



King County

**Disability Services
Safety and Claims Management**
Department of Executive Services
Human Resources Division
500 4th Avenue, Room 500
Seattle, WA 98104
(206) 477-3350
(206) 296-0514 FAX

Employee : Nikki Johnson

Claim # : SK91707

JOB ANALYSIS

Job Title:	Line Material Worker		
Department:	Transportation	Division:	Transit
DOT Title:	Line Installer, Street Railway	DOT #:	821.361-022
SVP:	7	Requestor:	
Worksite Address:	2255 4 th Ave S Seattle, WA 98134	Office Contact Name/ Phone/ Email:	Layne Eddy 203-263-1714 layne.eddy@kingcounty.gov
Original Analyst:	Kyle Pletz, BA, BA, VRC, CDMS		Analysis Date: 10/12/22
Update Analyst:			Update Date:

☒ On-Site ☐ Interview ☐ Representative

JOB DUTIES:

Stocks and operates line trucks in the repair of the transit system by assisting and providing materials to line workers.

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.
1. Assists Line Crew in the operation and maintenance of the trolley overhead system.
 2. Installs wood and steel poles.
 3. Operates pole and line hauling trucks in transporting Line Crews, equipment and materials to work sites.
 4. Operates machinery such as a jackhammer, bucket truck, crane, combination truck, medium and large wire cutters, hydraulic hoist, chain hoist and power tools.
 5. Pulls trolley poles off trolley with 52 pounds of force while running for up to 40 yards, with the other hand touching the back of the trolley, when jumping trolleys past line work area.
 6. Installs foundations and steel poles.
 7. Equips trucks with tools, equipment, and materials used by Line Crew workers.
 8. Operates cab controls of trucks during line repair to ensure truck is appropriately positioned in accordance with overhead work area.
 9. Prepares daily reports indicating location of repair work as well as type and proportion of equipment and materials used.
 10. Assists crew members in trimming trees, shoveling dirt and gravel and setting poles.
 11. Performs flagging duties including directing traffic around slow work zones.
 12. Applies snow chains in equipment when required.
 13. Works with high voltage downed wires in an emergency situation.
 14. Responds to emergency repair calls during non-working hours as necessary.
 15. Drives various County vehicles to and from various work sites.



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16. Inspects Tools and equipment to ensure they are in appropriate working condition.
 17. Fuels vehicles and checks fluid levels.

EXPERIENCE, QUALIFICATIONS, KNOWLEDGE, SKILLS:

Commercial Driver's License class A. One year of experience working on a line crew is preferred. Ability to obtain and maintain a Washington State driver's license as well as a first aid card, CPR card, forklift certification and flagging certification. General knowledge of electricity, vehicle maintenance and Line Worker's Tasks. Ability to operate boom trucks, vactor trucks, bucket trucks and other heavy equipment.

Machines, Tools, Special Equipment, Personal Protective Equipment Used:

Wood and steel poles, heavy trucks (manual shift and power controls), jackhammer, bucket truck, crane, combination truck, medium and large wire cutters, sledgehammers, shovel, spools of wire/cable, hydraulic hoist, chain hoist, bus trolley poles, trolley switches, ladder, vault lids, hand tools, power tools, and rope. Tower truck, boom truck, heavy equipment, bucket truck, vactor truck, hoisting devices, wood and steel poles, chain saw, concrete saw, hedge trimmer, cranes, shovels, digging bars, jackhammer, digger truck, auger, pole puller, spoon and spades, pry bar, ratchets, anvil, hammer, man lift, ladder, various testers, shivs, blocks, torch, pumps, air monitor, locator, flag stands, signs, cold patch, crimpers, heater, battery powered guy cutters, generators, cutters, battery cutters and ratcheting cutters.

PPE:

Head protection, safety vest, gloves (high and low voltage), harness, flash resistant clothing, belts, ear protection, eye protection, safety rated footwear, knee pads, and insulating blankets.

