

Job Description



Job Title: Civil Engineering Apprentice	Service Area: Highways and Sustainable Transport	
Directorate: Environmental and Sustainable Transport	Post Number: Fusion	Evaluation Number: 6948,a,b,c
Grade: Scale 3/Scale 4/Scale 5/Scale 6	Date last updated: June 2023	

People at the heart of everything we do

We are committed to putting people – Newham residents and Council staff – at the heart of all we do. Our approach is a collaborative joint enterprise between residents, the Mayor, Members, Council staff and the Corporate Management Team.

Equality and diversity

We are committed to and champion equality and diversity in all aspects of employment with the London Borough of Newham. All employees are expected to understand and promote our Equality and Diversity policy in the course of their work.

Protecting our staff and services

Adherence to health and safety requirements and proper risk management is required from all employees in so far as is relevant to their role. All employees are expected to understand and promote good health and safety practices and manage risks appropriately.

Corporate parent

We believe that every member of staff working for Newham Council should understand and fulfil our corporate parenting responsibilities for our looked after children that we have under the Children and Social Work Act 2017.

Overall Purpose of Job

To assist and to develop the required skills to deliver high quality engineering support to projects delivered by the Highways and Sustainable Transport Group. You will be expected to learn whilst working and gaining an appreciation of the tasks involved as you progress through the grades for this apprenticeship.

Job Summary

1. The post-holder reports to the Principal Officer for the team that they are working in. This may change from time to time as the post holder moves around the department to gain knowledge and experience.

2. The post holder has no line management responsibility.
3. The post-holder will be responsible for providing an appropriate level of project support to the team. The project support could take many forms but could include survey specification and analysis, data presentation, site visits, photographs/drawings, report writing, project communications etc. This will be developed over time as experience and knowledge is gained.
4. As experience, knowledge and confidence develops, the post-holder may also be responsible for the development and delivery of small highways and sustainable transport projects as allocated, from the investigation stage, through initial design and consultation, obtaining approvals and consents and liaising with Contractors as required, through to delivery on site. This will further develop onto medium sized projects.
5. The post-holder has responsibility for the monitoring and management of specific small schemes, including the tracking of project programmes and expenditure, as allocated.
6. The post-holder may occasionally be required to work evenings, weekends and public holidays, in order to meet service requirements e.g. public meetings outside of working hours.
7. The post-holder will be required to communicate and liaise effectively with colleagues, members of the public, key stakeholders and service providers.
8. The post-holder will apply a quality control approach to the work of external service providers to ensure that the Council's requirements are met in accordance with specification.
9. The post-holder will assist with the management of project records and files according the Department's standard templates.
10. The post-holder should familiarise themselves with Health and Safety and risk management responsibilities in respect of co-ordinating service delivery. They will be required to maintain standards of safety and comply with the Council's health, safety and environment management systems requirements. They will also be required to take reasonable care of their own health and safety and that of others when in the workplace.
11. The post holder will be responsible for attending classes, courses, university etc. as set out in the post holders training plan, so that they can obtain the appropriate qualifications that match the apprentice position.

Key Tasks and Accountabilities:

Key tasks and accountabilities are intended to be a guide to the range and level of work expected of the post holder. This is not an exhaustive list of all tasks that may fall to the post holder and employees will be expected to carry out such other reasonable duties which may be required from time to time.

