

JOB DESCRIPTION & PERSON SPECIFICATION

Job Title	Senior Electrical Engineer	Status	V1
Reports To:	Engineering Manager	Date Effective:	May 2025
Function:	Engineering	Grade	10

ROLE & PURPOSE OF JOB:

The post holder will take a lead role within a flexible team and will have significant responsibility to ensure the comprehensive, efficient and effective maintenance of the complex range of Humber Bridge Board (HBB) multidisciplinary assets. This will also include drawing on their engineering expertise in new ways to sustainability solve problems with complex constraints.

The postholder will support the Engineering Manager and provide leadership, supervision, guidance and support to the Engineering team. They will also be responsible for driving compliance, continuous improvement and ensuring efficient use of resources both internal and external.

They will be a subject matter expert in Electrical Engineering providing guidance to employees of all levels to assist them with electrical matters. They will also contribute to non electrical engineering activities when directed to do so.

The postholder will develop professional working relationships to support, challenge and inform decision making in relation to departmental issues, offering innovative and feasible solutions.

The Humber Bridge Board operates 7 days per week / 365 days per year and the postholder is required to contribute to the corporate objectives by delivering solutions that minimise business risk and disruption whilst offering excellent value for money.

PRINCIPAL ACCOUNTABILITIES:

1.	Strategy <ul style="list-style-type: none"> Contributing to and developing the long term asset maintenance plan of HBB assets to ensure the objectives in the Strategic Plan are achieved Providing technical governance to multiple simultaneous and complex Engineering activities Identify and mitigate business risk by undertaking and overseeing formal inspections, making informed recommendations and proposals for work required, accounting for; cost, time, resources, heritage, environment and safety Being a champion for collaboration with other departments to maximise efficiency and achieve business objectives
2.	Customer Focus <ul style="list-style-type: none"> Deliver projects using methodologies that minimise disruption to customers;

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	<ul style="list-style-type: none"> • Provide sustainable asset management to deliver value for money • Engage with customers with professionalism and courtesy • Contribute to external communications
3.	Performance Management <ul style="list-style-type: none"> • Support the Engineering Manager to fulfil their role • Undertake Engineering Supervisor duties during their absence • Support the achievement of the department KPI's and asset management strategy • Drive and deliver excellence in line with KPI's contributing to improved service • Ensure efficient coordination external service providers, stakeholders and contractors • Carrying out Safety & Environment Tours • Programme works to ensure availability and efficiency of resources
4.	Leadership <ul style="list-style-type: none"> • Line management, supervision, mentoring of direct reports and other members of the engineering team as required • Engendering and monitoring a culture of Right First Time • To effectively plan and lead in the commissioning of a value for money service and projects as well as to supervise works carried out by contractors as the nominated Client's representative in accordance with the relevant terms and conditions of contract in consultation with the Engineering Manager ensuring that projects are completed on time, within budget and to the required quality. • Through observation and liaison with the workforce and subcontractors create and maintain continuous improvement in the service area
5.	Financial <ul style="list-style-type: none"> • Responsible for procuring and project management of works up to £2m in value • Responsible for providing budget information for allocated works up to £2m and monitoring expenditure with financial forecasting • Contribute to the managements of assets valued <£500m • Ensuring best value is secured for expenditure on specific projects as part of the overall frameworks of corporate and departmental budgets
6.	Delivery of Service <ul style="list-style-type: none"> • To undertake asset management of HBB assets involving: <ul style="list-style-type: none"> ○ Investigations, principal, general and special inspections, assessment, structural review and diagnose defects, develop solutions and strategies to problems identified by applying appropriate analysis and design techniques, and completing all site related documentation. ○ The management and design for routine maintenance and general repairs ○ Preparing outline and / or detailed designs for major maintenance, strengthening or refurbishment schemes or replacements, including the preparation of contract documents and drawings in accordance with relevant standards ensuring fit for purpose, statutory compliance and minimised whole life-cycle costs. ○ Responding to incidents and damage reports to the bridge and highway assets ○ Liaising with colleagues in HBB and third parties to ensure the safety of all users • Provide timely and accurate management information relating to the service area • Ensure compliance and provide feedback on relevant Policies in service area

