



Disability Services
Safety and Claims Management
Department of Executive Services
Human Resources Management Division
P.O. Box 80283
Seattle, WA 98108
(206) 205-8575
(206) 296-0514 FAX

JOB ANALYSIS

Job Title:	Engineer IV, Supervising Engineer-Stormwater Services		
Department:	Natural Resources and Parks	Division:	Stormwater Services
DOT Title:	Drainage-Design Coordinator	DOT #:	005.167-014
SVP:	8	Requestor:	Jeff Casem
Worksite Address:	201 South Jackson Seattle, WA 98104	Office Contact Name/ Phone/ Email:	Curt Crawford 206-477-4675 curt.crawford@kingcounty.gov
Original Analyst:	Kyle Pletz, VRC, CDMS		Analysis Date: 1/2/20
Update Analyst:			Update Date:

☒ On-Site ☐ Interview ☐ Representative

JOB DUTIES:

King County Stormwater Services (SWS) is the County section responsible for management of stormwater runoff in unincorporated King County. There are two primary purposes for this stormwater management:

1. To protect public safety and properties, and
2. To protect the water quality and beneficial uses (fishing and swimming) of surface waters, which is a requirement Of the federal Clean Water Act, and more specifically, the National Pollutant Discharge Elimination System (NPDES) municipal stormwater permit issued by the State of Washington.

This position is the supervisor for Engineering Response and Support Unit (ERSU).

Essential Functions according to the employer:

All King County jobs require ability/essential function to:

Demonstrate predictable, reliable, and timely attendance.

Follow written and verbal directions to complete assigned tasks on schedule.

Read, write, and communicate in English & understand basic math.

Learn from directions, observations, and mistakes and apply procedures using good judgment.

Work independently or as part of a team and interact appropriately with others.

Report all workplace injuries and illnesses to Supervisor, and seek medical attention when appropriate.

Supervises the following:

- Complaint Response.
- Emergency Response.
- SWM Fee measurements and discounts.
- Agricultural Drainage Assistance Program (ADAP) projects.
- Neighborhood Drainage Assistance Program (NDAP) Projects.
- Drainage and Maintenance Enforcements.
- Engineer Pool Support.



King County

King County Job Analysis

Job Title : Engineer IV, Supervising Engineer-
Stormwater Services

Employee :

DOT # : 005.167-014

Claim # :

EXPERIENCE, QUALIFICATIONS, KNOWLEDGE, SKILLS:

- Knowledge of management techniques and principles
- Knowledge of intergovernmental relations
- Knowledge of the legislative process
- Advanced and/or specialized technical knowledge and skills
- Conflict-resolution skills
- Problem-solving skills
- Team-building skills
- Advanced interpretative skills
- Advanced negotiating skills
- Advanced planning skills
- Advanced scheduling skills
- Advanced budgeting skills
- Skill in managing a number of projects or programs
- Policy development skills

Licensing, Certification and Other Requirements

Washington State Driver's License or the ability to provide transportation to remote work locations with limited or no public transportation may be required.

Some positions may require a Washington State professional engineer's license or land surveyor's license. Additional licenses, certifications and other requirements determined to be necessary to meet the business needs of the employing unit may be required.

Machines, Tools, Special Equipment, Personal Protective Equipment Used at the professional discretion of the employee:

Hard hat, safety vest, protective eyewear, ear protection, boots (including steel toe), rain suit/ umbrella, first aid kit, gloves, field bag and emergency kit (food, water and survival supplies).

County vehicles (car, truck or SUV), shovel, potato fork, lid puller, hip and chest waders, machete, pipe inspection camera, flashlight, trash pump, All Terrain Vehicle (ATV), survey equipment, buckets, small sledge hammer, clipboard (with document storage), camera, 800Mhz radiosmartphone, laptop computer; Microsoft Office software including Access, copy machine, Cityworks, various environmental engineering programs and mapping, AutoCad, GIS, and telephone.

