



Department
for Education

Employer's Requirements Part A General Conditions

DfE Construction Frameworks

**(DfE Construction Framework 2021 and
DfE Offsite Schools Framework)**

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Summary

Part A contains details, requirements and protocols that outline conventions, practices and restrictions relevant throughout the design development, construction and post completion stages.

Review Date

Review dates for this document shall be at 6-month intervals.

Who is this publication for?

This document is for technical professionals involved in the design and construction of School and College premises, as part of the Employer's Requirements of the DfE Construction Frameworks (DfE Construction Framework 2021 and DfE Offsite Schools Framework). It may also be used as the basis of similar documentation for other procurement routes using the Schools and Further Education Output Specifications.

Definitions

Terms and acronyms used throughout the Employer's Requirements (ERs) are defined below.

Any document referred to in the Part A: General Conditions is particularised within the project specific DfE's Detailed Exchange Information Requirements referenced within the Project's Information Protocol (BIM Protocol) Information Particulars.

Unless the context otherwise requires, any defined term in this document shall have the same meaning given to such term in the Scheme Contract and Schools/Further Education Output Specifications (Parts B and C):

BIM Execution Plan (or BEP) - is the project specific document of that name proposed by the Contractor and agreed by the Employer prior to the date in the PCSA in response to the BIM Protocol.

BIM Protocol - is the Project's Information Protocol including the Information Particulars within the Project's Information Protocol and the following documents: DfE's Exchange Information Requirements, DfE's Detailed Exchange Information Requirements, Project's Information Standard and Project's Information Production Methods and Procedures.

Building Readiness Programme - Programme to be developed six months in advance of Practical Completion to capture all handover activities in the run up to Practical Completion including testing, commissioning and witnessing, soak test, decant and contractor's clean, as well as post-handover matters detailed on the Completion Checklist.

College - as defined in the Scheme Contract.

College-specific Brief (CSB) - The CSB (and its Annexes) provides key data for a specific College and sets out requirements for that College which are additional or alternative to the GDB (and associated Technical Annexes) including, where relevant, the Refurbishment Scope of Works (Annex CS2).

College-specific SoA and ADS - The College-specific Schedule of Accommodation (SoA) and Area Data Sheets (ADS), Annex CS1 of the CSB, lists every space in the Works, based on a project SoA. The area data requirements for each space are provided on summary worksheets and are recorded on College-specific ADSs for each space.

Completion Activities - Activities detailed on the Handover Completion Checklist.

Cyber Essentials or Cyber Essentials Plus - Cyber Essentials is the government backed, industry supported scheme to help organisations protect themselves against common cyber-attacks. Cyber Essentials and Cyber Essentials Plus are levels within the

scheme. There are a number of certification bodies that can be approached for further advice on the scheme; the link below points to these providers:

<https://www.cyberessentials.ncsc.gov.uk/getting-certified/#what-is-an-accreditation-body>

Deliverables or Information Deliverables - means information or action required from the Contractor at key stages in the Scheme to provide the evidence of satisfactory progress or compliance with the Employer's Requirements.

Departmental Data - is any data or information owned or retained in order to meet departmental business objectives and tasks, including:

(a) any data, text, drawings, diagrams, images or sounds (together with any repository or database made up of any of these components) which are embodied in any electronic, magnetic, optical or tangible media, and which are:

(i) supplied to the Contractor by or on behalf of the Department; or

(ii) which the Contractor is required to generate, process, store or transmit pursuant to this Contract; or

(b) any Personal Data for which the Department is the Data Controller.

Departmental Security Requirements - Refers to the Departmental Security Standards for Business Services and ICT Contracts as set out in Section 2.1.3 of this document.

Employer - means the party named as the Employer in the Scheme Contract.

Employer's Representative - means the person as may be appointed by the Employer to act as the Employer's Representative, Contract Administrator or Employer's Agent as the case may be, in connection with the Contract from time to time¹.

Note: A professionally accredited Clerk of Works shall form part of the Employer's Representative team.

Employer's Requirements (ERs) - as defined in the Scheme Contract.

Exchange Information Requirements (EIR) – as defined in the BIM Protocol.

Further Education Output Specification (FE-OS) - DfE specification suite comprising; Generic Design Brief, with associated Technical Annexes and College-specific Brief, with associated College-specific Annexes.

Fittings, Furniture and Equipment (FF&E) - FF&E is a blanket term which includes fittings. Fittings are furniture items that form an integral part of the building to be operational and require wall/floor treatments after installation. Furniture and Equipment (F&E) may be fitted, fixed or loose. Fitted F&E is fitted to the fabric of the building but does not rely on the building to be operational. Fixed equipment requires installation and

¹ The Employer's Representative should be a professionally accredited, experienced person with capacity to fulfil the role and this is expected to be the technical adviser appointed to the project unless instructed otherwise by the Employer.

is hard wired to the fabric of the building. Fixed furniture is also attached to the fabric of the building but only to ensure stability. Loose F&E is independent from the building but has spatial implications and shall be shown on final layouts.

Generic Design Brief (GDB) - the Generic Design Brief (and integral Technical Annexes) outlines the Employer's generic requirements for School/College Buildings and grounds.

Good Industry Practice - the exercise of that degree of skill, diligence, prudence and foresight which would reasonably and ordinarily be expected from a skilled and experienced Contractor engaged in the same type of undertaking under the same or similar circumstances.

GSCP - means the Government Security Classification Policy which establishes the rules for classifying HMG information. The policy is available at:

<https://www.gov.uk/government/publications/government-security-classifications>

Handover Completion Checklist - a detailed checklist capturing all handover activities, including pre and post Practical Completion activities, documentation required at handover and post-handover matters.

ICT Infrastructure - Information Communication Technology (ICT) Infrastructure means passive ICT Infrastructure as defined in Section 4 of the GDB.

Legacy - Items which have been used at the existing Site (where applicable) which are considered suitable for the new or refurbished Site.

Master Information Delivery Plan (or MIDP) – is the project specific document of that name proposed by the Contractor and agreed by the Employer prior to the date in the PCSA in response to the BIM Protocol.

NCSC - The National Cyber Security Centre (NCSC) is the UK government's National Technical Authority for Information Assurance. The NCSC website is:

<https://www.ncsc.gov.uk>

Output Specification - DfE Schools specification suite comprising; Generic Design Brief, with associated Technical Annexes and School-specific Brief (SSB), with associated School-specific Annexes.

Practical Completion - as defined in the Scheme Contract.

Project Execution Plan (PEP) - the project execution plan is the governing document that establishes the means to execute, monitor, and control projects. The plan serves as the main communication vehicle to ensure that everyone is aware and knowledgeable of Scheme objectives and how they will be accomplished.

Quality Plan - means a document, or several documents, that together specify quality standards, practices, resources, specifications and the sequence of activities relevant to a Scheme.

Rectification Period - as defined in the Scheme Contract.

Refurbishment Scope of Works (RSoW) - Annex SS2/CS2 of the SSB/CSB which sets out the scope of works required for Refurbished Buildings. Work required to each element shall be defined as Renewed, Replaced, Repaired, Retained or have 'No Work'.

Schedule of Accommodation (SoA) - A schedule of all spaces required in the School/College, including their required size and type.

Scheme - means the design and construction or construction (as the case may be) of works associated with School/College Buildings under a Scheme Contract.

School - as defined in the Scheme Contract.

School-specific Brief (SSB) - The SSB (and its Annexes) provides key data for a specific School and sets out any requirements for that School which are additional or alternative to the GDB (and associated Technical Annexes) including, where relevant, the Refurbishment Scope of Works (Annex SS2).

School-specific SoA and ADS - The School-specific Schedule of Accommodation and Area Data Sheets, Annex SS1 of the SSB, lists every space in the Works, based on a project SoA. The area data requirements for each space are provided on summary worksheets and are recorded on School-specific Area Data Sheets for each space.

Sensitive Works - The carrying out of any part of the Works (including the making good of any Defects) in or on any part or parts of the Sites which may allow direct access to premises occupied or used, or likely to be occupied or used, during the course of the Works by pupils attending a school.

Sites - as defined in the Scheme Contract.

Soft Landings - The DfE process for soft landings pursuant to the Government Soft Landings (GSL) Protocol.

Special Conditions - Any additional project specific conditions as may be applicable and as set out at Annex 6 of Part A.

Technical Annexes - The suite of documents integral to the GDB which outlines the detailed technical requirements for a School/College. Where the term GDB is used, it assumes inclusion of the requirements outlined in the Technical Annexes.

Whole School/College Project - A project in which the Works are carried out on most Buildings or most of the grounds of a school/college, typically more than 75% of the

overall building area, and the Contractor has responsibility for providing the required facilities for the whole school/college with the Sites.

Works - All of the works (including design and works necessary for obtaining access to the Sites) to be undertaken as defined in the Scheme Contract.

1.0 Introduction

This document is Part A of the Employer's Requirements: General Conditions.

The Lead Appointed Party²/Contractor is obliged to meet the requirements of the Employer's Requirements.

The Employer's Requirements shall be read in conjunction with the PCSA/Scheme Contract.

Special Conditions may be included at Annex 6 of Part A and the Contractor shall comply with the same.

1.1 Information Management and Building Information Modelling (BIM)

1.1.1 The DfE's Information Management Resources (including the BIM Protocol) comprises the following parts and is applicable to all documentation, drawings and models:

- a) Project's Information Protocol (including the Information Particulars)
- b) DfE's Exchange Information Requirements (EIR)
- c) DfE's Detailed Exchange Information Requirements (DEIR)
- d) Project's Information Production Methods And Procedures
- e) Project's Information Standard.

1.1.2 The DfE's Information Management Resources seek to define how project information shall be generated, visualised, exchanged, assured (and subsequently used and re-used), including data, to the benefit of all those involved in any part of an asset's lifecycle.

1.2 Structure of the Employer's Requirements

1.2.1 The Employer's Requirements (ERs) identify the requirements for the delivery of Scheme(s). This document is Part A: General Conditions.

1.2.2 The Employer's Requirements are presented in three parts. The content of each part is outlined below and shall be developed for each Scheme:

² As defined in the Information Particulars within the BIM Protocol.

- a) Part A: General Conditions: contains details, requirements and protocols that outline conventions, practices and restrictions that are relevant throughout the design development, construction and post completion stages. Annexed to Part A: General Conditions are the Project's Information Protocol (BIM Protocol), DfE's Exchange Information Requirements (EIR), DfE's Detailed Exchange Information Requirements (DEIR), Project's Information Production Method And Procedures, Project's Information Standard and any Special Conditions³.
- b) Part B: The Generic Design Brief (and integral Technical Annexes) outlines the Employer's generic requirements for School/College Buildings and grounds.
- c) Part C: School/College-specific Brief (SSB/CSB) and its Annexes provides key data for a specific School/College and sets out any requirements for that School/College which are additional or alternative to the GDB (and associated Technical Annexes) including, where relevant, the Refurbishment Scope of Works (Annex SS2/CS2).

1.2.3 Part B and Part C make up the complete Schools/Further Education Output Specification (OS/FE-OS).

³ Special Conditions where applicable.

2.0 General Conditions and Requirements

2.1 Overarching Requirements

2.1.1 The Works shall be planned and managed to support collaborative working between the Employer's Representative(s), key design professionals and specialist contractors (such as the commissioning engineer) and shall include the adoption of Government Soft Landings. In doing so, the Contractor shall ensure alignment with Government Soft Landings as detailed in the DfE's 'A Guide to: Soft Landings Project and Contract Management', technical commissioning and a Building Performance Evaluation (BPE) during the Rectification Period.

2.1.2 The Contractor shall comply with the requirements of the Modern Slavery Act 2015 and the Gangmasters and Labour Abuse Authority.

