



July 2015

UTILITY WORKER II

DEFINITION

Under general supervision, performs a variety of work in the construction, modification, maintenance, repair, and operation of city infrastructure, including streets, traffic controls and structures, storm and sanitary sewers, water systems, parks, landscapes, and street trees; and performs related work as required.

SUPERVISION RECEIVED AND EXERCISED

Receives general supervision and/or technical and functional direction from assigned supervisory or management personnel. May exercise technical and functional direction over volunteers or seasonal staff.

CLASS CHARACTERISTICS

This is the journey-level class in the public works utility series that performs the full range of duties required to ensure that city infrastructure, systems, and facilities to which assigned are maintained in a safe and effective working condition and provide the highest level of safety for public use. Responsibilities include performing a wide variety of tasks in the inspection, maintenance and repair of assigned facilities and systems in a timely manner. This class is distinguished from Senior Utility Worker in that the latter exercises technical and functional direction over lower-level staff and is capable of performing the most complex duties assigned to the division. It is further distinguished from the Utility Worker I classification by the requirement to hold a commercial driver license (CDL) and other assignment-specific certifications.

ESSENTIAL FUNCTIONS

When performing the street maintenance assignment:

- Performs maintenance and repairs to city streets and roadways, including shoveling and spreading asphalt in patching, painting and striping, repairing, and reconstructing streets.
- Installs, maintains, and repairs, traffic signs, including making signs, and installing sign posts and signs in accordance with city, state, and federal codes.
- Performs a variety of duties in the maintenance of drainage structures, such as catch basins, storm drains, and outfalls, to ensure efficient drainage.
- Performs a variety of weed abatement duties to eliminate hazards to vehicles and pedestrians.
- Maintains city streets, right of ways, and alleys to ensure safe and efficient access for the public.
- Sands streets during snow/ice storms as required.
- Participates in cleaning hazardous materials spills as required.

When performing the water distribution systems assignment:

- Inspects water services for compliance with established codes and/or damaged or worn parts, and makes repairs as necessary, including pump stations.
- Repairs transmission and distribution water mains, including installing parts as necessary.
- Installs, repairs, and replaces water services and fire hydrants, including installing parts and fittings and performing scheduled maintenance and making any repairs.
- Performs visual checks of meter conditions and connections to ensure efficient operations; reports damaged or non-functioning meters.
- Reads water meters; installs, repairs, or replaces meters as necessary to ensure efficient operation; replaces and maintains meter boxes and lid covers; investigates leaks and reports malfunctions; completes orders for meter repairs.
- Assists the Utility Billing Division by reading meters, turning water on or off, locking and unlocking meters, and delivering notices.
- Performs location and marking for all city-owned utilities; retrieves data; maintains accurate records and files; assists contractors and other city staff as required.

- Performs asphalt and concrete repair and patch work; removes trees, brush, and debris to access water meters, boxes, and fire hydrants.

When performing the wastewater collections/storm systems assignment:

- Maintains wastewater lines to ensure continuous flow of city wastewater collection system.
- Installs, maintains, and repairs wastewater mains and laterals.
- Operates and maintains the city's closed circuit television system and equipment used to monitor and prevent problems in the wastewater system.
- Installs and maintains wastewater manholes; makes minor repairs as directed.
- Inspects wastewater lines and manholes to ensure compliance with established codes.
- Maintains the city's wastewater collection system in a safe and sanitary manner to ensure safe conditions for the city, including repairing broken wastewater mains and parts, and hydro-cleaning and rodding to ensure clean and open distribution.
- Installs new wastewater/storm laterals and mains.
- Transports contaminated soils and raw sewage to designated areas for proper disposal.
- Performs asphalt and concrete repair and patch work; removes trees, brush, and debris from right-of-ways to access sewer main lines and laterals.
- Generates, reads, and interprets inspection reports and updates maintenance database as required.

