

PHYSICAL DEMANDS DESCRIPTION (PDD)

Date July 26, 2006						Analyst Jennifer Yorke B. Sc. (Hons Kin)				
Department Line & Utility – Traffic Lights & Transformers				Job Title Electrician		Company Stacey Electric & K-Line				
PHYSICAL DEMANDS		Not Component	*FREQUENCY				LOAD (object/tool)		COMMENTS	
			Seldom	Minor	Required	Major	Maximum (Kg)	Usual (Kg)		
STRENGTH	Lifting				x		30	1 - 5	Working with tools (usually ratchets, hammers, etc.); materials handling	
	Carrying				x		30	22	Carrying traffic poles, traffic lights, etc.	
	Pushing			x					Pushing bolts through drill holes, etc.	
	Pulling			x			85		Opening submersible transformer lids, removing old bolts	
	Handling					x	30	1 - 5	Materials and tools handling (eg. Cordless drill)	
	Throwing		x						Tossing items to electrician in the bucket of the lift truck approx. 8' from the ground	
	Gripping	Power Grasp			x					Loosening tight bolts, holding traffic light during installation
		Pinch Grasp			x					Writing, connecting traffic light
	Reaching	Above Shoulder		x						
		Below Shoulder					x			Bucket work, filling out inspection sheets
To the Side				x					Awkward positions during bucket work	
POSTURES	Shoulder	Abduction			x				Awkward positions during bucket work	
		Flexion			x				Bolting traffic pole to bracket (bucket work)	
	Hip	Abduction		x						Wide stance in bucket for balance
		Wrist	Flexion/Extension			x				Using bucket controls, writing
			Radial/Ulnar Devn				x			
	Trunk	Pronate/Supinate		x						Screwdriver use
		Flexion				x				Bucket work, driving to the work site
		Extension		x						
		Side Bend				x				Bucket work
	Neck	Twist		x						Bucket work
		Flexion				x				Writing, bucket work
		Extension		x						
		Side Bend		x						Awkward positions during bucket work
MOBILITY	Twist		x						Awkward positions during bucket work	
			x						Awkward positions during bucket work	
	Sitting		x						Driving to the work location	
	Standing					x				
	Walking				x				Walking between transformers, gathering materials	
	Climbing		x						Climbing into and out of the bucket or truck	
	Crawling	x								
	Crouching	x								
	Kneeling	x								
	Balancing					x			Working on traffic lights in the bucket	
Foot Action	One Foot		x							
	Feet					x			Standing in bucket, walking between transformers	
Fine Finger Movements				x				Filling out transformer inspection sheets, connecting wires		

***FREQUENCY**

SELDOM = Not always performed during completion of job
 MINOR = Performed less than 25% of job

REQUIRED = Frequent Repetition for 25%-50% of job
 MAJOR = Frequent Repetition for more than 50% of job

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PHYSICAL DEMANDS		Not Component	*FREQUENCY				COMMENTS	
			Seldom	Minor	Required	Major		
SENSORY/PERCEPTUAL	Hearing	Conversations			x		Communicating with partner regarding task at hand	
		Other Sounds	x				Potential emergency calls and alarms	
	Vision	Far			x		Past 5 feet; identifying components on submersible transformers	
		Near			x		Installing traffic lights (in bucket)	
		Colour		x			Wiring traffic lights, identifying the status of transformer parts	
		Depth			x		Used in transformer inspections, light installations	
	Perception	Spatial – organization		x			Redirecting traffic with pylons, identifying transformer components	
		Form - recognition			x		Identifying different bolt lengths, finding items in tool bag	
	Feeling					x	Finding an item in the bucket tool bag, tightening bolts	
	Reading			x			Reading work orders, transformer inspection sheets	
	Writing			x			Filling out transformer inspection sheets, work orders	
	Keying/Typing	x						
	Speech				x		Communicating with partner on ground/in bucket	
	WORK ENVIRONMENT	Outside Work					x	
		Hot			x			Average max. temp. (for the GTA) in July is 29C. Work continues during hot weather.
Cold				x			Work continues during the winter months – extreme cold limits ability to work	
Humid				x			Usually the weather is humid during the summer months – work continues during humid weather	
Dry						x	Outdoor work stops during heavy rain; work mostly in dry weather/environments	
Dust				x			Outdoor allergens	
Vapour Fumes						x	Traffic, bucket lift generator	
Noise						x	Traffic, generator to power bucket lift, mechanical tools	
Vibration		Whole Body		x				Driving to a work site
		Upper Extremity		x				Drilling
Contact Stress					x		Drilling, hammering, loosening rusted bolts, etc.	
Striking with Hand/Fist		x					Striking is accomplished with hand tools (ie. Hammers)	
Moving Objects						x	Traffic, bucket lift constantly moving in the wind	
Hazardous Machines			x				Tools & lift truck are safe if kept in repair	
Electrical						x		
Sharp Tools				x			Cutting devices to strip wires, wire cutters	
Radiant/Thermal Energy		x						
Slippery			x				Tools, the bucket, etc. can become slippery when it rains	
Congested Worksite						x	Traffic concerns	
Chemical Irritants			x				Spray used to loosen rusted bolts	
CONDITIONS	Works Independent but in Group					x	Works in pairs – one in the bucket, one on the ground	
	Operate Equipment/Machinery					x	Bucket lift, drills	
	Machine Paced		x				Bucket lift ascends/descends at a one speed	
	Production Quotas				x		Traffic lights must be completed in a certain timeframe due to need for traffic control officers	
	Deadline Pressures			x			Continuous work rate	
	Irregular/Extended Hours	x						
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