

Master Plumber

SUMMARY/PURPOSE

To provide citywide oversight, guidance, and quality control of City plumbing infrastructure and application. This position will properly plan, lay out, and supervise the installation and repair of apparatus and equipment for plumbing, heating, air-conditioning, ventilation, irrigation, and related systems.

SUPERVISION RECEIVED

The supervisor provides continuing or individual assignments by indicating generally what is to be done, limitations, quality and quantity expected, deadlines, and priority of assignments. The supervisor provides additional, specific instructions for new, difficult, or unusual assignments, including suggested work methods or advice on source material available.

SUPERVISION GIVEN

Does not have direct supervisory responsibility but does have significant oversight of employees or project that require delegation and direction over the work of others.

ESSENTIAL DUTIES AND RESPONSIBILITIES

1. Provide general oversight on City projects and plumbing systems to ensure all regulations and codes are met.
2. Train, mentor, and oversee work completed by other plumbers throughout the City.
3. Perform skilled plumbing work in the installation, maintenance, and repair of plumbing, heating, air-conditioning, ventilation, irrigation, and related systems.
4. Install, maintain, and make repairs to plumbing, heating, water, and sewer systems in City structures, and assume accountability for conformance with minimum code standards.
5. Install, maintain, and make repairs to all plumbing and related appurtenances.
6. Install wash basins, urinals, toilet bowls, and toilet tanks.
7. Perform all types of piping joints and hanger installation.
8. Install and make repairs to lawn sprinkler systems.
9. Determine modifications required when obstructions are met while installing plumbing/heating/ventilation systems.
10. Maintain and make repairs to ventilation systems.
11. Ensure a safe work environment.
12. Prepare seasonal plumbing systems by winterizing as required.
13. Operate power and hand tools and motorized equipment.
14. Attend related training sessions.
15. Assist other tradespersons as necessary.
16. Review and interpret blueprints, develop materials lists, and determine costs.
17. Estimate time and materials necessary to perform a job.
18. Assist with inspections of new installations, repairs, and/or modifications performed by others.
19. Obtain plumbing permits for the City of Duluth when required.
20. Secure meter applications when required.
21. Solicit bids on assigned projects and maintenance activities and coordinate with contracts on assigned work.
22. Be an effective team member by exhibiting self-motivation, supporting other employees in handling tasks, interacting effectively and respectfully with others, showing a desire to contribute to the team effort, accepting assignments willingly, and completing tasks within agreed upon timelines.
23. Coordinate with various City departments, other government agencies, and community groups to develop methods of sharing resources, minimizing duplication, and simplifying procedures.
24. Provide training on new or modified procedures and policies to all affected parties.

25. In collaboration with the supervisor, organize and direct the work activities of assigned team, and determine work priorities, assignments, and work schedules.
26. Provide input on decisions regarding the hiring processes and onboarding procedures of personnel.
27. Establish and maintain positive working relationship with the supervisor and employees by maintaining two-way communication, producing consistent results, advocating for the team when appropriate, and offering expertise to improve processes, systems, and the organization.
28. Other duties may be assigned.

JOB REQUIREMENTS

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed are representative of the knowledge, skills, and abilities required.

