Summary of Duties: Performs a variety of tasks in maintaining and repairing mechanical equipment and tools; performs the more difficult and skilled mechanical work with limited supervisory responsibility over a small crew; or supervises such work; and does related work.

Distinguishing Features: A Mechanical Repairer installs, maintains, and performs repair work requiring an understanding of techniques of several mechanical fields. An employee of this class does not normally encounter the level of difficulty of work within a single craft, nor use the variety of skills required of a skilled craft worker. An employee of this class performs both semiskilled and skilled work and uses judgment in determining the extent of necessary repairs and replacements. Electrical repair work and precision machine work are not normally a responsibility of an employee of this class, except when it is a component of equipment within the scope of the employee's responsibility. Supervision received varies with assignments, but usually consists of inspection for adequacy upon completion. An employee of this class is exposed to typical hazards encountered in using welding equipment and working around machinery in operation. In some assignments the employee is exposed to explosive or toxic conditions. An employee of this class may assign and review the work of helpers.

A Senior Mechanical Repairer spends part of the time supervising a small crew of Mechanical Repairers, welders and helpers and the rest of the time performing or supplying the technical support for the more difficult and skilled mechanical work.

A Mechanical Repair Supervisor is a full-time supervisor of Senior Mechanical Repairers, Mechanical Repairers and other employees. An employee of this class has responsibility for planning and implementing a preventive maintenance program for mechanical equipment, including determination of the extent of repairs, subject to decisions of the employee's supervisor. Assignments are in terms of objectives, and the employee is responsible for the quantity and quality of work performed.

Examples of Duties: Mechanical Repairer: Inspects, tests, analyzes trouble in, cleans, lubricates, adjusts, and repairs a wide variety of hand and power tools including pneumatic tools and equipment, uncomplicated meters and gauges, mechanical equipment such as small gasoline and diesel engines, lawnmowers, pumps and valves of various types and sizes, steam regulators and large reduction gears, compressors, condensers, cooling towers, blowers and fans, woodworking machines, large paint bake ovens, on-board heavy duty equipment used for striping and application of hot thermoplastic material, large sandblasting equipment, tower and platform rigs, steam cleaning, minor automotive tune-up and servicing, swimming pool, low pressure steam heating, water treatment, sewage treatment and pumping plant, and sewer ventilating and maintenance equipment; disassembles, repairs, and reassembles equipment and operates it to verify proper functioning; occasionally sets and aligns equipment in place; sharpens a variety of tools such as drills, taps, chisels, saws, mower units, wood chippers,
MECHANICAL REPAIRER 3773
SENIOR MECHANICAL REPAIRER 3772
MECHANICAL REPAIR SUPERVISOR 3795

Page 2 of 5

and tool bits; maintains battery operated floor scrubbers and carts, charges refrigeration machines; may recharge fire extinguishers;

Regulates, operates, maintains, and repairs equipment used in the treatment, disinfection, and purification of water; performs and interprets various chemical and physical tests using turbid meters, colorimeters, charts, and graphs to determine performance of water treatment equipment and water condition; correlates and records such information in logs; keeps records and inventories; prepares reports;

Fabricates metal items such as manhole jacks, catch basin frames and grates, welding carts, ventilation ducts, machine guards, pipe racks and frames for large traffic signs; does some fabrication and repairing of truck bodies and parts such as tail gates, pipe frames, shelves, bumpers, and steps; lays out and installs special equipment on truck and trailer bodies; repairs or replaces sections of water, oil, air, and sewer pipelines; brazes, solders, and performs limited gas and electric welding; performs rigging necessary in installing and moving heavy equipment; uses a wide variety of hand tools and powered equipment of the various mechanical fields; drives automotive equipment as an incidental part of the work;

May perform as an incidental duty such tasks as: repairing window frames and chairs; installing gutter spouts and cleaning roof drains; painting repaired equipment; patching small places in concrete broken out for mechanical repairs; emptying, cleaning, repairing, and filling swimming pools; transporting chlorine and other chemicals as instructed; requisitioning chemicals; making minor plumbing repairs; operating low-pressure steam heating systems; acting as relief Electric Pumping Plant Operator; and receiving, issuing, and maintaining a stock of tools, supplies, and protective clothing.

Senior Mechanical Repairer: Supervises and works with a small crew of employees engaged in maintaining and repairing swimming pool equipment, sewage treatment, sewer pumping and ventilating, and sewer maintenance equipment, or mechanical equipment located at municipal airports; lays out work, interprets plans, and makes working sketches for subordinates; dispatches crews; instructs others in work with which they are not familiar; inspects work in process and after completion; checks to assure that repaired equipment is in good operating condition; keeps records of the service and repair of equipment; requisitions materials, supplies, and tools; and may act for a Mechanical Repair Supervisor during absences.

