



# LAKEHAVEN WATER AND SEWER DISTRICT Job Description

<b>POSITION TITLE</b> DE FIELD TECHNICIAN II - INSPECTIONS (Level 11)	
<b>DEPARTMENT:</b> ENGINEERING	<b>SUPERVISOR:</b> DEVELOPMENT ENGINEERING MANAGER
<b>FLSA STATUS:</b> NON-EXEMPT	<b>INCUMBENTS(S):</b>
<b>SII CODE:</b> 1507	<b>REVISION DATE:</b> 2017-11-27
<b>UNION STATUS:</b> IUOE	<b>REVIEW DATE:</b> 2017-12-07

**JOB SUMMARY:**

The employee is responsible for observing the construction and installation of water and wastewater facilities for conformance with District approved project plans, District design and construction standards, right-of-way agency requirements, and governmental regulations and/or guidelines. Also, this employee is performing and/or assisting in performing technical work locating and marking underground water & sewer utilities using maps, record drawings, GIS software, and electronic equipment. This position is assigned to the Development Engineering Section (DES) under the direct supervision of the Development Engineering Manager.

Work is generally performed under general supervision.

**ESSENTIAL JOB FUNCTIONS:**

- Maintains regular, predictable attendance.
- Physical ability to conform with all safety requirements.
- Observes construction activities of contractors who construct and install water and wastewater related facilities for conformance with District approved project plans and specifications, District design and construction standards, right-of-way agency requirements, and governmental regulations and/or guidelines.
- Provides input to other District personnel for the approval of project plans and specifications.
- Measures and develops quantities for contract bid items in preparation of progress payments for District public works contracts.
- Obtains measurements and documents of constructed work for development of "as-built" record drawings.
- Interfaces with other staff, departments, utilities and governmental agencies as needed regarding installation of water and wastewater facilities.
- Prepares and maintains inspection records, field notes/redlines and reports concerning projects, job status and progress.
- Sketches depictions of special work items, including side sewer stubs and building sewers; may also require the formal drafting of side sewer stubs and building sewers on permit forms.
- Examines, evaluates, grades and tests construction materials such as pipes, fittings, manholes, hydrants, fill material, etc., as necessary.
- Observes pressure and vacuum tests of water and wastewater facilities, and collects field

disinfection test samples.

- Verifies field position of pipes, valves, meters, pigports and manholes as necessary to confirm approved construction plan location; documents and photographs utility markings and stakes/flags and related damage to utilities.
- Maintains work and performance records, including site sketches and prepares written reports and logs and maintains inventory and performance records.
- Monitors and complies with all safety measures and procedures at all times.
- Participates in pre-construction and progress meetings with developers and/or contractors.
- Approves or disapproves construction work performed by others as meeting District standards.
- Coordinates with the District Development Engineering Manager and/or District Project Manager, the design engineer, and/or contractor for identification and approval of field changes to the original design, ensuring that such changes conform to current standards, regulations and guidelines. For District public works contracts, this activity shall also include assistance in the negotiation of cost and time impacts associated with the field changes.
- Drafts water shutdown/isolation maps for construction water tie-ends and/or abandonments, for review and approval by DE Manager, Project Engineer or Senior Inspector.
- Approves water tie-ends and restrained pipe fittings (i.e. thrust blocking and/or mechanical joint restraint) by others.

**ADDITIONAL DUTIES AND RESPONSIBILITIES:**

- Performs technical duties locating and marking underground water and sewer lines in public streets, alleys, utility easements and rights-of-ways using installation knowledge, maps, record drawings, sketches. Working knowledge of using GIS software and magnetic and electronic equipment. General knowledge in the operation of the District's ground penetrating radar (GPR) equipment.
- Maintains an inventory of location markings for future reference; ensures markings and stakes/flags are visible and informs construction crews of potential problems or complications.
- Answers customer inquiries concerning project activities, construction specifications, standards and general water and wastewater service questions.
- Maintains knowledge of current District standards and policies, also provides input on updating the current District construction standard practices.
- Performs side sewer inspections.
- Monitors and complies with all applicable safety measures and procedures at all times.
- Performs work outside of regular work schedule, as needed.
- Assists the operations and/or maintenance of the flushing/chlorination boxes and hydrant meters.
- Reads and interprets maps, drawings, engineering documents, and construction record drawings to locate underground utilities.
- Performs general mathematical calculations and calculate and measure distances.
- Operates and maintains electronic and magnetic detection equipment and other equipment related to location of underground utilities.
- Prepares accurate sketches of underground utility locations.
- Operates safely in high-traffic and congested areas.
- Communicates effectively both orally and in writing with contractors, the public and other employees.
- Establishes and maintains effective working relationships with contractors, the public, and other employees.
- Organizes and prioritizes the daily one-call notification system marking request schedules, if needed.

