.12.5. Fans and pumps (depends massively on extent of HVAC, figures normalised across School total floor area, however range is) 6-15 kWh/m<sup>2</sup>;
- 2.8.1.12.6. Server rooms 8 kWh/m<sup>2</sup>;
- 2.8.1.12.7. Lifts 1kWh/ m<sup>2</sup>;
- 2.8.1.12.8. IT circa 8-10 kWh/m<sup>2</sup> (although depends on Pupil to PC/laptop ratio and charging method);
- 2.8.1.12.9. Miscellaneous and small power 5-10 kWh/m<sup>2</sup>; and
- 2.8.1.12.10. Catering 7-14 kWh/m<sup>2</sup>.

2.8.1.13. Current iSERVcmb or similar industry benchmarks for the various energy end uses should be used, where available.

**2.8.2. Contractor Predicted Loads.**

2.8.2.1. The Contractor shall predict the annual energy and utilities consumptions of the following Services and report on them annually as part of the Energy and Water Efficiency Plan:

- 2.8.2.1.1. Building load end uses identified in paragraph 2.8.1.9;
- 2.8.2.1.2. End-user load end uses identified in paragraph 2.8.1.10;
- 2.8.2.1.3. Total hot and cold water consumption; and
- 2.8.2.1.4. Catering hot and cold water consumption.

2.8.2.2. The energy and water consumption of Legacy facilities and Buildings or parts of Buildings which may be let out to the community on a commercial basis

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such as sports or leisure facilities shall be separately accounted for in energy prediction calculations and may be separately zoned and metered.

**2.8.3. Energy and Utilities Monitoring and Reporting**

- 2.8.3.1. Following the Services Availability Date, the Contractor shall monitor the energy use against the installed meters and provide the School and Authority with on line data and benchmark information on at least a monthly basis and a daily basis when required by the School or Authority, by means of data exchange with the iSERVcmb continuous monitoring and benchmarking website<sup>13</sup> or similar benchmarking system approved by the Authority.
- 2.8.3.2. Where the School is fully or partially responsible for the volume of energy, the actual against anticipated use and previous years, when available, will be reported quarterly by the Contractor.
- 2.8.3.3. At the end of each year the actual energy end use consumption figures shall be compared with the predictions from the In-Use Energy Model and iSERVcmb benchmarks.
- 2.8.3.4. The Contractor shall provide Schools and their agents with full access with unrestricted use of and rights to energy, heating, hot water, lighting and water consumption metering data. At least the last two years' historic data shall be available in a suitable on-line format designed to be understood by Pupils and School premises staff. The Contractor shall agree with the School the level and type of real time data, including weather data, to be provided for curriculum use.
- 2.8.3.5. Energy and utility use data shall be acquired and stored every 15 minutes. The data shall be uploaded every month, and preferably every day, to the iSERVcmb continuous monitoring and benchmarking application or similar system approved by the Authority for energy management purposes.
- 2.8.3.6. The Contractor shall ensure that Schools are metered separately for all utilities in line with Approved Document L (AD L) in support of the Building Regulations and CIBSE TM39. Automatic Meter Reading (AMR) must be provided on all incoming services and sub-metering to report energy end use consumptions.
- 2.8.3.7. The Contractor shall ensure that the energy use data has separate data streams (usually meters) for all the meters identified above and for each of the following HVAC components that are installed:

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<sup>13</sup> See [www.iservcmb.info](http://www.iservcmb.info)

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2.8.3.7.1. **Fixed Building Services Meters**

- 2.8.3.7.1.1. Boiler energy use (electrical and fossil fuel separated);
- 2.8.3.7.1.2. Hot water pumps;
- 2.8.3.7.1.3. Domestic hot water pumps;
- 2.8.3.7.1.4. Any separate heat rejection fans;
- 2.8.3.7.1.5. Individual Air Handling Units (if applicable)
- 2.8.3.7.1.6. Cooling Systems: e.g., packaged a/c systems and split systems; (if applicable);
- 2.8.3.7.1.7. Heat pumps; (if applicable);
- 2.8.3.7.1.8. Lighting Distribution Boards ; and
- 2.8.3.7.1.9. Motor Control Panels;

2.8.3.7.2. **Additional Meters**

- 2.8.3.7.2.1. Domestic Hot water supplies;
- 2.8.3.7.2.2. Cold water consumption; and
- 2.8.3.7.2.3. Small Power Distribution Boards;

2.8.3.7.3. **Specialist Meters**

- 2.8.3.7.3.1. Catering facilities (Gas and electricity);
- 2.8.3.7.3.2. Server Room equipment, including UPS;
- 2.8.3.7.3.3. External Lighting;
- 2.8.3.7.3.4. Multi-surface sports facilities and external sports lighting; and
- 2.8.3.7.3.5. Swimming pools and hydrotherapy facilities (process and lighting loads).

- 2.8.3.8. Theoretical corrections to end use consumptions where individual metering of that end use is required will not be permitted.
- 2.8.3.9. The data is usually provided by meters but many HVAC components, e.g., pumps are now fitted with in-built sensors and meters which can be connected to the internet and data collected from them directly. Duplicate metering and data collection systems should be avoided where the components can already provide the required data.
- 2.8.3.10. The Contractor shall ensure that data from the AMR system and headline output data from the Building Controls and Energy Management Systems, for example room temperatures and heating and hot water flow/return temperatures, is uploaded to the iSERVcmb or similar system and available to the School and the Authority via the web for use in energy management and monitoring performance in use.

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- 2.8.3.11. The Authority/School shall have responsibility for day to day energy management at the School and the Contractor shall have overall responsibility for energy monitoring at the School and shall report findings to the Authority/School. The Contractor and School shall work together to overcome any inefficiencies in system operation identified by the Contractor or the School.
- 2.8.3.12. The Authority/School may appoint a person with overall responsibility for energy management at the School. This person shall report his findings to the Authority/School and the Contractor. The Contractor and School shall work together to overcome any inefficiencies in system operation identified by the relevant person responsible for energy management.
- 2.8.3.13. Renewable energy contracts, payments and incentives must be agreed by the Authority.
- 2.8.3.14. The energy consumption in run and standby conditions for all equipment shall be estimated by the Contractor for the purposes of calculation of energy end use loads. For this purpose the Contractor shall obtain information on Legacy equipment, including name plate loads, manufacturer's names and serial numbers and shall provide the information to the Authority.
- 2.8.3.15. The Contractor may meter any item of equipment where they would like to determine the actual energy use.
- 2.8.3.16. The Contractor shall monitor the individual energy end uses. As part of the IPDSB submission the Contractor shall produce a metering schematic and complete the iSERVcmb facility and services description spreadsheet (as far as possible). This will be fully completed during the Works Period and will be completely filled in by the Services Availability Date. End use data and meter readings will subsequently be uploaded to the iSERVcmb continuous monitoring and benchmarking website using this spreadsheet, or to a similar benchmarking system approved by the Authority. The Contractor shall provide commissioning records for the metering and monitoring system including test data uploads and reports e.g.: from the iSERV database. The Contractor shall provide as built meter schematic record drawings showing all the meters and the loads connected to each meter. This shall accompany the iSERV facilities and services spreadsheet. See [www.iservcmb.info](http://www.iservcmb.info).
- 2.8.3.17. Annually, the Contractor shall report actual consumption figures and DEC ratings on the Carbon Buzz and iSERVcmb websites or similar on-line systems approved by the Authority in order to benchmark the School's energy profile.

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#### 2.8.4. Weather data

- 2.8.4.1. The Contractor shall access and present weather data. The Contractor shall either monitor a weather station at the School that will be in a location regarded as suitable for collecting weather data or where available may use local Met Office data. The Contractor shall specify the type and location of weather station to be used.
- 2.8.4.2. The Contractor shall use the weather data to:
  - 2.8.4.2.1. calibrate the Final Baseline Energy Model after the first year of operation;
  - 2.8.4.2.2. make adjustments to Energy Consumption figures for comparison with the In-Use Energy Model;
  - 2.8.4.2.3. record and report weather variations; and
  - 2.8.4.2.4. provide to parties, that require this information, as part of a dispute resolution regarding adjustment to the Building Load,  $E_{\text{building}}$ .
- 2.8.4.3. As a minimum the following weather data is required; Outdoor Dry Bulb Temperature, Outdoor Humidity, Wind Speed, Wind Direction, Dew Point and Solar Radiation over a maximum of 1-hour averages.
- 2.8.4.4. The weather data shall be available for curriculum use as agreed with the School.

#### 2.8.5. Invest to save measures

- 2.8.5.1. The Contractor shall provide 'invest to save' proposals to reduce energy and water use based on the provisions outlined in clause 39 of the Project Agreement and Schedule 6 (Payment Mechanism) to this Agreement.
- 2.8.5.2. Following the Services Availability Date, the Contractor and Energy Manager are encouraged to identify any energy conservation measures that will reduce energy and utilities consumption. Where these have economic paybacks, typically with simple paybacks of less than 8 years, the Contractor may, with the agreement of the Authority and the School, use the IPMVP protocol and the Payment Mechanism to recoup the savings achieved.
- 2.8.5.3. It is the responsibility of both the Contractor and the School to identify areas for energy improvements and to implement those improvements where they are agreed to be both technically and financially viable.