2.1.3 For each Scheme the Employer's Representative will undertake a security triage process in accordance with ISO 19650. Where the triage results in the need for a security-minded approach, the Contractor shall comply with and deliver the Scheme in accordance with the security strategy and security management plan and update the same as required. As a minimum in all Schemes (including those triaged at ST4), the Contractor shall also comply with the following requirements:

- a) The Contractor shall be aware of and comply with the [HMG security policy framework](#), [NCSC guidelines](#) as applicable to any activity undertaken.
- b) Where the Contractor will provide a CDE (common data environment) and/or maintain an EDMS (electronic data management system) to host Departmental Data, the requirements of [Cabinet Office Procurement Policy Note – Use of Cyber Essentials Scheme certification - Action Note 09/14](#) dated 25 May 2016, or any subsequent updated document, are mandated, namely that contractors supplying products or services to HMG shall have achieved, and will be expected to retain Cyber Essentials certification at the appropriate level for the duration of the contract. The certification scope shall be relevant to the services supplied to, or on behalf of, the Department.

(Guidance: Details of the acceptable forms of equivalence are stated at Section 9 of Annex A within the link to Cabinet Office document in this clause.)

(Guidance: The Department's expectation is that the certification scope will be relevant to the services supplied to, or on behalf of, the Department. However, where a contractor or (sub) contractor is able to evidence a valid exception or certification to an equivalent recognised scheme or standard, such as ISO 27001, then certification under the Cyber Essentials scheme could be waived. Changes to the Cabinet Office Action Note will be tracked by the DfE.)

(Guidance: The Department's expectation is that SMEs or organisations of comparable size shall be expected to attain and maintain Cyber Essentials. Larger organisations or enterprises shall be expected to attain and maintain Cyber Essentials Plus.)

- c) Where clause 2.1.3 b) above has not been met, the Contractor shall have achieved, and be able to maintain, independent certification to ISO/IEC 27001 (Information Security Management Systems Requirements.)

The ISO/IEC 27001 certification must have a scope relevant to the services supplied to, or on behalf of, the Department. The scope of certification and the statement of applicability must be acceptable, following review, to the Department, including the application of controls from ISO/IEC 27002 (Code of Practice for Information Security Controls).

(Guidance: The Department's expectation is that suppliers claiming certification to ISO/IEC 27001 shall provide the Department with copies of their Scope of Certification, Statement of Applicability and a valid ISO/IEC 27001 Certificate issued by an authorised certification body.)

- d) The Contractor shall (and shall procure that any consultants, third party suppliers, sub-contractors or partners) follow the UK Government Security Classification Policy (GSCP) in respect of any Departmental Data being handled in the course of providing this service and will handle all data in accordance with its security classification.
- e) The Contractor and any consultants, third party suppliers, sub-contractors or partners providing the service will provide the Department with full details of any actual or future intent to develop, manage, support, process or store Departmental Data outside of the UK mainland. The Contractor or sub-contractor shall not go ahead with any such proposal without the prior written agreement from the Department.

(Guidance: The offshoring of HMG information outside of the UK is subject to approval by the Departmental SIRO.)

- f) The Contractor shall procure that any consultants, third party suppliers, sub-contractors or partners who will provide a CDE and/or maintain an EDMS to host and/or manage Departmental Data in the course of providing this service shall comply with the above requirements.
- g) The Contractor shall provide the CDE and/or EDMS for the duration set out in Section 6.0 of the Project's Information Standard.
- h) The Contractor shall otherwise have in place and shall maintain procedural, personnel, physical and technical safeguards to protect Departmental Data, in

accordance with Good Industry Practice, and shall ensure that such Departmental Data is made available to and can be accessed only by those persons who have a 'need-to-know' and require that information to deliver the Scheme.

2.2 Survey Information and Reports

2.2.1 Surveys

2.2.1.1 As part of any agreed preconstruction services, the Contractor shall carry out any surveys that may be required to facilitate the carrying out of the Works as set out in the Scheme contract and taking the risk of the same.

2.2.2 Access and Transport

2.2.2.1 The Contractor shall comply with any travel plans provided as part of the School/College-specific Brief and ensure they are incorporated into the Construction Phase Plan (refer to DfE Ref. 210 within the DfE's DEIR).

2.3 Design and Construction Protocols

2.3.1 The Contractor shall develop clear protocols to address design development, programming, reporting, the provision of construction information and defects rectification procedures. These shall be reflected in the Project Execution Plan (PEP) (refer to DfE Ref. 296 within the DfE's DEIR), and the Employer's Requirements.

2.3.2 All information produced and issued shall be aligned to the Project's Information Standard as defined within the BIM Protocol.

2.4 Information Deliverables and Communications

2.4.1 Works Programming

2.4.1.1 Programmes shall typically be a linked bar chart programme and plotted using software as required by the Scheme. The critical paths shall be clearly shown on the linked bar chart.

2.4.1.2 The Contractor shall show on the Master Programme (refer to DfE Ref. 718 within the DfE's DEIR) each stage of both the design and construction of the various elements of the Works to illustrate the latest dates by which instructions requiring changes can be accommodated in each part of the Works without affecting the completion (of any Relevant Part) thereof.

2.4.1.3 The Contractor shall amend and revise the programme(s) as required by the Scheme Contract and as required by the Employer.

2.4.1.4 The Contractor shall obtain programme information from all statutory bodies and use best endeavours to obtain the same from all sub-contractors, including those made known to the Contractor during the course of the Works, and incorporate relevant changes in the revised programme(s).

2.4.1.5 The Contractor shall record progress on a copy of the programme kept on Site. If any circumstances arise which may affect the progress of the Works, the Contractor shall put forward proposals or take other action as appropriate to mitigate delay and to recover any lost time.

2.4.1.6 The Contractor shall submit programmes for the execution of the Works which shall include the following:

- a) Design Programme (refer to DfE Ref. 288 within the DfE's DEIR).
- b) Works Package Procurement Programme (refer to DfE Ref. 717 within the DfE's DEIR).
- c) Construction Programme (refer to DfE Ref. 348 within the DfE's DEIR).
- d) ICT Construction Programme (refer to DfE Ref. 349 within the DfE's DEIR).
- e) Decant Programme (refer to DfE Ref. 340 within the DfE's DEIR and the Decant Protocol in the Scheme Contract where applicable).

2.4.2 Information Deliverables

2.4.2.1 The Contractor shall develop the design deliverables during the Design Development stage as required to fully define the Works and support the planning application (if applicable) in accordance with the project specific DfE's Detailed Exchange Information Requirements (by reference to the BIM Protocol).

2.4.2.2 The Contractor shall submit Contractor's Proposals for comment by the Employer's Representative(s) in accordance with framework process timeline applicable to the Scheme and as particularised in the project specific DfE's Detailed Exchange Information Requirements (by reference to the BIM Protocol).

2.4.2.3 Any proposed derogations from the Employer's Requirements are to be scheduled and submitted for review by the Employer and Employer's Representative (refer to DfE Ref. 334 within the DfE's DEIR). Derogations are to be considered for each project in isolation from agreements on other projects and shall be supported by a Designer's Risk Assessment (refer to DfE Ref. 697 within the DfE's DEIR) and statement of support from the Principal Designer. Any agreed derogations are to be scheduled for inclusion in the Scheme Contract.

2.4.3 Programmes, Reports, Schedules and Plans

2.4.3.1 The Contractor shall prepare and submit the following as a minimum:

- a) Quality Plan (refer to DfE Ref. 037 within the DfE's DEIR) and Project Execution Plan (PEP) (refer to DfE Ref. 296 within the DfE's DEIR) including;
- b) Detailed Construction Method Statement(s) (refer to DfE Ref. 339 within the DfE's DEIR) describing the techniques, equipment, plant, access and protection the Contractor intends to use during the Scheme Contract;
- c) Design Programme (refer to DfE Ref. 288 within the DfE's DEIR), coordinated with the Construction Programme as detailed in these requirements;
- d) Construction Programme (refer to DfE Ref. 348 within the DfE's DEIR), coordinated with the Design Programme as detailed in these requirements, and linked to the Whole Site Plan (refer to DfE Ref. 197 within the DfE's DEIR) and Phasing Plans (refer to DfE Ref. 212 within the DfE's DEIR);
- e) A Decant Strategy of Legacy FF&E (refer to DfE Ref. 342 within the DfE's DEIR) and a Decant Programme (refer to DfE Ref. 340 within the DfE's DEIR), coordinated with the Design and Construction Programmes as detailed in these requirements.

2.4.3.2 The Programmes shall take account of the period of time required by the Contractor for completing the design and such production drawings as are necessary and for the Employer and Employer's Representative to review them.

2.4.3.3 The Contractor shall, in his programming and pricing of the Works, make adequate allowance for dealing with the details contained in the pre-construction information, together with further development of the Construction Phase Plan (refer to DfE Ref. 210 within the DfE's DEIR) which may be required by the Contractor and which may reasonably be foreseen pre-contract to enable compliance with the relevant statutory provisions relating to Construction, Design & Management Regulation (CDM) and Health and Safety Legislation.

2.4.3.4 The Contractor shall state the period required to complete the design and such production drawings as are necessary prior to a start on Site.

2.4.3.5 The Contractor shall provide a Handover Training Plan (refer to DfE Ref. 558 within the DfE's DEIR) detailing how he shall interface and assist the Employer and School/College with the familiarisation and training process for the operation of the facilities particularly with regards to the operation of the mechanical, fire and electrical installations and coordination of the FF&E and ICT requirements. The Contractor shall provide a Training Log (refer to DfE Ref. 560 within the DfE's DEIR) of all staff that have undertaken training and agree to provide a recording of all training (by way of digital media) for future reference.

2.4.4 Framework Pricing Schedule and Contract Sum Analysis

2.4.4.1 The Contractor shall provide any amplification of the Framework Pricing Schedule (refer to DfE Ref. 379 within the DfE's DEIR), schedule of rates and contract sum analysis as required by the Employer's Representative to NRM format to Level 2 as a minimum.

2.4.4.2 Costs relating to all required elements/items of work, if not expressly priced, will be deemed to be included.

2.4.4.3 For the avoidance of doubt, the costs submitted on the Framework Pricing Schedule and in the contract sum analysis shall be a fixed price lump sum. Provisional and prime cost sums will not be accepted without prior agreement with the Employer and Employer's Representative.

2.4.5 Progress Reporting and Communications

2.4.5.1 The Contractor shall prepare systems and procedures to comply with the lines of communication and reporting procedures to be contained in the Scheme Contract. Such procedures shall be presented in the Contractor's Proposals as part of the PEP (refer to DfE Ref. 296 within the DfE's DEIR).

2.4.5.2 Keeping full and proper records of all meetings and negotiations attended or conducted by the Contractor and making the same available for inspection by the Employer on request.

2.4.5.3 Throughout the Scheme, the Contractor shall provide early warning of any matter likely to:

- a) delay completion; or,
- b) increase cost; or
- c) impair performance of the completed Scheme.

2.4.5.4 As soon as practicable following such early warning, the parties shall meet to discuss and agree any mitigating actions.

2.4.6 Progress and Performance Meetings

2.4.6.1 The Contractor shall organise and chair a monthly progress meeting at the construction site with the Employer and Employer's Representative(s). The Contractor shall prepare and submit to the Employer and Employer's Representative(s) a monthly Progress Report in advance of the meeting. The report content shall be agreed between the Employer's Representative and the Contractor (refer to DfE Ref. 351 within the DfE's DEIR). The meeting shall update on matters of health, safety and quality as detailed in the DfE Progress Meeting Guidance, which shall form part of the agenda.

