AHR – Lead Consultant/Architecture/Interior Design

General duties

- Provide architectural consultancy services for the duration of the workstage
- Fulfil Designer duties, as defined by Regulation 9 of the CDM Regulations 2015
- Take account of the General Principles of Prevention when preparing or modifying the design
- Consider and contribute to H+S risk management process and develop proposals for risk mitigation
- Assist the Client in developing the initial architectural brief
- Assist the Cost Consultant in determining Construction Costs
- Advise the Client on statutory and other legal obligations
- Report on progress against the design programme
- Appointments
- Enter into / maintain a direct agreement with the Client for the provision of architectural services

Collaboration

- Participate in design team meetings and design coordination / design review workshops. Provide feedback
- Collaborate in project reviews and apply principles of continuous improvement to the design
- Coordinate the architectural design with the other design disciplines
- Provide information for updating the cost plan
- Participate in a team-wide design review to signal the end of concept design

Procurement

- Advise on selection of Contractor Design Portions for architectural elements
- Construction
- Consider constructability issues when developing the Concept Design
- Support the PM/QS in finalising the procurement strategy

RIBA 2

- Visit site and/or example projects to assess restrictions that might influence design philosophy
- Advise on need and scope of special investigations or tests to be carried out in support of the design
- Identify activities needing early specialist design input by others
- Define design performance metrics and targets for architectural elements
- Support the PM in prepare a programme for Workstage 2 design activities
- Site surveys and investigations
- Review available survey data. Identify shortfalls and request additional data, as necessary to progress the design
- Identify architectural constraints, including adjoining landowners' issues
- CDM, Risk Registers and Change Control
- Maintain design risk assessments for the architectural design
- Contribute to risk assessments for the design covering programme, cost and quality
- Statutory and Stakeholder Consultations / Submissions
- Advise the Client of planning conditions & other statutory restrictions or constraints that apply to the project
- Provide information in support of any required Outline Planning Application
- Participate in preliminary Building Regulations discussions
- Prepare the Concept Design

- Define the architectural design standards and criteria in support of the Client's objectives
- Develop the current architectural concept design, defining scope, scale and form of the building(s)
- Develop, review and assess architectural options
- In collaboration with the MEP, determine passive design philosophy for the project
- Provide information to the Client's Cost Consultant for updating outline project costs.
- Review and value-engineer the architectural concept against the latest approved cost plan

RIBA 3

- Support the PM in prepare a programme for Workstage 3 design activities and deliverables
- CDM, Risk Registers & Change Control
- Maintain design risk assessments for the architectural design
- Contribute to risk assessments for the design covering programme, cost & quality
- Stakeholder & Statutory Consultations / Submissions
- Through a process of Client & Stakeholder engagement, finalise the architectural design
- Advise the Client of planning conditions & other statutory restrictions or constraints that apply to the project
- Undertake third party consultations, as reasonably required.
- Submit relevant coordinated architectural design information in support of the required Planning Application
- Submit coordinated architectural design information to demonstrate compliance with Building Regulations
- Be available to answer queries & provide a reasonable level of supporting information
- Prepare the Coordinated Design
- Develop the architectural aspects of the coordinated design.
- Develop the architectural design Standards & criteria in support of the Client's objectives
- Provide coordinated design information to the other Designers to enable them to carry out their services
- Provide information to the Client's Cost Consultant for updating project costs
- On instruction, value-engineer the coordinated design against the latest approved cost plan
- Develop the preferred design
- Develop preliminary information on specialist architectural systems to be developed as Contractor Design Portions
- Develop architectural levels, grids & key setting-out coordinates
- Finalise schedules of accommodation & room numbering (incl. occupancy numbers for each space)
- Spatially coordinate the architectural design & integrate with the structural, MEP & other design disciplines
- Develp Room Data Sheets for Standard/non-Standard room layouts
- Finalise architectural finishes to the building exterior. Arrange samples in support of Planning Application process if required
- Develop key architectural finishes to the building interior - detail & colour to be agreed during Workstage 4
- Finalise horizontal & vertical circulation strategies to address accessibility, security, fire-fighting & escape
- Finalise the architectural building safety strategy . Identify: -
    - means of escape (incl. travel distances)

  - compartment lines / compartment sizes (incl. fire resistance requirements)
  - emergency wayfinding (signage) strategy
  - fire extinguisher locations
  - fire-fighting access & facilities (incl. travel distances)
  - locations of intumescent coating / board protection solutions to structural frame members (R requirements by SE)
- Finalise the acoustic strategy. Identify: -
  - performance requirements for façade, roof, floor & party wall elements
  - design intent solutions / outline specifications for controlling noise through façade, roofs, floors & walls
  - design intent solutions / outline specifications for controlling reverberation in key architectural spaces
  - design intent solutions for balancing natural ventilation solutions with noise control / overheating scenarios
- Finalise the access & maintenance strategy. Identify: -
  - site & building access, boundary treatment & door & gate security provisions
  - vehicle & pedestrian routes, drop-off points, car-parking, disabled access, cycle storage
  - service access, refuse storage & collection (incl. recycling points) , major deliveries, moving-in / moving-out,
  - facade cleaning, inspection & maintenance. Roof access & maintenance, incl. plant replacement
- Develop key architectural assembly details (design intent) for external facade, roofs & floors
- Finalise Outline Specifications for key architectural elements, systems & products,