When performing the parks assignment:

- Performs a variety of technical landscape construction duties, including planting flowers, shrubs, and trees, pruning and repairing damaged trees, making and repairing tree wells, irrigating, mowing, and fertilizing turf, and trimming, planting, fertilizing, and pruning shrubs.
- Inspects, maintains, repairs, and constructs developed and undeveloped parks, playgrounds, athletic fields, and other related facilities and properties.
- Performs pesticide applications as required, including calculating proper amounts of pesticides, spraying parks, landscapes, and street trees, and completing necessary paperwork.
- Operates specialized vehicles and heavy equipment related to the construction, maintenance, and repair of city parks, landscapes, and street trees, and related facilities, such as aerial lift trucks.
- Installs, inspects, and maintains park equipment and grounds to ensure safe operating conditions for citizens, including basic maintenance duties such as fabrication, painting, and carpentry.
- Maintains parks and landscapes in a clean and safe condition, including picking up trash and maintaining trash receptacles, and cleaning and repairing restrooms.
- Maintains park appearance, including mowing, trimming, edging, fertilizing, watering lawns and other landscaped areas, and removing graffiti.
- Installs and repairs irrigation equipment, including installing irrigation pipes, testing systems, and making repairs.

When performing all assignments:

- Observes safe work methods and makes appropriate use of related safety equipment as required.
- Operates specialized vehicles and a variety of light, medium, and heavy equipment related to the construction, maintenance, and repair of city infrastructure, facilities, and systems within the functional area of assignment.
- Operates a variety of hand and power tools and equipment related to work assignment as instructed.
- Maintains work areas in a clean and orderly condition, including securing equipment at the close of the workday.
- Installs street barricades and cones, and controls traffic around work sites to ensure safe conditions for the general public and city workers.
- Provides needed information and demonstrations concerning how to perform certain work tasks to new employees in the same or similar class of positions.
- Responds to after-hours emergencies.
- Provides accurate documentation of work assignments (asset, activity, equipment, contractor or personnel hours, and other data entry information as needed) by completing Computerized Maintenance Management Systems (CMMS) work orders.
- Performs related duties as assigned.

QUALIFICATIONS

Knowledge of:

- Maintenance principles, practices, tools, and materials for maintaining and repairing water distribution systems, including water hydraulics, valves, pipe materials, pump stations, and water service components; OR storm and sanitary wastewater collection systems, including gravity wastewater lines, manholes, and wastewater cleanouts; OR streets, including traffic signs, street marking, and asphalt and concrete repair; OR parks, including landscape construction, street tree maintenance, irrigation, playgrounds, athletic and sports fields, and other related facilities and properties.
- The operation and minor maintenance of a variety of hand and power tools, vehicles, and power equipment.
- Traffic control procedures and traffic sign regulations.
- Applicable Federal, State, and local laws, codes, and regulations.
- Safety equipment and practices related to the work, including the handling of hazardous chemicals.
- Safe driving rules and practices.
- Record keeping principles and procedures.
- Computer software related to work.
- Techniques for providing a high level of customer service to public and city staff, in person and occasionally over the telephone.

Ability to:

- Perform construction, modification, maintenance, and repair work on streets; or water distribution systems; or wastewater collection systems; or parks, landscapes, and street trees such as found throughout the city.
- Operate specialized maintenance and repair equipment related to the area of assignment.
- Set up and operate traffic area construction zones, including cones, barricades, and flagging.
- Locate underground utilities by use of blue prints and electronic locating equipment in accordance with appropriate regulations, depending on assignment.
- Troubleshoot maintenance problems and determine materials and supplies required for repair.
- Make accurate mathematical calculations.
- Read and interpret construction drawings and specifications.
- Safely and effectively use and operate hand tools, mechanical equipment, power tools, and equipment required for the work.
- Perform routine equipment maintenance.
- Maintain accurate logs, records, and basic written and computerized records of work performed.
- Follow department policies and procedures related to assigned duties.
- Understand and follow oral and written instructions.
- Organize own work, set priorities, and meet critical time deadlines.
- Comprehend and use English effectively including producing all forms of communication in a clear, concise and understandable manner to intended audiences.
- Use tact, initiative, prudence, and independent judgment within general policy, procedural, and legal guidelines.
- Establish, maintain, and foster positive and harmonious working relationships with those contacted in the course of work.