2.4.6.2 The Contractor shall prepare and agree with the Employer's Representative the timing and agenda for each progress meeting (refer to DfE Ref. 358 within the DfE's DEIR) and:

- a) Publish the agenda giving adequate prior notice of each meeting; and
- b) Be responsible for minuting the meetings (refer to Progress Meeting Minutes DfE Ref. 364 within the DfE's DEIR).

2.4.6.3 One copy of each Progress Report (as above) including a programme showing progress against the Construction Programme prepared by the Contractor shall be kept on Site and a copy issued electronically to the Employer and Employer's Representative(s).

2.4.6.4 Reports and programmes shall be prepared, monitored and maintained by a suitably qualified person who shall retain close contact with the Site until completion of the Scheme.

2.4.6.5 The Contractor shall attend bi-monthly performance review meetings with the Employer and Employer's Representative. The Contractor shall submit a report 3 days ahead of the meeting for review by the including, but not limited to, the current cost plan, progress versus programme, key design development and coordination updates, and risk register. The report content shall be agreed between the Employer's Representative and the Contractor.

2.4.6.6 Submission of any programme or report etc., shall not:

- a) relieve the Contractor of his obligations under the Scheme Contract;
- b) constitute the agreement of any delays etc., shown thereon;
- c) affect the Date(s) for Completion;
- d) relieve the Contractor of his responsibility to complete the Scheme by the Date(s) for Completion.

2.4.7 Design Coordination Meetings

2.4.7.1 The Contractor shall hold design coordination meetings at not less than monthly intervals throughout the duration of the Works. The meetings shall generally be held on Site and shall be chaired by the Contractor. Meeting invites shall be extended to the Employer, the Employer's Representative(s) and the Principal Designer. The Employer's Representative may request the attendance of representatives from sub-contractors or principal suppliers. The Contractor shall not deny a reasonable request.

2.4.7.2 The Employer may request the attendance, at design coordination meetings, of its Advisors (ICT, Health, Safety and Quality, Technical, Cost, Design, FF&E and Planning).

2.4.7.3 The Contractor shall:

- a) Prepare and agree with the Employer's Representative the timing and agenda for each design coordination meeting (refer to DfE Ref. 721 within the DfE's DEIR);
- b) Publish the agenda giving adequate prior notice of each meeting; and
- c) Be responsible for minuting the meetings (refer to Design Coordination Meeting Minutes DfE Ref. 722 within the DfE's DEIR).

2.4.8 Progress Photographs

2.4.8.1 The Contractor shall take digital photographs of the Works at key construction stages and a minimum of 30 photographs at monthly intervals to record progress. Photographs shall be of good quality, without blurring and be a mixture of close up and wide angled views that clearly show the area being photographed. Refer to the Level of Information Need for DfE Ref. 370 within the DfE's DEIR.

2.4.8.2 Photographs shall be issued to the Employer's Representative electronically. All photographs shall be treated as confidential information unless otherwise directed by the Employer's Representative.

2.4.9 Risk Register

2.4.9.1 The Contractor shall develop, adapt and maintain a Risk Register as defined by DfE Ref. 300 within the DfE's DEIR.

2.4.10 Standards of Materials and Work

2.4.10.1 All supply chains shall receive a quality and workmanship specific induction prior to beginning work. This induction shall include examples of poor practice to be avoided.

2.4.10.2 All supply chains shall be fully supervised to a standard that ensures quality and workmanship is not compromised. Standards of work shall be regularly monitored throughout the day by the Principal Contractor and rectified at the time.

2.4.10.3 Standards of materials and workmanship shall be monitored throughout the works with trade specific samples of works identified to gauge quality and to provide a reference throughout the snagging process.

2.4.10.4 Samples that showcase good quality and workmanship standards shall be provided as detailed in the Employer's Requirements.

2.4.10.5 The Contractor shall provide one number 'mock-up' general teaching (English, Mathematics etc.) classroom. This 'mock-up' room shall be provided sufficiently in advance to enable the Employer to make final comments/decisions about colours, textures, patterns and finishes to be used for other rooms without causing any delay to the Works. 'Mock-up' rooms shall be provided to the good quality and workmanship

standard required for Completion for the building as whole, except for, fully commissioned services and any loose furniture to be provided by the Employer.

2.4.10.6 Where and to the extent that materials, goods and workmanship are not fully specified, they shall be suitable for the purposes of the Works, stated in or reasonably inferred from the Contract and in accordance with Good Industry Practice, including relevant British Standards and Codes of Practice.

2.4.10.7 Materials described to be obtained from a particular manufacturer shall be installed strictly in accordance with that manufacturer's instructions.

2.4.10.8 The Contractor shall supply written evidence of the source of any supplied materials to be used in the Works when requested by the Employer's Representative.

2.4.11 Product Guarantees and Warranties

2.4.11.1 The Contractor shall obtain for the benefit of the Employer, Trustees or Governors and/or any other stakeholders, product guarantees or the like where these are available from manufacturers, suppliers or sub-contractors (refer to DfE Ref. 591 within the DfE's DEIR). Such guarantees and warranties may require to be supported by an appropriate insurance policy.

3.0 Managing the Construction Works

3.1 Site Access

3.1.1 Temporary and permanent access to and from the Site, internal highway arrangements and movement and parking of traffic within the Site boundary shall be agreed with the School/College and the Employer's Representative prior to commencing work on Site.

3.1.2 The Contractor shall not gain or allow access to and egress from the Site except as set out in the Contractor's Proposals.

3.1.3 Separate access shall be provided for School/College deliveries, maintenance vehicles and waste removal during the period for which the Works are being carried out.

3.1.4 Contractor deliveries to Site and collections from Site shall be managed so as not to interfere with the delivery of education at the School/College or the safe movement of School/College users about the Site. This includes scheduling deliveries outside of school/college arrival and departure times at the beginning, middle and end of the day.

3.1.5 Site access location and provisions shall not compromise highway safety requirements or the safety of other road/pavement users.

3.1.6 Pedestrian site access shall be through a dedicated door separate from vehicular access.

3.1.7 Access gates and doors shall not be made from repurposed site material or provisions such as temporary fence panels but be actual doors and gates.

3.1.8 Site access shall lead from and into an area of safety where pedestrians and vehicles cannot mix.

3.1.9 Doors and gates shall be locked at all times to maintain site security unless access is supervised by permanent gate security personnel.

3.1.10 The Contractor shall arrange access for the Employer and Employer's Representative to onsite and offsite Works for the for the purposes of:

- a) Health and Safety inspections,
- b) Progress and quality inspections,
- c) DfE & Ministerial visits,
- d) Valuations,
- e) Any other reasonable visits that may be necessary from time-to-time

3.1.11 Where such access is required, the Contractor shall provide personal protective equipment, safety induction and site escort for these personnel.

3.2 Adjoining Properties, Roads, Paths, Boundaries

3.2.1 The Contractor shall take suitable and sufficient precautions to cause no interference or interruption to the use of any adjoining, adjacent properties including roads, footpaths, soft and hard landscaping.

3.2.2 Prior to commencement of construction works on the Site, the Contractor shall prepare or commission a survey or a Pre-Start Condition Photographic Schedule (dated photographic Schedule of Condition as per DfE Ref. 692 within the DfE's DEIR) of retained, adjacent buildings, excluded buildings, roads, hard standings, landscaping, playing fields, paths, paving, boundaries and other site features.

3.2.3 The Contractor shall repair any damage over and above that identified within the survey/photographic Schedule of Condition caused by the Works.

3.2.4 The Contractor shall use best endeavours to prevent mud or rubbish of any kind being carried onto the roads, footpaths or paving this shall include the washing of soiled vehicles before they leave site. Notwithstanding such precautions, any mud or rubbish carried onto the roads, footpaths or paving shall be immediately cleaned by the Contractor and removed to authorised tips. Special attention shall be given to prevent mud becoming embedded in road and footpath surfaces with roads and pavements leading to and from the site being subject to thorough cleaning and washing.

3.2.5 Utilities to adjoining properties shall not be affected without prior agreement and notice.

3.2.6 Should any work be required on or from any adjoining property, the necessary permission shall first be obtained, by the Contractor, from the relevant authority or landowner, and all statutory notices and section agreements obtained and discharged on completion (e.g., party wall certificate, Section 38 Agreement).

3.2.7 Should it be necessary for any plant, machinery or equipment used for the Scheme to operate over adjoining or adjacent property or rights-of-way, the Contractor shall obtain the permission of the adjoining or adjacent owner or occupier and obtain legal licence as necessary. The contractor shall not operate over an occupied property. The Contractor shall be deemed to have allowed for the payment of any fees and charges in connection therewith. The Contractor shall indemnify the Employer against any claim or action for damages arising from the use of any plant, machinery or equipment.

3.2.8 The Contractor shall ensure that the security of the adjoining or adjacent properties shall not in any way be impaired by the carrying out of the Works.

3.3 Temporary Fencing and Hoardings

3.3.1 Temporary fencing, hoardings and access gates of good quality shall be provided to maintain site security to a minimum height of 2.4 metres. This shall be solid timber hoarding and temporary fencing as detailed in the Framework Pricing Schedule. Alternatives such as solid metal hoarding will be considered but not at the expense of site security and subject to agreement with the Employer. All site fencing shall be subject to a temporary works design.

3.3.2 Temporary fencing may need to be enhanced in areas of increased trespass risk either from the public or the School/College areas.

3.3.3 Fencing shall be provided with debris netting to ensure that site debris and other items do not leave the site.

3.3.4 Wire/wire mesh panels shall not be used unless there is an operational reasons subject to agreement with the Employer; such as site adjacent highway service excavation activity requiring a daily transient boundary.

3.3.5 Lighting shall be installed to temporary fencing and hoardings to maintain safe lighting requirements.

3.3.6 The Contractor shall make provision for maintaining temporary fencing, hoardings and associated lighting, and any alterations and adaptations necessitated by the carrying out of the Works. This shall include a regular inspection and maintenance regime that ensures safety and security.

3.3.7 Temporary fencing standards shall not be lessened as the project comes to conclusion. Security arrangements between site and school/college/public areas shall be maintained.

3.3.8 Temporary fencing and site hoardings shall only be taken down and removed from site after the school's permanent anti-climb fencing and gates have been installed. Site security shall not be compromised during this process.

3.4 Site Security

3.4.1 Adequate temporary security fences and hoardings shall be erected and maintained around the Works to prevent unauthorised persons from gaining access to the Works at all times, especially pupils/students/building users.

3.4.2 The Contractor shall be deemed to have included all costs associated with the maintenance of the lighting installations within the Site, including all temporary power supply requirements, particularly during periods of interruption to the mains power supply.

3.4.3 The Contractor shall safeguard the Works, materials and plant against damage and theft, including all necessary surveillance and lighting for the security of the Works etc. and the protection of the public, the Employer and the School/College.

3.4.4 All materials shall be kept in safe compounds so as not to allow access for vandalism. Materials storage facilities shall be reviewed by the Employer's Representative(s) and shall include as a minimum:

- a) a designated storage area for plant, materials, waste, flammable materials, gases and hazardous substances,
- b) materials shall be protected from damage due to inclement weather
- c) clearly defined pedestrian routes (storage areas shall not obstruct access routes or interfere with emergency escape routes),
- d) guard rails for any materials stored at height.

3.4.5 Storage areas shall be kept tidy, and materials deliveries shall be planned to keep the amount of material on site to a minimum.

3.5 Temporary Screens and Walls

3.5.1 The Contractor shall provide, maintain (including taking down and re-erecting from time to time as necessary), clear away and make good all necessary temporary screens and walls etc., required for the proper execution of the Works. Temporary screens and walls are subject to temporary works design and installation.