RIBA 4

- Prepare a Technical Design for the architectural elements that clearly communicates:
  - architectural layouts (site, context, levels and boundaries)
  - architectural plans, sections and elevations
  - architectural setting-out (incl. levels, grids, slab recesses, penetrations and dimensions)
  - access panel locations (coordinated with building services requirements)
  - accessibility requirements (e.g. means of escape / space-planning / sanitary / wayfinding & signage etc.)
  - access for maintenance requirements (access platforms, lifts, ladders, stairs, rails, protection elements etc)
  - building safety strategy requirements
  - construction methods and materials
  - design quality requirements
  - durability requirements for architectural elements (external finishes / internal finishes)
  - durability requirements for FF&E
  - environmental scheme requirements,
  - room naming and numbering strategies
  - room uses and functions (space-planning) - in support of building services room data sheets
  - key details and performance specifications for elements of building envelope
  - key details, performance specifications and schedules for elements of building shell
  - architectural core requirements
  - key details, performance specifications and schedules for elements of interior finish

  - fire protection of structural frames using intumescent-coatings (instances & performance specifications only)
  - fire protection of structural frames using boxing-in (instances, manufacturer details & performance specifications)
  - life cycle performance for systems and products related to the architectural elements
  - reflected ceiling proposals, detailed to allow the overlay and coordination of relevant building services provision
  - sanitary layouts (space-planning) - as underlays for building services use
- The Requirements shall: -
  - be coordinated with the outputs and briefings provided by the other Designers
  - be aligned with the latest Cost Plan
  - include key setting-out information
  - include performance compliance criteria (acceptable methods of proof - lab tests / computer tests etc)
  - include required levels of performance - in accordance with relevant National or EN Standards
  - include required levels of workmanship, inspection, commissioning and sign-off, by system or product
  - include schematic layouts, design details, schedules & calculations suitable for tendering the works
  - be verified by the architect as meeting the architectural performance requirements of the brief
- Undertake periodic reviews of the Technical Design, to check that: -
  - the architectural design is compliant with statutory, regulatory and project brief requirements
  - metrics for GIFA / room area provision are accurately reported via accommodation schedules
  - architectural elements are coordinated with the G.A.s prepared by the other Designers
  - architectural aspects of the Building Safety Strategy are coordinated with the Client's building safety objectives
  - partition types are compensated for Rw Db (C:Ctr) drop-off - as advised by the Acoustic Engineer
  - grids, levels and setting-out information is practical and easily applyable in site conditions
  - external envelope details are robust achieve thermal continuity, incl. attachments (e.g. balconies and signage)
  - U-value, Thermal Bridging and Interstitial Condensation calculations have been undertaken
  - habitable or routinely used spaces are naturally lit
  - the design takes into account AHR's Prohibited Materials List
  - only 'adequate and proper' construction materials are proposed re: Regulation 7
  - the Designers have removed all reliance on fall restraint systems for maintenance
  - the specification supports local supply chains
  - layouts meet space and mobility requirements of BS 8300 or similar national or sector-specific standards
  - plant room and service riser sizes match the requirements of the building services engineer
  - service routes are incorporated into the architectural design

RIBA 2-4 - Structural/Civil Engineer

- Allowance for meeting / discussion following conceptual design stage to work up & develop a suitable Grid layout / Arrangement and discussions for locations of columns and cross bracing locations etc.
- Appraisal of wind and gravity loadings.
- Preparation of structural calculations in order to calculate steelwork sizes.
- Design of steel frame comprising roof beams, floor beams, columns, tie beams, sway bracing and roof bracing, lintel beams and door posts with possible rigid sway frame action if bracing locations cannot be achieved.
- Guidance & specification for proposed roof and floor decks depending if precast planks, profiled metal deck with concrete on steel beams are adopted.
- Design / Specification for door & window lintels.
- Masonry wall panel design checks for lateral wind loading.
- Review of masonry movement joints.
- Design of either 'spread' pad bases / pile & pile cap design.
- Design of either 'spread' footings / RC ground beams to support masonry walls & suspended ground floor construction.
- Preparation of Structural General Arrangement layout plan drawings of the steel frame including bracings, roof & floor span/spec., lintels and door/window restraint post positions etc.
- Preparation of overall steelwork sections and elevations.
- Preparation of sections and details as necessary for Tender, to structural components.
- Preparation of Foundation General Arrangement layout plan drawing showing pad/pile cap and footing/ground beam sizes & locations.
- Preparation of foundation sections & details as necessary.
- Determine permissible requirements and allowable discharge into public sewer. Fees do not include any cost associated with any new connection costs, abandonment costs or planning costs that may be required.
- Determine impermeable site areas and calculate run off discharge rates for storm criteria as per LA guidance and maximum foul water discharge.
- Allowance for calculating volume requirements for either soak-away design or attenuation tank design depending on outcome from soak-away percolation testing (by others) and/or Statutory Authorities'
- Design of both separate surface water & foul water drainage system for proposed classroom block. Existing sewer plans, invert levels, pipe sizes and run positions for the site will need to be confirmed by others prior to commencement of design.
- Preparation of drainage layout plan including pipe diameters, manhole locations and soak-away/attenuation tank position etc.
- Preparation of section detail through soak-away or attenuation tank (assuming the use of polypropylene block cells).
- Manhole sections / details and any pipe bedding details.
- Preparation of structural designer's residual risk assessment.