Education and Experience:

Any combination of training and experience, which would provide the required knowledge, skills, and abilities is qualifying. A typical way to obtain the required qualifications would be:

Equivalent to the completion of the twelfth (12th) grade and two (2) years of related experience, such as construction, repair, operation, and maintenance of streets, underground utilities, or parks and landscape.

Licenses and Certifications:

- Possession of a valid Class A (CDL) Commercial Oregon driver's license with the appropriate endorsements and satisfactory driving record.
- Standard First Aid Certificate issued by the American Red Cross.
- CPR Certification.

- Oregon Department of Agriculture Pesticide License (*if applying to parks maintenance*).

Preferred Certifications:

If assigned to water distribution systems maintenance:

- Possession of or ability to obtain a Grade I Water Distribution Operator Certification from the State of Oregon.
- Confined Space Entry Certification.
- Competent Person Certification.

If assigned to wastewater collection systems maintenance:

- Possession of or ability to obtain a Grade I Wastewater Collection System Operator Certification from the State of Oregon.
- Confined Space Entry Certification.
- Competent Person Certification.

PHYSICAL DEMANDS

Physical demands for Utility Worker vary somewhat based on division. See the attached job task analyses for the physical demands of each of the divisions in which Utility Workers are assigned.

ENVIRONMENTAL ELEMENTS

Employees work in the field and are exposed to loud noises, cold and hot temperatures, inclement weather conditions, road hazards, vibration, confined workspace, chemicals, mechanical and/or electrical hazards, and hazardous physical substances and fumes. Employees may interact with upset staff, public and private representatives, and contractors in interpreting and enforcing departmental policies and procedures.



JOB TASK ANALYSIS

COMPANY: City of Tigard: Public Works Department
 JOB TITLE: Utility Worker Classification for: **Parks Division**
 CONTACT PERSON: Dana Bennett
 PHONE: 503-718-2453

Purpose of the Job:
 Maintain parks in and around the city of Tigard, OR.

Essential physical demands of the job:

1. Operating lawn mowers and outdoor power tools (i.e. string trimmers, edger's, chainsaws, blowers)
2. Using hand tools (i.e. rakes, hula hoe, shovels)
3. Tree removal
4. Moving goal posts,
5. Pulling invasive plants.
6. Spraying;
7. Picking up leaf piles.
8. Cleaning tables /picnic shelters
9. Emptying trash containers.
10. Cleaning bathrooms.

Equipment, machines, tools, vehicles:

- Power tools: Edger's, blowers, string trimmers, chain saws, hedge trimmers,
- Hand tools: Shovels, hoes, rakes, loppers, clippers
- Vehicles: Gator (utility vehicle), truck , riding lawn mower, forklift, 2-yd dump truck, man lift
- Ladders

Physical Demands:

R = Rare: Less than 1 hour or 1-5% of the day
 O = Occasionally: 1-2.5 hours or 10-33% per day
 F = Frequently: 2.5 – 5.5 hours or 34-66% per day
 C = Continuously: 5.5-8 hours or 67-100% per day

POSTURES

POSTURES	MAX. CONSECUTIVE MIN/HOURS	TOTAL DAILY HOURS	POSITION CHANGE OPTIONAL?	COMMENTS
Sitting		O		Riding in trucks. Operating riding lawn mowers.
Standing-Stationary		O		Meetings, instructions
Walking / Moving about		O		Mowing, edging, trimming.

LIFTING

WEIGHT	OBJECT	LOWEST POINT	HIGHEST POINT	R	O	F	C
100-lbs	Lifting side of mower for cleaning.	ground	12"	x			
16-lbs	string trimmer, and hedge trimmer	ground	waist height			x	
45-lbs	4 gallon spray tank (worn with harness on the back)	ground	waist height		x		
70-lbs	picnic tables	28"	waist height		x		
100-lbs	pressure washer (in/out of truck)	36"	waist height	x			
40-lbs	lifting garbage bags out of garbage cans.(bend lift)	35"	shoulder height		x		
15-lbs	chainsaws	waist	head height			x	

