

## Millwright II

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### **DEFINITION**

This is advanced journeyman work in the trade of Millwright, with the additional requirement to coordinate the work of on-site repair and maintenance members including other tradesmen, millwrights and trades helpers. Activities also encompass planning, preventative maintenance and test scheduling, consultation with foremen and engineers and providing field expertise on major projects. A significant component of this work involves the timely response to equipment breakdown and malfunctions, initiation of remedial procedures (bypass pumping, isolation, etc.), diagnosis and implementation of repair procedures, and work site direction of other crew members. Incumbents in this class require advanced knowledge of complex and integrated mechanical and control systems such as drainage networks and are required to perform maintenance and repair activities in a wide variety of sites and equipment.

This class is distinguished from the Millwright I class by: knowledge of and experience with a considerable variety of equipment, mechanical and hydraulic components, specialized monitoring and control devices, and a large-scale and inter-connected network of systems and sub-systems; the onsite coordination and direction of other tradesmen and crew members; the ability to initiate appropriate, remedial procedures in response to equipment breakdowns, and to make independent decisions respecting individual job site conditions.

Some positions may act as a specialist maintenance planner/scheduler, logistical evaluator, and processor of work packages through the use of enterprise resource support systems.

Incumbents in this class ensure that the use of approved methods and equipment and appropriate worksite safety procedures (confined space entry and rescue, hygiene, heavy lifting, etc.) are maintained at all times.

Assignments are in the form of oral and/or written instructions by foremen and/or engineers and may be accompanied by detailed technical sketches, plans, blueprints, specifications and maintenance schedules. Work is reviewed in progress and/or upon completion. Activities are performed in conjunction with Standard Operation Procedures. Incumbents of this class relieve the foreman in his absence and provide standby coverage as required.

### **TYPICAL DUTIES** \*

Organize, supervise and participate in the installation, inspection and preventive maintenance, repair, overhaul, removal and testing of mechanical equipment such as pumps, motors, drive units, compressors, collector chains and sprockets, conveyors, heat exchangers, and various piping systems. Inspect individual and system components for wear and measures and evaluates tolerances.

Operate a large repair vehicle to attend a wide geographical area involving maintenance, inspection and/or repair and responds to emergent situations (including alarms) to assess the nature of failure and to initiate remedial procedures (bypass, isolation, diversion, etc.) and repairs. Advise other personnel of unusual situations when required.

Organize, supervise and participate in the examination and diagnosis of equipment for excessive vibration, temperature, and speed and lubrication abnormalities under operating conditions; adjustment of pulleys, belts and drive units as required. Ensure adequate supplies of tools, equipment, parts, etc. are on hand.

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Organize, supervise and participate in the installation and maintenance of hydraulic, pneumatic and specialty systems including heating, ventilating and air-conditioning equipment, chlorine systems and boilers; adjustment, repair or replacement of components such as pumps, accumulators, control valves, cylinders, control switches and safety devices.

Conduct activities associated with confined space entry, and ensures the appropriate use of specialty equipment and devices for safe job site performance.

Assist the supervisor in planning and monitoring preventative maintenance programs; provide field expertise on upgrades or new facilities as required.

Monitor and inspect the work of contractors during new project or major upgrades, conducts onsite testing and compliance acceptance, and reports deficiencies as required.

Maintain an inventory of spare equipment, parts, maintenance supplies, repair manuals, parts lists, etc. and fabricates or directs others to fabricate parts as required. Process work packages to implement programs of preventive maintenance, refurbishment, breakdown/demand maintenance, etc.

Provide estimates of material and labour requirements for specific jobs; contacts contractors and suppliers for repairs and parts.

May be required to collect water samples and complete reports on environmental releases as required.

Perform related duties as required.

### **KNOWLEDGE, ABILITIES AND SKILLS**

Considerable knowledge of the standard methods, practices, materials, tools and equipment of the millwright trade. Specific knowledge of control systems and large-scale networks of equipment and related infrastructure.

Considerable knowledge of the occupational hazards and safety precautions applicable to the work of the trade and to work sites.

Ability to effectively respond to emergent situations including equipment breakdowns and to initiate appropriate remedial and repair procedures.

Ability to plan, assign, supervise and monitor the work of subordinates.

Ability to withstand periods of strenuous physical activity and to function within a confined and hazardous environment for prolonged periods of time.

Ability to use SCBA and related air supply equipment when required.

Ability to understand and execute oral and written instructions and to interpret technical plans and specifications.

Spatial perception to visualize from drawings and sketches sequences of parts assembly and relative positions of machinery components; coordination and manual dexterity to accurately assemble parts, make fine adjustments and to use precision measuring techniques.

Skill in the use and care of a variety of hand and power tools and equipment of the trade.

Skill in the safe and effective operation of a large repair and service vehicle, and ability to safely operate a Crane Truck when necessary.

**TRAINING AND EXPERIENCE REQUIREMENTS**

Job Level

- Certified Alberta Journeyman in the trade of Millwright.
- Three years experience at the journeyman level, including demonstrated supervisory ability.
- Completion of Level I Foremanship Training or an equivalent recognized by the City of Edmonton; “Leading People for Results” must be successfully completed upon appointment.
- Possession of a Class 5Q Alberta Motor Vehicle Operator's License and ability to hold a City Drivers permit is required.
- May be required to attain and hold a valid First Aid Certificate.

Pumpwell Drainage Services:

- Completion of the twelfth school grade or GED; and requires Level II Wastewater Collection of the Alberta Environment Certification Program.
- Certification on Confined Space Entry Code of Practice.
- Certification as a cross connection control specialist.

\* *This is a class specification and not an individualized job description. A class specification represents and defines the general character, scope of duties and responsibilities of all positions within a specific job classification. It is not intended to describe nor does it necessarily list the essential job functions for a specific position in a classification. Positions may perform some of the duties listed above but this does not necessarily qualify for placement into this classification.*

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Salary Plan	<u>10M</u>	<u>10A</u>	<u>10B</u> 0073 (inactive)	<u>10C</u>
Drainage Uncertified Grade	0072 (WWTP) 045			
Drainage Uncertified Grade	2020 045			
Last Updated:	2010-05			
Previous Updates:	1991-08, 2004-03			
Originated:	1980-07			