### **EDUCATION AND EXPERIENCE:**

- High School Diploma or G.E.D Certification.
- Two (2) or more years related inspection experience applying basic knowledge of materials and workmanship standards used in the construction of water and wastewater facilities and/or related construction projects.
- Two (2) or more years of construction experience with the installation of water, sewer and storm facilities, preferably within a water and/or sewer utility.
- Some related experience performing locating work.
- Computer experience in using Microsoft office software and working knowledge in GIS mapping.
- Working knowledge of drafting techniques and construction plan reading.
- Must obtain a Water Distribution Manager (WDM) II certification within one-year of hire.
- Working knowledge of traffic control experience is preferred.
- Must acquire and maintain any required certifications or training applicable to the District (i.e. First Aid Training/CPR, Certified Flagging Safety, etc.).
- The successful completion of post-high school technical courses related to construction management, survey and/or engineering, would be desirable, but not required.
- Ability to obtain a Wastewater Collection Certification Level I within one-year of hire.
- Ability to obtain a Cross-Connection Control Specialist (CCCS) Certification within two (2) years of hire.
- An equivalent combination of education and related experience may be substituted for evaluation by the District.

### **KNOWLEDGE SKILLS AND ABILITIES:**

- Working knowledge of construction observation techniques.
- Working knowledge of construction terminology, methods, materials, and equipment used in installation, maintenance, excavation, and repair of underground water and sewer utilities.
- Ability to express thoughts clearly and concisely either by written or oral communication.
- Ability to interpret engineering plans and specifications, other construction contract documents, basic land surveying documents and field construction markers, water and wastewater facility maps, and construction record drawings.
- Ability to manage multiple construction projects, organize work products and keep detailed daily records using an inspector's project log book or the equivalent.
- Working knowledge of techniques utilized to measure distances, weights, areas, volumes, etc., and devices to perform said measurements for development of construction record drawings and to obtain quantities for contract bid items for progress payments for District public works contracts.
- Working knowledge of basic water and wastewater system operation.
- Ability to communicate effectively (oral and written) with contractors, engineering consultants, District staff, customers, agency representatives and the general public by the proper use of tact, patience, courtesy and respect.
- Ability to meet schedules and timelines.
- Ability to organize work products and documentation, including record keeping techniques.
- Working knowledge of methods, tools and equipment, and standard practices for locating and marking underground utilities.
- Working knowledge and experience working with engineering plans, drawings, sketches, record drawings, and diagrams.
- Working knowledge of Federal (OSHA) regulations and State and District regulations and policies regarding utility marking and safe work practices.
- Working knowledge and experience to control traffic at work sites by setting warning signs

- and lights, traffic/pedestrian barricades, and flagging traffic manually.
- Operation of a computer terminal with working knowledge of commonly used office software programs, including word processing, spreadsheets, calendaring and email applications.
- Ability to accurately perform and evaluate mathematical calculations and to work with numbers accurately (unit conversions, fractions, percentages, decimals).
- Ability to know when to refer situations to a higher level authority.
- Ability to perform research and make independent investigations of assigned problems.
- Ability to understand and follow complex oral and written instructions.
- Ability to maintain a courteous attitude toward the public and other employees -- even in stressful and unpleasant situations.
- Working knowledge on the proper handling of asbestos pipe.
- Ability to analyze unanticipated situations during construction activities and to accurately communicate these unanticipated situations and offer advice and recommendations to the Development Engineering Manager and/or Project Manager.
- Ability to lead construction meetings, as required.