#### 2.9. Elective Services

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- 2.9.1. Service Delivery Proposals for each of the Elective Service shall be provided by the Contractor and revised as required on an annual basis.
- 2.9.2. The Contractor shall demonstrate that the proposed Elective Services represent value for money to the Authority, by the provision of relevant benchmark data or market testing when requested by the Authority.
- 2.9.3. The Authority shall request any Elective Services through the procedure set out at Part 7 of Schedule 24 to this Agreement.
- 2.9.4. Charges for Elective Services shall be submitted on a monthly basis in accordance with the Payment Mechanism.

## **Annex 1 - Performance in Use (PIU) Targets**

1. The Contractor shall ensure that the Building meets or improves upon the following PIU Targets:

### **1.1. Indoor air quality:**

1.1.1. Concentration of CO<sub>2</sub> shall not exceed the maximum levels of 1,500 parts per million (ppm) for mechanical ventilation and 2000ppm for natural ventilation under any conditions for more than 20 minutes during the School Day. Measurement shall be by monitoring of extract air by CO<sub>2</sub> sensors or spot-checks using a CO<sub>2</sub> meter.

1.1.2. The operational targets shall be 1,000ppm for mechanical ventilation and 1500ppm for natural ventilation.

1.1.3. The required maximum CO<sub>2</sub> levels shall not be exceeded during room dim-out / blackout, and shall not be impaired by security or safety requirements.

1.1.4. Cold draughts from incoming ventilation air in cold weather shall not cause thermal discomfort to occupants.

### **1.2. Acoustics:**

1.2.1. Background noise level in each teaching and learning spaces shall not exceed the Design Indoor Ambient Noise Level (IANL) by more than 5 dBA when the windows are open for ventilation as defined in Table 1.1 of Acoustic Design of Schools 2011 and equipment that is normally continuously in use during teaching and learning activities including data projectors and ICT equipment is in use. The ventilation openings shall be open so as to satisfy the 1500ppm CO<sub>2</sub> air quality operational target.

### **1.3. Lighting Quality:**

1.3.1. When measured with a calibrated light meter the lux levels shall be greater than or equal to the horizontal/task maintained illuminance levels and the cylindrical illuminance levels and less than the maximum maintained illuminance levels given on the area data sheets.

1.3.2. The teaching spaces shall be free from disabling glare.

## **2. Room temperature:**

2.1. All room temperature sensors used to control room temperatures shall at all times measure a temperature that does not deviate from the air temperature by more than 3°C. Verification of accuracy shall be by six monthly spot-checks with a handheld thermometer.

2.2. PIU requirements for internal air temperatures:

2.2.1. to prevent summertime overheating: Summertime temperatures shall be reported to the SMT and the Contract Manager. Under the Payment Mechanism the Contractor is required to meet the following performance standard:

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- 2.2.1.1. for the defined occupied period in a School Day an acceptable standard of thermal comfort shall be achieved over the year in each teaching space in new and refurbished buildings. The following method shall be used to demonstrate this:
- 2.2.1.1.1. when the spaces are occupied for a period of more than 30 minutes the following shall be observed:
  - 2.2.1.1.2. when the external air temperature is 20°C, or higher, and the diurnal temperature range<sup>14</sup> (lowest temperature from the previous night to the maximum daytime temperature the following day) exceeds 4°C, the internal air temperature<sup>15</sup> shall not exceed the external air temperature by more than 5 °C;
  - 2.2.1.1.3. the temperatures shall be achieved when windows, fans and ventilation systems are operated to reduce summertime temperatures and the space has the intended number of occupants and the internal heat gains from, teaching equipment, including computers and data projectors does not exceed 15 W/m<sup>2</sup>;
  - 2.2.1.1.4. the preferred method of measurement is continuous monitoring of inside and external air temperatures but spot measurements during peak summertime conditions are acceptable; and
  - 2.2.1.1.5. diurnal temperature ranges will require measurement of external air temperature at the School using a screened thermostat such that the reading is not unduly affected by direct solar radiation or indirect radiation.

**Room temperatures in winter time**

2.2.2. The heating system shall be capable of maintaining the air temperatures given in the ADS and the following table, in winter time, measured at 1m from the floor in the centre of the room:

	Normal maintained air temperature to be achieved by the heating system in less than 20 minutes after closing any external doors - °C <sup>16</sup>	Minimum maintained air temperature provided by heating system during occupancy at the CIBSE outside design conditions - °C	Maximum air temperature during wintertime at maximum occupancy - °C
Stores	5°C	N/A	N/A

<sup>14</sup> The diurnal temperature range is typically 7°C and is > 4°C on approximately 2/3rds of nights, i.e., except when there are anti-cyclonic conditions.

<sup>16</sup> This temperature is to be used for energy consumption calculations

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Areas where there is a higher than normal level of physical activity ( such as sports halls) and sleeping accommodation	17°C	15°C	23°C
Toilets, circulation spaces and store rooms that are normally occupied	17°C	15°C	26°C
Kitchen preparation areas	20°C	15°C	N/A
Spaces with normal level of activity, teaching, study, exams, admin and staff areas, prep rooms	20°C	18°C	26°C
Spaces with less than normal level of activity or clothing, including sick, isolation rooms, changing rooms; and Gymnasias and dance and movement studios	21°C	19°C	26°C
Special schools and resourced provision, where needs of Pupils tend to be complex and varied, including Pupils with physical difficulties or profound and multiple learning difficulties.	23°C	21°C	25°C
Where Pupils or adults may be wet and partially clothed for a significant length of time, such as swimming pools	23°C in changing rooms and no more than 1°C above or below that of the water temperature in pool halls subject to a maximum of 30°C	21°C in changing rooms and no more than 1°C below that of the water temperature in pool halls	28°C in changing rooms and no more than 1°C above that of the water temperature subject to a maximum of 30°C in pool halls
Where young children or those with SEN or physical disabilities may be wet or partially clothed for a significant length of time Rapidly of air movement can lead to chilling by evaporation and to compensate, a higher design temperature may be required.	25°C  The air speed in these environments should not exceed 0.1 m/s at 25°C	23°C	30°C

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**Monitoring temperatures**

2.2.3. The preferred method of measurement is continuous monitoring of inside air temperatures but spot measurements during winter time and mid-season conditions is acceptable.

2.2.4. The iSERVcmb application or similar on line reporting and monitoring systems shall be used where possible to report on Performance in Use to the School and the Authority.

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## **Annex 2 - Service Quality Standards<sup>17</sup>**

**These Service Quality Standards cover the continual expected performance of the building, its grounds and its related plumbing, drainage, mechanical and electrical services which are not covered by the Performance and Availability regimes, but provide protection to the end users enjoyment of its facilities.**

### **The Building, including its mechanical & electrical and internal plumbing and drainage systems:**

- shall be structurally sound, secure or fixed to their intended point of anchorage and weatherproof where appropriate;
- shall be free from damp penetration or spalling, free from debris (especially where it can harbour vermin and/or pests), corrosion, organic growth and blockages;
- external surfaces shall be free from cracks and/or deflection or any other surface degradation inconsistent with a building maintained in accordance with Legislation and Good Industry Practice; and
- internal surfaces shall be free from all but minor surface blemishes or shrinkage cracks, subject to due wear and tear;

### **The Contractor will have additional responsibility to maintain the following elements to a quality standard described**

#### **Doors, windows, hatches, vents and cupboards:**

- shall operate as intended, in a safe way, without making undue noise and without including observable strains on hinges, locks, catches and handles, and without binding, rubbing or catching in any way; and
- luminescent strips, signs, notices, warning signs provided by the Contractor shall be intact, legible and illuminated as appropriate in accordance with Legislation and good industry practice;

#### **Internal finishings and coverings:**

- shall be free from tears, scoring or any other damage that is unsightly and/or could cause a health and safety hazard; and
- flooring shall facilitate adequate drainage where necessary;

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**Mechanical & electrical and internal plumbing & drainage systems:**

- shall function without leaks, drips, undue noise or vibration;
- shall function without discharges from overflow pipes or similar warning systems;
- lifts will have a fully functioning emergency communication system;
- labelling, signs, notices, warning signs provided by the Contractor are maintained intact, legible and illuminated as appropriate in accordance with Legislation and good industry practice; and
- drainage shall be free from persistent odour and be free-flowing (unless as a result of a lack of cleaning); and

**External Site Elements including lighting, barriers, fencing, storage, furniture and equipment:**

- shall be structurally sound, safe, secure or fixed to their intended point of anchorage;
- external surfaces shall be free from cracks and/or deflection or any other surface degradation inconsistent with being maintained in accordance with Legislation and good industry practice;
- where appropriate have even surfaces or otherwise facilitate drainage with no potholes or sinkings;
- shall be free from standing water; and
- drainage shall be free from persistent odour and shall be free-flowing (unless as a result of a lack of cleaning).

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**Appendix A - Performance Standards**

**Introduction**

The Performance Standards set out below are to be applied with reference to the following guidance:

**PS Ref:** The unique identifier for each Performance Standard

**Performance Standard:** The short description of the Performance Standard

**Performance Requirement:** A description of the standard that the Contractor is expected to achieve.

**Priority Category:** The Category used to determine the level of deduction and (where rectification applies) the Response and Rectification time applicable to the failure

**Periodic (P) or Event (E) Standard:** Identifies whether the Periodic deduction level or Event deduction level applies.