1. Education & Experience Requirements
 - A. A minimum of four (4) years of full-time, verifiable professional experience as a licensed Master Plumber.
2. License Requirements
 - A. Possess and maintain a valid Minnesota Master Plumber license.
 - B. Possess and maintain a valid Minnesota 1st Class Engineer license.
 - C. Possess and maintain a valid Minnesota Class D driver's license or privilege.
 - D. Possess and maintain a Minnesota Backflow Prevention Rebuilder license within twelve (12) months of hire.
3. Knowledge Requirements
 - A. Extensive knowledge of Minnesota plumbing codes.
 - B. Extensive knowledge of all other laws and rules regulating plumbing practices.
 - C. Extensive knowledge of the techniques, tools, equipment, and materials used in the plumbing trade.
 - D. Knowledge of hydraulics as related to flow rates, pipe sizes, and water pressure.
 - E. Knowledge of wiring involved with heating, ventilation, and cooling controls.
 - F. Knowledge of pneumatic controls.
 - G. Knowledge of various types of pumps involved in plumbing, heating, ventilation, and cooling.
 - H. Knowledge of the methods used in the installation, operation, and maintenance of irrigation systems.
 - I. Knowledge of sheet metal and ducting.
 - J. Knowledge of applicable safe work practices and procedures.
 - K. Knowledge of problem-solving and conflict-resolution techniques.
 - L. Knowledge of applicable safety requirements.
 - M. Knowledge of, or the ability to learn, City policies and procedures.
 - N. Knowledge of federal, state, and local laws, statutes, regulations, codes, and standards related to the area of responsibility.
 - O. Knowledge of effective leadership and personnel practices.
4. Skill Requirements
 - A. Skill in the installation, operation, and maintenance of plumbing systems and fixtures.
 - B. Skill in the installation, operation, and maintenance of steam and hot water heating systems.
 - C. Skill in the installation, operation, and repair of oil and gas warm air heating systems.
 - D. Skill in the operation and maintenance of aquatic pools, including filtration systems, circulation pumps, injection pumps, and related equipment.
 - E. Skill in the operation and maintenance of decorative fountains.

- F. Skill in the operation of large compressors (up to 1000 CFM), generators, and power threading equipment.
 - G. Skill in the operation of office equipment including, but not limited to, general computer systems, job required software applications, the internet, and modern office equipment.
 - H. Skill in managing one's own time and the time of others.
 - I. Skill in completing assignments accurately and with attention to detail.
 - J. Skill in using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions, or approaches to problems.
5. Ability Requirements
- A. Ability to read and interpret blueprints, diagrams, and manuals.
 - B. Ability to calculate materials costs.
 - C. Ability to estimate time and materials necessary to complete a job.
 - D. Ability to weld/braze.
 - E. Ability to perform mechanical work, especially that involved in plumbing.
 - F. Ability to understand and follow oral and written instructions.
 - G. Ability to erect ladders and scaffolding and operate scissors lifts, boom trucks, and related devices in a safe manner.
 - H. Ability to use power hand tools.
 - I. Ability to recognize safety hazards and to take appropriate precautions.
 - J. Ability to work on-call after completion of regular assigned work hours.
 - K. Ability to create and maintain a positive working environment that welcomes diversity, ensures cooperation, and promotes respect by sharing expertise with team members, fostering safe work practices, and developing trusting work relationships.
 - L. Ability to communicate and interact effectively with members of the public.
 - M. Ability to communicate effectively both orally and in writing.
 - N. Ability to recognize, analyze, and solve a variety of problems.
 - O. Ability to organize and prioritize work while meeting multiple deadlines.
 - P. Ability to handle difficult and stressful situations with professional composure.
 - Q. Ability to work successfully as a member of a team and independently with minimal supervision.
 - R. Ability to train and lead others.
 - S. Ability to interpret and apply laws, contracts, regulations, policies, and procedures.
 - T. Ability to enforce safety rules and regulations.
 - U. Ability to maintain confidential information.
 - V. Ability to demonstrate dependability, responsibility, and consistency in their job performance.
 - W. Ability to attend work as scheduled and/or required.

Physical Demands

The work requires considerable and strenuous physical exertion such as frequent climbing of tall ladders, lifting heavy objects over 50 pounds, crouching or crawling in restricted areas.

Work Environment

The work environment involves high risks with exposure to potentially dangerous situations or unusual environmental stress requiring a range of safety and other precautions (e.g., working at great heights under extreme outdoor weather conditions, or in similar situations in which conditions cannot be controlled).