PHYSICAL REQUIREMENTS

Frequency Scale	Strength	Work Pattern
N = Never	<input checked="" type="checkbox"/> Sedentary	<input checked="" type="checkbox"/> Full-time
S = Seldom (1-10 %, up to 48 min)	<input type="checkbox"/> Light	<input type="checkbox"/> Part-time
O = Occasional (11-33%, 48 min. – 2 hr 25 min)	<input checked="" type="checkbox"/> Medium	<input type="checkbox"/> Seasonal
F = Frequent (34-66%, 2 hr 26 min – 5 hr 35 min)	<input type="checkbox"/> Heavy	8 Hours Per Day
C = Constant (67-100%, more than 5 hr 35 min)	<input type="checkbox"/> Very Heavy	5 Days Per Week*
		FLSA Exempt <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Work Pattern (continued)

This is classified as a SEDENTARY job by the US Department of Labor, but can range to MEDIUM when performing field work. * The employee may work overtime.



King County

King County Job Analysis

Job Title : Engineer IV, Supervising Engineer-
Stormwater Services

Employee :

DOT # : 005.167-014

Claim # :

Fieldwork is performed approximately 5-25% of the job and can be dependent on weather, staff availability, customer complaints/claims/lawsuits.

Job Demand	Frequency and Weight (lbs.)					Activity Description
	N	S	O	F	C	
Lifting floor – waist		3-20 21-60*			1-2*	Up to 1 hr./time, 7 hrs. total with 1-2 lbs. for camera, files, clipboard, plans/drawings, smart phone, etc. *when working in the field. Up to 1 min./time, 5 min. total with a laptop, boxes of files (20 lbs.), office equipment when in the office. *Up to 30 sec./time, 2x mo. While manipulating survey equipment, pipe inspection camera, drainage lids, etc. while performing field work.

Job Demand	Frequency and Weight (lbs.)					Activity Description
	N	S	O	F	C	
Lifting waist–shoulder		3-20 21-60*			1-2	Up to 1 hr./time, 7 hrs. total with 1-2 lbs. for camera, files, clipboard, plans/drawings, smart phone, etc. *when working in the field. Up to 1 min./time, 5 min. total with a laptop, boxes of files (20 lbs.), office equipment when in the office. *Up to 30 sec./time, 2x mo. While manipulating survey equipment, pipe inspection camera, drainage lids, etc. while performing field work.
Lifting above shoulder		1-5				Up to 5 sec./time, 1-2x shift with office supplies, files, etc. on upper shelves.



King County

King County Job Analysis

Job Title : Engineer IV, Supervising Engineer-
Stormwater Services

Employee :

DOT # : 005.167-014

Claim # :

Job Demand	Frequency and Weight (lbs.)				Activity Description
Carry (Distance/Surface)		3-9 21-60*	10-20*		<p>Up to 1-2 hrs./time, 7 hrs. total with 1-2 lbs. for camera, files, clipboard, plans/drawings, smart phone, etc. *when working in the field.</p> <p>Up to 1 min./time, 5 min. total with a laptop, boxes of files (3-20 lbs.), office supplies while in the office.</p> <p>*Up to 5 min./time, 2 hrs. total while utilizing survey equipment while in the field (10-20 lbs.).</p> <p>*Up to 5 min./time, 30 min total in a shift, 2x/mo. With 21-60 lbs.. while manipulating survey equipment, pipe inspection camera, drainage lids, etc. while performing field work.</p>
Pushing/Pulling (Distance/Surface)		3-20		1-2	<p>Up to 1.5 hr./time, 4-5 hrs. total while driving with 1-2 lbs. force for the steering wheel.</p> <p>Up to 5 sec./time, 2 min. total survey equipment (20 lbs.), , drawers and doors (3-10 lbs.).</p> <p>*Up to 60 lbs. when pulling drain lids 6-20x/shift while performing field work. Up to 1 hr. total , with approx. 15 lbs. of force, while using pipe camera.</p>