3.6 Temporary Roofs

3.6.1 The Contractor shall provide, maintain (including taking down and re-erecting from time to time as necessary), clear away and make good all necessary temporary roofs etc., required for the proper execution of the Works. Temporary roofs are subject to temporary works design and installation.

3.7 Scaffolding

3.7.1 If the Contractor strikes scaffolding before ascertaining whether it is required by any statutory authority or the Employer's Representative, they shall be responsible for re-erecting the scaffolding or other appropriate and safe form of access (as agreed with the Employer) at their own expense.

3.7.2 Scaffolding shall be subject to safe design. Scaffold erectors shall follow safe working requirements which includes the use of fall arrest systems and working from places of safety.

3.7.3 Scaffolding shall be inspected by competent persons. Particular attention shall be paid to ensure edge protection measures close all gaps. Work platforms shall have no gaps. Trip hazards shall be removed and falling objects prevented through the use of toe boards and brick guards with no gaps.

3.7.4 Access to scaffolding and between platforms shall be through robust ladder or stair arrangements protected by ladder gates or trap doors. Ladder and platform runs shall be short to avoid excessive climbs. Ladders and stairs shall be made of metal, tied in and be of good condition.

3.8 Temperature and Humidity

3.8.1 All works as they progress shall be protected from the weather and from other work activities.

3.8.2 The Contractor shall be responsible for providing all permanent and/or temporary climatic conditions to ensure satisfactory and efficient progress of the Works. This includes humidity control, lighting and air conditioning as required.

3.8.3 The Contractor shall dry out the Works, maintain an adequate temperature and control the humidity levels in all parts of the Works as necessary to facilitate the progress and satisfactory completion of the Works including work of sub-contractors and persons directly engaged by the Employer.

3.8.4 The drying out and humidity of the Works and the application of heat shall be controlled to prevent any excessive movement, blistering or failure of adhesion and to prevent any damage due to trapped moisture or other causes. A control system shall be provided for whatever method of drying is adopted to limit the temperature and humidity range and provide all necessary monitoring equipment.

3.8.5 The Contractor shall be deemed to have allowed for all costs in connection with drying out and controlling the temperature and humidity of the Works.

3.8.6 The Contractor shall not be permitted to use the permanent heating/air conditioning system for drying out and controlling the temperature and humidity of the Works without prior approval from the Employer.

3.8.7 The Contractor shall provide suitable and sufficient temporary work area lighting throughout the construction phase. This shall include all task lighting to avoid any operative working in low light conditions. The use of the permanent lighting installation will not be permitted unless previously agreed in writing by the Employer in which event new replacement luminaires shall be provided by the Contractor at their expense, prior to practical completion.

3.8.8 Save for any necessary testing and commissioning, the Contractor shall not rely upon new services provisions to provide heating or lighting for the Works.

3.9 Temporary Telephones & Communications

3.9.1 Use of the Contractor's own telephone equipment/system and internet or Wi-Fi facilities may be required by the Employer and Employer's Representative(s). The Contractor shall allow such use.

3.10 Identity Cards

3.10.1 The Contractor shall provide identity cards for all its operatives (including sub-contractors). Such operatives shall wear identity cards at all times when on the Site or working on the Scheme.

3.10.2 The Contractor shall comply with the Disclosure and Barring Scheme requirements in the Scheme Contract in respect of any potential staff or persons (including sub-contractors of any tier) who will be carrying out any Sensitive Works (including the making good of any defects) before those persons attend the Site.

3.10.3 The Contractor shall ensure that no member of the site team has direct or indirect contact with school/college pupils/students. This includes taking photos or videos.

3.11 Site Name Board

3.11.1 The Contractor shall provide at the Site, a name board for the duration of the Works of sufficient size to display the Scheme name and description, the Employer's, and the Contractor's names and to enable the erection of professional name boards for all the consultants involved, including those consultants employed by the Employer. The Contractor shall be responsible for including any logo or other signage required by the DfE or other funding bodies.

3.11.2 The design and position of the site sign board shall be agreed with the Employer's Representative and approved in writing by the Employer.

3.11.3 The Contractor shall not erect or exhibit or permit or suffer to be erected or exhibited on any part of the Site any signs or trade boards save those previously approved in writing by the Employer (such approval shall not be unreasonably withheld).

3.11.4 Professional name boards shall be removable upon completion of the Works for return to relevant companies.

3.11.5 Site access contact for the site team during the day and emergency contact out of hours should be clearly displayed.

3.12 Fire Access

3.12.1 The Contractor shall ascertain the required access routes for the fire brigade and those routes are to be kept open and maintained throughout the duration of the Works including nights and weekends.

3.12.2 In all schemes, emergency exit routes from existing buildings shall be maintained at all times. The Contractor shall liaise with the Employer's Representative and the school when defining or changing such exit routes.

3.12.3 All current or alternative emergency assembly areas should be maintained for the number of persons that require them. The Contractor shall liaise with the Employer's Representative and the school when changing assembly areas.

3.13 Fire Precautions

3.13.1 The Contractor shall comply with the HSE's 'Fire safety in construction. Guidance for clients, designers and those managing and carrying out construction works involving significant fire risks' (HSG168). The Contractor shall appoint a site fire safety coordinator and implement any site fire strategy before commencing work as required.

3.13.2 The Contractor shall take all reasonable precautions to prevent the outbreak and spread of fire and shall provide and maintain suitable and adequate firefighting equipment at points adjacent to the Works and unfixed materials and shall observe strict fire prevention measures throughout the duration of the Works, which includes robust management of waste and waste storage areas.

3.13.3 Potential hazards shall be discussed, and fire precautions shall be agreed with an appropriate Fire Officer from the Fire Brigade and the Employer's Representative prior to commencement of work.

3.13.4 The Contractor shall facilitate any visits the Fire Officer may make, to inspect the Site and buildings and to ensure that fire precautions are adequate. The Contractor shall comply with any reasonable request made by the Fire Officer in this connection.

3.13.5 No smoking outside of designated areas shall be allowed on the Site.

3.13.6 All fire exits and escape route shall be kept clear of obstructions.

3.13.7 All escape routes internally and externally to the construction site should be clearly defined and signed.

3.14 Route Signage and Site Delineation

3.14.1 The site should be clearly separated from the school/college using fencing to the same standard as detailed previously. This separation also applies to vehicles and pedestrians and should also be clearly signed.

3.15 Work Beyond the Boundary of the Site

3.15.1 Where work is executed beyond the boundary of the Site or in the public highway, the Contractor shall be responsible for ensuring the safety of all persons and vehicles and complying with Chapter 8 of the traffic signs manual. No person should work on the public highway without recognised highway working competence.

3.15.2 The Contractor is responsible for:

- a) Ensuring the highway is not obstructed or worked upon without the consent of the relevant authority;
- b) Giving all notices to the relevant authorities, paying associated fees and charges and carrying out the work to their satisfaction; and
- c) Removing temporary works in connection upon completion.

3.16 Working Hours

3.16.1 Working hours are normally 8.00am to 6.00pm, Monday to Friday. No work shall be executed outside these times unless in exceptional circumstances and then only with the written approval of the Employer's Representative. Planning restrictions may also apply.

3.16.2 Where the Contractor intends to work outside agreed 'normal working hours' a minimum of two working days' notice and detailed reasons are required to be given to the Employer's Representative for consideration. If work outside of normal hours is agreed noise, vibration, dust and other areas of nuisance risk should be managed to a high standard to prevent the creation of nuisance to neighbouring properties.

3.16.3 The Contractor's shall comply with requirements of the Local Authority including the Control of Pollution Act and the Environmental Protection Act.

3.17 Demolition Works

3.17.1 The Employer will not permit any demolition work to be carried out on Saturdays, Sundays, statutory bank holidays or during specific times designated by the School/College, such as examinations, without specific prior approval by the Employer's Representative.

3.17.2 The Contractor's shall comply with requirements of the Local Authority including the Control of Pollution Act and the Environmental Protection Act.

3.17.3 All demolition works shall be subject to enhanced health and safety arrangements to ensure the safety of people and property affected by the demolition. These arrangements shall include controlling noise, vibration, dust and debris effectively.

3.17.4 All demolition works shall be within an area of exclusion that prevents unauthorised access to site personnel as well as external trespassers.

3.18 Trees, Hedges, Shrubs and Lawns

3.18.1 All trees, hedges, shrubs and lawns should be inspected and condition noted prior to works commencing.

3.18.2 The Contractor shall adequately protect and preserve all trees, hedges, shrubs and lawns on the Site, except those to be removed. If damage or removal of species occurs that is not in accordance with the Employer's Requirements, then the Contractor is required to treat or replace such species. The Contractor shall not unnecessarily disturb trees or planted areas either by the disposal of surplus spoil or excavation of topsoil.

3.18.3 Trees that prevent safe site management such as the circulation of vehicles or other plant should be identified and made safe. No work to the trees should take place without the consent of the Employer's Representative.

3.18.4 All trees within the site boundary shall be inspected and made safe before handover. Trees that are located close to buildings or in public areas shall not be in a condition which could lead to a safety incident such as a falling branch or preventing safe access and circulation due to excessively long lower branches.

3.19 Utilities

3.19.1 All excavations shall be managed to avoid contact and damage of underground utilities. As a minimum, the Contractor to follow the guidance as detailed in HSG47 'Avoiding danger from underground services'.

3.19.2 It is anticipated that there may be services on the Site which are not correctly identified on existing records. Where such services are encountered the Contractor shall notify the Employer, and any necessary diversion of such services shall be the responsibility of the Contractor without adjustment to the Contract Sum.

3.19.3 The Contractor shall be responsible for all costs associated with alterations to or additional provision of any services made necessary by the Works whether specifically identified or not unless prohibited by law.

3.19.4 The Contractor shall undertake all necessary surveys to identify any existing drainage systems and services to be retained, which are to be fully maintained during the progress of the Works and the Contractor shall take all necessary steps to prevent any interruption to such. Any existing drainage systems retained but not used shall be recorded on the drawings. The Contractor shall issue a Drainage CCTV Survey Report (refer to DfE Ref. 056 within the DfE's DEIR).

3.19.5 The Contractor shall adequately protect, uphold, maintain and prevent damage to all existing services above and below ground. In respect of drainage systems, the Contractor shall carry out Underground Drainage Cleaning and CCTV Condition Survey (refer to DfE Ref. 057 within the DfE's DEIR).

3.19.6 The Contractor shall be responsible for identifying the location of all existing Services on site and take all reasonable steps to ascertain the accuracy of any information provided by others including carrying out any surveys.

3.19.7 Continuity of Existing Services:

- a) The Contractor shall ensure that all power, energy and water supplies used during the Works are separately metered where utilising School/College supplies unless separate supplies are procured by the Contractor. The Contractor shall provide meter readings to the relevant representative of the School/College and Employer's Representative at the commencement and completion of each phase of the Works.
- b) The Contractor shall reimburse the School/College for all power and water utilised. For the avoidance of doubt this shall include a proportion of all heating bills relating to work areas until the Works are handed back to the School/College.
- c) The Contractor shall indemnify the School/College and all stakeholders of any loss resulting from the accidental interruption of Services due to negligence or poor practice.

3.20 Work by Statutory Authorities

3.20.1 The coordination, order, programming and sign-off of any work(s) to be executed by local authorities and statutory undertakers shall be the responsibility of the Contractor.

3.21 Phasing and Construction

3.21.1 All works should be designed and constructed, as a minimum, to satisfy the requirements of Construction (Design and Management) Regulations 2015 and other relevant legislative requirements and guidance. This includes following the guidance as detailed in HSG150 'Health and safety in construction'.