To undertake all responsibilities listed below:

Level 1 – Scale 3

1. To develop draughting skills and within one year be able to produce drawings using digital computer aided software “AutoCAD” with minimal supervision, and to continue to develop AutoCAD skills during the course of career.
2. To gain a basic understanding of Health and Safety legislation, including the Construction Design and Management Regulations 2015 (CDM Regs)
3. To gain an understanding of the types of surveys used to collect data for the development and assessment of highways schemes. Using this knowledge assist with planning and undertaking surveys to solve highways problems, including the commissioning, analysis and presentation of survey information.
4. To undertake measurements on site with minimal supervision, and to translate these measurements onto drawings in AutoCAD software.
5. To develop knowledge of other computer aided design software packages such as Photoshop, Adobe 'In Design', to produce drawings, charts and maintain highway records using this specialist software with minimal supervision:
6. To gain an appreciation of highway related design, general civil engineering design principals, the regulations, design guidance (this can be local and national guidance), specifications to help the post holder assist with the design of minor highways and parking schemes as directed.
7. To partake in the observation, recording and supervision of minor site works to better understand the process involved in a highway scheme delivery.
8. To gain an appreciation of how projects are funded, how much project costs, works cost estimates, how these are prepared, assessed and paid.
9. To develop a knowledge of information technology as it applies to the planning, operation, maintenance and new build of highways and infrastructure projects.
10. Develop knowledge of ICT software such as MS Office (MS Project, MS Excel, MS PowerPoint, MS Word) and use with minimal supervision.
11. To maintain records in a systematic, consistent and accessible format.
12. To contribute to continuous improvement and the achievement of best value, promoting new ways of working and facilitate change by ensuring buy-in and support at all levels of the organisation.
13. To assist with maintaining the Group's Technical Literature Library.
14. To assist in dealing with routine correspondence from the public, other sections, departments and outside bodies.

15. To assist other staff members with attendance at meetings as required and directed (e.g. residents meetings out of hours).
16. Such other duties, within the competence of the post holder, which may be required, reasonably, from time to time.
17. To maintain an active learning and training record, along with a capability tracker.
18. Meeting the learner responsibilities as set out in the 3-way Apprentice agreement and training plan.

Level 2 – Scale 4 (As above plus)

19. Building on knowledge already gained, develop CDM 2015 related knowledge to a sufficient depth to be able to carry out risk assessments as well as prepare health and safety documents for schemes as appropriate with minimal supervision.
20. Using knowledge gained already and with minimal supervision, undertake arithmetical checks of cost estimates proposed by others and contractor's accounts. Using the method of measurement to further your understanding of how these are put together.
21. Gain an appreciation on Geographical Information Systems "GIS".
22. Further develop knowledge of regulations, guidance and specifications to be able to develop designs with minimal supervision.
23. Gain an appreciation of project management skills whilst working alongside a senior officer in the delivery of minor schemes.
24. To assist in the site supervision of minor schemes on site and develop site supervision skills.
25. To develop skills in the use of specialist software such as MS Project, KeyLines, KeySigns, KeyPost, KeyAccident and RedOptima and use the software in the delivery of minor schemes with minor supervision.
26. To develop knowledge of public engagement techniques for highways and sustainable transport projects.
27. To develop survey skills and carry out survey work using dumpy level or similar equipment with minimal supervision.
28. Further develop knowledge of ICT software such as MS Office (MS Project, MS Excel, MS Powerpoint, MS Word) and use without supervision.
29. To gain an appreciation of asset inspection and condition surveys.

Level 3 - Scale 5 (As above plus)

30. Using the knowledge already gained, undertake the preparation of BoQs, use of Method of Measurement and Highway Specifications and apply the skills as appropriate.
31. Using the knowledge already gained carry out the design and project management of minor schemes.
32. To prepare briefs, BoQs and assist with the procurement of third parties.
33. To work alongside senior officers in undertaking and delivering asset inspection and condition surveys.
34. To prepare works information under CDM 2015.
35. Develop in-depth knowledge of ICT software such as MS Office (MS Project, MS Excel, MS Powerpoint, MS Word) and use without supervision.
36. Using knowledge gained in minor schemes, work alongside senior officers to manage and deliver larger schemes, continually gaining understanding and knowledge of Project Management, design, specifications, regulations and guidance.
37. Continue to develop knowledge and understanding of GIS and be able to use it with limited supervision
38. Gain an understanding of 3D level design using computer aided software, such as CIVILS 3D.
39. To become proficient in using survey equipment and undertake surveys using Dumpy level or similar within supervision.

