

Supporting a thriving Parliamentary democracy

Job Title:	Principal Mechanical Engineer
Salary:	Band A1 - £63,716 to £75,953
Team:	Design Authority
Number of Posts:	1
Contract Type/Duration:	Permanent

Team Information

Parliament's In-House Services and Estates team (IHSE) manages all property and engineering infrastructure across the Parliamentary Estate. The Estate consists of 17 main buildings ranging from the historic Palace of Westminster to the modern Portcullis House. The Palace is located within a UNESCO World Heritage site, and the Estate spans 4 conservation areas. IHSE has an annual budget of several hundred £m, split between around 100 ongoing capital projects and operations, and has several multi-million refurbishment projects planned over the next decade to refurbish some historic buildings and replace ageing engineering infrastructure.

The Design Authority manages the lifecycle of the buildings together with providing advice and assurance to the Project Delivery and Maintenance groups. The Design Authority has a core of expert in-house staff providing continuity, direction and support to colleagues, consultants and contractors, and represents the estate with key external bodies. It also manages the records and digital models for the buildings and infrastructures, and leads the Clerks of Works, CDM Safety Advisors and Building Services Consultant contracts. It is staffed mainly by Chartered professionals covering Conservation Architecture, Electrical, Mechanical, Public Health, Electronics, and Control Systems Engineering.

Job Information

Working within the Design Authority, this post will focus on the provision of subject matter expertise for mechanical engineering and provide team leadership and long-term assurance and benefits to Parliament. The post holder will work closely with complementary posts and will concentrate on core delivery over the short to medium term.

The Principal Mechanical Engineer is the expert client and customer representative who establishes and owns the relevant design standards and validates their application. He/she develops, implements and oversees the strategy for mechanical services design and implementation across the Parliamentary Estate.

Responsible for leading on mechanical engineering services to meet the long-term needs of user departments in the two Houses.

Due to the essential association with the wider Organisation of both Houses, the post holder is expected to foster a culture of achieving business excellence, high customer service and professional standards, compliance with statutory regulations and legislation, as well as providing best practice support and guidance.

Responsibilities

Strategies and Systems

Research, development and upkeep of long-term strategies, policies and lifecycle plans for the diverse range of mechanical engineering and other services across the Parliamentary Estate buildings, including:

1. Heating systems, mostly using gas fired plant, heat exchangers and calorifiers
 2. Mechanical ventilation and air conditioning from chilled water and refrigerant plant
 3. Water treatment plant and distribution systems, including mains, fire mains, boosted, softened, bore-hole, chilled, domestic hot and cold, and low temperature hot water
 4. Public health systems, including drainage and sewage ejectors
 5. Steam generation and distribution, with a focus on conversion to LTHW
 6. Control methodologies for the above systems delivered by standalone controllers, BMS/PLC systems and variable speed pumps
- Assess and inspect the varied range of mechanical engineering infrastructures, both directly and through leading consultants, and prepare resulting lifecycle maintenance plans.
 - Review changes and modification proposals, and recommend sign-off where adaptations do not threaten the original design intent, service delivery or resilience.
 - Provide support to develop, guide and approve testing and commissioning methodologies.
 - Advising on maintenance planning, commissioning, and testing.

Feasibility Studies

- Brief, appoint, lead and manage external consultants to enable delivery of mechanical engineering infrastructure work, making sound judgements as the "informed client".
- Undertake feasibility and option studies from small scale up to several £m for expanding, replacing and future proofing the mechanical engineering infrastructures and use the results to provide objective advice to meet the needs of users.
- Develop and produce project briefs, designs and specifications, and manage some electrical building services and infrastructure-based projects through to final delivery and commissioning, including budgets, being able to use their own expertise and having accountability for their own decisions without relying on external consultants.
- Develop business cases in accordance with Treasury Green Book and Parliamentary processes and provide specialist business case support to others on complex projects, to secure funding.

Standards

- Develop and keep up to date the building services Design Guide, being the principal source of expertise for the mechanical systems, advising designers, consultants and colleagues on their application.
- Ensure compliance with current and new regulations, standards, legislation, and codes of practice to the design, installation and commissioning stages of own projects.
- Incorporate accessibility and environmental sustainability into projects wherever possible.
- Ensuring the advantages of Building Information Modelling are incorporated in relevant documents and at all project stages.
- Influence colleagues to adhere to Parliamentary design standards, persuading rather than enforcing.

Technical Support

- Reviewing infrastructure design, installation, maintenance, operating and decommissioning methods, and recommending the authorisation of change proposals from consultants, contractors and colleagues ensuring they meet the estate-wide strategies, maintenance and user requirements.
- Assessing the engineering competency and capabilities of consultants and contractors, and evaluating tender proposals, whilst maintaining good relations.
- Providing a proactive expert service during mechanical services and infrastructure faults, and where failures may be due to consultant or contractor error, preparing evidence and acting as an Expert Witness should a dispute follow.
- Own and lead areas of complex projects with overall values up to £50M.
- Support the Records Manager in reviewing O&M manuals and H&S files, and tracking defects.
- Witness, record and sign off new or refurbished systems at handover.