PHYSICAL REQUIREMENTS

Frequency Scale	Strength	Work Pattern	
N = Never	<input 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%, 49 min. – 2 hr 40 min)	<input type="checkbox"/> Medium	<input type="checkbox"/> Seasonal	
F = Frequent (34-66%, 2 hr 41 min – 5 hr 20 min)	<input type="checkbox"/> Heavy	10	Hours Per Day
C = Constant (67-100%, more than 5 hr 20 min)	<input checked="" type="checkbox"/> Very Heavy	4	Days Per Week
Work Pattern (continued)		FLSA Exempt <input type="checkbox"/> Yes <input type="checkbox"/> No	

Optional on most occasions but can be required in emergency situations. Up to 1,200 hrs./year of overtime can occur. Prevalence/need of overtime varies depending on the season.



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Job Demand	Frequency and Weight (lbs.)					Activity Description
	N	S	O	F	C	
Lifting floor – waist		51-170	21-50	11-20	1-10	<p>Up to 30 min./time, 6 hrs. total with various hand tools, parts, accessories, small power tools, etc. up to 10 lbs.</p> <p>Up to 10 min./time, 4 hrs. total with measuring sticks, chainsaw, hedge trimmer, cement saw, power tools, canvas bag with tools, pulling gear, barricades, etc. 11-20 lbs.</p> <p>Up to 5 min./time, 2 hrs. total with power tools, wires, equipment, accessories, materials, fuel containers, jackhammer (45 lbs.), cable, etc. 21-50 lbs.</p> <p>Up to 10 min./time, 1-2 hr. total with coils of wire, parts, vault lids, jackhammer (75 lbs.), pole puller, pole brace, etc. 51-100 lbs. Most commonly when setting poles.</p> <p>Feeder arm 0-2 times a day and moving an injured coworker in the case of an emergency. Also rarely hoist switches, crossovers, and disconnects with up to 170 lbs. of force.</p>
Lifting waist–shoulder		51-170	21-50	11-20	1-10	<u>See description above in lifting floor to waist.</u>
Lifting above shoulder		21-50 51-100	11-20	1-10		<p>Up to 2 min./time, 3 hrs. total with various hand tools, parts, accessories, small power tools, etc. up to 10 lbs.</p> <p>Up to 2 min./time, 2 hrs. total with measuring sticks, chainsaw, hedge trimmer, power tools, canvas bag with tools, pulling gear, pole saw, etc. 11-20 lbs.</p> <p>Up to 1 min./time, 20 min. total with power tools, pole braces, wires, equipment, accessories, etc. 21-50 lbs.</p> <p>Up to 30 sec./time, 5 min. total while manipulating coils of wire, parts, cross arms, pole braces, mast arms, switches, switch parts, crossovers, switches, disconnects, feeder arms etc. 51-100 lbs.</p>



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	N	S	O	F	C	
Carry (Distance/Surface)			1-500			Up to 500'/time, 1.5 hrs. total to set out or pick up multiple cones (30#). Carry tools (1-50#) between truck and site; parts, material sack, 4' pieces of cedar poles, wire, sign stands, materials, mast arms, pole braces, power tools, cross arms, feeder arms, etc.
Pushing/Pulling (Distance/Surface)		51-170	21-50	11-20	1-10	<p>Up to 30 min./time, 6 hrs. total with various hand tools, parts, accessories, wire, materials, hoses, small power tools, etc. up to 10 lbs. Hand lining, shoveling.</p> <p>Up to 10 min./time, 4 hrs. total with measuring sticks, chainsaw, concrete saw, hedge trimmer, pressure washer, power tools, canvas bag with tools, pulling gear, guy wire, hand tools, various saws, barricades, etc. 11-20 lbs.</p> <p>Up to 5 min./time, 2 hrs. total with power tools, wires, equipment, accessories, insulators, cross arms; Stringing loose lines, securing fixtures, using hand tools, hand lining materials, using chain hoists and tool sack, etc. 21-50 lbs.</p> <p>Up to 1-2 min./time, 1-2 hr. total with coils of wire, parts, vault lids, cross arms, feeder arms, hand lining, jackhammering, concrete cutting, pulling wire, etc. 51-100 lbs.</p> <p>Feeder arm 0-2 times a day and moving an injured coworker in the case of an emergency. Also rarely hoist switches manually when a pole is not accessible by truck; with up to 150-170 lbs. of force.</p>

Physical Demands	Frequency					Activity Description
	N	S	O	F	C	
Sitting				X		Up to 2 hrs./time, 4 hr. total while driving various vehicles and heavy equipment.
Standing					X	Up to 1 hr./time, 10 hrs. total on concrete, asphalt, wood and fiberglass while performing job duties in/on the tower truck as well as when performing safety watch, testing and inspecting duties. The employee also stands while assembling or wiring switches. Flagging.