**Rectification Applies (Y/N):** Identifies whether the Rectification period applies to failures under this standard - Yes (Y) or No (N).

**Monitoring Frequency:** for Periodic Standards, the frequency of monitoring / reporting to be applied to the standard, (Daily, Monthly, Annually etc.) all Event Standards should be measured “per event” or “per request”.

**Monitoring Methods:** identifies which of the following monitoring methods should be used to monitor and report the occurrence of a failure. The Contractor shall describe the approach to monitoring failures in the Service Delivery Proposals.

**Monitoring Method Codes Table:**

Monitoring Method Code	Description/Source
1	<b>Helpdesk Records:</b> records of Authority & Contractor reports to the Helpdesk
2	<b>Contractor’s Proposals:</b> Comparison with Contractor’s Proposals including Service Delivery Proposals

3	<b>Service Quality Standards:</b> Comparison against Service Quality Standard
4	<b>Statutory Obligations:</b> Comparison against Statutory obligations, including insurance requirements
5	<b>Contractor Self Monitoring:</b> Identified through the Contractor's own monitoring methods, as described in the Service Delivery Plans. Including the analysis of complaints
6	<b>Authority Audit:</b> Identified through the Authority's audit - validation checks of Contractor's data, random visits and deliberate testing (including Audit by an independent technical advisor.

### 1.1. Performance Failures<sup>18</sup>

Deductions for Performance Failures shall be calculated in accordance with the Payment Mechanism, the table below has been extracted from the Payment Mechanism for ease of reference.

Priority Category	Service Failure Deduction for Event (E) Standards	Service Failure Deduction per Reporting Cycle for Periodic (P) Standards
Low	[£5]	[£50]
Medium	[£10]	[£75]
High	[£20]	[£100]
[Super]	[£50]	[£250]

### 1.2. Response and Rectification Times<sup>19</sup>

Where Rectification applies (as identified in the Performance Standards Table) the Contractor shall Respond and Rectify the failure in accordance with the timescales indicated in the table below, and failure to do so shall be treated as a Performance Failure.

Response Category	Response Period	Rectification Period	Description
Urgent	[1] Hour	[4] hours or, where a Temporary Rectification has been carried out within [1] hours, [4] Core School Hours	A Performance Shortfall that gives rise to an immediate threat to Health & Safety of any person, but does not render the area Unavailable

<sup>18</sup> Deduction Levels should be set on a project by project basis, and should be calibrated in line with SOPC Guidance

<sup>19</sup> Response & Rectification timescales should be set on a project by project basis, and must take account of the cost implications of setting response times that will require the Contractor to base staff on site during all Core Hours in order to avoid deduction

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Important	[4] Hours	[8] Hours or where a Temporary Rectification has been carried out within [4] hours, [8] Core School Hours	A Performance Failure that causes disruption to the Authority, Authority Service Providers or Users but does not render the area Unavailable, nor give rise to a threat to the health & safety of any person.
Routine	[8] Hours	[8]Core School Hours	A Performance Failure that is neither Urgent nor Important.

**The category to be applied should be determined at the point of failure, and based upon the nature of the failure itself, and is not a matter of Authority or Contractor choice.**

Performance Standard	Performance Requirement	Priority Category	Periodic (P) or Event (E) Standard	Rectification Applies (Y or N)	Monitoring Frequency	Monitoring Method (s)	Definition of Failure
Post Occupancy Evaluation							
PS1	Post Occupancy Evaluation	[High]	P	N	Annual	2	Failure to carry out the activities identified in Soft Landings, Post Occupancy Evaluation and Building Performance Evaluation Requirements in accordance with 2.3.29 and paragraph 2.4.
PS2	Post Occupancy Evaluation Report	[High]	P	N	Annual	2	Failure to provide the Post Occupancy Evaluation report within [30] Business Days of relevant Survey Date;
PS3	Performance In Use Standards	[High]	P	Y	Per Area	2	Failure of an area to meet all the relevant PIU Standards at the point of checking. Failure to check all the relevant PIU Standards in any area within [90]Business Days of Service Commencement or Annually
Management							
PS4	Service Delivery Proposals	[High]	P	N	Annually	2	Failure to provide any updated

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Performance Standard	Performance Requirement	Priority Category	Periodic (P) or Event (E) Standard	Rectification Applies (Y or N)	Monitoring Frequency	Monitoring Method (s)	Definition of Failure
	and associated Plans						Service Delivery Proposal or Plan within [3] Business Days of the due date
PS5	Changes to Service Delivery Proposals	[Medium]	E	N	Per Event	5	Failure to provide the Authority with notice of any changes [5] Business Days prior to the change taking effect.
<b>Staff &amp; Training</b>							
PS6	Staff Checks	[Medium]	E	N	Per event	5	Each incident of Staff being at the Facility who have not undergone the required checks
PS7	Soft Services and School Training	[Medium]	P	N	Per Activity	2, 5	Each failure to carry out Training activities within [5] Business Days of the time scheduled in the Soft Services and School Training Plan.
PS8	Staff Induction	[Medium]	P	N	Annual	5	Failure to produce up to date induction programme within [5] Business Days of a request from the School Representative
PS9	Staff behaviour & appearance	[Low]	E	N	Per Event	5, 6	Each incident of non-compliance with the requirements of paragraph 1.9.5
<b>Communications Contingency Planning</b>							
PS10	Disruption	[High]	E	N	Per Event	5	Each incident of causing disruption to the School without pre-agreed written consent.

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Performance Standard	Performance Requirement	Priority Category	Periodic (P) or Event (E) Standard	Rectification Applies (Y or N)	Monitoring Frequency	Monitoring Method (s)	Definition of Failure
	Authority Representative) prior to carrying out any Services that may cause disruption to the School in accordance with paragraph 1.10.2.5						
PS11	Access to Work System	[High]	E	N	Per Event	1, 5	Each incident of work being carried out without the appropriate Access to Work
PS12	Meeting Attendance	[Medium]	P	N	Monthly	5, 6	Failure to attend meetings as agreed
PS13	Communications Plan	[Medium]	P	N	Annually	2	Failure to provide the updated Communications Plan within [3] Business Days of the due date
PS14	Contingency Plan	[Medium]	P	N	Annually	2	Failure to provide the Contingency Plan within [3] Business Days of a request from the School or Authority Representative
PS15	Contingency Plan Implementation	[Medium]	P	N	Per Event	2	Each failure to implement the Contingency Plan when necessary
Health & Safety, Quality & Environment							
PS16	Health & Safety Plan	[High]	P	N	Annually	2	Failure to provide an up to date Health & Safety Plan within [3] Business Days of a request from the Authority Representative
PS17	Health & Safety Implementation	[High]	E	N	Per Event	4, 5, 6	Each failure to deliver the Services in accordance with Health & Safety legislation; and/or each failure to

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Performance Standard	Performance Requirement	Priority Category	Periodic (P) or Event (E) Standard	Rectification Applies (Y or N)	Monitoring Frequency	Monitoring Method (s)	Definition of Failure
							implement the Health & Safety Plan.
PS18	Fire Safety Management	[High]	E	N	Per Event	1, 4, 5, 6	Each failure of fire safety systems to comply with Law, Good Industry Practice, the Service Quality Standards and the Fire Safety Policy
PS19	Fire Drills	[Medium]	P	N	Bi-Annually	5, 6	Failure to provide assistance when requested by the Authority Representative given [5] Business Days notice
PS20	Quality Management Plan	[High]	P	N	Annually	2	Failure to provide an up to date Quality Management Plan within [3] Business Days of a request from the School Representative or Authority's PS21 Representative.
PS21	Quality Management Plan Implementation	[Medium]	E	N	Per Event	5, 6	Each failure to deliver the Services in accordance with Quality Management Plan.
PS22	Environmental Management Plan	[High]	P	N	Annually	2	Failure to provide an up to date Environmental Management Plan within [3] Business Days of a request from the Authority or School Representative
PS23	Environmental Management Plan Implementation	[Medium]	E	N	Per Event	5, 6	Each failure to deliver the Services in accordance with Environmental Management Plan.