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	<ul style="list-style-type: none"> • Contribute to the review and production of relevant procedures • To frequently make decisions within the delegated authority for specific projects and schemes to ensure compliance with quality, safety timescales and cost. • Support STEM (Science, Technology, Engineering and Mathematics) and during and outside business hours • Undertake continued professional development and provide peer group learning • Contribute to the development of emergency response plans • Identify and record non-conformance and actions to prevent recurrence • Ensure efficient inductions and briefings regarding safety documentation • Produce and review Risk Assessments, methodology and quality documentation • Produce inspection reports and quality documentation
	<p>Statutory Obligations</p> <ul style="list-style-type: none"> • Responsible for ensuring service area complies with statutory legislation, Humber Bridge Acts, HBB Policies and Procedures, Constitution and Standing Orders, and Byelaws • Within standing orders using Department for Transport (DfT) standards and advice and codes of practice adapted and applied appropriately in the context of HBB • To undertake the role of Client / Designer as required, in accordance with the current Construction and Design Management (CDM) Regulations. • To carry out risk assessments and provision of design information for the Health and Safety file. • Ensure compliance with audit protocol • Comply with Data Protection and General Data Protections Regulations (GDPR). • Responsible for the Health, Safety and Welfare of employees, contractors, volunteers, visitors, customers and public within service area, in accordance with the Health and Safety at Work Act (and all relevant H&S guidance) and HBB Health and Safety Policy

CORPORATE RESPONSIBILITIES:

1.	<p>GENERAL</p> <p>The above principal duties and responsibilities do not include or define all the tasks which may be required to be undertaken. The postholder must be flexible to ensure the operational needs of the organisation are met. This includes the undertaking of duties of a similar nature and responsibility as and when required.</p>
2.	<p>DIGNITY AT WORK</p> <p>To show, at all times, a personal commitment to treating all customers and colleagues in a fair and respectful way, which gives positive regard to people's differences and individuality (for example, gender, gender identity, nationality or ethnic origin, disability, religion or belief, sexual orientation, age). Assists in ensuring equal access to services and employment opportunities for everyone and promotes equal opportunities across the business.</p>
3.	<p>HEALTH AND SAFETY</p> <p>The Health and Safety at Work etc Act 1974 and associated legislation places responsibilities for health and safety on the Humber Bridge Board, as your employer and</p>

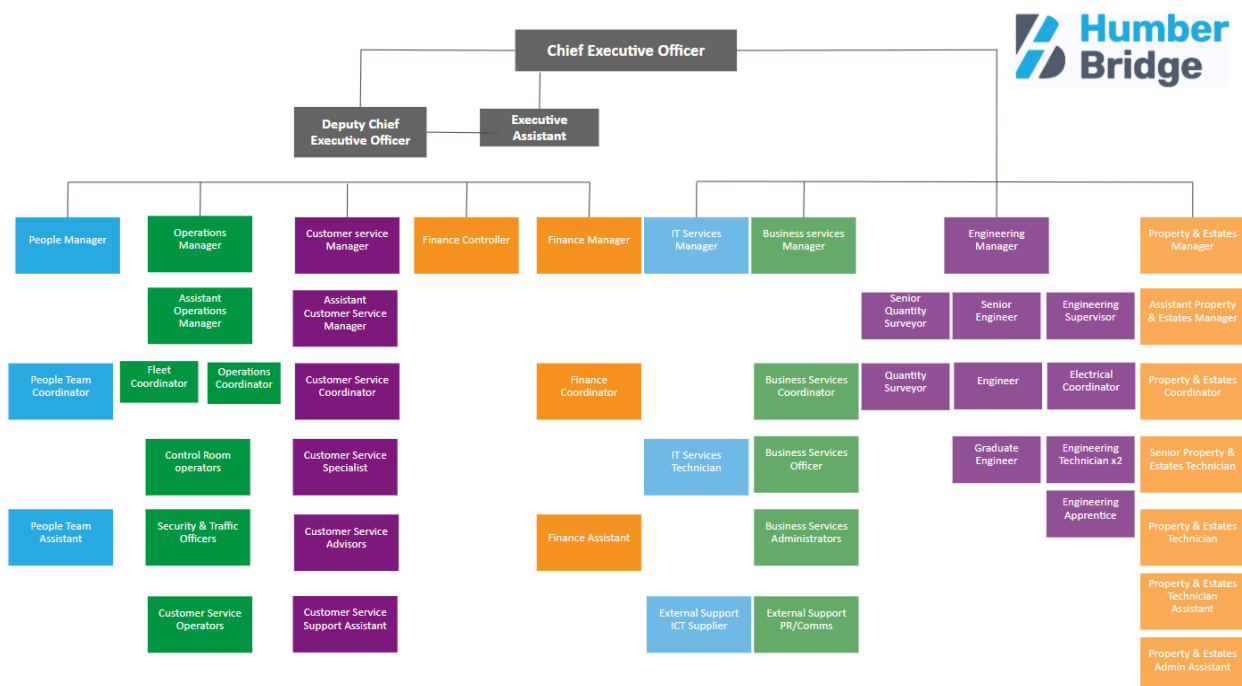
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you as an employee. In addition to the Board's overall duties, the post holder has personal responsibility for their own health, safety and wellbeing and that of other employees; additional and more specific responsibilities are identified in the Board's Health & Safety policy and associated procedures.