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	N	S	O	F	C	
Walking					X	Up to 20 min./time, 8 hrs. total on hard and uneven surfaces while repairing, installing, or troubleshooting trolley systems. The employee also walks when traversing between the work site and work truck as well as when performing inspections/rolling inspections.
Perform Work on Ladders		X				Up to 10 min./time, 1 hr. total on an 8' ladder.
Climbing			X			Up to 30 sec./time, 2 hrs. total, ladders propped against building structures. Getting in/out of truck and heavy equipment, climbing in to boom bucket.
Balancing					X	Up to 2.5-3 hrs./time, 10 hrs. total on uneven ground, performing line installations, trouble shooting, working on a ladder, testing and maintenance; working around open manholes, vaults, etc. Traversing various trucks and machinery.
Bending Neck Up					X	Up to 30 min./time, 8 hrs. total while observing overhead work, performing safety watch, observing screens in trucks as well as inspecting lines.
Bending Neck Down					X	Up to 30 min./time, 8 hrs. total while communicating with ground crew, assembling parts, installing parts, performing vector duties, etc.
Stooping / Bending				X		Up to 30 min./time, 5 hrs. total while performing safety watch in vaults, cleaning brush, cleaning up job site, shoveling, reaching for items out of the bucket, handing items off of truck, jackhammering, assembling switches and crossovers, performing vector duties, etc. Also occurs while worker is bent forward at the waist to crank a chain hoist.
Twisting at Neck					X	Up to 30 min./time, 8 hrs. total while observing overhead work, performing safety watch/traffic, observing screens in trucks as well as inspecting lines. Utilizing mirrors in vehicles.
Twisting at Waist				X		Up to 10 min./time, 5 hrs. total while hand-lining materials bag, trimming brush, chipping brush, performing vector duties, shoveling, using measuring poles, etc.
Squatting / Kneeling			X			Up to 5 min./time, 3 hrs. total on concrete, asphalt, fiberglass and wood surfaces while performing maintenance, testing, assembling/disassembling switches, down guys, jobsite cleanup, performing vector duties.
Crawling		X				Up to 1 min./time, 10 min. total while crawling under equipment or truck; performing pre trip inspections.
Reach waist to shoulder				X		Up to 5 min./time, 4-6 hrs. total while driving, handling tools in tower truck and on ground. Using grips, cranking hoists, climbing on/off trucks, using measuring sticks, manipulating wires, using hand/power tools, placing tension on wires, etc.



