The Corporation of the District of Oak Bay Job Description



Job Title:	MUNICIPAL UNDERGROUND UTILITIES ENGINEER	JEPE Number:	
Department:	Engineering & Public Works	Pay Grade:	Agreed Exemption
Area:	Engineering	Position Status:	Regular – Full Time
Location:	Municipal Hall (Athlone Court)	Position Type:	Union
Supervisor:	Manager of Engineering Capital Projects	Last Updated:	July 2025

Job Purpose:

Reporting to the Manager of Engineering Capital Projects, the Municipal Underground Utilities Engineer will lead a skilled technical team focused on the design and delivery of critical infrastructure projects. They will also serve as the Engineer of Record for internally prepared designs and play a key role in implementing quality control processes to ensure compliance with the Professional Governance Act.

This role will require direct engagement with municipal and regional partners and representing the municipality in regional project partnerships. The exercise of considerable independent judgement is required within the bounds of approved budgets and departmental priorities.

Duties and Responsibilities:

Development and Servicing – Engineering Reviews:

- Leads Engineering discipline servicing and development reviews, focusing on utility design standards, capacity checks, and regulatory compliance.
- Coordinates base plan development, GIS data validation, and record drawing updates.
- Conducts field inspections, construction red-line reviews, and assist with as-built verification.
- Performs basic hydraulic modelling for system evaluations (EPA SWMM or equivalent).
- Supports infrastructure condition assessments, rehabilitation planning, and trenchless technology consideration in the planning and delivery of design.
- Provides on-site Engineering field support to District's Public Works staff to complete required tie-ins with existing assets and Capital improvements.
- Prepares and reviews inspection reports, supported by the District's Engineering Technicians.

Professional Engineering Practice - Utilities Design and Engineer of Record

- Oversees the preparation and review of water, stormwater and wastewater engineering designs and associated engineering standards.
- Acts as the Engineer of Record for water, sanitary and storm designs undertaken by the District.
- Coordinates the District's Engineering review at design review stages, where designs completed by Consultants.
- Leads the development of Owner's Project Requirements (functional and operational) through direct coordination with Public Works.
- Clearly documents project needs, requirements to support appropriate scheduling, resourcing and budgets as well as completion tracking.

- Reviews and approves vendor and contractor's technical submittals related to Engineering designs undertaken by the District.
- Provides Owner design standards and documentation quality requirements for tendered designs, when the District outsources detailed design to design consultants.
- Reviews and provides comments on technical submittals (contractor/vendor/supplier) formally reviewed by District's Consultant Engineers where applicable.
- Maintains (tracks, updates and reviews on regular basis) District's engineering utility standards, specifications and connection requirements, prioritized for development by the Engineering and Public Works leadership.
- Collaborates with consultants, contractors, and operations staff to solve technical issues during design and construction phases, through meaningful, effective and organized communication.
- Prepares technical reports, cost estimates, and presentations as required.
- Monitors Departmental and project budgets.
- Makes recommendations on technical issues to senior management staff and policy-making bodies, including preparation and delivery of reports, presentations, and briefings.

Professional Engineering Practice - Quality Management:

- Adopts and implements regulated practice quality control processes and procedures.
- Regularly reviews and updates as required the Department's Professional Practice Management Plan.
- Supports continuous application and improvement of regulated practice procedures and systems, supporting internal documentation reviews and audits as necessary.
- Establishes and implements technical specifications, standards and related work processes which may be relied upon as District published standards for reference by external consultants and vendors.
- Continually monitors the delivery of engineering practice, identified opportunities to drive continuous improvement and with Leadership approval addresses gaps and provides support to District's technical staff.
- Timely completion of annual CE Plan and submissions, including professional practice risk register and confirms controls with Manager.
- Provides professional engineering and corresponding field review, and quality documentation support for Public Works Division activities.
- Oversee engineering survey work under the applicable requirements and professional care required by PGA, EGBC and ASTTBC.

Capital Works Planning - Utility Programs and Budgeting Support:

- Supports the development of, and recommendations for multi-year utility replacement programs and commensurate long-term budgets to maintain and improve assets.
- Works with Department Leadership and Project Delivery Leads to develop, monitor and manage project work plans (scope, budget, schedule, quality, risk, resources).
- Supports analyses and assessments of critical functional and operating requirements and recommends
 optimal methods for mitigating risks and issues pertaining to existing assets and asset management
 programs.