General

- Represent the Parliamentary Design Authority on programmes/projects boards, and with other departments.
- Work with limited guidance, communicate respectfully, and support equality, diversity and inclusion.
- Provide content for relevant FOI requests, Written and Oral Parliamentary Questions.
- Understand and apply tendering processes particularly Public Sector Procurement rules; KPIs; industry contracts such as NEC3; and project delivery methodologies such as the RIBA Plans of Work.

The post holder will report to The Head of the Design Authority and will act with their authority in commissioning and overseeing work.

The post has line management responsibility for the lead mechanical engineer, mechanical engineer (M+E) and design manager (M+E)

Location

This post will be located on the Parliamentary Estate, Westminster, London.

Security

Successful candidates will be required to complete pre-employment checks. This includes security vetting to Counter Terrorist Check (CTC) level or higher, as described in the job description. All successful candidates are required to pass these checks before an offer can be confirmed.

You should be aware that if you have resided outside of the UK for a total of more than two of the last five years, you are not eligible to receive security clearance to work on the Parliamentary Estate.

[Click here](#) for further information.

Hours

We welcome applications from candidates who wish to work part-time or as part of a job share. If you are selected for interview please inform the panel of the days/hours you are available to work, alternatively you can inform the recruitment team at any stage of the process.

Bands A – E Positions (Full-time)

Net conditions full-time working hours for staff of the House are 36 hours per week. This excludes daily meal breaks of one hour. The exact daily times of attendance will be agreed with line management.

Workplace Adjustments

As an inclusive employer, the House of Commons supports individuals in need of workplace adjustments. The workplace adjustment process prevents, reduces or removes problems you might face at work. Adjustments can be requested to help with obstacles relating to mental health, and physical or non-physical requirements. You can request a workplace adjustment if you have a disability or suffer from a difficulty or disadvantage in your workplace.

Application and Selection Process

Further details will be provided if you are successful at the initial application stage.

We may ask you to complete a test, presentation or other assessment as a part of your recruitment process.

If you are invited to interview, we will ask you a combination of competency questions and role specific questions solely based on the criteria below. Any presentation or test requirements will be clearly communicated to you well in advance of your interview.

As a Disability Confident Leader, it is important that we are able to make appropriate arrangements or adjustments where necessary in order to create a full and equal participation in the selection process. If you require any reasonable adjustments, please contact the recruitment team to see how we can meet your needs.

Our Values

The House Service is proud of our organisational values, which will deliver our strategy. We are looking for people who can bring these values to life:

Inclusive: We value everyone equally; We respect each other; We all have a voice.

Courageous: We try new things; We own our actions and decisions; We learn from our mistakes.

Trusted: We trust each other to do a good job; We are impartial; We build confidence in Parliament with our integrity.

Collaborative: We share our knowledge and experience; We work towards a shared vision; We know we work better in a partnership.

Skills and Experience

Criterion 1

Chartered Mechanical Engineer and Member or Fellow of IMechE or CIBSE or equivalent with broad experience with consultants and with client-side experience. Demonstrable leadership skills and projects delivery experience and demonstrable competence of operating in a complex stakeholder environment. Ability to develop mechanical engineering strategies, standards, design guidelines and briefs across a range of building services.

Criterion 2

Experience as an on-site representative overseeing site installation works, monitoring, testing and commissioning complex mechanical services and equipment. Applies a range of analytical techniques to understand complex issues and risks particularly in building services, making strategic decisions leading to workable solutions or mitigations. Basic understanding of tender processes, contract management, finance, public procurement, listed building and safety regulations.

Criterion 3

Influences the behaviours of stakeholders, contractors and colleagues to achieve objectives without damaging relationships. Promotes and facilitates effective relationships between staff, managers, consultants and contractors ensuring that everyone is treated with dignity, courtesy and respect. Ensures engagement with Members, Peers and other key stakeholders in decision making processes and organisational change.

Criterion 4

Effectively present and convey a range of technical information in clear, unambiguous language to lay audiences. Influences the behaviours of wide variety of stakeholders (including political ones), contractors and colleagues to achieve objectives and manage change, without damaging relationships.

Criteria 5

Effectively manages several complex activities at the same time. Understanding of project delivery methodologies (e.g. RIBA Plans of Work). Ability to identify, build and maintain collaborative and effective working relationships with a wide variety of stakeholders. Excellent interpersonal and communication skills, both written and oral, with proven ability to influence, lead and persuade using a range of techniques at all levels across a complex organization.

Criterion 6

Full appreciation of project management, procurement; contract management, KPIs; standard contracts such as NEC3 and a working understanding of tender processes, contract management, finance, public procurement, listed building and safety regulations. Practical IT skills, including capability to work with BIM. Competent in operating inside the CDM Regulations and a good understanding of environmental and sustainability issues and their application. Experience as onsite representative for clients or users, overseeing installation, testing and commissioning of mechanical services infrastructures, managing high level risks and uncertainties.

Desirable

Knowledge and experience of Government Soft Landings