Mechanical Repair Supervisor: Plans, supervises, coordinates, and inspects the work of employees engaged in maintaining, repairing, overhauling, and installing sewage treatment, sewer pumping and ventilating, sewer maintenance, and related equipment; determines work methods and procedures to be used; coordinates the repair of equipment with operating schedules; checks work to be done and makes sure materials and supplies are available; assures that adequate repairs are completed in a reasonable time; personally supervises emergency or difficult work, particularly heavy work done to
close tolerances; prepares cost estimates of proposed work; keeps records of time and materials used; may act for a Machinist Supervisor in the absence of that employee; and fulfills supervisory affirmative action responsibilities as set forth in the City’s Affirmative Action Program.

**All Classes:** May occasionally be assigned to other duties for training purposes or to meet technological changes or emergencies.

**Qualifications:**

<table>
<thead>
<tr>
<th>Knowledges</th>
<th>Mechanical Repairer</th>
<th>Senior Mechanical Repairer</th>
<th>Mechanical Repair Supervisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methods, equipment, tools, and terminology of the trades involved in mechanical work; Functions, operating principles, and methods of installing, maintaining, and repairing a wide variety of mechanical tools and equipment, such as pumps and valves, small electric motors, small gasoline engines, pneumatic and electrically operated tools, hydraulic equipment, high-pressure lubricating equipment, metering devices, large industrial fans and blowers, compressors, and sewage processing machinery, in shops, plants, and buildings; Safety precautions necessary when hoisting and moving heavy equipment, using welding equipment, working around machinery in operation and working on mechanical and electrical equipment; Welding, brazing, and soldering practices and procedures; Rigging necessary to remove and install pumps, motors, large pipes and valves, and similar machinery and equipment; Provisions of Memoranda of Understanding (MOU) as they apply to subordinate personnel; Supervisory principles and practices; Laws and regulations related to equal employment opportunity and affirmative action;</td>
<td>Working</td>
<td>Good</td>
<td>Good</td>
</tr>
</tbody>
</table>
Personnel rules, policies and procedures; Practices and procedures employed in machining work.

### Abilities:

<table>
<thead>
<tr>
<th>Ability</th>
<th>Mechanical Repairer</th>
<th>Senior Mechanical Repairer</th>
<th>Mechanical Repair Supervisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use a wide variety of tools and equipment commonly used in mechanical repair work;</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Supervise a group of employees doing mechanical maintenance and repair work;</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Read and follow blueprints and plans;</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Make routine computations; keep records and prepare reports;</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Interpret plans for subordinates;</td>
<td>X</td>
<td></td>
<td></td>
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<tr>
<td>Make sketches of the installing, dismantling, and repair of mechanical equipment;</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Estimate costs of proposed work.</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

### Requirements:

Two years of experience at the helper level in mechanical repair work is required for Mechanical Repairer. Completion of the Air-Cooled Engine curriculum may be substituted for one year of the required experience.

Two years of experience as a Mechanical Repairer or in a class which is at least at that level and which provides experience in mechanical repair work is required for Senior Mechanical Repairer.

Four years of experience as a Mechanical Repairer or in a class which is at least at that level and which provides experience in mechanical repair work is required for Mechanical Repair Supervisor.

**License:** A valid California driver’s license may be required for all classes.

**Physical Requirements:**

- **Mechanical Repairer:** Strength to perform average lifting up to 70 pounds and occasionally over 70 pounds; back and leg coordination involved in activities such as stooping, crouching, and climbing; arm, hand and finger dexterity, with at least one hand, involved in activities such as reaching, handling, and feeling; good hearing ability; and good eyesight.

- **Senior Mechanical Repairer:** The same requirements as Mechanical Repairer and good speaking ability.
**Mechanical Repair Supervisor:** Strength to perform average lifting up to 15 pounds maximum and occasionally over 25 pounds; good speaking ability; and otherwise the same requirements as for Mechanical Repairer.

Persons with medical limitations may, with reasonable accommodations, be capable of performing the duties of some of the positions in this class. Such determination must be made on an individual basis in light of the person’s limitations, the requirements of the position, and the appointing authority's ability to effect reasonable accommodations to the person's limitations.

As provided in Civil Service Commission Rule 2.5 and Section 4.55 of the Administrative Code, this specification is descriptive, explanatory and not restrictive. It is not intended to declare what all of the duties and responsibilities of any position shall be.