RIBA 2-4 - Mechanical and Electrical Consultant

Electrical

- Undertaking electrical load schedule for the new building and detailing where main power connections will emanate
- Detailing where main data network connections will terminate on the existing site and what termination racks are required to accommodate this
- Detailing how new fire alarm system will interconnect to the existing school
- Detailing how the new intruder alarm & access control systems will interconnected into the existing school
- Detailing how the new CCTV system will interconnected into the existing school
- Detailing philosophy for mains distribution within the new building
- Detailing philosophy for lighting installation and method of switching/control
- Detailing philosophy for external lighting installation and method of switching/control
- Detailing philosophy for small power installations
- Detailing philosophy for supplies to main items of mechanical plant and equipment
- Detailing philosophy for fire alarm and refuge systems required to comply with the project fire risk assessment
- Detailing philosophy data outlet & wifi distribution around the new building and assessing space requirements and AC heat loadings for server rooms
- Detailing intruder alarm & access control philosophy for the new building
- Detailing general containment methods required for the new build
- Assessment of proposed building structure and of what method of lightning protection is required and detailing the philosophy

Mechanical

- Detailing where new mains cold water connections ill emanate to serve the new extension
- Detailing where any new gas supply will emanate from to serve the new extension (if gas is required)
- Detailing philosophy for heating the new extension, including central plant and heat emitters
- Detailing philosophy for providing domestic hot and cold water services to the extension.
- Detailing the above ground drainage services for the extension
- Detailing philosophy for ventilating the new extension to comply with the requirements for ESFA BB101
- Detailing the philosophy for any mechanical cooling systems which may be required
- Detailing the philosophy for any Building Management Systems for the new extension including any sub-metering
- Producing iSBEM calculations and Thermal Model to ensure compliance with the requirements of ESFA BB101 and Building Regulations

General

- Detailing main external services routes to facilitate all site interconnections between new school block and existing school
- Detailing philosophy for main services routes throughout the new extension including main pipework, ductwork and containment route planning and co-ordination of services
- General space planning of main items of mechanical and electrical equipment including weights of main equipment
- Review and assess ways to reduce the carbon emissions of the building by considering renewable technologies

- Managing iSBEM assessors with respect to M&E designs and incorporating required strategies within the mechanical and electrical design requirements
- Detailing requirement for any solar PV where required to meet iSBEM or project requirements
- Ensuring the M&E design philosophy complies with latest legislation, British standards, Building regulations and DoE standards
- Production of drawings and mechanical and electrical services specifications illustrating the above mechanical and electrical installation elements and requirements
- Provide an indication of associated builders works requirements to the architect for both internal & external works associated with the mechanical and electrical installations
- Liaise with the project Architects to develop the above strategies in line with the required building aesthetics
- Production of an M&E Designers risk assessment

RIBA 2-4 - Principal Designer under CDM Regulations

- Attend Design Team meetings to review and comment on the design
- Provide input into stage completion reports advising the client that H&S has formed part of the design.
- Visit the site to review site access constraints and liaise with the lead designer on suitable access and site compound locations.
- Complete the Client's Duties under the Regulations until a Principal Contractor has been appointed.
- Review & Comment on the Design Risk Register relating to the works.
- Prepare a project specific Pre-Construction Information Plan at RIBA 4 for the project following a review of the stage 4 design and Designer Risk Assessment's
- Comment on the contractor's tender proposal from a H&S perspective (if required).
- Attend a pre-start meeting and liaise with the client and Principal Contractor on key facets of the project.
- Review the Contractor's Construction Phase Plan, reviewing, commenting and approving if satisfactory.
- Prepare, submit and monitor the F10 to the HSE covering the project duration.
- Liaise with the contractor as to the progress of the H&S file as the project nears completion.
- Review and issue the H&S File to the client at the end of the project, checking that all information is accurate and project specific. This will include as built information.

Client Advisor Duties

- Attend monthly site meetings to review that the works are being delivered in accordance with the CPP and that welfare arrangements remain appropriate.
- Attend and prepare a monthly site visit random inspection & report to check that the works are being constructed safely and issue this to the client.
- Discuss with the client any safety incidents that occur on site and providing a lessons learnt response.
- Undertake accident investigation (if required).

RIBA 2-4 - Planning Consultant

- Work leading up to the preparation of a full application including the preparation of a planning support statement and dialogue with Sport England. This would be followed by the submission and progression of the application.

- Work associated with the discharge of conditions.