3.21.2 The Contractor shall follow the CDM Principle of Prevention and comply with the requirement to avoid risks through the design process. The Contractor shall not introduce risks that had or should have been eliminated at the design stage.

3.21.3 The Works shall be planned to ensure safety, to minimise environmental impact and to avoid disruption to School/College operations.

3.21.4 The Works shall be designed and constructed to optimise low environmental impact materials.

3.21.5 In order to meet the UK Government's timber procurement policy, timber materials shall be:

- a) independently verifiable legal and sustainable timber or FLEGT-licensed or equivalent timber,
- b) recycled timber, or
- c) a combination of the above - independently verifiable legal and sustainable timber/FLEGT-licensed or equivalent timber, and recycled timber.

3.21.6 Waste and Resources Action Programme (WRAP) practices shall be implemented following DEFRA's waste hierarchy principles of a commitment to halve waste to landfill.

3.21.7 New and Refurbished Buildings shall be designed so that they can be safely constructed.

3.21.8 Removal or containment of hazardous materials shall be managed safely.

3.21.9 There shall be minimal disruption to a School/College, particularly during refurbishment and where New Buildings are being built on the Site of an existing School/College.

3.21.10 A period of time shall be pre-agreed for the placement and installation of FF&E and ICT, taking account of any FF&E delivery issues identified the SSB/CSB.

3.21.11 The School/College shall be able to occupy any premises in the Works at least two weeks before the start of a new term. To allow occupation, the premises shall be safe by the standards of an operational school and not a construction site.

3.21.11 The proposed timing of any landscaping shall ensure that sports pitches and hard surfaced games courts are available before, or as soon as possible after, the handover of completed Buildings.

3.21.12 Work to any Renewed, Replaced or Repaired element shall include the removal and disposal of any redundant existing material and temporary scaffolding and protection where necessary.

3.21.13 The Contractor shall be a member of the Considerate Constructors Scheme (or equivalent) or evidence delivery of the equivalent standards throughout the construction phase of the project. In its Contractor's Proposals evidence that its policies and procedures are comparable to those required of the Considerate Constructors Scheme.

3.22 Quality Assurance of the Works

3.22.1 The Contractor shall establish quality assurance procedures that enable the Employer's monitoring of the design in collaboration with the Employer's Representative(s). This process is required entirely for review purposes and shall not constitute a commenting procedure on the Contractor's design.

3.22.2 The Contractor shall establish quality assurance procedures to enable the Employer's monitoring of the Works in collaboration with the Employer's Representative(s).

3.22.3 The Contractor's quality control system shall enable the Employer and Employer's Representative to review the following:

- a) design and construction drawings and documentation of all types and at all stages,
- b) any instructed changes to agreed designs and/or specifications,
- c) all construction, installation and commissioning works, including offsite fabrications,
- d) the Contractor's Scheme Control Systems and Procedures, insofar as they relate to compliance with the Scheme Contract,
- e) any testing or commissioning of structure, systems or equipment,
- f) compliance with the agreed Programme, and
- g) compliance with the Employer's Requirements.

3.22.4 The Contractor shall use competent construction and quality personnel to closely monitor and manage all phases of the build to ensure good quality and workmanship standards are delivered.

3.22.5 The Contractor shall identify and resolve poor quality and workmanship issues at the time of or soon after occurrence. Issues shall not be allowed to accumulate during the build phase.

3.22.6 The Contractor shall develop a Quality Plan encompassing all quality assurance procedures and issued electronically to the Employer and Employer's Representative(s) for agreement (refer to DfE Ref. 037 within the DfE's DEIR).

3.23 Coordination, Monitoring and Supervision of the Works

3.23.1 The Contractor shall fully manage the design, procurement and construction of the Works.

3.23.2 The Contractor shall be responsible for the coordination, management and administration of the Works, including all sub-contracts. The Contractor shall agree, manage and monitor micro programmes with each sub-contractor, supplier and statutory authority and obtain and supply information as necessary for coordination of the work.

3.23.3 In the event that the Employer requests his own sub-contractor (the term sub-contractor for this clause shall mean any third party with a vested interest in the scheme e.g., school staff, ICT etc.) to carry out works prior to practical completion, the Contractor shall afford these parties all necessary access and attendances. The Employer shall seek to notify the Contractor of such events at invitation to tender stage, or as early as is possible. The Contractor retains responsibility for coordinating the Works, including the induction of these personnel. Condition records shall be taken before access has been granted, any damage caused to areas of new work shall only be made good under instruction from the Employer or Employer's Representative once before and after condition records have been reviewed.

3.23.4 The Contractor shall be responsible for notifying and coordinating all statutory authorities as and when required on Site. The coordination shall include providing the statutory authorities with sufficient information regarding line, level etc., to enable them to provide and lay mains, cables etc., to suit the progress of the Works, irrespective of whether payments are made direct to the statutory authorities by the Employer.

3.23.5 The Contractor shall be responsible for coordinating the sequencing and setting out of the work on Site, having regard to any conflicts which may arise as a consequence of the interpretation of drawings by operatives.

3.23.6 The Contractor shall make regular visits to the premises of all his sub-contractors to inspect the quality of the work and to check on progress and delivery in relation to the Programme.

3.23.7 The Contractor shall provide the access, facilities and necessary equipment for inspection of the Works by the Employer and Employer's Representative at any time up to and including issue of the Notice of Completion of Making Good or any other notice of completion as the Scheme Contract requires. This shall include the Contractor facilitating access for inspection at offsite building/component manufacturing facilities, sub-contractor manufacturing facilities, and supplier facilities etc.

3.23.8 The Contractor shall notify the School/College in advance of the date on which lifts, fire protection, mechanical, electrical, security installations (and the like) will be ready and available for inspection by their insurers. The Contractor shall also liaise with all parties, including the Employer's Representative, to establish a suitable date for

inspections within the programme without causing a delay to handover. The Contractor shall provide access to the facilities and necessary equipment for such inspections.

3.23.9 The Contractor shall give reasonable notice to the Employer's Representative before covering up work.

3.24 Planned Maintenance Programme (PMP)

3.24.1 A 5-Year Planned Maintenance Plan (refer to DfE Ref. 612 within the DfE's DEIR) and Planned Maintenance Programme (refer to DfE Ref. 613 within the DfE's DEIR) shall be provided. For all relevant works:

- a) safety and security measures shall be provided for internal and external maintenance purposes including boarding, fixed ladders and handrails within roof spaces,
- b) measures shall be incorporated to prevent birds roosting or nesting on or in the structure, especially around building entrances and rainwater goods,
- c) there shall be no visible signs of entry to weather caused by a breakdown in the building fabric or its installations, and
- d) there shall be no discomfort to occupants due to weather penetration (any water penetration shall be measured by electrical conductivity tests).

3.24.2 The design of all parts of the Works shall facilitate future maintenance in particular by:

- a) using Good Industry Practice,
- b) using industry standard construction methods likely to be in use for the foreseeable future,
- c) providing ease of access for maintenance,
- d) complying fully with the Employer's Requirements, and
- e) complying fully with CDM Regulations.

3.24.3 The Planned Maintenance Programme for a Special School or Alternative Provision shall take particular account of the need to minimise disruption and discomfort to vulnerable pupils/students and young people.

3.25 Protection of the Public and the Environment

3.25.1 Overview

3.25.1.1 The Contractor shall take all steps to protect the public against harm due to demolition works. These steps shall include the provision and adaptation, maintenance and removal as required of all necessary temporary fences, barriers, hoardings, guardrails, screens and the like.

3.25.1.2 The Contractor shall take steps to prevent all nuisances such as (not exhaustive) dust, smoke, debris, silt, artificial lighting, stockpiles, temporary works and the like from causing unnecessary inconveniences or becoming a nuisance.

3.25.1.3 The burning of materials on site is prohibited.

3.25.2 Control of Noise and Pollution

3.25.2.1 The Contractor's attention is drawn to Statutory Requirements regarding the control of noise and pollution in relation to any demolition and construction works and to the need to obtain all necessary prior consents from the relevant authorities. All work shall be carried out in accordance with the agreed programme to minimise disruption to educational services.

3.25.2.2 Noisy works shall generally be avoided during lessons and absolutely during examination periods. Where unavoidable noise is required to take place during the School/College day at an operational School/College, the Contractor shall give at least 24 hours' notice of the time and duration of the impending disturbance to the Employer's and School/College's Representatives.

3.25.2.3 The Contractor shall at all times prevent any public or private nuisance (including, without limitation, any such nuisance caused by noxious fumes, noisy working operations or the deposit of any material or debris on the public highway) or other interference with the rights of any adjoining or neighbouring landowner, tenant or occupier or any statutory undertaker arising out of the carrying out of the Works and shall assist the Employer in defending any action or proceedings which may be instituted in relation thereto.

3.25.2.4 The Contractor shall be responsible for and shall indemnify the Employer from and against all expenses, liabilities, losses, claims and proceedings whatsoever resulting from any such nuisance or interference.

3.25.2.5 The Contractor shall take all necessary precautions to prevent nuisance from smoke, dust, rubbish, vermin and other causes.

3.25.2.6 The Contractor shall be deemed to have priced for compliance with the requirements of local authorities and the Health and Safety Executive (HSE) with regard to control of noise, pollution and all other statutory obligations.

3.25.2.7 The Contractor's particular attention is drawn to the rights of restrictive action which exist by virtue of the Environmental Protection Act 1990 and of Sections 60, 61 and 68 of the Control of Pollution Act 1974 and shall comply with statutory notices, conditions or limitations that may be imposed on them or on the Employer by any local authority.

3.25.2.8 The Contractor shall make all applications and obtain all such consents as are required under the said Acts.

3.25.2.9 Without prejudice to his duty to comply with the Control of Pollution Act 1974, the Contractor shall allow for complying with BS 5228 'Code of practice for noise and vibration control on construction and open sites', including the recommendations on community relations, planning and supervision.

3.25.2.10 The Contractor shall immediately inform the Employer's Representative in writing of any contravention of the said Act or British Standard. The Employer's Representative may subsequently issue such instructions as may be required to abate, avoid or halt any further contravention and the Contractor shall comply with such instructions at their own cost.

3.25.2.11 The Contractor shall not be entitled to reimbursement by the Employer of any costs, damages, loss or expense which have been occasioned or caused by compliance with any such notice, consent, limit, condition or instruction as aforementioned. The Contractor shall not be entitled to any extension of time for delays caused by such compliance.

3.25.2.12 The use of explosives will not be permitted unless expressly agreed in writing with the Employer's Representative and Employer.

3.25.2.13 All plant, tools and vehicles shall be fitted with effective silencers of a type recommended by the manufacturers of the plant, tools and vehicles.

3.25.2.14 The Contractor shall not permit radios or other audio equipment to be used on Site in ways or at times which may cause nuisance or distraction.

3.25.2.15 The Contractor shall take all necessary measures to ensure that no oil, grease or deleterious, dangerous, poisonous, explosive or radioactive matter are discharged from the Site into any rivers, ditches, watercourses or drains on the Site and/or any adjoining property.

3.25.2.16 The Contractor shall not permit the blockage of any rivers, ditches, watercourses or drains by reason of anything done or omitted to have been done on the Site or any land upon which the Works are being undertaken.

3.25.2.17 The Contractor shall comply, at its own expense, with any requirements of the Environment Agency or any other relevant authority so far as such requirements relate to or affect the Works.

3.25.2.18 The Contractor shall note that in many cases the neighbouring properties to the Site are likely to be residential properties, and without prejudice to its liabilities and responsibilities in the Scheme Contract, the Contractor shall take full responsibility for

any complaints or claims resulting from any failure to control dust, noise or vibration on the Site.

