Job Description For Engineer Positions

This form is used to provide a complete description of the specific job (or role) and defines the skills, knowledge and abilities required to undertake the specific and generic role profile.

Section A: Specific Role Profile

The specific role profile provides key information relating to the salary and working conditions e.g. location of a job, along with the current focus of the job role and a brief description of the main duties.

Role Details

Job Title:	Senior Highway Engineer	JEID	EN004
Salary Grade:	Grade L		
Team:	Structural Highway Maintenance Team		
Service Area:	County Highways		
Primary Location:	Countywide		
Political Restriction	This position is not politically restricted.		
Responsible to:	Design & Delivery Manager		
Responsible for:	N/A		

Role Purpose

To work as required by the Design & Delivery Manager or Team Leader in partnership with the locality team and term contractor to deliver all planned highway works and capital highway programme, within agreed timescales, budgets and quality standards. To assist when required with the management and delivery of planned cyclic, reactive and emergency maintenance works.

Role Responsibilities

To investigate, cost and design highway structural and surface maintenance schemes/works, (including carriageway and footway reconstruction and resurfacing; structural patching; micro-asphalt; surface dressing; footway slurry sealing etc) and manage their delivery in conjunction with the term contractor.

To investigate, cost, design and manage the delivery of small-scale capital improvement projects/programmes (including traffic schemes; pedestrian crossings; minor works etc) on behalf of a range of clients.

To investigate, cost, design and manage the delivery of highway drainage maintenance/improvement schemes.

To specify, develop and manage works in accordance with design and quality management standards.



To plan, co-ordinate and implement programmes of work, as efficiently and effectively as possible in partnership with the term contractor and his sub-contractors/suppliers.

To manage and supervise all planned works to ensure that they delivered in accordance with agreed programmes, budgets and required quality and safety standards.

To manage works costs and provide information to inform financial management of works budgets and expenditures.

To collect and provide information for performance and quality management reporting.

To manage and implement the requirements of the Traffic Management Act.

To help develop longer term programmes of work designed to maintain and improve the condition of the highway network.

To assist in the provision of information to the Insurance Officer- this may include presentation of information in evidence in court.

To undertake any other relevant and appropriate duties and responsibilities commensurate with the post as required to ensure that the delivery service is run in a flexible and efficient manner.

Section B: Generic Role Profile

The generic role profile provides a list of the main tasks that cover the broad range of duties and responsibilities performed at this level for the job role. An employee may not be undertaking all of these at any one time, but they could be expected to do so under their contract of employment.

Generic Role Details

Job Role:

Engineer – Level 4

Main Tasks

****Bold tasks indicate those that are specific to the Senior Engineer role working within the Structural Highway Maintenance team. ****

- To be responsible for professional engineering input (e.g. design, development, advice and management) across one or more of the following areas as required:
 - 1. undertaking feasibility studies
 - 2. maintaining specialist capability with service area and provide technical guidance/ supervision to less-experienced members of the team and assisting with training junior staff in technical and professional disciplines
 - 3. maintaining technical standards and good practice within the team;
 - 4. initiating legal processes for traffic regulation etc

- 5. programming of highway maintenance work to ensure there is a consistent and high quality service provided in order to maintain the network in a safe and serviceable condition
- 6. responsibility for the highway routine maintenance budgets allocated to a specified area of the County (up to £3m per annum) and to resolve problems that arise from under/over spending by locality officers
- 7. contributing to the development of annual structural and cyclical structural maintenance works programmes ensuring resources are allocated effectively
- 8. ensuring that reactive maintenance is reduced and planned maintenance optimised by preparing local maintenance plans and work schedules to improve resource effectiveness and minimise disruption on the network
- 9. the delivery of a significant transport planning projects with direction only in complex circumstances

10. undertaking engineering design for large complex engineering works.

- 11. the development of S38 Agreements, including technical approval of proposals for compliance with planning and other conditions, preparing cost estimates, negotiating with prospective developers, inspections and the issuing of final certificates
- 12. providing statutory highway advice, undertaking pre-application advice and appraisals on significant planning applications to District/Borough Councils and for major sites and significant proposals affecting the LDF
- 13. leading on the critical analysis of significant transport / traffic assessments, consulting with relevant professional colleagues in order to agree appropriate local infrastructure improvements that can be secured through S278 works or S106 agreements
- 14. carrying out complex safety audits and supervising and being responsible for audits undertaken by less senior colleagues
- 15. leading and managing major projects which may involve other agencies including establishing partnerships
- 16. managing depots, plant and equipment, ensuring availability and in suitable condition for use by staff, contractors and others when required
- 17. managing Winter Maintenance including the prediction and instruction of treatments required across the County
- To act as project manager for the delivery of large or complex schemes up to including the supervision of and negotiations with contractors on site, anticipating and resolving complex problems with designers and contractors or where technical and political considerations conflict, in order to achieve agreed objectives in relation to completion, quality and safety standards.
- To monitor and manage budgets for own projects and take corrective action when expenditure diverges from budget with supervision only in complex circumstances, act as a 'supervisor with delegated powers' under the Engineering and Construction contract for medium-sized works.
- To monitor, co-ordinate and manage programmes encompassing more than one individual scheme, recommending optimum solutions balancing engineering, economic and environmental aspects and resolving complex problems using professional judgement to ensure work is completed to the appropriate standards.
- To produce project plans, technical and formal committee reports and take decisions outside standard parameters within specialist areas with limited supervision.
- To contribute to the monitoring and review across a number of areas of County Council policy e.g. Local Transport Plan, Asset Management Plan, LDF and Development Control Policy, through the provision of technical advice and guidance in response to changes at local, regional and national levels.