JOB CHARACTERISTICS: The post has the following characteristics

✓	Postholder will be required to have a range of either professional or specialist knowledge or experience.
✓	Role has latitude to determine appropriate actions within set policies and practices. Role is subject to structured direction and supervision with set objectives.
✓	Sufficient HR skills to lead and motivate their direct report and other team members as required (short term) and ensure health and wellbeing, including the development of staff to improve service delivery
✓	Role has a requirement to identify and establish relevant policies and practices within their specific area of responsibility.
✓	Role is required to monitor budgets in line with corporate policy
✓	Role has the authority to make key decisions impacting on the Principal Accountabilities.

ORGANISATION CHART: The chart shows this post, its peers, reporting lines and management tier



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RESOURCE MANAGEMENT:	
1.	Responsibility for Staff: Line management for Assistant Engineer or electrical personnel Leadership and supervision of technicians and contractors Providing rescue to those within the structure
2.	Responsibility for 3rd parties: Coordinating and managing a large number of 3rd party service providers including contractors, consultants and stakeholders. This could be as many as five direct reports across various project stages.
3.	Impact on Departmental spending: Delivering compliant procurement of materials, plant, labour and contracts valued \leq £2m Provide budget information for allocated works \leq £2m Provide financial forecast for allocated works \leq £2m Project management of works valued \leq £2m Developing inspection strategies and resourcing methods to maximise efficiency and value for money. Sustainable managements of assets valued $<$ £500m
4.	Responsibility for Physical Resources / Assets: Allocated the main point of contact for HBB assets (electrical).

WORKING RELATIONSHIPS:	
1.	Within own Function: <ul style="list-style-type: none"> Develop professional working relationships to support, challenge and inform decision making, offering innovative and feasible solutions Team members - engage and communicate on service related matters Champion continuous improvement and business collaboration
2.	Within the wider Business: <ul style="list-style-type: none"> Managers - develop professional working relationships to support, challenge and inform decision making, offering innovative and feasible solutions Data Protection Officer - collaborate on data protection matters Staff - engage and communicate on service related matters and businesses initiatives
3.	External Parties to the Business: <ul style="list-style-type: none"> External suppliers - develop professional working relationships to manage contracts Provide coordination of external stakeholders requiring access to HBB premises. Auditors - collaborate on operational aspects for audit purposes

WORKING CONDITIONS INCLUDING PHYSICAL & EMOTIONAL DEMANDS

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	<i>State for each: Not Applicable, Low, Moderate, High, Very High, Intense</i>	Supporting Information (if applicable)
PHYSICAL DEMANDS: Physical Effort and/or Strain – (tiredness, aches and pains over and above that normally incurred in a day to day office environment).	Very High	Climbing long ladders, undertaking rescue training, manual tasks, walking long distances
EMOTIONAL DEMANDS: Exposure to objectionable situations over and above that normally incurred in a day to day office environment.	High	Likely to be exposed to Emotionally distressed member of the public and possible suicide. High pressure situations such as rescue
WORKING CONDITIONS: Working Conditions – (exposure to objectionable, uncomfortable or noxious conditions over and above that normally incurred in a day to day office environment).	Very High	At great height, within enclosed areas, exposed to wind, rain and heat whilst on/in the structure. Undertaking tasks that require the use of Respiratory Protection

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The information listed as essential is used as part of the job evaluation process.		Essential (E) or Desirable (D)	How identified A - Application/CV C - Certification I - Interview P - Presentation T - Test/Assessment
1.	Qualifications:		
	Degree or equivalent level of experience within Electrical Engineering	E	
	Evidence of continuing professional development and/or membership of professional body	E	
	Health and Safety Qualification - IOSH or equivalent	E	
2.	Relevant Experience:		
	Experience of delivering, monitoring and planning services at an operational level	E	
	Experience of undertaking Change Management, planning and implementing new ways of working	E	
	Ability to build and maintain effective teams ensuring the health, safety and wellbeing of all staff within the team.	D	
	Ability to manage effective budgets/resources and enforce proper financial controls, showing sound business judgement	E	
	Experience and understanding of planning and project management	E	
	Proven experience in electrical inspection, construction and maintenance repair techniques and practices for various types of bridges and related highway assets.	E	
	Experience of corporate and specialist software for computerised design and drafting, including AutoCAD, asset management, contracts, with the ability to manipulate, extract and present information, and accurately summarise documents	E	
	Experience in contract preparation, management, supervision and monitoring involving internal and external service providers	E	
3.	Skills (including thinking challenge/mental demands):		
	Able to challenge constructively, to design and introduce improvements and to manage change	E	
	Ability to plan ahead / organise / prioritise, implement service improvements and innovations	E	
	Ability to synthesise and prioritise complex and potentially conflicting demands, understand and absorb information and resolve problems. Require highly developed coordination, time management and prioritisation skills to enable the post-holder to achieve plans and objectives in a timely and organised manner	E	
	Ability to analyse problems, situations and information, think laterally and present innovative and feasible solutions	E	