3.25.2.19 The Contractor shall provide and remove on completion such screens, dustsheets etc., as it considers necessary to minimise the nuisance caused by the distribution of dust including the prevention of damage to the School/College's equipment etc.

3.25.2.20 The Contractor shall not, without the consent of the Employer, sell or dispose of any earth, clay, sand, gravel, chalk or other material from the Site or any land upon which the Works are being undertaken or permit the same to be removed, except insofar as is necessary for the proper execution of the Works.

3.25.2.21 All precious or valuable metals or items identified that are required to be removed from site during the course of the Works shall first be notified to the Employer and shall be listed in the form of a Credit Schedule (refer to DfE Ref. 691 within the DfE's DEIR) prior to their removal from site. The Contract Sum shall then be adjusted accordingly.

3.25.2.22 The Contractor shall, at his cost, transport all surplus materials arising from the Works and arrange for the tipping of the same at such places as may lawfully be used for tipping. The Contractor shall (until such time as such material is lawfully tipped) ensure that such materials will not cause or give rise to pollution of the environment as defined by Section 29(3) Environmental Protection Act 1990 as may be amended, extended or re-enacted from time to time or any future legislation that may be introduced into Parliament in respect of the same.

3.25.2.23 The Contractor shall take all necessary measures to prevent damage, loss, injury or nuisance caused by:

- a) mud, dirt stones or other materials used or generated whilst carrying out demolition. This includes, but is not limited to, ensuring that no fuel or lubricant, mud, dirt, stones or other material is spilled or deposited on the highway whether or not it is open to traffic,
- b) smoke or dust generated whilst carrying out the demolition works, and
- c) bonfires, which will not be permitted.

3.25.2.24 The Contractor shall take the necessary measures to ensure that all vehicles leaving the Site are adequately cleaned to prevent the deposit of waste materials and debris on any adjoining property and/or the existing buildings and if any such material or debris is so deposited the Contractor shall forthwith employ such measures as shall be necessary to remove the material and debris and to clean and reinstate any adjoining property and/or existing buildings to the reasonable satisfaction of the owners or occupiers of any adjoining property and/or existing buildings as the case may be.

3.25.2.25 The Contractor shall prevent fire or explosion caused by any means.

3.25.2.26 The Contractor shall prevent nuisance from dust by appropriate methods of working, by the use of water as appropriate, by screening, enclosure or extraction using appropriate equipment. The Contractor shall ensure that all sensitive equipment owned by the School/College is protected from dust during the Works.

3.25.2.27 The Contractor shall take adequate precautions to protect pupils/students, staff, the general public and site operatives from dangerous fumes and dust arising from all works.

3.25.3 Materials Efficiency and Reducing Waste During Construction

3.25.3.1 The Contractor is required to help achieve a sustainable development and to reduce waste during construction according to the requirements as set out in Section 1.7 of the GDB.

3.26 Health and Safety

3.26.1 Overarching Requirements

3.26.1.1 In relation to all demolition and construction work, the Contractor shall take all necessary steps in accordance with Statutory Requirements to ensure that the Health and Safety of all occupants of the Site, individuals invited onto the Site, occupants of the existing School/College and occupants of adjoining properties is not adversely impacted by the undertaking of the Works.

3.26.1.2 The Contractor's attention is drawn to Statutory Requirements regarding the Health and Safety of all personnel engaged on or visiting the Site and to members of the public and to the need to obtain all necessary prior consents from the relevant authorities.

3.26.1.3 Where existing sites continue to be occupied by pupils/students during the construction work, the Contractor shall take particular care to safeguard them.

3.26.1.4 The Contractor shall provide welfare facilities immediately from the start of the project and not remove these facilities until the very end of the project to ensure those setting up and closing down the Site have suitable and sufficient provision as well as those working during the construction phase. Further guidance can be found in HSE Construction Information Sheet 59 [Provision of welfare facilities during construction work \(hse.gov.uk\)](#) and [Construction: Welfare - Managing occupational health risks in construction \(hse.gov.uk\)](#).

3.26.1.5 The Contractor shall ensure that assessments are made such that all significant risks likely to arise throughout the construction phase are anticipated and that appropriate steps are taken to eliminate, reduce or control the risk in accordance with Statutory Requirements/legislation.

3.26.1.6 The Contractor shall make specific site rules dealing with the wearing of PPE, drinking, eating, smoking and general housekeeping discipline on Site.

3.26.1.7 The Contractor shall prepare an emergency plan as a part of the Construction Phase Plan (refer to DfE Ref. 210 within the DfE's DEIR) for the Site which shall include details of how fires will be dealt with throughout the construction phase. The Contractor shall share these plans with the Employer, Employer's Representative, and the School/College.

3.26.1.8 The Contractor shall undertake inductions for the emergency plan with the School/College and all affected parties, where the plan might affect the safety of people and pupils/students in retained buildings in close proximity to the Works.

3.26.2 Safety of Pupils, Staff and the Public

3.26.2.1 The Contractor shall take all precautions necessary to ensure the safety of pupils, staff and the public. The Contractor shall ensure that plant and equipment is not left unattended and is secured during periods when the Site is vacant/unoccupied.

3.26.2.2 Access to scaffolding and entry points to the Works and its buildings shall be prevented to unauthorised personnel. In particular, the Contractor shall ensure that access to the Works, whether this be via scaffolding, ladders, gates or temporary doors, are not left unattended, when open, such that pupils/students and other parties can gain access.

3.26.3 Temporary Accommodation

3.26.3.1 The Contractor shall not without the written consent of the Employer's Representative erect or permit to be erected on the site any temporary structure except site accommodation.

3.26.3.2 The provision of temporary school/college accommodation, whether as additional accommodation or being required during construction or refurbishment of the School/College buildings, shall ensure the School/College is able to deliver the curriculum to all its pupils/students, and to meet its administrative, pastoral and other needs throughout the Works. The Contractor shall be responsible for providing this accommodation including, but not limited to, obtaining all consents, the supply and erection of the school/college facilities, including all necessary ICT and utilities connections and the removal and Site reinstatement following completion of the Works.

3.26.3.3 All temporary accommodation (including existing temporary accommodation on a Site which is to be re-used) will be required to meet the following performance requirements:

- a) to meet all current legislation and regulations,

- b) take into account, and where mandatory, comply with all European and British Standards, Codes of Practice etc,
- c) to be sensitive to the local environment including neighbours,
- d) to provide an internal and external environment that is, safe and secure for all its users, and
- e) to contribute to the overall smooth operation of the School/College during the Works.

3.26.3.4 The Contractor shall design any temporary accommodation such that a disabled pupil or pupil with SEN is not placed at a disadvantage in terms of access to teaching, learning and social spaces.

3.26.3.5 The Contractor shall ensure that the environmental design and the temporary accommodation fabric are appropriate to the needs of disabled pupils or those with SEN.

3.26.3.6 It is expected that all temporary accommodation and its component parts shall all have a minimum life expectancy of 150% of the time it is contracted to be on site, to ensure some residual life in case of contract delay or extension.

3.26.3.7 The Contractor shall design any temporary accommodation to create an environment conducive to effective teaching and which supports behaviour and pastoral care through the provision of:

- a) some internal transparency between the central circulation and teaching spaces so that users are visible to others in that suite. This can be in the form of glazed screens to the side of doors or fully glazed doors,
- b) entrance and circulation areas that allow space for safe and comfortable movement,
- c) offices and staff workrooms that are located and designed to support passive supervision, and
- d) toilets that are positioned for easy access and to facilitate passive supervision.

3.26.3.8 The Contractor shall provide and maintain including heating, lighting and cleaning and taking down and re-erecting from time to time as necessary their own temporary accommodation and for accommodating site meetings during the progress of the Works.

3.26.3.9 On completion, the Contractor shall clear away temporary buildings, all debris, surplus materials, rubbish and reinstate external areas.

3.26.4 Protective Clothing

3.26.4.1 The Contractor shall provide and maintain protective clothing, footwear and headwear as required by relevant Health and Safety legislation for all personnel engaged on or visiting the Site and for the sole use by persons acting on behalf of the Employer.

3.26.5 Site Hazards

3.26.5.1 All reasonable precautions shall be taken to avoid infestation of the Works by all pests, including but not limited to, insects, birds and vermin.

3.26.5.2 When drains are being constructed, precautions shall be taken to avoid the entry of rodents, including providing temporary stoppers to pipe ends and setting manhole covers in position as the work proceeds. Pipes and cables passing through the foundations and walls shall be properly built with appropriate seals whilst allowing for movement.

3.26.5.3 Prior to the commencement of demolition work, the Contractor shall ensure that measures for dust suppression are in place.

3.26.5.4 Should the use of water for dust suppression result in a drop in pressure to other users in the vicinity, then the Contractor shall programme the Works to prevent this or provide an alternative means of supply.

3.26.6 Other Site Contaminants

3.26.6.1 The Contractor shall report to the Employer's Representative the presence and levels of site contaminants found during the Works. The Contractor shall be responsible for the design of the remedial measures required and shall advise the Employer's Representative of these measures in accordance with legislation.

3.26.6.2 The Contractor's attention is drawn to Building Regulations Approved Document C: 'Containment' section and the BRE's report entitled 'The Construction of New Buildings on Gas Contaminated Land'. Both documents provide details on the control and excavation of gaseous contaminants and the necessary action on Site.

3.27 Asbestos

3.27.1 In carrying out its obligations under a Scheme Contract, the Contractor is required to comply with the Control of Asbestos at Work Regulations, together with its associated Approved Code of Practice. In so doing, the Contractor shall become and fulfil the "duty holder" role and responsibilities for managing asbestos for the Site.

3.27.2 No materials or products containing asbestos shall be used in the Works and during the operational phase.

3.27.3 The Contractor shall be responsible for visiting the Site to ascertain the means of access, nature, content, condition and extent of any asbestos containing materials (ACMs) including any rubble, surface or buried, resulting from previously demolished buildings.

3.27.4 The Contractor shall carry out all necessary removal or remedial works and shall make provision for undertaking the Works and operations in accordance with its specification and all current and foreseeable legislation and associated practical guidance, leaving the Site safe.

3.27.5 When the Contractor undertakes any work to existing buildings/services, it is essential that it proceeds with caution, taking care to establish whether or not there is a hazard arising from the presence of asbestos. The Contractor shall report to the Employer's Representative any suspected asbestos containing material discovered during demolition/refurbishment work. The Contractor shall avoid disturbing such materials and inform the Employer's Representative of the methods proposed for safe removal or encapsulation in accordance with legislation.

3.27.6 In the event of any suspected spread of asbestos, the affected area shall be evacuated immediately and sealed. The Contractor shall instigate emergency procedures to protect site personnel. This should be followed by advising the Employer's Representative, the School/College and the HSE.

3.27.7 In addition to the Control of Asbestos at Work Regulations and associated Approved Codes of Practice (ACOPs), the Contractor shall be responsible for ensuring compliance with all other relevant Statutory Requirements.

4.0 Handover and Completion

4.1 Practical Completion Activities

4.1.1 Prior to Practical Completion, the Employer's Representative and Contractor shall review details (roles, responsibilities, input requirements and timescales) for all activities required to achieve Practical Completion. The responsibility of the completion process shall be assigned to a designated person.

4.1.2 The Employer's Representative shall refer to the Handover Completion Checklist (and DfE Ref. 550 within the DfE's DEIR) and amend to suit the Project striking out irrelevant activities and adding in aspects particular to the Project.

4.1.3 The Contractor shall prepare a Building Readiness Programme (refer to DfE Ref. 526 within the DfE's DEIR), 6 months in advance of Practical Completion, to capture all activities in the run up to Practical Completion and through to the end of the Rectification Period.