Physical Demands	Frequency					Activity Description
	N	S	O	F	C	
Sitting					X*	<p>Up to 2 hrs./time, 8 hrs. total while completing paperwork, performing computer duties and driving a County vehicle during field inspections.</p> <p>*Can alternate sit/stand as needed when in the office as there is a sit/stand workstation present.</p>
Standing					X*	<p>Up to 1 hr./time, 7 hrs. total on surfaces including flat concrete and carpet, gravel, rocks, vegetation, rocks, steep inclines, dirt, mud, grass, substandard structures, undeveloped land, and wet or frozen ground while conversing with customers. *Can alternate sit/stand as needed when in the office as there is a sit/stand workstation present.</p>
Walking					X*	<p>Up to 1 hr./time, 7 hrs. total on surfaces including flat concrete and carpet, gravel, rocks, vegetation, rocks, steep inclines, dirt, mud, grass, substandard structures, undeveloped land and wet or frozen ground while conversing with customers. *This occurs approximately 1-2x./month, but on a rare occasion the employee may need to work in the field 2-3 days in a row.</p>
Perform Work on Ladders	X					



King County

King County Job Analysis

Job Title : Engineer IV, Supervising Engineer-
Stormwater Services

Employee :

DOT # : 005.167-014

Claim # :

Physical Demands	Frequency					Activity Description
	N	S	O	F	C	
Climbing			X			On steep inclines for up to 30 min./time, 1 hr./total while traversing areas that may have debris or fallen trees; undeveloped land and brush. Also climbs stairs 1-2 flights of stairs.
Balancing					X*	Up to 1 hr./time, 7 hrs. total on surfaces including flat concrete and carpet, gravel, rocks, vegetation, rocks, steep inclines, dirt, mud, grass, substandard structures, undeveloped land, landfill, and wet or frozen ground while conversing with customers. *This occurs approximately 1-2x./month, but on a rare occasion could happen 2-3 days in a row.
Stooping / Bending		X*				Up to 5 min./time, 30 min. total while inspecting low areas such as manholes and pipes. Low file drawers and shelves in office. *Can alternate with squatting/kneeling as needed.
Twisting at Neck			X			Up to 10-30 sec./time, 1 hr. total while inspecting field projects and driving.
Twisting at Waist		X				Up to 10-30 sec./time, 5 min. total while placing/removing equipment from vehicles,
Squatting / Kneeling		X				Up to 5 min./time, 30 min. total while inspecting low areas such as manholes and pipes. Low file drawers and shelves in office. *Can alternate with squatting/kneeling as needed.
Crawling	X					
Reach waist to shoulder				X		Up to 1 hr./time, 4-5 hrs. total while driving, writing on clipboard, computer duties, manipulating equipment, etc.
Reach above shoulder		X				Up to 5 sec./time, 5x shift with office supplies on upper shelves, loading/unloading equipment.
Reach below waist		X				Up to 5 min./time, 30 min total while filing, loading/unloading equipment, placing/removing items on low shelves and in low drawers.
Keyboarding					X	Up to 1 hr./time, 7 hrs. total while performing computer duties.
Wrist Flexion/Extension				X		Up to 1 hr./time, 4 hrs. total while manipulating measuring equipment, inspecting pipes, opening doors, opening drawers and driving.
Handle/Grasp					X	Up to 1.5 hr./time, 6 hrs./total while driving as well as manipulating a clipboard, laptop and field equipment; opening/closing drawers/doors.
Forceful Grasp		X				Up to 5 min./time, 15 min. total while manipulating field equipment such as pipe camera, machete, survey equipment, etc.
Fine Finger Manipulation					X	Up to 2 hrs./time, 7 hrs. total while manipulating documents, writing, typing, and using a computer mouse. Certain databases, spreadsheets, mapping software and AutoCad require heavy mouse usage.
Hand Controls					X	Up to 2 hrs./time, 6 hrs. total while driving as well as when using measuring equipment and a computer mouse.
Foot Controls				X		Up to 1.5 hr./time, 4-5 hrs. total while driving.