CARRYING

WEIGHT	OBJECT	MAXIMUM DISTANCE CARRIED	R	O	F	C
70-lbs	picnic tables	10'		x		
40-lbs	garbage bag	250'		x		
15-lbs	string trimmer, hedge trimmer	Continuous				x

PUSH / PULL

WEIGHT	OBJECT	DISTANCE	R	O	F	C
50 to 85-lbs	picnic tables	10'		x		
50 to 85-lbs	goal posts	50'		x		

PHYSICAL ACTIVITIES

POSITION	R	O	F	C	COMMENTS
Squatting / crouching			x		Weeding, lifting from ground level.
Crawling	x				Weeding
Kneeling			x		Weeding
Digging			x		Irrigation repair
Stooping/ Bending			x		During digging, weeding, bathroom cleaning, and raking.
Twisting			x		Pitching weeds/leaves into gator.
Balancing			x		Walking over uneven ground
Reaching forward			x		During tool use, weeding, cleaning tasks.
Stair climbing		x			Accessing equipment via stairwells.
Ladder climbing		x			Removing posters in shelters, trimming trees, cleaning shelters, changing light bulbs.
Grasping				x	Using hand tools, weeding by hand, holding power tools.
Pinch		x			Weeding, bathroom cleaning
Finger manipulation		x			Operating sprayer, opening gas caps.
Lying down		x			Cleaning out mower
Push/pull			x		Raking, hoeing, moving goal posts.

ENVIRONMENTAL EXPOSURES

Temperature Range 25 - 100 degrees F

	R	O	F	C	COMMENTS
Chemicals Contact			x		Spraying, fueling vehicles and equipment, cleaning restrooms
Inhalation			x		Machine exhaust, fuel fumes, dust
Restricted spaces	x				Under vehicles
High elevations			x		Man lift.
Moving objects			x		Mowers, gator utility vehicles, man lifts
Noise				x	Working with mowers, trimmers, blowers, pressure washers.
Safety equipment				x	PPE (i.e. safety glasses, hard hat, steel toe boots, hearing protection, gloves).
Slippery surface		x			Wet concrete, equipment steps, wet grass
Special clothing	x				Chaps, coveralls, rubber gloves
Vibration			x		Operating: chainsaws,
Wetness			x		Wet surfaces due to rain. & landscape sprinklers
Lighting		x			Occasionally working at night.
Floor surfaces		x			Concrete, earth
Vision				x	

SENSORY REQUIREMENTS

	Rare	Occasional	Frequent	Continuous	Comments
Vision				x	Operating machinery, working around park patrons
Hearing				x	Operating and working around equipment.
Talking in person			x		Communicating with fellow workers and the public.



JOB TASK ANALYSIS

COMPANY: City of Tigard Public Works Department.
 DEPARTMENT: Utility Worker Classifications for **Water, Sanitary Sewer, Streets and Storm Water Divisions.**
 CONTACT PERSON: Dana Bennett Ph: 503-718-2453

Purpose of the Job:

Maintain water, sanitary sewer, streets and storm water systems in and around the city of Tigard, OR.

Essential physical demands of the job:

1. Installing man holes, catch basins
2. Installing outfall restoration systems
3. Tree removal
4. Clearing debris from drains
5. Cleaning water systems (off road line cleaning)
6. Repairing broken pipeline
7. Installing / relocating and repairing fire hydrants

Equipment, machines, tools, vehicles:

- Power tools: string/blade trimmers, chain saws, cut off saws, plate compactor, portable pumps, winches
- Hand tools: Shovels, hole diggers, breaker bar, T-bar, sledge hammers, pipe cutters
- Vehicles: truck, vacuum truck, back hoe, loader, fork lift and asphalt roller.
- Ladders

Physical Demands:

- N= Never
 R = Rare: Less than 1 hour or 1-5% of the day
 O = Occasionally: 1-2.5 hours or 10-33% per day
 F = Frequently: 2.5 – 5.5 hours or 34-66% per day
 C = Continuously: 5.5-8 hours or 67-100% per day