4.1.4 The Building Readiness Programme and Handover Completion Checklist shall capture all activities in the run up to Practical Completion, including all testing and commissioning, witnessing and soak test, decant, contractor's clean and activities into the first year of operations including the Building Performance Evaluation (BPE) – the methodology for which is set out in Technical Annex 2K of the Employer's Requirements.

4.1.5 The status of each Completion Activity shall be tracked and recorded on the Handover Completion Checklist.

4.1.6 Prior to Practical Completion:

- a) Testing and commissioning shall be completed to ensure installed systems meet the design performance requirements.
- b) A 'soak test' shall be carried out of all the services and systems in their normal/auto operation mode, as if the Building were occupied and in use.
- c) Non-conformance raised during site inspections shall have been remedied in accordance with an agreed protocol.

4.1.7 The 'soak test' shall be programmed to occur after completion of all setting to work, commissioning and testing and is to prove reliability and correct calibrations over a continuous period of 7 days prior to Practical Completion.

4.1.8 The 'soak test' shall be carried out according to the requirements in the relevant Technical Annex:

- a) Technical Annex 2F, Section 13.2 (mechanical)
- b) Technical Annex 2G, Section 6.2 (electrical); Section 7.2 of the FE-OS version
- c) Technical 2I, Section 4.2 (controls).

4.1.9 Decant shall be organised and in accordance with the requirements for FF&E and ICT as detailed in the Employer's Requirements.

4.1.10 A Snagging Report (refer to DfE Ref. 552 within the DfE's DEIR) shall be prepared, and remedial works managed to minimise snags at handover. Separate snagging reports shall be drawn up for FF&E (refer to DfE Ref. 719 within the DfE's DEIR) and ICT (refer to DfE Ref. 528 within the DfE's DEIR) respectively.

4.1.11 The Contractor shall demonstrate compliance with the Employer's Requirements by use of protocols detailed in the Contractor's Quality Assurance procedures capturing evidence of both coordinated design and its implementation into the construction of the School/College Building(s) with photographic evidence and/or third party accreditation.

4.1.12 Where, due to seasonal constraints, grassed areas have not been either sown or established at the time of Practical Completion, the Contractor shall be obliged to return to comply with the provisions set out in Section 4.4 below.

4.1.13 Insurance transfer has been agreed between all parties.

4.1.14 Fire performance/resistance of materials used in construction has been certified as meeting all relevant standards and legislation.

4.1.15 All collateral warranties required have been provided.

4.1.16 The Fire Officer and Building Control inspection and sign off has been concluded.

4.1.17 All planning conditions have been discharged by the planning authority.

4.1.18 Confirmation that any lift installation meets current Building Regulations and the requirements of The Equality Act.

4.1.19 General Items:

- a) Keys (refer to DfE Ref. 110 within the DfE's DEIR for Key Suiting Schedule): Keys, swipe cards, proximity cards and other access control devices provided as part of the Works have been labelled and formally handed over to the School/College or maintenance provider,
- b) Building naming and room numbering agreed,
- c) Asbestos Clearance Certificate (refer to DfE Ref. 386 within the DfE's DEIR) and updated Asbestos Management Plan (refer to DfE Ref. 646 within the DfE's DEIR),
- d) Acoustic testing to the requirements of BB93 (refer to DfE Refs. 384 and 454 within the DfE's DEIR),
- e) Fibre Cabling Test Certificate (refer to DfE Ref. 391 within the DfE's DEIR) to be issued, and
- f) Road Sewer Adoption Licence (refer to DfE Ref. 620 within the DfE's DEIR).

4.1.20 Meter Readings (as a minimum):

- a) Electricity, Water, Gas and any other metered charges,
- b) Project commencement and Project completion, and
- c) Existing and new supplies.

4.1.21 The Contractor shall have provided all necessary information to enable the occupation and use of each School/College Building comprising, or forming part of, the Scheme.

4.2 Requirements for Practical Completion

4.2.1 The Contractor shall provide written confirmation that the Works have been carried out and completed in accordance with the Employer's Requirements, the Contractor's Proposals, and all Consents.

4.2.2 The Contractor shall provide written confirmation that the Works have been designed, constructed, remodelled or refurbished in the forms and materials described and as approved in any Consents and in accordance with the Employer's Requirements and Contractor's Proposals.

4.2.3 New Buildings shall have been located on each of the Sites, together with external hard and soft play and landscaped areas⁴, and with the sports and recreational facilities in accordance with the Employer's Requirements and Contractor's Proposals, and as approved in any Consents.

4.2.4 External fencing, gates, security equipment, vehicular and pedestrian access routes are complete as described in the Employer's Requirements and Contractor's Proposals, and as approved in any Consents.

4.2.5 Any buildings that are to be made weatherproof and watertight as part of the Scheme are weatherproof and watertight.

4.2.6 The Building services and drains comply with the Employer's Requirements in all material respects.

4.2.7 The School/College Building(s), and where relevant the Sites, are clean and tidy and all debris, surplus material and rubbish removed.

4.2.8 The Contractor has provided to the Employer all information required by the Contract relating to the Works including (but not limited to) operation and maintenance manuals to enable the occupation and unfettered beneficial use of the Works in accordance with the Scheme Contract and, all models and/or deliverables at the

⁴ Landscape works may be excluded if this work is required to be carried out during the next available planting season.

completion of construction to the level of information need as defined in the project specific DEIR (by reference to the BIM Protocol);

4.2.9 The Contractor shall have provided a 5-Year Planned Maintenance Programme (refer to DfE Ref. 613 within the DfE's DEIR) in relation to the Scheme or the parts of the Scheme in accordance with the Employer's Requirements.

4.2.10 All statutory certificates shall have been issued.

4.2.11 All testing, commissioning and witnessing are complete and all certification has been issued as detailed on the Handover Completion Checklist.

4.2.12 All mechanical and electrical installation work is complete and the plant and equipment are safe for use.

4.2.13 All collateral warranties shall have been provided in accordance with Articles 9, 10 and 11.⁵

4.2.14 Any tests for active ICT infrastructure shall have been met in accordance with the Employer's Requirements.

4.2.15 The decanting into the New Buildings and Refurbished Buildings shall have been completed in accordance with the provisions of the Decant Protocol where applicable.

4.3 Post Practical Completion Activities

4.3.1 The requirements that follow support optimal operational function of the School/College in use. To ensure a successful Practical Completion and issue of the Notice of Completion of Making Good, some activities shall commence prior to Practical Completion and other activities are required to take place during the Rectification Period. The activities that follow shall be progressed and/or delivered during the Rectification Period:

- a) Soft Landings including:
 - i) Aftercare
 - ii) Operability and Training
 - iii) Closure of snagging items
 - iv) Defects reporting and monitoring
 - v) Lessons Learnt
- b) Seasonal Commissioning
- c) Building Performance Evaluation (BPE) including:
 - i) Energy Monitoring and Benchmarking
 - ii) Carbon Reporting.

⁵ Article 11 does not apply to JCT IC or JCT MW contracts.

4.4 Soft Landings

4.4.1 Initial Aftercare

4.4.1.1 Soft Landings shall be considered at the outset of a project through to Practical Completion and into the first year of operation/occupation.

4.4.1.2 Soft Landings activities shall be captured within a Building Readiness Programme (refer to DfE Ref. 526 within the DfE's DEIR) and carried out in accordance with the Soft Landings protocols.

4.4.1.3 The Contractor shall identify a Soft Landings representative.

4.4.1.4 The Soft Landings representative shall be present on site and available to the School/College one day a week for a period of six weeks after Practical Completion, for site reviews and meetings as support for the School/College and to enable issues to be addressed as soon as they arise.

4.4.1.5 The Employer's Representative shall liaise with the School/College to agree a suitable base for the Soft Landings' representative after Practical Completion.

4.4.1.6 The Contractor shall facilitate, chair and minute monthly Aftercare Review Meetings for a period of 12 months (refer to DfE Ref. 363 within the DfE's DEIR for Aftercare Review Meeting Minutes). The Employer's Representative shall set the agenda for these meetings and attend. School/College to attend as necessary based on need. The Employer shall attend on a minimum quarterly basis.

4.4.2 Operability & Training

4.4.2.1 All New Buildings and any systems provided shall have services and controls that are straightforward and efficient to operate, and integrated where necessary into the whole School/College estate. This includes fire and security alarms, external lighting controls and access controls.

4.4.2.2 The School/College shall have sufficient information to enable all operators to understand how the relevant items and systems are designed to run effectively, efficiently and reduce running and maintenance costs.

4.4.2.3 The Contractor shall agree with the Employer a Handover Training Plan (refer to DfE Ref. 558 within the DfE's DEIR) during the design development phase and in accordance with Soft Landings protocols.

4.4.2.4 Training activities shall be captured within a Building Readiness Programme (refer to DfE Ref. 526 within the DfE's DEIR) 6 months in advance of Practical Completion and in accordance with Soft Landing protocols.

4.4.2.5 The Contractor shall ensure that the following groups of School/College operators are provided, in a timely manner, with the appropriate level of information and training to satisfy their responsibilities:

- a) Technical i.e., facility management team with a detailed understanding of the building operation and maintenance including Building Management System (BMS).
- b) Operational i.e., users who need to understand certain operational systems but require a less technical application of knowledge including business managers.
- c) Functional i.e., teaching staff and students who need a basic operational understanding of how the Building works e.g., ventilation of teaching spaces, lighting controls in communal teaching spaces etc.

4.4.2.6 The Contractor shall agree with the Employer a Training Schedule (refer to DfE Ref. 561 within the DfE's DEIR), pre and post-handover, in accordance with Soft Landings protocols to:

- a) ensure the School/College's technical and operational team(s) have a thorough understanding of:
 - i) how the building systems work (including systems relating to fire safety),
 - ii) how to check and adjust building systems and controls,
 - iii) how to monitor and review the Building's environmental and energy performance in use, and
 - iv) how to record adjustments made in the Operation and Maintenance (O&M) Manual (refer to DfE Ref. 549 within the DfE's DEIR and Appendix A of the Project's Information Standard for the proposed O&M Manual structure).
- b) ensure that appropriate School/College staff have been trained on the operational understanding of how the Building works e.g., ventilation and lighting controls of individual teaching spaces, and communal teaching spaces, and
- c) agree an ongoing training programme as part of the Soft Landings process following Practical Completion, and in addition when seasonal variations of systems occur, as agreed with the Employer and the School/College.

4.4.2.7 The Contractor shall ensure the following is included in the Training Schedule:

- a) training to be given,
- b) initial target audience identifying roles affected within the School/College environment,
- c) actual names of staff and operatives to be trained,
- d) planned dates,
- e) actual dates,

- f) a log of actual training given capturing the names and signatures of those trained (refer to Training Log DfE Ref. 560 within the DfE's DEIR).

4.4.2.8 In some instances, additional training will be required throughout the first year of operations, particularly in connection with system normalisation and seasonal commissioning e.g., BMS controls and adjustments, energy monitoring.

4.4.2.9 The Contractor shall maintain the Training Log and include it within Volume 1 of the O&M Manual.

4.4.3 Closure of snagging items (including grass growing)

4.4.3.1 The Contractor shall agree with the Employer access arrangements for completion of all snagging in accordance with the Contract.

4.4.3.2 The Employer's Representative shall monitor the completion of snagging and confirm in writing when complete.

4.4.3.3 The ICT Advisor shall monitor the completion of the ICT snagging and confirm in writing when it is complete.

4.4.3.4 FF&E installation shall be checked for completeness against the Detailed Furniture Layouts, General Arrangement Building Sections and General Arrangement Floor Plans (refer to DfE Refs. 171, 181 and 198 respectively within the DfE's DEIR), and any damage recorded as part of the snagging process.