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Performance Standard	Performance Requirement	Priority Category	Periodic (P) or Event (E) Standard	Rectification Applies (Y or N)	Monitoring Frequency	Monitoring Method (s)	Definition of Failure
	Services in accordance with paragraph 1.13.						
PS24	Water Quality & Efficiency Plan	[High]	P	N	Annually	2	Failure to provide an up to date Water Quality and Efficiency Plan within [3] Business Days of a request from the Authority Representative
PS25	Building Users' Guide	[Medium]	E	N	Per Event	2	Failure to produce an up to date Building Users' Guide within [5] Business Days of the requirement pursuant to paragraph 2.2.5.
Helpdesk Services							
PS26	Helpdesk Availability	[Medium]	P	N	Daily	1	Failure to provide the Helpdesk on a School Day
PS27	Out of Hours Helpdesk	[Medium]	P	N	Daily	1, 2	Failure to provide out of hours Helpdesk as required by paragraph 2.1.3.
PS28	Helpdesk Operating Procedures	[Low]	E	N	Per Event	1	Each failure to handle Helpdesk calls and/or maintain Helpdesk records in accordance with the requirements
PS29	Helpdesk Response Times	[Low]	E	N	Monthly	1	Failure to demonstrate on a monthly basis that [90%] of Helpdesk calls have been answered within timescales specified in paragraph 2.1.5.
PS30	Helpdesk "Read Only" Access	[Low]	E	N	Monthly	1, 6	Failure to provide "read only" access to helpdesk records within [2] Business Days of a request from the Authority or School Representative

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Performance Standard	Performance Requirement	Priority Category	Periodic (P) or Event (E) Standard	Rectification Applies (Y or N)	Monitoring Frequency	Monitoring Method (s)	Definition of Failure
Performance Monitoring, Reporting & Record Keeping							
PS31	Performance Monitoring	[Low]	E	N	Per Event	1, 2	Each failure of the Contractor to monitor performance
PS32	Monthly Review Report	[Medium]	P	N	Monthly	5, 6	Failure of the Contractor provide the Monthly Review Report within [5] Business Days of the end of each Contract Month
PS33	Contractor's Annual Services Reports	[High]	P	N	Annual	5, 6	Failure of the Contractor provide the Contractor's Annual Services Report within [10] Business Days of the end of each Contract Year
PS34	Record Keeping	[High]	P	N	Per request	2, 6	Each failure of the Contractor to produce any relevant information or compliant records within [5] Business Days of a request from the Authority Representative
PS35	Ad Hoc Reporting	[Medium]	P	N	Per request	5, 6	Each failure of the Contractor produce any required information or reports within [5] Business Days of a request from the Authority Representative
Maintenance and Lifecycle							
PS36	Five Year Maintenance Plan	[High]	P	N	Annual	2	Failure to provide the updated 5 year Maintenance Plan within [3] Business Days of the due date
PS37	Schedule of Programmed Maintenance	[High]	P	N	Annual	2	Failure to provide the updated Schedule of Programmed Maintenance within three (3)

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Performance Standard	Performance Requirement	Priority Category	Periodic (P) or Event (E) Standard	Rectification Applies (Y or N)	Monitoring Frequency	Monitoring Method (s)	Definition of Failure
	accordance with clause 23 and paragraph 2.6.8						Business Days of the due date
PS38	Programmed Maintenance	[High]	E	N	Per Event	1, 2	Each failure to complete a Programmed Maintenance task within [30] Business Days of the date identified in the Schedule of Programmed Maintenance
PS39	Lifecycle Schedule	[High]	P	N	Annual	2	Failure to provide the updated Lifecycle Schedule within [3] Business Days of the due date
PS40	Lifecycle Replacement Tasks	[High]	E	N	Per Event	1, 2	Each failure to complete a Lifecycle replacement task within [30] Business Days of the date identified in the Lifecycle Schedule
PS41	Statutory Testing & Inspection	[High]	E	N	Per Event	4, 1	Each failure to complete a Statutory testing task within [5] Business Days of the date identified on the Schedule of Programmed Maintenance.
PS42	Reactive Maintenance	High (Where the fault is Urgent) Medium (where the fault is Important) Low (where the fault is Routine)	E	Y	Per Event	1	Each failure to Rectify the fault within the appropriate Response and Rectification times.
PS43	Compliance with Service Quality Standard (SQS) as	High	E	Y	Per Event	1,3	Failure to respond to SQS failure, issue a report on course of action and

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Performance Standard	Performance Requirement	Priority Category	Periodic (P) or Event (E) Standard	Rectification Applies (Y or N)	Monitoring Frequency	Monitoring Method (s)	Definition of Failure
	set out in Annex 2						failure to carry out proposed course of action.
PS44	Actions implemented as set out in the initial report to rectify SQS failure	High	E	Y	Per Event	2	Failure to implement action to rectify SQS failure as set out in initial report or provide updated report setting out remedial action.
PS45	Contractor undertakes work to the appropriate quality standard which rectifies failure in the agreed timescale or on discovery of new cause of failure issues an updated report setting out the remedial action to be taken in a fair and reasonable timescale	High	E	Y	Per Event	2	Failure to rectify SQS failure in accordance with initial or updated report.
PS46	Prepare and comply with the Soft Services Interface Protocol		E	Y	Monthly		Failure to comply with the Soft Services Interface Protocol
Energy & Utilities							
PS47	Energy and Utilities Management Plan (including efficiency)	[High]	P	N	Annual	2	Failure to provide the updated Energy and Utilities Management Plan within [3] Business Days of the due date
PS48	Operating Efficiently	[Medium]	E	N	Monthly	2, 5	Failure to demonstrate that

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Performance Standard	Performance Requirement	Priority Category	Periodic (P) or Event (E) Standard	Rectification Applies (Y or N)	Monitoring Frequency	Monitoring Method (s)	Definition of Failure
	minimise Energy and Utilities consumption in accordance with paragraph 2.7.13						operational inefficiencies identified in the Energy and Utilities Efficiency Plan have been rectified
PS49	Energy & Utilities Consumption Monitoring	[High]	P	N	Monthly	2, 5	Failure to provide the monitor and report energy and utilities consumption to the Authority Representative within [5] Business Days of the end of the month
PS50	Energy Efficiency Assistance	[Medium]	P	N	Per request	5, 6	Each failure to attend energy forums and/or provide assistance to the Authority within [5] Business Days of a request from the Authority Representative
PS51	Indoor Air Quality	[High]	E	Y	Per event	2,5,6	Each failure to comply with the PIU Targets specified in paragraph 1.1 of Annex 1 of this SOS.
PS2	Acoustics	[Medium]	E	Y	Per event	2,5,6	Each failure to comply with the PIU Targets specified in paragraph 1.2 of Annex 1 of this SOS. Penalties do not apply where failure is due to noisy equipment provided by the School. In this case Contractor is to advise only.
PS53	Lighting Quality	[Medium]	E	Y	Per event	2,5,6	Each failure to comply with the PIU Targets specified in paragraph 1.3 of Annex 1 of this SOS.
PS54	Internal Air Temperature	[High]	E	Y	Per event	2,5,6	Each failure to comply with the PIU Targets specified in paragraph 2.1 of Annex 1 of this SOS.
PS55	Energy and Utilities	[Medium]	P	N	Monthly	2,6	Each failure to provide monthly and

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Performance Standard	Performance Requirement	Priority Category	Periodic (P) or Event (E) Standard	Rectification Applies (Y or N)	Monitoring Frequency	Monitoring Method (s)	Definition of Failure
	Monitoring and Reporting						quarterly reports to the School and the Authority on Energy and Utilities consumption.
PS56	Utilities Interruptions	[Medium]	E	N	Per event	1	Each incident of allowing Utilities interruptions without receiving prior consent from the Authority
PS57	Building Controls and Energy Management Systems	[Medium]	P	N	Daily	2, 5, 6	Failure to manage, test and operate building controls and energy management systems effectively
PS58	Utilities Invoice Verification	[Low]	P	N	Monthly	5	Failure to take meter readings or verify utilities invoices against meter readings and confirm their accuracy to the Authority Representative within [5] Business Days of receipt of Utilities invoices.
PS59	Display Energy Certificate	[Low]	P	N	Annual	5, 6	Each failure to produce a Display Energy Certificate or keep it up to date
PS60	Water run-off and sewage	[High]	E	Y			
[Elective Services]							
PS61	[Elective Services]	[Medium]	P	N	[Monthly]		[Failure to provide Elective Services to the standard required.]

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**Appendix B - Interface Issues and Responsibility Matrix for Services / Soft Services Activities**

The success of the interface issue will be dependent on effective communication between both parties.

The following table sets out some of the interface issues that may arise between the Contractor and the School. The table will be developed during the School Engagement Meeting and as part of the Soft Landings Approach and will form part of the management Service Delivery Proposal produced.

The Contractor and the School should work together to deliver a best practice resource efficient procurement and operation of ICT, seeking innovative approaches to reduce energy consumption of servers, server rooms, and other equipment, and sustainable disposal of equipment, saving costs and reducing resource consumption.

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**FM and School Interface Issues**

Task/ Responsibility	Interface Issues	Proposed Approach
Over-arching Management Service and co-ordination of Services	Both parties have an equal responsibility to ensure effective communication in relation to planned events, service delivery arrangements, Reactive Maintenance, Routine Maintenance and Lifecycle Asset Replacement. The key objective of the Services and Soft Services is to support the facilities that provide learning for the young and failure to communicate appropriately may ultimately have a detrimental effect on the delivery of the educational curriculum. In addition to this critical objective, the provision of these services in a resource efficient manner is also necessary, to reduce costs and wastage for Schools. Operations which consume less energy, water, and materials, and produce less waste will help to ensure more budget is available to deliver	<p>Development of a communication strategy that clearly outlines the levels and responsibility for communication by both the School and Contractor, methods of communication, and planned frequency. This strategy will cover but not be restricted to:</p> <ul style="list-style-type: none"> <li>• Communication matrix identifying key interfaces;</li> <li>• Soft landings responsibilities matrix (see BSRIA guidance);</li> <li>• Frequency of meetings/format of meetings/key objectives;</li> </ul>

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Task/ Responsibility	Interface Issues	Proposed Approach
	education.	<ul style="list-style-type: none"><li>• Communication route to students; and</li><li>• Escalation procedures, etc.</li></ul>
	Health and safety requirements must be developed in conjunction with the School and Soft Services Provider and plans should include co-ordinated responses to Fire evacuation and disaster management.	Joint health and safety plan to be agreed and signed by all parties.