King County Job Analysis

Job Title : Engineer IV, Supervising Engineer-
Stormwater Services

Employee :

DOT # : 005.167-014

Claim # :

Physical Demands	Frequency					Activity Description
	N	S	O	F	C	
Repetitive Motion			X			Body Part: hands Cycles/hr: 300
Vibratory Tasks – High	X					
Vibratory Tasks – Low		X				Very low vibration while driving 1 hr./time, 3 hrs. total; may drive on rough roads.
Talking				X		Conversing customers, managers, employees and coworkers.
Hearing				X		Conversing customers, managers, employees and coworkers. Utilizes hearing to identify safety hazards.
Visual – Near Acuity					X	Computer duties, performing inspections and filling out paperwork.
Visual – Far Acuity			X			Driving, performing inspections.
Visual – Depth Perception			X			Driving and performing inspections.
Visual – Color Discrimination		X				Identifying color coded maps, labels and signage. Identifying colors of potentially hazardous materials.
Visual – Accommodation			X			Performing field work and driving.
Visual – Field of Vision			X			Performing field work and driving.
Exposure to Weather			X			
Extreme Cold		X				
Extreme Hot		X				
Wet and / or Humidity			X			
Proximity to Moving Mechanical Parts		X				Construction equipment, trucks, automobiles, pumps and heavy machinery.
Exposure to Explosives	X					
Atmospheric Conditions		X				Dust, fumes, gases.
Exposed Heights		X				Manholes, ravines and waterways.
Exposure to Electricity		X				
Exposure to Toxic / Caustic Chemicals		X				Field work sites.
Exposure to Radiation	X					
Other:		X				
Other: Unpredictable persons		X				Interacts with unpredictable, aggravated, aggressive, intoxicated, violent etc. persons. Interacts with persons with mental health and substance abuse issues.
Noise Intensity	<input type="checkbox"/> Very Quiet <input checked="" type="checkbox"/> Quiet <input type="checkbox"/> Moderate <input checked="" type="checkbox"/> Loud <input type="checkbox"/> Very Loud					Noise can vary from quiet to loud; quiet office to industrial setting.

Visual:

Continuously uses multiple computer monitors and drives occasionally. Color vision is seldom utilized.



King County

King County Job Analysis

Job Title : Engineer IV, Supervising Engineer-
Stormwater Services

Employee :

DOT # : 005.167-014

Claim # :

Analyst's Comments:

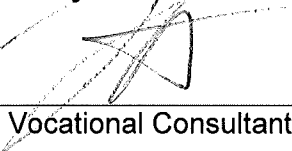
A sit/stand workstation is present.

Possible Employer Modifications:

Off road pull cart to reduce carrying heavier equipment in the field.

Note: The information for this job analysis was gathered by either on-site observation, interview and / or is representative of the labor market as indicated on page one. Additional data may have been obtained from standardized industry resources such as the DOT, GOE, COJ, OOH, WOIS and O-NET. On occasion, practicality and feasibility prevent the direct observation and/or gathering of objective, quantifiable data. For this reason, a "best estimate" may have been used.

Analyst:



Vocational Consultant

1/8/20

Date

Presenting VRC signature:

Vocational Consultant

Date

Employer Verification:



Name

1/8/20

Date

Employee Verification: (optional)

Name

Date



King County Job Analysis

Job Title : Engineer IV, Supervising Engineer-
Stormwater Services

Employee :

DOT # : 005.167-014

Claim # :

MEDICAL PROVIDER:

- ☐ I agree that the employee can perform the physical activities described in this job analysis and can return to work.

State date employee is released to return to work if different from today's date _____

- ☐ I agree the employee can perform the described job but only with modifications (describe in comments section). Modifications are needed on a permanent ☐ or temporary ☐ basis.

- ☐ The employee **temporarily** cannot perform this job based on the following physical limitations:

Anticipated release date: _____

Treatment plan: _____

- ☐ The employee is **permanently** restricted from performing the physical activities described in this job analysis based on the following physical limitations (state objective medical findings):

Comments:

Signature

Date

Print Name

- | | | |
|--|---|---|
| <input type="checkbox"/> Attending Physician | <input type="checkbox"/> Consulting Physician | <input type="checkbox"/> Pain Program Physician |
| <input type="checkbox"/> IME Physican | <input type="checkbox"/> PCE Therapist | <input type="checkbox"/> OT / PT Therapist |
| <input type="checkbox"/> PEP Physician | | |