4.4.3.5 Where seasonal constraints have prevented grassed areas from being established, the following provisions shall apply and as noted in Table 1:

- a) The Contractor shall be obliged to return to site during the first growing season following the applicable Completion Date to cultivate, seed and adequately protect the grassed area(s).
- b) From the applicable Completion Date until the satisfactory completion of the grassed areas, the Parties shall have a responsibility for the maintenance of the grassed areas in accordance with the following:

	Description/Item	Contractor Responsibility	Employer Responsibility
1	Grass cutting and necessary cultivation.	Yes	n/a
2	Ensuring no damage arising from access by School/College staff and pupils/students and/or vandalism to the areas.	n/a	Yes
3	Install and maintain adequate barrier/fencing or otherwise	Yes	n/a

	as stated in the Employer's Requirements.		
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Table 1 - Grassed areas requirements

4.4.3.6 For the avoidance of doubt, any failure on the part of the Contractor to comply with its responsibilities as above shall constitute a defect.

4.5 Defects & Non Conformance Reporting and Monitoring

4.5.1 The Contractor shall adhere to the DfE defects and non conformance protocols, as set out in the Soft Landings procedures ensuring:

- a) The School/College are in receipt of key contact details (including out of hours/emergency telephone numbers).
- b) Defects and Non Conformances shall be recorded on a Non Conformance Register (refer to DfE Ref. 568 within the DfE's DEIR).
- c) Defects are rectified within an agreed timeframe.

4.5.2 All defects and non conformance matters shall be monitored at the monthly aftercare meetings during the Rectification Period.

4.5.3 The Contractor shall provide an updated Non Conformance Report (refer to DfE Ref. 618 within the DfE's DEIR) at each monthly aftercare meeting. The Report shall capture the issues, remedial and corrective measures undertaken. The Employer and Employer's Representative shall agree the status of each issue.

4.5.4 All defects and non conformance shall be remedied prior to the issue of the Notice of Completion of Making Good.

4.5.5 The response times referred to in Section 2 of the Scheme Contract shall be as follows:

- a) Water ingress or leak from internal services - 8 working hours.
- b) Electrical and heating faults - 8 working hours.
- c) Blocked drains - 8 working hours.
- d) Ill-fitting doors/windows where security affected - 8 working hours.
- e) All other defects which the Employer reasonably considers require attention before the end of the Rectification Period and which materially impact to the operation of the School/College - 7 days (unless in the opinion of the Employer these represent a possible danger, in which case, 8 working hours).

4.5.6 Provided always that, without prejudice to the generality of Section 2 of the Scheme Contract, should the Contractor be unable to comply with a relevant response time, or a defect requires an emergency response, then the defect can be made safe by the

Employer or others on their behalf (including those working at the School/College) in line with the provisions of the Scheme Contract.

4.5.7 For the purpose of this Section (4.5), “working hours” shall mean any hour between 9am and 5pm on a day other than a Saturday, Sunday or Bank Holiday. In the event of an emergency, access will need to be agreed between the Employer and the Contractor (both acting reasonably).

4.6 Lessons Learnt

4.6.1 The Employer’s Representative shall arrange, chair and manage lessons learnt workshops at the end of RIBA Stages 3-6 with the Contractor and their delivery team and capture all outcomes in a Lessons Learnt Log (refer to DfE Ref. 350 within the DfE’s DEIR).

4.7 Seasonal Commissioning

4.7.1 Seasonal commissioning adjustments shall be conducted throughout the first year of the Building's operation following Practical Completion by the Contractor and as noted in Table 2. Seasonal commissioning adjustments are to be agreed and diarised in a Seasonal Commissioning Adjustment Programme (refer to DfE Ref. 345 within the DfE’s DEIR) giving the Employer and School/College at least 1 weeks’ notice of any activities. In particular:

- a) boiler plant/heat pumps and heating controls shall be reviewed and adjusted during the first winter period when outside conditions match the design temperature,
- b) ventilation and cooling plant shall be reviewed and adjusted when the Building is at full occupancy during the first summer period matching the peak design temperature,
- c) for the domestic cold water systems the end of line automatic flushing system seasonal adjustments shall be reviewed upon occupation of the Building and also at peak summer time temperatures,
- d) for electrical systems seasonal commissioning shall review the settings for automatic daylight controls at the autumnal and spring equinox, and
- e) power factor correction settings shall be reviewed once the Building is at full occupation (or at 12 months post Practical Completion) and all equipment/plant fully operational.

4.7.2 Where adjustments are made to any plant and control settings as a result of seasonal commissioning activities these shall be summarised and all adjustments recorded within the O&M Manual.

4.8 Building Performance Evaluation (BPE), Energy and Carbon Monitoring

4.8.1 Building Performance Evaluation (BPE)

4.8.1.1 The purpose of the BPE is set out in the DfE's Generic Design Brief (GDB) Technical Annex 2K: Building Performance Evaluation Methodology. The Contractor shall support the School/College building users in achieving building performance through an agreed evaluation and reporting regime.

4.8.1.2 The Contractor shall support the School/College building users by setting up and carrying out BPE reviews and reporting at 3-6 months and 9-12 months post Practical Completion as noted in Table 2. This shall comprise:

- a) analysis of information on the project before the visit,
- b) two-part site visit and walk around/meeting with the School/College – the Contractor (including MEP and controls specialist),
- c) photos of the School/College/Works reviewed,
- d) completion of an FM questionnaire,
- e) completion of a teaching staff questionnaire, and
- f) review of the BMS system and energy consumption data.

4.8.1.3 Follow up actions after the initial meeting shall comprise:

- a) analysis of the data collected for each School/College,
- b) compilation of a report on all findings, energy trends and observations from each School/College – aimed at the Employer and Employer's Representative,
- c) compilation of short summary report that will go back to the School/College, and
- d) overall report on the batch of School/College Buildings for the Employer, if part of a batch/wider campus project.

4.8.1.4 All reports shall follow the standard Employer's format for BPE reviews as detailed in DfE's Generic Design Brief (GDB) Technical Annex 2K: Building Performance Evaluation Methodology i.e., an Initial Performance Review Report followed by a Final Performance Review Report (refer to DfE Ref. 619 within the DfE's DEIR).

4.8.2 Energy Monitoring & Bench Marking

4.8.2.1 Reporting of Energy In Use consumption data and performance verification of systems shall be monitored against the benchmarks shown in Technical Annex 2H: Energy from the BMS or via iSERV/K2n (or approved equivalent) using data from sub-meter(s) fitted. All incoming utilities including electricity, gas, water and heat meters (fitted where district heating is used). Sub-metering requirements are captured in Technical Annex 2H of the Employer's Requirements.

4.8.3 Carbon Reporting

4.8.3.1 Embodied Carbon in Construction (refer to DfE Ref. 617 within the DfE's DEIR) shall be reported at:

- a) Three months post-Practical Completion (Interim Report).
- b) At end of Rectification Period (Final Report).

4.8.3.2 Operational carbon reflecting 'in use' data during the Rectification Period (refer to DfE Ref. 617 within the DfE's DEIR) shall be reported at:

- a) Six months post-Practical Completion (Interim Report).
- b) At end of Rectification Period (Final Report).

4.8.3.3 At the end of the Rectification Period the above information shall be collated and captured into a 'Year 1' Net Zero Strategy Report (refer to DfE Ref. 617 within the DfE's DEIR).

Soft Landings Requirement	Employer Tasks	Contractor Tasks	Other Stakeholder Tasks	Output
<p>Initial Soft Landings Assistance & Aftercare</p>	<p>Employer's Representative to liaise with School/College to agree where Contractors' Soft Landing representative can base themselves and ensure School/College know to utilise them</p>	<p>Contractor to ensure all defects are recorded, monitored and completed</p> <p>1 operative, 1 day per week for initial 6-week period</p>	<p>School/College to accommodate Contractor's representative and utilise assistance</p>	<p>Defects Register updated and maintained by Employer's Representative</p>
<p>Training to ensure the Responsible Body fully understand how to operate the Building(s)</p>	<p>Employer's Representative to liaise with School/College for attendance at training</p>	<p>In addition to initial training for all systems, 6 No. additional days shall be allowed for replicated training, as required, based on topics identified in the monthly meetings</p>	<p>Propose training topics at the monthly meetings</p>	<p>Training Schedule based on the initial Handover Training Plan culminating in a Training Log – all prepared/ maintained by Contractor</p>
<p>Monthly Aftercare/ Enhanced Rectification Period Meeting</p>	<p>Employer's Representative sets the agenda</p> <p>DfE PM/PD to attend based on need (minimum quarterly)</p> <p>Employer's Representative manages two lessons learnt workshops at 6 and 12 months post handover</p>	<p>1-day formal Aftercare Review Meeting per month during first 12 months of Rectification Period</p> <p>Contractor required to prepare information based on agenda items, prepare/issue minutes and track agreed actions</p>	<p>School/College to attend as necessary based on need</p>	<p>Agenda (TA) + Minutes (Contractor) including:</p> <ul style="list-style-type: none"> - Aftercare Issues - Training Update/Requirements - Defects/Non-conformance - Systems Monitoring and Utility Usage/BPE

		Attendance from specialist Contractor representatives' dependent on agenda items		<p>- Lessons Learnt sessions at 6 and 12 months (TA)</p> <p>Defects Register including retrospective derogations covering non-performance (TA)</p> <p>Lessons Learnt Log for DfE knowledge sharing (RIBA Stages 3-6)</p> <p>Reports and Certificates as per items below (based on agenda items)</p>
Seasonal Commissioning	Employer's Representative to liaise with School/College regarding accommodating Contractor for seasonal commissioning	1 day per quarter to make seasonal adjustments (to be planned as required)	School/College to accommodate Contractor's representatives and understand seasonal adjustments	<p>Commissioning activities agreed and diarised on a Seasonal Commissioning Adjustment Programme, reviewed at monthly meetings and recorded in Lessons Learnt Log</p> <p>Commissioning certificates at 3, 6, 9 & 12 months reviewed and placed in Operational and Maintenance (O&M) Manual</p>
Building Performance Evaluation	Employer's Representative to extract relevant data, review and share with	Work with Employer's Representative and School/College to review 'in use'	School/College to engage with the process	Two Building Performance Evaluation Reports – Initial Performance Review and

<p>Frequency: Energy – Quarterly Water – Quarterly Carbon – 3, 6 & 12 months BPE – 6 & 12 months</p>	<p>Contractor for comment</p> <p>Employer's Representative to prepare reports for DfE summarising findings</p> <p>Cover in monthly aftercare meetings</p>	<p>data and assist in preparation of reports</p> <p>Monitor and Benchmark - verifying system performance via K2n/iSERV or similar platform providing daily readings</p> <p>Upload total water consumption data, via K2n/iSERV or similar, and/or to a public platform for first 1-year post-completion</p>		<p>Final Performance Review as per Template set out in Technical Annex 2K</p>
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Table 2 - Handover and Completion Requirements

Annex 1 – Project’s Information Protocol

Refer to Annex 1 – Project’s Information Protocol including Information Particulars

Annex 2 – DfE’s Exchange Information Requirements

Refer to Annex 2 – DfE’s Exchange Information Requirements

Annex 3 – DfE’s Detailed Exchange Information Requirements

Refer to Annex 3 – DfE’s Detailed Exchange Information Requirements

Annex 4 – Project’s Information Production Methods And Procedures

Refer to Annex 4 – Project’s Information Production Methods And Procedures

Annex 5 – Project’s Information Standard

Refer to Annex 5 – Project’s Information Standard

Annex 6 – Special Conditions

Refer to Annex 6 - Special Conditions where applicable



Department
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