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Task/ Responsibility	Interface Issues	Proposed Approach
	<p>The School Premises/ Caretaking team will need to understand the requirement for control of persons on site and operate a Access to work system implemented by the Contractor with suitable training.</p> <p>Required Period – The hours of operation are included in the Payment Mechanism. The Schedule of Programmed Maintenance and Lifecycle Asset Replacement plan have been produced on that basis.</p>	<p>Agree access protocol for the Contractor’s staff and subcontractors, including the Access to Work Protocol.</p>
Helpdesk	<p>The Contractor is responsible for providing the Helpdesk. The Helpdesk should be used to report all maintenance faults in order that the Response and Rectification times can be recorded. There will be a number of options for contacting the Helpdesk i.e. Phone, email, sms, etc.</p>	<p>A Helpdesk guide will be produced explaining the services the helpdesk will provide and the information required from the School to ensure that asset history is maintained.</p> <p>The Contractor will discuss and agree the appropriate reporting procedure with the School Premises Team. This will include a feedback loop to ensure that all</p>

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Task/ Responsibility	Interface Issues	Proposed Approach
		<p>outcomes are captured and included in future asset management.</p> <p>Where maintenance tasks are undertaken by the School Premises Team the School must complete a task sheet and submit this to the Helpdesk.</p>
Cleaning	<p>The management of cleaning services will be retained by the School. The Contractor will require liaison with the Caretaking/Cleaner team on cleaning methodology for some key building fabric and fittings, to ensure optimum lifecycle performance i.e. if carpet and vinyl is not cleaned in line with manufacturers' instructions, its life can be greatly reduced, also scuffs to wall finishes may need first line attendance by cleaners and School Premises Team.</p> <p>Cleaning should also be planned to be</p>	<p>The standard of cleaning conducted by the School shall in line with the manufacturers' O&amp;M manuals. The Contractor is not responsible for the performance of the cleaning service but will need to identify where this service is affecting the proposed life cycle replacement of hard fabric and fittings for which he is responsible.</p> <p>The Contractor and the School should work together to deliver a</p>

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<b>Task/ Responsibility</b>	<b>Interface Issues</b>	<b>Proposed Approach</b>
	sustainable and resource efficient, using chemicals of the lowest possible toxicity, and planning regimes to reduce water consumption and reduce the need for extended hours of building operation (having the lights on for longer whilst cleaning takes place uses energy).	best practice resource efficient operation, seeking innovative approaches to reduce costs and save resource consumption.  The School Premises Team and the Contractor will conduct regular site inspections covering general maintenance and HEALTH AND SAFETY matters. Any issue relating to concern over cleaning performance or associated services should be identified as part of this process.
Waste	The management of waste (excluding effluent and hazardous waste disposal) will be retained by the School. The Contractor will require liaison with the	The standard of waste management conducted by the School shall be in line with Good Industry Practice. This will

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Task/ Responsibility	Interface Issues	Proposed Approach
	<p>Caretaking/Cleaner team on removal of waste to ensure no waste is permitted to accumulate. Neither general storage nor waste is to be stored in plant rooms, etc.</p> <p>The Contractor will operate a Maintenance Waste Efficiency management plan for waste produced by their activities on site. This will use best practice innovative solutions to reduce waste produced, and follow the Defra waste hierarchy (reducing materials used, reducing waste, increasing recycling, and ultimately reducing waste sent to landfill). Waste weight data will be collected by the Contractor for their waste, and this data will be combined with School waste data.</p>	<p>involve the use of industry guidance to provide a best practice resource efficient operation, seeking innovative approaches to reduce costs and save resource consumption.</p> <p>The School waste management process will use Defra's waste hierarchy.</p> <p>Data of weight in Kg will be collected for different waste streams collected by the School. The School will aim to increase the segregation of waste on site (e.g. different types of bins and recycling).</p> <p>The waste management</p>

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Task/ Responsibility	Interface Issues	Proposed Approach
		<p>Contractor will be set Performance Standards and targets for waste reduction by the School. The Contractor will then work with these parties to contribute wherever possible to achieving these targets – contributing to data collection, and offering innovative solutions to waste reduction.</p>
<p>Pest Control</p>	<p>The management of pest control will be retained by the School.</p> <p>The Contractor will require liaison with the Caretaking/Cleaner team on pest control methodology for building fabric and grounds i.e. pest control is proactive so pests are less likely to chew through cables or dig up plants, grass.</p>	<p>The standard of pest control conducted by the School shall be in line with Good Industry Practice.</p> <p>The School Premises Team and the Contractor will conduct regular site inspections covering general maintenance and HEALTH AND SAFETY matters. Any issue</p>

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Task/ Responsibility	Interface Issues	Proposed Approach
	<p>The Contractor is responsible for maintenance and if the building is not properly maintained this could give pests the opportunity to enter the buildings through gaps left, etc. causing the School Premises Team an issue.</p> <p>The Contractor will be required to liaise with the Caretaking team on maintenance methodology to ensure areas are not left exposed to pest invasion.</p>	<p>relating to pest control should be identified as part of this process.</p>
Maintenance	<p>The Contractor will be responsible for the delivery of Reactive Maintenance, Routine Maintenance and Lifecycle Asset Replacement.</p>	<p>Asset register of items will be produced and logged onto the Helpdesk. Out of this a Schedule of Programmed Maintenance will be produced. The Schedule of Programmed Maintenance will detail the tasks to be undertaken</p>

Task/ Responsibility	Interface Issues	Proposed Approach
	<p>The School Premises Team may be able to carry out certain Hard FM duties and provide first line attendance on reactive calls, such as the replacement of lamps or a heating failure.</p> <p>The School's Premises Team will need to understand the basis of the performance management system and his/his team's role in not obstructing the Contractor in meeting the required Response and Rectification times.</p> <p>School Premises Team to record all Reactive Maintenance tasks onto the helpdesk.</p> <p>Premises Team undertaking repairs but not reporting back to the helpdesk result in this</p>	<p>and details of these tasks will be shared with the School Premises Team.</p> <p>When works are complete a worksheet will be completed by the School Premises Team and a signature obtained. Details will be fed back to the helpdesk and the Schedule of Programmed Maintenance updated.</p> <p>The School Premises Team will be given training to undertake these tasks and provided with the necessary risk assessments and method statements.</p> <p>The School and Contractor will work together to create the Maintenance Materials and</p>

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<b>Task/ Responsibility</b>	<b>Interface Issues</b>	<b>Proposed Approach</b>
	<p>information not being logged against the asset history and hence the asset records will not provide a true reflection of condition, history or life expectancy.</p> <p>The Contractors and the School will be working together to deliver a best practice resource efficient operation, seeking innovative approaches to reduce costs and save resource consumption in maintenance.</p>	<p>Waste Efficiency Management Plan – to ensure cost efficient maintenance, and the reduction in materials (and energy) consumed and waste produced in maintenance.</p> <p>Liaison with waste management at the School will likely be necessary to ensure that maintenance waste data is properly collated, and more significant waste quantities produced in cyclical replacement is managed in an efficient way (sending as much as possible to re-use or recycling).</p>
		<p>The Contractor will provide training on the performance management system.</p>

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Task/ Responsibility	Interface Issues	Proposed Approach
		<p>The Premises Team will be able to contact the helpdesk via email, phone, sms and facsimile. They will chase any outstanding tasks until completed. Regular reports will be provided to the Facilities Manager, School Premises Team and School on levels of tasks and completion times. These statistics will be benchmarked to determine if a lower number of reactive tasks are being recorded and the probable reasons why.</p>
Loose FF&E	<p>The repair and replacement of loose FF&amp;E not classified as Group 1 will be retained by the School. The Contractor will be required to liaise with the Caretaking Team on repair and replace methodology to ensure optimum lifecycle performance of items it impacts on i.e. if rubber feet are worn and</p>	<p>The standard and frequency of repair conducted by the School shall be in line with the manufacturers O&amp;M manuals. This will ensure that maintenance and lifecycle are not adversely</p>

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Task/ Responsibility	Interface Issues	Proposed Approach
	<p>damaging carpet and vinyl its life can be greatly reduced.</p> <p>To this end, the Contractor and the School should work together to deliver a best practice resource efficient provision, maintenance, and disposal of FF&amp;E, seeking innovative approaches to reduce costs and save resource consumption. In particular, ad-hoc replacement of furniture (e.g. occasional broken chair) creates complications for sustainable disposal (for re-use or recycling). The composition of much FF&amp;E (made of metals, rubbers, plastics, wood, foams, adhesives etc.) complicates disposal.</p>	<p>affected.</p> <p>The Contractor and the School should work together to deliver a best-practice, resource-efficient operation, seeking innovative approaches to reduce costs and ensure Defra's waste hierarchy is followed when disposing of FF&amp;E, both ad-hoc and in large refurbishments.</p>