Asset Management Coordination and Support:

- Supports departmental and District asset management strategies and approved programs, capital projects, planning, and coordination activities related to the identification, upgrade and maintenance of all District water, stormwater and wastewater infrastructure.
- Liaises with Infrastructure Analysis & Planning group in the development of long-term plans and priorities

• Coordinates and leads the departmental review process for design drawings, including designs related to external development, identifying and resolving issues as required with minimal guidance.

Leadership and Engagement

- Provides technical guidance to junior staff and technologists.
- Supports the manager with work planning, reporting, and staff supervision as needed.
- Assists in preparing Council reports, budget materials, and internal briefs.
- Participates in inter-departmental coordination (e.g., Financial Services, Parks, Recreation & Culture).
- Leads public and jurisdictional engagement or utility-related communications as required.

Public Facing and Collaboration Requirements:

- Establishes and maintains strong working relationships with employees, consulting professional engineers, external special interest groups, other government agencies, developers and the public as needed to complete work plan priorities and achieve goals.
- Meets and negotiates with property owners on engineering issues which may be non-routine from both technical and policy points of view.
- Liaises with Public Works staff on technical issues, budgeting and scheduling.
- Liaises with suppliers of equipment for the purpose of developing capital cost estimates and coordinating work with municipal crews.
- Attends intermunicipal meetings where required to provided technical advice or to represent the interests of the municipality.

Required Knowledge, Abilities & Skills:

- Thorough knowledge of municipal infrastructure design and construction principles and methods.
- Professional-level proficiency:
 - Regulated Practice Professional Governance Act, quality management standards
 - Municipal water, storm and sanitary standards (EGBC, Provincial Guidelines, MMCD, regional standards, ASTM, AWWA)
 - Water resources engineering, hydraulic modelling (EPA SWMM or similar programs)
 - Microsoft Office Suite (Excel, Word, PowerPoint, SharePoint) for technical and administrative work.
 - o Construction Site Inspections, Contract Administration and Construction Quality Assurance
 - Accurately estimating quantities of materials, labour, equipment and contract services required for the development of capital project budgets.
 - Digital drawings review and markups (PDF software Bluebeam, Adobe)

• Foundational skills:

- Applied mathematical, engineering and analytical principles to complex engineering and technical problems.
- Strong aptitude for learning new procedures and making effective use of changing technology affecting the engineering field.
- o Ability to work productively under deadlines.
- Ability to prepare clear written reports with recommendations supported by objective analysis.
- o Ability to provide technical and motivational leadership to subordinate staff.
- Thorough working knowledge of municipal bylaws and regulations relating to engineering issues.
- Ability to deal with contractors, homeowners, municipal employees, utility companies and others with professionalism, courtesy, tact, while maintaining independence and objectivity in the application of regulations and bylaws.

- Ability to work cooperatively and productively with municipal employees inside and outside the Engineering & Public Works Department, and to provide timely and accurate engineering technical support when required.
- Ability to develop, evaluate, and administer procurement processes and contracts including basic knowledge of law relating to contracts and tendering.
- o GIS data review and validation practices.
- o Field surveying and preparation of base plans
- Working level experience:
 - Asset Management Standards and Practices
 - Occupational Health and Safety Workers Compensation Act, preferably in public sector
 - o Environmental and Archaeological site management practices, regulations and guidelines
 - Cost Estimating principles
 - Construction Quality Management and Documentation Practices
 - Seismic and Climate Resiliency guidelines and adaptation standards.
 - Capital project delivery management, including the PMBOK framework or equivalent cost and risk control and documentation

Qualifications:

- Bachelor of Applied Science in Civil Engineering from an accredited university.
- A minimum of 6 years of Applied Professional Engineering experience in Civil or Mechanical fields with Application in underground utilities, civil infrastructure.
- Professional experience delivering detailed design of municipal underground utilities and the preparation
 of tendered technical specifications, including pressurized water mains, low pressure sewage systems,
 sanitary lift stations, pump stations, flow control systems, and related maintenance and asset management.

Required Licenses, Certifications and Registrations

- Registered as an EIT or P.Eng. in good standing with Engineers and Geoscientists BC (EGBC).
- Possession of a valid British Columbia Class 5 driver's license and a personal vehicle that is suitable for use as and when required.
- MMCD Contract Administration certification would be considered a valued asset.
- Project Management Professional (PMP) certification would be considered an asset