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	N	S	O	F	C	
Reach above shoulder			X			Up to 2 min./time, 2 hrs. total while working with tools and equipment above shoulder. Handling materials and tools up to coworkers. Installing signs, hammering in lag bolts, PBF installations, hand signals, hand lining, trimming brush, pole saw, etc.
Reach below waist				X		Up to 20 min./time, 4-5 hrs. total while retrieving tools and materials at lower levels, hand lining up parts/tools, shoveling, setting up platform safety rails, cutting concrete, job site cleanup, vactor duties and assembling/disassembling switches.
Wrist Flexion/Extension				X		Up to 30 min./time, 6 hrs. total while hammering wire, manipulating materials/tools, installing whips, using a chainsaw, power tools, jackhammering, vactor duties, assembling switches, operating heavy equipment, using a hoist and using various hand tools.
Handle/Grasp				X		Up to 30 min./time, 6 hrs. total while hammering wire, driving, manipulating materials/tools, installing whips, using a chainsaw, power tools, jackhammering, vactor duties, assembling switches, operating heavy equipment, using a hoist and using various hand tools.
Forceful Grasp			X	X		Up to 10 min./time, 3-4 hrs. total while manipulating coils of wire, various materials, parts, tamp, vault lids, cross arms, cutting wires, jackhammering, sledgehammering, jobsite cleanup, hand lining and moving an injured coworker in the case of an emergency.
Fine Finger Manipulation				X		Up to 10 min./ time, 4 hrs. total with bolts, washers, nuts, rings, springs, fuses, wiring, wire nuts, taping, manipulating small parts.
Hand Controls					X	Up to 30 min./time, 10 hrs. total while driving, operating boom truck lift controls. Also operates various machinery that may include vactor, backhoe, skid steer, power trailer, power tools,
Foot Controls					X	Up to 1 hr./time, 10 hrs. total while driving and operating boom truck, derrick trucks and various other vehicles.
Repetitive Motion			X			Body Part: Upper/lower extremities Cycles/hr: 200
Vibratory Tasks – High		X				Up to 10 min./time, 1 hr. total with a jackhammer, hydraulic tamp, drills, impact tools, chainsaw, concrete saw etc.
Vibratory Tasks – Low					X	Up to 1 hr./time, 10 hrs. total with various power tools, heavy equipment, trucks, etc.
Talking					X	Continuously converses with coworkers throughout the day, via radio, telephone or in person for safety purposes, etc. Talks with the general public and dispatchers a well.
Hearing					X	Employee continuously hears for moving equipment, vehicles, equipment failures, crane directions and various other hazards.
Visual – Near Acuity					X	Gauges, mirrors, wires, parts, switches and truck controls.



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Visual – Far Acuity					X	Driving and operating equipment. Performing safety watch. Patrolling to inspect lines. Working around moving traffic.
Visual – Depth Perception					X	Driving and operating equipment. Working around high voltage. Working around moving traffic.
Visual – Color Discrimination				X		Colors of wires. Safety signage.
Visual – Accommodation					X	Looking between gauges and traffic while driving; looking between elevated areas and ground for safety purposes.
Visual – Field of Vision					X	Driving, operating heavy equipment. Working near high voltage.
Visual – Night Vision				X		Driving, operating heavy equipment. Working near high voltage.
Exposure to Weather					X	The job is performed outdoors, potentially in inclement weather.
Extreme Cold		X				Freezing temperatures during snowstorms etc.
Extreme Hot		X				Works around hot equipment; engines etc. Rarely extremely hot days while wearing AR clothing.
Wet and / or Humidity			X			Hoses, pressure washer.
Proximity to Moving Mechanical Parts					X	Continuously in/around moving vehicles
Exposure to Explosives					X	Various fuels/fumes. Potential electrical explosion.
Atmospheric Conditions					X	Dust, exhaust fumes, asphalt fumes.
Exposed Heights					X	Truck bed/rail; on top of equipment. Working near open manholes/vaults, pole holes, etc.
Exposure to Electricity					X	Continuously works on/around high voltage.
Exposure to Toxic / Caustic Chemicals			X			Asbestos fibers, wood preservatives on poles, PCB, etc.
Exposure to Radiation	X					
Noise Intensity	<input type="checkbox"/> Very Quiet <input type="checkbox"/> Quiet <input checked="" type="checkbox"/> Moderate <input checked="" type="checkbox"/> Loud <input checked="" type="checkbox"/> Very Loud					Employee is exposed to noise while driving and is also exposed to loud machinery such as vactor trucks, jackhammers, concrete saw, hydraulic tamp, chain saws, hammers, diesel trucks, etc.
Other:						



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Analyst's Comments:



Fiberglass floored platform/lift truck.



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Protected Health Info | Rcvd: 10/25/2022



Possible Employer Modifications:

Update Comments (*if applicable*):



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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:

Update (if applicable):

Vocational Consultant

Date

Vocational Consultant

Date

Employer Verification:

Employee Verification: (optional)

Name

Date

Name

Date



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MEDICAL PROVIDER:

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

- ☐ Attending Physician ☐ Consulting Physician ☐ Pain Program Physician
- ☐ IME Physican ☐ PCE Therapist ☐ OT / PT Therapist ☐ PEP Physician