Task/ Responsibility	Interface Issues	Proposed Approach
<p>ICT equipment and infrastructure</p>	<p>Schools will need to continue to use their existing ICT solution in the new building. New infrastructure (passive, active and associated components) will be provided by the Contractor. A summary of what will be included within this infrastructure can be found in the PSBP ICT Responsibility matrix. The Responsibilities matrix shows for each ICT system whether the School or Contractor will:</p> <p><b>Specify</b> – determine the technical specification of the solution to meet stated requirements;</p> <p><b>Supply</b> – procure the equipment and services to provide the solution;</p> <p><b>Install</b> – install and commission the equipment;</p> <p><b>Test</b> – confirm the correct working of the equipment and services of the solution; and</p> <p><b>Integrate</b> – School specific configuration, including implement any interconnections between systems and applications. Where shared between School and BC responsibility sits with the School but the Contractor will provide support including limited resources. The package of support provided by the</p>	<p>The PSBP ICT Responsibilities matrix sets out the responsibilities for the following ICT systems:</p> <ul style="list-style-type: none"> <li>• Server Room &amp; Distribution Rooms;</li> <li>• Network infrastructure - passive and active;</li> <li>• Local Technology – Core;</li> <li>• Local Technology – AV;</li> <li>• Automated Systems;</li> <li>• Building Control and Energy Management Systems;</li> <li>• Fire Alarm/Detection; and</li> <li>• Telephony, Internet and TV signal.</li> </ul>

Task/ Responsibility	Interface Issues	Proposed Approach
Security systems	<p>The School Premises Team will open and close the Schools and provide security patrols during School occupation. They will monitor security and access control systems without amending settings. In addition they will also assist with the day-to-day operation of external CCTV, Building Controls and Energy Management Systems and Access control, providing first line attendance and contacting the Contractor for specialist support.</p> <p>Internal CCTV systems are the responsibility of the School.</p>	<p>Agreed training may be provided to the School Premises Team on specialist equipment. This will ensure that staff are competent and can work safely.</p>
	<p>The School Premises Team may be required for out-of-hours attendance to provide access to the Contractor's staff.</p>	<p>The Contractor to be advised of on call rota so School Premises Team can be contacted if necessary.</p>

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Task/ Responsibility	Interface Issues	Proposed Approach
	<p>Access required for Routine, Lifecycle Asset Replacement and Reactive Maintenance purposes to all areas.</p>	<p>Agree access protocol for the Contractor's staff and sub-contractors, including the the Access to Work Protocol.</p>
<p>Utilities</p>	<p>The Contractor will monitor utilities consumption and report to the School.</p> <p>The Contractor and the School will work together to deliver the Energy and Water Efficiency management plans and targets for resource consumption. A best practice resource efficient operation with all parties seeking innovative approaches to operation will reduce costs and save resource consumption.</p>	<p>The Contractor will provide training on utilities management and operation of Building Controls and Energy Management Systems.</p> <p>The Contractor will collate and analyse consumption data and present it to the School both annually and whenever immediately appropriate, to work together on initiatives to reduce</p>

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Task/ Responsibility	Interface Issues	Proposed Approach
		utility consumption (energy and water) and meet reduction targets and PSs.
Access to Work Protocol	The Contractor should use an "Access to Work Protocol" which ensures that the School premises team are aware at all times who is working on the sites and the nature and impact of that work. This process is a key component of operating a Health and Safety management system and ensures that all parties know where they stand with respect to responsibilities while on site.	There needs to be discussion on how best to operate the "Access to Work Protocol" for the Schools.
Health and Safety	Both parties will be responsible for Health and Safety within their own areas of responsibility and will have a duty of care to ensure safety of all users of the School.	The Contractor and the individual Schools will develop a joint Health and Safety plan clearly outlining areas of responsibility.

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<b>Task/ Responsibility</b>	<b>Interface Issues</b>	<b>Proposed Approach</b>
	There must be a clear demarcation of responsibilities particularly around areas where there is a combined approach to delivering services, i.e. Routine Maintenance, Reactive Maintenance and Lifecycle Asset Replacement.	Health and Safety plans compiled by both the Contractor and the School should clearly outline any specific training that needs to take place to ensure that individuals from both parties are competent to carry out their responsibilities. Individual HEALTH AND SAFETY Plans must recognise other HEALTH AND SAFETY Plans
DDA (Disability Discrimination Act)	The School will retain responsibility for the management of DDA.	The Contractor will support the School in the meeting of statutory management obligations for DDA and will ensure that all their systems are compliant with Legislation.

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Task/ Responsibility	Interface Issues	Proposed Approach
Fire Safety Management	<p>The School will retain responsibility for Fire Safety Management including Fire Risk Assessment.</p> <p>The Contractor will be responsible for the fire fighting equipment and School Premises Team will complete statutory tests on fire systems and update log books.</p>	<p>The Contractor will support the School in the meeting of statutory management obligations by maintaining the written Fire Safety Management Plan and will ensure that all systems are statutory compliant.</p> <p>A list of Routine Maintenance tasks to be undertaken by The Contractor and School Premises Team is to be included in the Schedule of Programmed Maintenance and the Fire Safety Management Plan.</p> <p>The School Premises Team will be given training to undertake these tasks and provided with</p>

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Task/ Responsibility	Interface Issues	Proposed Approach
		the necessary risk assessments and method statements.
Insurance	All parties must hold the appropriate insurances for the services that they are responsible for undertaking.	This will be established during the mobilisation phase but must appear on the routine agenda at least on a 6-monthly basis to ensure that appropriate insurances are updated.
Grounds Maintenance	<p>Grounds Maintenance will come under the responsibility of the School. Liaison between the Contractor and the School will permit works to be carried out in sympathy with School requirements.</p> <p>The School Premises Team will be expected to undertake the following tasks:</p> <ul style="list-style-type: none"> <li>• Daily litter collection; emptying of</li> </ul>	<p>The School Premises Team and The Contractor will have regular informal and formal meetings to discuss planned/reactive Grounds Maintenance works and lifecycle replacement programmes.</p> <p>A list of Routine Maintenance tasks to be undertaken by the Contractor/School Premises Team shall be included in the</p>

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<b>Task/ Responsibility</b>	<b>Interface Issues</b>	<b>Proposed Approach</b>
	<p>bins;</p> <ul style="list-style-type: none"><li>• Remove litter and leaves from gullies; and</li><li>• Snow and ice clearance and gritting of all access roads and paths.</li></ul>	<p>Schedule of Programmed Maintenance. The School Premises Team will be given training to undertake these tasks and provided with the necessary risk assessments and method statements.</p>
		<p>The Contractor and the School should work together to deliver a best-practice, resource-efficient operation, seeking innovative approaches to reduce costs and save resource consumption in grounds maintenance. Green waste should be composted.</p>

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<b>Task/ Responsibility</b>	<b>Interface Issues</b>	<b>Proposed Approach</b>
Caretaking and Portering	<p>Day to day programmed maintenance and minor repair work to building and components.</p> <p>There are a number of the first line remediation / maintenance tasks that the School Premises Team will be required to undertake.</p> <p>The School Premises Team will require the necessary PPE and tools to undertake Programmed and Reactive Maintenance.</p>	<p>A list of typical Reactive Maintenance tasks will be agreed with the School.</p> <p>A list of PPM tasks to be undertaken by the School Premises Team is to be included in the Schedule of Programmed Maintenance.</p> <p>School Premises Team will be given training to undertake these tasks and provided with the necessary risk assessments and method statements.</p> <p>The Contractor will identify the PPE and tools required for maintenance purposes. These</p>

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Task/ Responsibility	Interface Issues	Proposed Approach
		will be provided by the School.
Catering	The management of catering services will be retained by the School.	The School's Premises Team and The Contractor will have regular informal and formal meetings to discuss access arrangements for maintenance.
	The Contractor will require liaison with the Schools' Premises Team /Catering teams on cooking, cleaning (daily and periodic), and usage methodology for the catering equipment.	Caterers to use and clean equipment in line with manufacturers' instructions and Good Industry Practice. School to be able to provide evidence that has been undertaken. Caterers to adopt "good practise" and minimise contributing to maintenance costs, e.g. fats & oils

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Task/ Responsibility	Interface Issues	Proposed Approach
		not disposed of via drains.
	<p>The Contractor will work closely with the Catering team to ensure that they can undertake both responsive and Programmed maintenance on Catering equipment and associated plant within the agreed response times.</p> <p>All Contractors and the School will be working together to deliver a best practice resource efficient operation of catering, seeking innovative approaches to reduce the very high costs of food wastage, and saving energy and water.</p>	<p>Schedules for programmed maintenance will be in consultation with the Schools and as far a possible be scheduled out of hours and during holiday periods.</p> <p>All Contractors to work with the School to offer and implement innovative solutions to reduce food wastage and kitchen energy and water consumption – and help the catering Contractor to meet Performance Standards for food waste reduction set by the School.</p>

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Task/ Responsibility	Interface Issues	Proposed Approach
	Where applicable, administrative management of any Cashless Catering systems will be the responsibility of the School.	

Bidders are required to develop a Soft Services Interface Protocol that will identify, manage and record any interface issues, including maintaining a co-operative working relationship with the Schools that may arise where Schools or Local Authorities retain responsibility for other services.