**GENERAL REQUIREMENTS:**

- Ability to communicate courteously, effectively, tactfully, and maintain confidentiality.
- Demonstrate strong written and oral communications skills.
- Ability to carry out oral and written instructions.
- Ability to organize and prioritize workload.
- May perform task/job duties of other work unit positions in order to balance workload and/or cross train personnel.
- Proficiency with common office practices, equipment and software.
- Follow all safety requirements set forth by District policy, State and Federal codes.
- Follow all District Policies and Procedures.
- Other duties as assigned.

**SPECIAL REQUIREMENTS:**

- Must have valid WA State Driver's license.
- Must obtain within eighteen (18) months from training start date as defined by the District, a Washington State Class "A" Commercial Driver's License for manual transmission vehicles, together with a Tanker and Hazardous materials endorsement
- Must obtain within eighteen (18) months of hire a Flagger's certification.
- Ability to perform manual tasks involving physical strength and endurance, such as to traverse uneven ground, climb, crawl, lift, push, pull, listen and move quickly to avoid hazardous situations.
- Ability to utilize a two-way radio and cellular phone.
- Ability to use a laptop computer in the office and/or field.
- Must demonstrate the ability to properly operate water system gate valves and hydrants in the field.
- Ability to perform duties as described at variable heights and depths, within confined spaces and within public right-of-way
- Ability to withstand exposure to variable weather conditions.
- Available to work beyond normal working hours, if needed.

**WORK ENVIRONMENT:**

- Work is generally performed in a field environment.
- May require shift, weekend and holiday work as required by emergency or work assignment.
- Anticipated to respond in emergency situations.
- Ability to work safely with chlorine and/or other hazardous materials used routinely at the District and/or construction sites.

- Ability to work within a construction work zone or public right-of-way.

**MACHINERY, TOOLS, EQUIPMENT, PERSONAL PROTECTIVE EQUIPMENT:**

- Steel toe work-boots with non-slip soles.
- Hard hat.
- Protective goggles/glasses.
- Hearing Protection .
- Leather gloves.
- 4-wheel drive truck (automatic transmission).
- Cell phone.
- Various basic machinery/mechanical tools (i.e. wrenches, sockets, screwdrivers, measuring wheel, etc.)
- WASDOT certified traffic vest.
- Computers and software programs.

**PHYSICAL DEMANDS:**

**N:** Never (not at all)

**O:** Occasional (1-33% of the time)

**F:** Frequent (34%-66% of the time)

**C:** Constant (67%-100% of the time)

STRENGTH:  Sedentary  Light  Medium  Heavy  Very Heavy

	Frequency	Comments	
Sitting	F	Driving to job sites.	
Standing	O		
Walking	O	Ability to traverse uneven ground	
Driving	C		
Lifting: 50 lbs.	O	Ability to perform manual tasks involving physical strength.	
Carrying: 50 lbs.	O	i.e. personal tools	
Push/Pull: 50 lbs.	O	i.e. operating (i.e. turning) valves	
Climbing Stairs/Ladders	O	Ability to perform duties at variable heights and depths.	
Working at Heights/Balancing	O		
Bending at Waist	O		
Twisting at Waist	O		
Crouching/Kneeling	O		
Crawling	O		
Reaching	O		
Repetitive Motion	O		
Handling/Grasping	O	Pinch Grasp 50 %	Whole Hand Grasp 50 %
<i>Comments for line above:</i> Ability to drive for long periods of time.			
Fine Finger Manipulation	F	i.e. writing and typing	
Talking	F		
Hearing	C	Indoors 15 %	Outdoors 85 %
Seeing	C		
Temperature Extreme	O		
<i>Comments for line above:</i> Ability to withstand exposure to inclement and/or variable weather conditions.			
Vibration	O		
Other			

The statements contained herein reflect general details as necessary to describe the principal functions of this job, the level of knowledge and skill typically required, and the scope of responsibility, but should not be considered an all-inclusive listing of work requirements. Individuals may perform other duties as assigned including work in other functional areas to cover absences or relief, to equalize peak work periods or otherwise to balance the workload.

This job description does not constitute an employment agreement and may be changed or amended at any time to meet the needs of the District.