PALOMAR COMMUNITY COLLEGE DISTRICT

PIPEFITTER – SPRINKLER SYSTEMS

Class specifications are not intended to present a descriptive list of the range of duties performed by employees in the class. Specifications are not intended to reflect all duties performed within the job.

DEFINITION

To work from plot plans and blue prints installing new automatic irrigation systems and assigned drainage and landscaping projects; to design and plot out the refurbishing of existing irrigation systems; and to perform a variety of technical tasks relative to assigned area of responsibility.

SUPERVISION RECEIVED AND EXERCISED

Receives direction from higher level supervisory or management staff.

Supervision may be exercised over Groundskeepers and hourly students.

ESSENTIAL FUNCTION STATEMENTS

The following tasks are typical for positions in this classification. Any single position may not perform all of these tasks and/or may perform similar related tasks not listed here:

1. Cuts, threads, solvent welds, installs and repairs up to 6” diameter schedule 40 and schedule 80 PVC pipe and fittings.

2. Cuts, installs and repairs galvanized pipe up to 4” diameter using straight, end, offset and vertical pipe wrenches up to 36”.

3. Threads schedule 40 galvanized pipes up to 3” diameter using exposed or enclosed ratchet drop head threader or power threader.

4. Taps and retaps galvanized pipe and fittings using heavy-duty pipe cutter, 4” wheel pipe cutter, portable chain vise and yoke vise.

5. Repairs copper pipe with compression fittings up to 1-½ “ diameter.

6. Assists plumbers with repair and installation of type “L” copper pipe, wrot solder joint copper fittings, and bronze solder joint fittings.

7. Install backflow prevention devices.

8. Replaces and installs manual gate valves and remote control automatic valves according to standard and city specifications.

10. Tests and inspects controllers for proper programming and operation.

11. Evacuates and backfills trenches for installation or irrigation systems using the appropriate equipment.

12. Designs and plots out refurbishing of existing irrigation systems.


QUALIFICATIONS

Knowledge of:

Pipe fitting as applied to irrigation system installation.
Methods, materials, terms, tools and equipment used in the installation, maintenance of automatic sprinkler systems.
Principles and procedures of irrigation and drainage system installation, troubleshooting, repair and maintenance.
Principles and practices of irrigation system planning and drafting.
Principles and techniques of irrigation and drainage system design.
Technical aspects of irrigation and drainage.
Turf types and soil infiltration rates.
Principles and procedures of record keeping.
Modern office procedures, methods and equipment including computers.
Regulations and applicable laws regarding the use and disposal of various hazards materials.
Pertinent Federal, State and local codes, laws and regulations.

Ability to:

Design, draft and install complete automated irrigation and drainage systems.
Troubleshoot, repair and maintain irrigation and drainage systems.
Develop and implement an irrigation system preventive maintenance plan.
Use drafting skills to create irrigation, drainage and other related landscape plans.
Maintain irrigation systems parts inventory.
Operate a variety of irrigation and grounds keeping equipment and tools in a safe and effective manner.
Maintain accurate records.
Operate office equipment including computers.
Communicate clearly and concisely, both orally and in writing.
Establish and maintain effective working relationships with those contacted in the course of work.
Maintain physical condition appropriate to the performance of assigned duties and responsibilities.
Experience and Training Guidelines
Any combination of experience and training that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:

Experience:

Three years of increasingly responsible experience in irrigation and drainage systems including pipefitting.

Education/Training:

Equivalent to the completion of the twelfth grade supplemented by course work in irrigation and drainage systems or a related field.

License or Certification
Possession of, or ability to obtain, an appropriate valid driver’s license.

WORKING CONDITIONS

Environmental Conditions:

Office and field environment; travel from site to site; exposure to computer screens, solvents, moving objects/vehicles, inclement weather conditions; work in or with water, work on slippery or uneven surfaces.

Physical Conditions:

Essential functions may require maintaining physical condition necessary for walking, standing or sitting for prolonged periods of time; heavy, moderate or light lifting and carrying; kneeling; repeated bending; operating motorized equipment and vehicles.