The Contractor has the lead responsibility for all Hard Services and will act as the main interface for the School Representatives as notified to the Contractor from time to time, and all other key stakeholders. As the Contractor is unlikely to be based on site and the Schools Premises Team is likely to be the point of contact for all Services-related visitors and tradesmen. We would expect their role to include the operation of an Access to Work Protocol so that they know and can communicate with who is working on site, the nature of their work, and will ensure that the appropriate surveys and risk assessments have taken place. The Contractor will check this documentation when visiting site. A comprehensive understanding of the interface between Services, Soft Services and ICT is a fundamental requirement from a Health and Safety perspective due to the need for test and inspections of statutory equipment such as fire alarms and the need for management plans to cover fire evacuation, fire warden training, log book record keeping and emergency lighting tests, etc.

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The following table provides a *draft* matrix of responsibilities:

Activity Description	School	Contractor	Commentary
<b><u>Cleaning</u></b>			
Floors	X		Cleaning by Schools.
Walls	X		If graffiti can be removed through cleaning.
Walls		X	If graffiti cannot be removed by cleaning.
Windows	X		Cleaning.
Windows		X	Repairs.
Regular Deep cleaning (Catering)	X		Contractor in attendance.
Annual Deep Clean (Catering)		X	
Cleaning of gutters and gullies	X		
Cleaning of internal drainage	X		
<b><u>Security</u></b>			
External CCTV Cameras	X		Monitoring
External CCTV Cameras		X	Maintenance

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Activity Description	School	Contractor	Commentary
Internal CCTV	X		See ICT responsibilities matrix
Keys	X		
Provision of Keys (Suiting)		X	
<b><u>Grounds maintenance</u></b>			
Line markings to grassed sports pitches	X		
Line markings to hard or synthetic sports pitches and play areas		X	
Maintenance of horticultural areas	X		
Trees and tree pruning	X		
Grass cutting	X		
Hedge trimming	X		
Water features	X		Planting.
Water features		X	Hard maintenance.
Walls and fences		X	
Snow and ice clearance inc. gritting	X		
Leaf collection / road and path sweeping	X		

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Activity Description	School	Contractor	Commentary
Control of weeds	X		
Composting	x		
<b><u>Health and Safety Legislation</u></b>			
Air conditioning systems		X	Annual Inspection.
Asbestos register and Asbestos Management Plan		X	Contractor must update if changes made to premises.
Car parking and vehicle / pedestrian segregation	X		Design by Contractor, managed by School.
Compulsory display of notices			To be agreed.
CDM Regulations 2007			As required under legislation
COSHH			Check on storage and use.
Disability Discrimination Act			Checks when changes made to the building.
Duct Hygiene (Air conditioning. Plenum Heating)		X	Inspection and testing and cleaning of ductwork.
Air filtration	X		School changes filters as required by interface agreement and Contractors

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Activity Description	School	Contractor	Commentary
			requirements.
Air filtration		X	Contractor maintains.
Electrical PAT		X	Portable testing inc School equipment.
Fixed Electrical Installations		X	Inspection and testing.
Emergency Lighting		X	Inspection and testing. Premises Team undertake monthly check.
Extraction Systems, inc fume cupboards			Local exhaust ventilation.
Fire Risk Assessment / Policy			
Fire Detection and Alarm Systems			Weekly Testing by School with formal quarterly and annual inspections by Contractor.
Fire Doors		X	Inspection. School reports any defects via help desk.
Fire Fighting Equipment		X	Contractor to carry out annual inspection and maintenance of extinguishers and fire sprinkler systems
First Aid Equipment (general School)	X		Inspection / replenishment.
First Aid Equipment (plant rooms)		X	

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Activity Description	School	Contractor	Commentary
Fuel Oil Storage		X	Inspection and maintenance.
Fuel Oil Delivery	X		To be received by School.
Gas safety / appliance / pipework		X	Inspection, servicing, testing and maintenance.
Glazing	X		Checks by School.
Glazing		X	Repairs by Contractor.
Hydrotherapy pools and swimming pools		X	Contractor retains responsibility for general maintenance and repair.
Hydrotherapy pools and swimming pools	X		Risk Assessment with School. Contractor trains School staff day to day operation and water quality checks.
Lifts and Hoists		X	Maintenance and inspection.
Lightning conductors		X	
Playground & Gymnasium equipment FIXED		X	Where not legacy.
Playground & Gymnasium equipment FIXED	X		Inspection and testing.
Tree Safety	X		School to report any damage to trees.

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Activity Description	School	Contractor	Commentary
Water Hygiene and Safety (e.g. Legionnaires Disease)	X		Risk Assessment, inspection and water quality check. School carries out weekly and monthly tests.
Water Hygiene and Safety (e.g. Legionnaires Disease)		X	Contractor carries out annual tests and maintenance.
<b><u>Miscellaneous</u></b>			
Maintenance of Sustainable Urban Drainage System (SUDS)			To be advised as per Contractor's solution. Dependent upon system design
Changing light bulbs	X		Stock of light bulbs / fittings to be provided by Contractor. School to replace as necessary if suitable solution for School to carry out. Disposal by Contractor.
Changing light bulbs		X	Bulk replacement and recycling to be part of Schedule of Programmed Maintenance by Contractor.
Playground & Gymnasium equipment NOT FIXED	X		

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Activity Description	School	Contractor	Commentary
Operating Manuals, Logbooks, Risk Assessments, Building Management Plans, Method Statements Provision		X	Initial responsibility for the production of O&M manuals, logbooks, risk assessments etc.
Operating Manuals, Logbooks, Risk Assessments, Building Management Plans, Method Statements (maintenance and updating)	X	[X]	Maintenance and updating School with assistance from Contractor.

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**Appendix C - Statutory Inspection, Testing and Maintenance Requirements**

Reference: Compliance monitoring [http://www.fedps.org.uk/compliance\\_monitoring.pdf](http://www.fedps.org.uk/compliance_monitoring.pdf)

The following table details the statutory testing required. All tests shall be undertaken by the Contractor unless specifically stated (highlighted in *RED Italics* below). Any Programmed Maintenance tasks that are to be carried out by the School do not supersede or replace the need for statutory testing; they are to promote routine operational testing and aid early identification of problems.

Item	Test Frequency	Regulation
Compressors, Pressure Vessels and Compressed Air	Annually, with suitable Written Scheme of Examination (WSE) in place. Inventory of Equipment maintained and up to date, examinations to be carried out by a competent Person.	Pressure System Safety Regulations 2000.
Emergency Lighting	<i>Monthly</i> , annually and 3-yearly tests basis in accordance with BS5266: Part 1: 1999.	Regulatory Reform Fire Safety Order (RRFOS) 2005.
Fixed Electrical Wiring Installation	5 year test (swimming pools annually) by the NICEIC registered Contractor.	Electricity at Work Regulations 1989.
Fire Safety Risk Assessment	Annually or sooner if there is a change in circumstances under the Regulatory Reform (Fire Safety) Order 2005.	Regulatory Reform Fire Safety Order (RRFOS) 2005.
Fire Alarms	Quarterly, annually, 3-yearly inspections by a competent electrician in accordance	Regulatory Reform Fire

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	with BS 5839 Part 1: 1988. <i>Weekly testing by Schools</i>	Safety Order (RRFOS) 2005.
Fire Fighting Equipment (including extinguishers, fire blankets and hoses)	All Portable fire fighting equipment must be serviced annually by a specialist Contactor and recorded in a log book.	Regulatory Reform Fire Safety Order (RRFOS) 2005.
Gas Boilers	Annual servicing and testing of gas appliances by a Specialist Gas Safe registered Contractor.	Gas Safety (Installation and Use) Regulations 1998.
Gas Appliances Safety Check (including catering equipment)	Annual servicing and testing of gas appliances by a Specialist Gas Safe registered Contractor.	Gas Safety (Installation and Use) Regulations 1998.
Gas soundness testing	Annual.	Gas Safety (Installation and Use) Regulations 1998.
Lift Insurance	6-monthly checks and certification by the Insurance Company.	The Lifting Operations and Lifting Equipment Regulations 1998.
Lifts (Passenger)	6-monthly as detailed by the manufacture. Suitable Written Scheme of Examination (WSE) in place. Planned Preventative Regime in place. Annual, 5-year and 10-year tests by qualified person.	The Lifting Operations and Lifting Equipment Regulations 1998.
Lifts ( Non Passenger)	6-monthly as detailed by the manufacture. Suitable Written Scheme of	The Lifting Operations and Lifting Equipment

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	Examination (WSE) in place. Planned Preventative Regime in place. Hand powered service lifts and platforms hoists, annual checks, annual insurer's inspection, and a 5-yearly safety gear test in accordance with BS 5655 : Part 14 : 1995.	Regulations 1998.
Lifts (Powered Stair)	6-monthly as detailed by the manufacture. Suitable Written Scheme of Examination (WSE) in place. Planned Preventative Regime in place. Annual insurer's inspection, an annual Programmed Maintenance inspection in accordance with British Standard (BS) 5776: 1996.	The Lifting Operations and Lifting Equipment Regulations 1998.
Lightning Conductors	Every 11 months in accordance with BS 6651: 1999.	Health and Safety at Work Act etc, 1974.
Local Exhaust Ventilation (including Chimneys / Flues) and Fume Cupboards	Every 14 months or less, in accordance with manufacturer's guidance. Planned Preventative Regime in place.	Control of Substances Hazardous to Health (COSHH) Regulations.
Play Ground Equipment, Adventure Areas and Gym Equipment	Annual inspection and maintenance by a specialist company (as detailed by the Manufacturer). <i>In addition, schools should undertake a weekly visual inspection (to</i>	Management of Health and Safety at Work Regulations 1999 and Provision and Use of Work Equipment

