## Northumberland County Council JOB DESCRIPTION

Post Title: Highways Technical Assistant Apprentice	Director/Service/Sector:	Office Use
	Local Services - Technical Services	
Band: National Apprenticeship Wage	Workplace: Morpeth	JE ref: 3736
Responsible to: Team Leader	Date: June 2022	

**Job Purpose:** To work in a supported learning environment to develop the skills and knowledge that will assist the apprentice to complete their qualification in civil engineering and secure employment and progress in their career in the future. You will be expected to develop and apply the technical knowledge gained during training, to the job role. Key to your success will be the ability to develop relationships across all levels within the organisation, good time management & organisational skills as well as enthusiasm & commitment. A Civil Engineering Technician provides technical support to engineers and other construction professionals in the design, development, construction, commissioning, decommissioning, operation or maintenance of the built environment and infrastructure.

Resources	Staff	None
	Finance	None
Physical Use of IT Equipment and shared responsibility for other equipment provided		Use of IT Equipment and shared responsibility for other equipment provided
	Clients	Visitors & Contractors

**Duties and key result areas:** Undertaken individually or as part of a team, these are examples of the nature and level of those expected to be undertaken by the post holder. You will undertake training throughout your apprenticeship to enable you to:

- To complete a Level 3 apprenticeship in Civil Engineering
- To undertake and successfully complete the End Point Assessment of the apprenticeship standard.
- To know and understand the principles of health, safety and welfare and how to apply this in relation to your own role and of others
- To know and understand the responsibilities under current legislation (including Health and Safety at Work Act 1974, Provision and Use of Workplace Equipment 1998, Manual Handling Operations regulations 1992) and official guidance (risk assessments, method statements) to undertake work
- To know and understand how to work in accordance with the National Highways Sector Schemes, Industry Codes of Practice, the New Roads & Street Works Act and other guidance relevant to the occupation
- The different techniques and methods used to design, build and maintain civil engineering projects. This includes understanding how ideas and requirements are converted into engineering designs, knowing the standards, contracts and specifications and their impact on the design and construction process.
- To know and understand the structure of the highway, civic engineering methods, construction technology and have knowledge of different road categories and types, construction materials and working methods
- Safe working practices and how to comply with them. Understanding regulations such as Construction Design and Management (CDM), Common Safety Method (CSM), hazard identification, mitigation and health safety and risk management in relation to project delivery.
- To know and understand how to identify, locate and excavate around underground services such as gas and power cables to avoid strikes and loss of service

## Skills (on completion):

- Be able to apply appropriate health, safety and environment procedures when working on the road
- Be able to plan and undertake work practice productively when carrying out repairs to potholes, pavements and kerbs, and laying new surfaces on rural and urban roads
- Select and use appropriate scientific, technical and engineering principles, techniques and methods to contribute to the design and delivery of
  infrastructure and building projects. This includes the ability to produce and self-check; calculations, models, drawings etc. use appropriate systems for
  data gathering, Computer Aided Drawing (CAD), Building Information Management (BIM) and project management; and assist with surveys and
  inspections.

- Be able to read, interpret and work to drawings, specifications and highways information. Highways information will include details on the use of safety barriers, cones, traffic flow and safety zones to work within, whilst employed on the highway
- Keep themselves and others safe by adhering to safe working practices. This includes the ability to identify hazards and assess risks, follow safe systems of work and adhere to all company safety policies.
- Be able to apply safe working practice for removing, storing, lifting and handling of resources
- How to work effectively and contribute to engineering solutions by the correct use of resources and time. This includes an understanding of project management systems, tools and techniques as they are applied to the design and construction process.
- Be able to install street ironworks (drain access covers and frames and gully gates situated on the road) to given work instructions
- Be able to prepare and operate powered tools or pedestrian plant, machinery or equipment for use on roads. This will include machinery for generator's, pumps, pedestrian operated plant (e.g. pushed roller), mixers, compressors and self-powered tools (pneumatic drill)
- This includes an understanding of different communication methods and when to use them; how to write technical reports; drawing and modelling conventions and engineering terminology; collaboration and effective team working.
- Be able to work with other sub-contractors on larger schemes (e.g. traffic management)
- To be committed to equal opportunities and to comply with the County Council's diversity and equality policies.
- To be committed to follow policies, practices and procedures in relation to employees of the County Council
- To be committed to self-development making use of training and development opportunities identified through appraisal
- To ensure job knowledge is updated by following council instructions, attend team meetings, participate in supervision and to adhere to the requirements of the training provider to undertake the required apprentice's standard

The duties and responsibilities highlighted in this Job Description are indicative and may vary over time. Post holders are expected to undertake other duties and responsibilities relevant to the nature, level and extent of the post and the grade has been established on this basis.

Work Arrangements	·
Transport requirements:	Travel to work sites, area offices, meetings or other venues throughout the County and region and further
Working patterns:	afield on occasion.
Working conditions:	May include weekends and evenings. Mainly office based but some travel required.
	Outdoors exposure to all weathers.

## Northumberland County Council PERSON SPECIFICATION

Post Title: Apprentice Civil Engineering Technician (Level 3)	Director/Service/Sector: Local Services - Highways	Ref: 3736
Essential	Desirable	Assess by
Qualifications and Knowledge		
<ul> <li>Grade 4 (c) GCSE Maths &amp; English (or equivalent; Level 2 Functional Skills)</li> <li>A good general education demonstrating numeracy and literacy. An initial assessment many be carried out</li> <li>Commitment to undertake and complete the Adult Care Worker Level 2 qualification.</li> </ul>	Applicants without Level 2 English and maths will need to achieve this level prior to taking their end point assessment.	A,I
(For those with an education, health and care plan or a legacy statement, the apprenticeships English and maths minimum		

requirements are Entry Level 3, and the British Sign Language qualification is an alternative to English qualifications for apprentices for whom this is their primary language)					
Experience					
Working as a team player	<ul> <li>Experience in a similar role would be beneficial.</li> <li>Experience of dealing directly with customers</li> </ul>	A,I			
Skills and competencies					
<ul> <li>Confident communicator and able to deal with problems</li> <li>Good communication skills</li> <li>Ability to understand and follow instructions</li> <li>Ability to work as part of a team and support colleagues</li> </ul>		A,I			
<ul> <li>Ability to maintain confidentiality where necessary</li> <li>Able to be flexible in work activities, location and hours of work</li> </ul>					
Physical, mental, emotional and environmental demands					
<ul> <li>Working in a range of positions, sometimes in tight spaces with the need to carry tool, equipment and materials.</li> <li>Regular periods of concentrated mental attention and tight deadlines</li> </ul>		A,I			
<ul> <li>Regular contact with tenants working in their homes may result in some emotional demands</li> <li>Some exposure to disagreeable and unpleasant conditions</li> </ul>					
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Motivation					
<ul> <li>Must be self motivated and have the ability to work largely unsupervised.</li> <li>Understanding the diverse needs of customers.</li> <li>Work collaboratively as part of a team</li> </ul>		A,I			
Other					

Key to assessment methods; (a) application form, (i) interview, (r) references, (t) ability tests (q) personality questionnaire (g) assessed group work, (p) presentation, (o) others e.g. case studies/visits