Level 4 - Scale 6 (As above plus)

40. To continue to develop asset inspection and condition survey knowledge and skills and carry out, prepare and/or review inspection reports with minimal supervision.
41. To develop report writing skills and write non-key decision reports and technical reports as required.
42. Develop communication skills including presentations and attendance at drop-in sessions and stakeholder meetings.
43. To further develop knowledge of the highway standards and their use in delivering schemes.
44. Carryout the design and supervision of medium sized schemes with minimum supervision, with the expectation to be able to carry out the design and supervision of scheme without supervision.
45. Become proficient in GIS and be able to use it unsupervised.

46. Continue to develop skills and understanding of CIVILS 3D and use it to deliver 3D level design with minimal supervision.
- 47.
48. Using gained experience and knowledge deliver medium sized projects using Project Management skills and design expertise.

Other Duties

49. All duties to be carried out in compliance with relevant Health and Safety legislation.
50. Completing all tests and assignments in line with the courses attended and the training plan as agreed.
51. Ensuring that managers are consulted on planning and completing development activities that contribute to the apprenticeship programme.

Personal Specification



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IMPORTANT INFORMATION FOR APPLICANTS

The criteria listed in this Person Specification are all essential to the job. Where the Method of Assessment is stated to be the Application Form, your application needs to demonstrate clearly and concisely how you meet each of the criteria, even if other methods of assessment are also shown. If you do not address these criteria fully, or if we do not consider that you meet them, you will not be shortlisted. Please give specific examples wherever possible.

EQUALITY AND DIVERSITY

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PROTECTING OUR STAFF AND SERVICES

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CRITERIA- Essential	METHOD OF ASSESSMENT
KNOWLEDGE: Computer literacy. Knowledge of Microsoft Office packages.	Application and Interview Application and Interview
EDUCATION/QUALIFICATIONS Apprenticeship candidates will typically have at least three A levels at Grades A*-C including Mathematics	Application

<p>and Physical Science or their equivalent or will have completed a Level 3 Apprenticeship as a Civil Engineering Technician.</p>	
<p>SKILLS AND ABILITIES:</p> <p>Ability to seek out information, to undertake simple research into given problem. The use and validation of digital solutions and data gathering tools to model, evaluate, design, test, build and manage civil engineering infrastructure, refining as required and applied to integrated solutions.</p> <p>Develop innovative, safe, technical solutions to civil engineering problems through the use of research techniques, market intelligence and best practice.</p> <p>Ability to work in a team and work independently.</p> <p>Ability to communicate.</p> <p>EXPERIENCE:</p> <p>An adequate working knowledge of appropriate software packages such as MS Office or equivalent.</p>	<p>Application and Interview for all</p>
<p>PERSONAL STYLE AND BEHAVIOUR:</p> <p>Ability to work effectively under direct supervision.</p> <p>Ability to carry out routine office tasks with reduced supervision.</p> <p>Ability to work unsupervised and demonstrate self-motivation.</p> <p>Ability to prioritise routine matters and achieve tasks to meet deadlines.</p> <p>Ability to organise and manage own workload, to achieve deadlines/targets.</p>	<p>Application Form/Interview/Test for all</p>
<p>OTHER SPECIAL REQUIREMENTS:</p> <p>Ability to communicate with a wide variety of individuals from varying backgrounds, person to person and in writing. Communicate effectively and provide guidance to others through design models, calculations, reports,</p>	<p>Interview/ test</p>

<p>drawings, specifications, presentations, digital media and discussions with those both inside and outside the industry.</p> <p>Willingness to learn and comply with the apprentice training plan. This will require post holder to engage with senior mentors and Talent Team representatives, learn and develop practical skills, knowledge, behaviours and leadership capability in line with the BSC Civil Engineering Degree.</p>	Interview
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