

Job Description

For Non-Streamlined 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:	Civil Engineering Degree Apprentice	JEID	M0622
Salary Grade:	Pay Scale E		
Team:	Bridge & Structural Design Team		
Service Area:	Engineering Design Services		
Primary Location:	Shire Hall		
Political Restriction	This position is not politically restricted.		
Responsible to:	Peter O'Connor		
Responsible for:	N/A		

Role Purpose

The Bridge and Structural Design Team is placed within Engineering Design Services which offers design consultancy services to both private and public sector. Our team works on variety of projects ranging from design of highway structures, alterations to educational buildings and household waste recycling centres, replacement of existing highway structures, reviews of Approval in Principles for new structures and construction supervision of major capital schemes within the county. We also work closely with neighbouring local authorities such as Coventry City Council and Solihull Metropolitan Borough Council in delivering highway improvement schemes.

Daily tasks will involve the full breadth of engineering activities within the bridge and structural construction projects, including feasibility studies, commissioning preliminary investigatory, technical design, design calculations, structural modelling, construction drawings, carrying out structural inspections and assessments, preparing and administering construction contracts, construction site supervision and quality assurance, and liaising with other internal departments and external organisations.

Role Responsibilities

- Liaise with senior engineers and graduates in the team to deliver projects
- Produce CAD (Computer Aided Design) drawings when necessary
- Utilise structural analysis software to supplement relevant design work.
- Compiling feasibility reports and other relevant reports
- Supporting the administration of projects including following the relevant Quality Management processes.
- Providing solutions to the ongoing engineering problems
- Carrying out inspections of existing structures and site visits.
- Liaising with third party organisations

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:

NVQ Level 3 ability in Mathematics and STEM subjects, for example: • Three A-Levels (or equivalent) including Maths and Physics • BTEC Diploma grade D*D*, with an A grade in A level Mathematics • BTEC Extended Diploma grade DDD including two Mathematics units, 'Calculus to Solve Engineering Problems' and 'Further Engineering Mathematics' • And/or pass in Warwick University mathematics assessment	A T
Demonstrate an interest to pursue a career in Civil Engineering	A/I
Demonstrate an understanding about the type of civil engineering work undertaken by Warwickshire County Council.	A/I
Demonstrate attention to detail in everyday work.	A/I
Ability to work within a team and lead when required.	A/I
Ability to work in an organised and methodical manner.	A/I
The ability to work under pressure and meet deadlines	A/I
The ability to develop multiple solutions to problems and evaluate them.	A/I
The ability to communicate both verbally and in writing.	A/I
To be able to use own initiative to deal with unexpected situations.	A/I
The ability to manage and organise different priorities.	A/I

Desirable Criteria

Assessed By:

Previous experience working/interning in a design/site office in the construction industry	A/I
Participation at any engineering related extra-curricular activities	A/I
Attendance at any engineering seminars or conferences	A/I
Previous experience of engineering design, using CAD or structural modelling software	A/I
Demonstrate an awareness of major Civil Engineering projects in the UK	A/I
Demonstrate an awareness of sustainable development and how the industry can become more sustainable in the future.	A/I

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
☒ 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	☐ Face-to-face contact with members of the public
☐ Other (please specify):	