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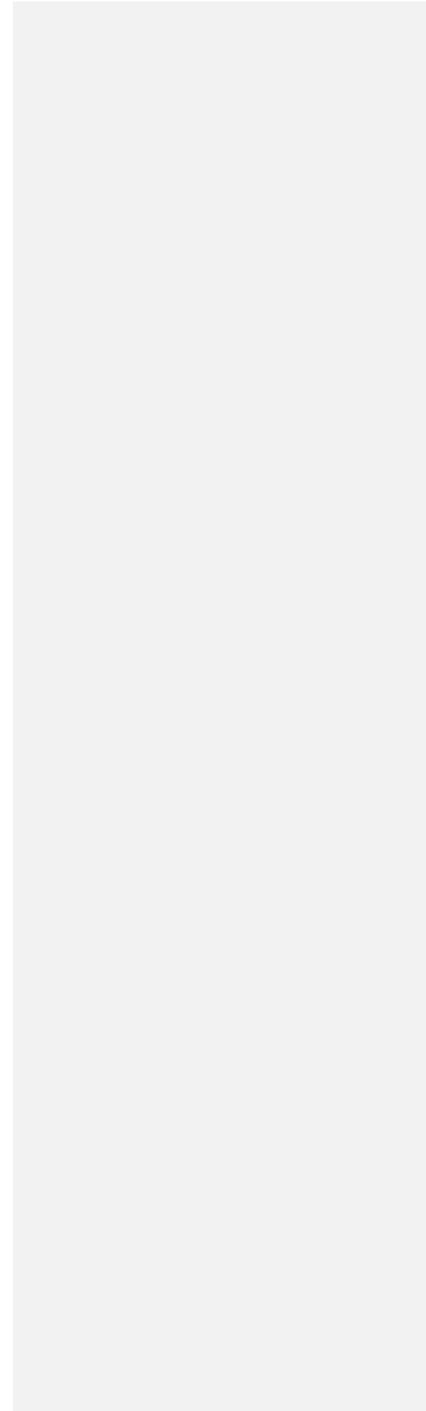
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		<i>check for loose bolts and screws etc).</i>	Regulations 1998.
Portable Appliance Testing	Appliance	Annual (desirable). All portable appliances must be tested at the correct frequency and then labelled, and dated to confirm the test in accordance with the IEE Code of Practice for Service Inspection and Testing Electrical Equipment.	The Electricity at Work regulations 1989.
Powered Doors	Pedestrian	6-monthly checks and annual test in accordance with BS7036: 1996 Parts 1, 2 and 3.	Management of Health and Safety at Work Regulations 1999.
Water Quality Sampling: Temperature	Quality	<i>Monthly temperature checks should be undertaken by the School, supported by an on-site risk assessment undertaken by a specialist in Legionella testing company.</i>  <i>Tests by School Staff as required by the Contractors Written Water Quality Policy document which is a requirement of the FOS</i>	Control of Substances Hazardous to Health (COSHH) Regulation and Approved Code of Practice & Guidance - The Control of Legionella Bacteria in Water Systems (L8).
Water Quality Sampling		Annually. Water tests need to be carried out and test results checked as required by Water Quality Policy document. Water risk assessment and control method to be reviewed every 2 years.	Water Act 1989, Water supply (water quality) Regulations 1994, and amended 1991 Food Safety Act.

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**Appendix D – Training Requirements****Training from Contractor**

The following table details the training that the Contractor must provide for School Premises Team and other School staff:

Training on new build system will be provided for the following areas.	Training for the Contractor staff	Training for the School Premises Staff	Training for the School Teaching Staff
Tour of the building(s) and grounds	?	?	?
Inspection of Externals/Facades etc	?	?	
Roof access, mansafe systems	?	?	
Location of Utility meters	?	?	
Plant and equipment relating to heating and hot water system i.e. boilers, isolation points	?	?	
Plumbing/Cold water system, isolation points	?	?	
Electrical systems, power circuits, distribution boards	?	?	
Ventilation systems, location, access and controls	?	?	
All local room controls	?	?	?

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Uninterruptible power supply systems	?	?	
Building Control and Energy Management systems	?	?	
Fire Alarm - panel, sounders (audio and visual), heat and smoke detectors, paging systems, deaf alarm system	?	?	?
Fire fighting equipment, extinguishers, hydrants	?	?	?
Intruder Alarm - panel and sensors	?	?	
Intruder Alarm - handover of codes	?	?	
Access Control - software and sensors	?	?	
CCTV - software and cameras	?	?	
Class Change - software and sounders	?	?	
PA system - software and sounders	?	?	
Audio devices for aiding hearing and learning	?	?	?
Audio visual devices in the classroom and teaching spaces	?	?	?
Lighting system - internal, lamp controls/override capability	?	?	
Lighting system - external, lamp controls/override capability	?	?	

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Lighting - internal classroom controls	?	?	?
Lighting – internal sports/hall/dining/studio lamp controls/override capability	?	?	?
Lighting –external sports pitch controls	?	?	?
Emergency Lighting	?	?	
Emergency Stop circuits i.e. Technology / Home economics / Science labs	?	?	?
Telephone system - software	?	?	?
Telephone system - Handsets	?	?	?
IT/Data systems	?	?	?
Joint inspection of building clean	?	?	
Kitchen Equipment, cooking ,refrigeration, water and energy management, ventilation, drainage, waste management - Demo/Training/Daily maintenance	?	??plus catering staff	
Cashless catering system	?	??plus catering staff	
Lifts	?	?	?
Hoists	?	?	?

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Electronic Security gates	?	?	
Doors internal, manual and automatic	?	?	?
Doors external manual and automatic	?	?	
Folding doors	?	?	?
Window and room ventilation controls – winter and summer mode	?	?	?
Black-out blinds and blinds in classrooms	?	?	?
Locking mechanisms, keys	?	?	?
FF&E - Fume Cupboards	?	?	?
FF&E - D&T Equipment	?	?	?
FF&E - Heat bay Equipment	?	?	?
FF&E - Light and Sound Equipment	?	?	?
FF&E - Library Security	?	?	?
FF&E - Kiln	?	?	?
Waste management including waste hierarchy	?	?	?
Asbestos Management and awareness (Retained / refurbished buildings)	?	?	-

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This training will typically involve walking the building and actually demonstrating the use of each and every item of plant and equipment to enable proper understanding of how the equipment works and what is required for the day-to-day operation of each item.

#### Training for Programmed Maintenance

This training will typically involve:

- How to read utility meters
- How to check boiler, security alarms, fire alarm are functioning correctly
- Test of fire alarm sounders
- Test of emergency lighting
- Basic plumbing
- Descale of showers
- Gulley, drain clearance

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**Appendix E – Minimum Life and Residual Life Expectancy**

The Buildings shall be specified as having a life of 60 years or more.

The following table sets out the minimum life expectancy of key building elements, the purpose of which is to reduce the frequency at which the replacement of Lifecycle Assets takes place. Where the minimum life expectancy requirement is deemed to have a significant impact on capital expenditure which is disproportionate to the benefit, the Contractor is encouraged to offer best value components to achieve optimum solutions. Where alternative minimum life expectancy is proposed by the Contractor this must be accompanied by an assessment of how the disruption and impact on the operation of the School is balanced and justified against the overall whole life cost benefit to the scheme.

The Authority will arrange for an independent condition survey (final survey) to be carried out prior to the Expiry Date in accordance with the provisions of clause 47, which will identify any rectification or maintenance work to be undertaken. The rectification or maintenance work shall be carried out in accordance with Good Industry Practice and such that the School Buildings, grounds, plant, FF&E, meet the Required Standard and the Minimum Life and Residual Life Expectancy Requirements as set out in Part A4 of the FOS and this Appendix E of this SOS.

In accordance with the obligations at clause 47.9 of this Agreement the Hand back Requirements may be relaxed by agreement between the Authority, the School and the Contractor in return for a share of the Lifecycle Fund.

<b>Building Element</b>	<b>Min Life Expectancy to limit frequency of replacement</b>	<b>Desired Min Residual life upon expiry of contract</b>
Substructure	60 years	35 years
Frame, Upper floors and stairs, roof structure	60 years	35 years
Underground Drainage	60 years	35 years
Windows and External Doors	25 years	3 years

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Engineering Services (Major Components)	In accordance with CIBSE Guide M Table Appendix 13.A1	3 years
Sanitary and Catering Fittings	20 years	3 years
Lifts (including controls)	15 years	3 years
Roof coverings	30 years and easily overlaid, over-coated, upgraded or replaced without affecting the deck below	5 years
Floor Finishes	10 Years	3 years
Internal door sets	20 years	3 years
Sprinklers	50 years	25 years
External walls / cladding	40 years	15 years