POSTURES

POSTURES	MAX. CONSECUTIVE MIN/HOURS	TOTAL DAILY HOURS	POSITION CHANGE OPTIONAL?	COMMENTS
Sitting		O		Riding in trucks
Standing-Stationary		F		Meetings, instruction, working in confined spaces, flagging/traffic control.
Walking / Moving about		C		Outfall restoration, clearing fallen trees

LIFTING

WEIGHT	OBJECT	LOWEST POINT	HIGHEST POINT	R	O	F	C
10 to 25-lbs	String trimmer, chain saws, shoveling wet leaves, vacuum tubes	ground	head height			x	
31 to 40-lbs	Blower, pipe cutter	ground	bed of truck				
50-lbs	Off road line cleaning hose	ground	knee height			x	
50-lbs	Flange – flange fittings	ground	6'	x			
61 to 70-lbs	Speed shoring units, 2' flange spools, flange-flange 90 degree fitting	ground	chest height		x		
71 to 80-lbs	Paving ring, iron grates, man hole covers (150-lbs, 2-person lift); 4" riser rings (145-lbs, 2-person lift)	ground	waist height		x		
81 to 90-lbs	2" riser rings, meter box lids,						
91-100-lbs	Fin forms (shoring sides), man hole, oversized meter box	ground	waist height		x		

CARRYING

WEIGHT	OBJECT	MAXIMUM DISTANCE CARRIED	R	O	F	C
15to 20-lbs	String trimmer, chainsaws	50'			x	
50-lbs	Buckets of rocks/sand.	50'		x		
60 to 75-lbs	Camera/tractor, pipe (6" iron, 2 person lift/carry)	100'		x		

PUSH / PULL

WEIGHT	OBJECT	DISTANCE	R	O	F	C
50-lbs	Off road line cleaning hose	300'		x		
65 to 85-lbs	Camera with spacers (lifting cameras out of holes)	15'	x			
100 to 110-lbs	Plate compactor	50'	x			

PHYSICAL ACTIVITIES

POSITION	N	R	O	F	C	COMMENTS
Squatting / crouching				x		Lifting from ground level, installing pipe
Crawling	x					
Kneeling				x		Installing pipe
Digging				x		Shoveling wet leaves, digging during outfall restoration
Stooping/ Bending				x		During digging
Twisting				x		Pitching leaves into truck, operating string/blade cutters
Balancing					x	Walking over uneven ground, walking switch backs, working in trenches
Reaching forward				x		During tool use, pulling pipe, operating trucks
Stair		x				Pump / motor access in pump stations.
Ladder Climbing			x			Climbing in and out of trenches and canister vaults
Grasping					x	Using hand tools, holding power tools
Pinch			x			General tool use
Finger manipulation			x			General tool use, operating machinery
Lying down			x			Getting into awkward positions when installing pipe and meters
Push/pull				x		Removing manhole covers and grates, pulling plate compactor

ENVIRONMENTAL EXPOSURES

Temperature Range 25 - 100 degrees F

	R	O	F	C	COMMENTS
Chemicals Contact			x		Gas
Inhalation				x	Gas fumes, machine exhaust, dust
Restricted spaces		x			Working in shoring
High elevations	x				Storage tanks and reservoir roofs.
Moving objects			x		Asphalt rollers, jetting nozzles, tracked cameras
Noise				x	Working with chainsaws, trimmers, chippers, vacuum truck
Safety equipment				x	PPD - hard hat, steel toe boots, hearing protection, gloves.
Slippery surface				x	Wet asphalt/concrete, wet grass, wet equipment steps, slippery slopes
Special clothing	x				Protective clothing when handling acids, chemicals, welding, or other hot work.
Vibration			x		Operating: chainsaws, tampers, vibrators.
Wetness			x		Wet surfaces due to rain
Lighting				x	Florescent lighting, sunlight
Floor surfaces				x	Concrete, earth

SENSORY REQUIREMENTS

	R	O	F	C	COMMENTS
Vision				x	Operating machinery, working around park patrons
Hearing				x	Operating and working around equipment
Talking in person			x		Communicating with fellow workers and the public