- To investigate, develop, procure, implement systems and equipment and monitor operational performance, including planned inspection and maintenance and taking remedial action as required and the commissioning of consultants to carry out specialist work as necessary.
- To take the lead role in managing complex consultations including those which relate to contentious matters, independently attending and making presentations at public meetings with elected members, parish and town councils, residents associations.
- To deal with enquiries and complaints from MPs elected members, developers, agents, planning officers, government agencies and members of the public and act as the Council's representative, and promote the interests of the Council at formal hearings and inquiries in respect of relevant matters.
- To be responsible for the development of performance management processes in order to ensure monitoring and reporting of service performance in relation to the postholder's area of responsibility.

****Bold tasks indicate those that are specific to the Senior Engineer role working within the Structural Highway Maintenance team. ****

Section B: Person Specification

The person specification provides a list of essential and desirable criteria (skills and competencies) that a candidate should have in order to perform the job.

Each of the criteria listed below will be measured through; the application form (A), a test / exercise (T), an interview (I), a presentation (P) or documentation (D).

Essential Criteria	Assessed By:
Either hold a full relevant professional qualification or have significant experience of managing large projects at a senior level	A/I/D
The ability to independently interpret and analyse varied and complex information or situations and to produce solutions over the long term	A/I
The ability to communicate complicated and contentious information with varied audiences in person and/or writing.	A/I
Have experience of using ICT including relevant Engineering/Transport Planning systems e.g. CAD	A/I
The ability to work within broad practice or guidelines using managerial discretion over a broad area of activity	A/I
The ability to work under a very high degree of pressure, including meeting unpredictable deadlines and dealing with conflicting demands	A/I
The ability to cope in situations where there is an emotional demand arising from the work being undertaken	A/I
Ability to provide day to day supervision to less-experienced members of the team including delegation and checking of work and provision of technical guidance, also covering for and providing technical support to the Team Leader as required	A/I
Experience of monitoring, managing and being accountable for budgets	A/I
Experience of contributing to the development of Engineering/Transport Planning Policies and Procedures	A/I

The ability to persuade others to adopt a course of action which is not necessarily their preferred approach	A/I
Mobility essential. Able-bodied applicants must be able to drive, have a driving licence and be a car owner. Disabled applicants should be able to perform the job with aid, where necessary.	A/I/D

Desirable Criteria	Assessed By:
A good understanding and experience of highway engineering specifications, material, techniques, treatments and procedures (including design and site supervision).	A/I
Good knowledge of all relevant highway legislation and statutory obligations applicable to highway and drainage matters including health and safety and CDM requirements and a thorough knowledge of all relevant highway legislation; design and maintenance standards; quality management procedures; and the term maintenance contract	A/I
Customer focussed with a willingness to develop and maintain effective working relationships with a range of Clients and Warwickshire's Term Maintenance Contractor	A/I
Sector 12D Accreditation (Maintaining and removing temporary Traffic Management on rural and urban roads	A/I/D
Evidence of continuing professional development	A/I/D

Section C: Working Conditions

The working conditions relate to those non-contractual elements of the job that may impact on the holder of the position, as well as those workplace-based responsibilities that are part of this job. These are not contractual but provide a guide to the working conditions and the potential hazards and risks that may be faced.

Health & Safety at Work

To take responsibility for your own health, safety and wellbeing, and undertake health and safety duties and responsibilities for your role as specified within Warwickshire County Councils Health and Safety Policy, and all other relevant health and safety policies, arrangements, procedures, systems of work as specified for the post/ role.

Potential Hazards & Risks

The potential significant hazard(s) and risk(s) for this job are identified below (those ticked). The purpose of recording this information on the job description is so that the health status of the potential and actual post-holders can be assessed with regard to the significant hazards and risks. These hazards and risks should be based on the appropriate activity, process and/or operation risk assessment whereby all of the significant risks are identified, recorded and appropriately controlled. The list below is therefore not an exhaustive list because it is the risk assessment that details all significant risks that could arise out of or in connection with the work activity, but any others will be identified in the 'other' section.

Provision of personal care on a regular basis	Driving HGV or LGV for work
Regular manual handling (which includes assisting, manoeuvring, pushing and pulling) of people (including pupils) or objects	Any other frequent driving or prolonged driving at work activities (e.g. long journeys driving own private vehicle or WCC vehicle for work purposes)
Working at height/ using ladders on a regular/ repetitive basis	Restricted postural change – prolonged sitting
imes Lone working on a regular basis	Restricted postural change – prolonged standing
Night work	Regular/repetitive bending/ squatting/ kneeling/crouching
Rotating shift work	Manual cleaning/ domestic duties
Working on/ or near a road	Regular work outdoors
Significant use of computers (display screen equipment)	Work with vulnerable children or vulnerable adults
Undertaking repetitive tasks	Working with challenging behaviours
Continual telephone use (call centres)	Regular work with skin irritants/ allergens
Work requiring hearing protection (exposure to noise above action levels)	Regular work with respiratory irritants/ allergens (exposure to dust, fumes, chemicals, fibres)
Work requiring respirators or masks	Work with vibrating tools/ machinery
Work involving food handling	Work with waste, refuse
Potential exposure to blood or bodily fluids	igsquire Face-to-face contact with members of the public
Other (please specify):	