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	In depth capability of structural analysis and interpretation techniques; project management techniques, supervision of construction works with ability to maintain an up-to-date knowledge of relevant technical standards, legislation, codes of practice, and best practices in areas of competence	E	
	Competent in the use of survey equipment, computerised design and drafting software	E	
	Ability to prepare specifications and contract documents for consultant and construction activities	E	
4.	Knowledge:		
	Possesses specialist skills and well-developed knowledge to provide in-depth support to a technical or operational service	E	
	Able to predict and drive change in a rapidly changing environment to deliver a performance based culture	E	
	Understand how government policy/legislation impacts on HBB strategy and objectives	D	
	Ability to analyse and solve problems with an appreciation of possible longer-term implications	E	
	Uses knowledge of the service to be able to make decisions on requirements of the service and it's development	E	
	Extensive and in depth knowledge of: <ul style="list-style-type: none"> Industrial Electrical design and construction methods Maintenance and repair approaches, techniques and practices relevant field Asset Management 	E	
	Fully conversant with: <ul style="list-style-type: none"> Code of Practice and best practice (HMEP, ADEPT, etc) Design Manual for Roads and Bridges Manual of Contract Documents for Highway Works Management of Highway Structures and Inspections Manual for Highway Structures Design Standards for concrete and steel bridges 	E	
	Detailed Understanding of the: <ul style="list-style-type: none"> NEC engineering and construction contract or similar HBB/Local Government Procurement procedures 	E	
	Fully conversant with Health, Safety and Welfare applicable to role including CDM regulations	E	
5.	Interpersonal/Communication Skills:		
	Verbal Skills		
	Ability to build and manage effective relationships with stakeholders	E	
	Strong analytical skills with the ability to process complex information and explain/present the information	E	
	High level of communication and interpersonal skills. Clearly spoken with good telephone, face-to-face and presentation skills	E	
	Capable and experienced in verbal communication with a high degree of courtesy, tact and clear articulation of instructions	E	
	Possessing negotiation skills with the ability to influence others	E	

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	Self motivated team player with a positive approach and able to promote good team working with an ability to make judgements and decisions, using own initiative, and present clear arguments in a manner appropriate to the circumstances	E	
	Written Skills		
	Ability to write structured and concise reports	E	
	Ability to prepare designs, drawings, specifications and contract documents	E	
6.	Other: <i>If there aren't any state 'none'</i>		
	Full driving licence	E	
	Capable of carrying out inspections/supervision at height and in a confined space, and in various weather conditions including night time as necessary.	E	

HBB's Mission Statement is: "*keeping the region connected, whilst providing safe, sustainable and reliable use of the bridge and estate*" and key to this are the values listed below

7.	Values & Competencies:	
	Value	Explanation
	Healthy and safe	<i>Creating a healthy and safe environment for everyone</i>
	Unique	<i>We are an Engineering icon</i>
	More than a bridge	<i>The bridge is a community and the community is the bridge</i>
	Best at what we do	<i>Be the best at what we do and exceed expectations</i>
	Everyone matters	<i>Everyone is important and everyone matters</i>
	Resourceful	<i>Innovative and efficient in the approach to using our limited resources</i>

8.	Disclosure of Criminal Record: <i>Note: For Standard, Enhanced, Enhanced & Barring List Disclosures the candidate is required to declare full details of everything on their criminal record. In any event where the post holder requires a 'Basic Disclosure' or no disclosure is required, the candidate is required to declare unspent convictions only.</i>	
	Is a DBS Disclosure Required? Mark as essential if the post holder requires a DBS disclosure with a satisfactory check as a condition of their employment.	No
	State type of check required: <i>no disclosure, Basic, Standard, Enhanced, Enhanced & Barring List Disclosure</i>	<i>No disclosure but the candidate is required to declare unspent convictions only.</i>

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I confirm I have read, understood and agree to the Job Description which outlines the purpose of my role. I also understand the job description may need to change over time and this will be done by consultation.

Signed by:	
Name:	
Date:	