HR: LD	Union: Basic	EEOC: Skilled Craft Workers	CSB: 03/01/2022	Class No: 1820
WC: 5183	Pay:	EEOF: Admin/Finance	CC:	Resolution:

MASTER PLUMBER

Master Plumber

SUMMARY/PURPOSE: _____

To provide citywide oversight, guidance, and quality control of City plumbing infrastructure and application. This position will properly plan, lay out, and supervise the installation and repair of apparatus and equipment for plumbing, heating, air-conditioning, ventilation, irrigation, and related systems.

FUNCTIONAL AREAS:

4. _____ SUPERVISION RECEIVED

The supervisor provides continuing or individual assignments by indicating generally what is to be done, limitations, quality and quantity expected, deadlines, and priority of assignments. The supervisor provides additional, specific instructions for new, difficult, or unusual assignments, including suggested work methods or advice on source material available.

SUPERVISION GIVEN

Does not have direct supervisory responsibility but does have significant oversight of employees or project that require delegation and direction over the work of others.

ESSENTIAL DUTIES AND RESPONSIBILITIES

1. Provide general oversight on City projects and plumbing systems to ensure all regulations and codes are met.
2. Train, mentor, and oversee work completed by other plumbers throughout the City.
3. Perform skilled plumbing work in the installation, maintenance, and repair of plumbing, heating, air-conditioning, ventilation, irrigation, and related systems.
4. *A. Install, maintain, and make repairs to plumbing, heating, water, and sewer systems in City structures, and assume accountability for conformance with minimum code standards.
5. *B. Install, maintain, and make repairs to all plumbing and related appurtenances.
6. *C. Install wash basins, urinals, toilet bowls, and toilet tanks.
7. *D. Perform all types of piping joints and hanger installation.
8. *E. Install and make repairs to lawn sprinkler systems.
9. *F. Determine modifications required when obstructions are met while installing plumbing/heating/ ventilation systems.
10. *G. Maintain and make repairs to ventilation systems.
11. *H. Ensure a safe work environment.
12. *I. Prepare seasonal plumbing systems by winterizing as required.
13. *J. Operate power and hand tools and motorized equipment.
14. *K. Attend related training sessions.
15. *L. Assist other tradespersons as necessary.

2. ~~Organize and direct activities of assigned personnel.~~

16. *A. Review and interpret blueprints, develop materials lists, and determine costs.
17. *B. Estimate time and materials necessary to perform a job.
18. *C. Assist with inspections of new installations, repairs, and/or modifications performed by others.
19. *D. Obtain plumbing permits for the City of Duluth when required.
20. *E. Secure meter applications when required.
- * F. Direct and check the work of journeypersons and helpers as assigned.

21. Solicit bids on assigned projects and maintenance activities and coordinate with contracts on assigned work.
22. Be an effective team member by exhibiting self-motivation, supporting other employees in handling tasks, interacting effectively and respectfully with others, showing a desire to contribute to the team effort, accepting assignments willingly, and completing tasks within agreed upon timelines.
23. Coordinate with various City departments, other government agencies, and community groups to develop methods of sharing resources, minimizing duplication, and simplifying procedures.
24. Provide training on new or modified procedures and policies to all affected parties.
25. In collaboration with the supervisor, organize and direct the work activities of assigned team, and determine work priorities, assignments, and work schedules.
26. Provide input on decisions regarding the hiring processes and onboarding procedures of personnel.
27. Establish and maintain positive working relationship with the supervisor and employees by maintaining two-way communication, producing consistent results, advocating for the team when appropriate, and offering expertise to improve processes, systems, and the organization.
28. Other duties may be assigned.

JOB REQUIREMENTS

1. LICENSE:

❖ To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed are representative of the knowledge, skills, and abilities required.

1. Education & Experience Requirements

A. Possession of a State minimum of four (4) years of full-time, verifiable, professional experience as a licensed Master Plumber.

2. License Requirements

A. Possess and maintain a valid Minnesota Master Plumber license.

B. ❖ B. Possession of Possess and maintain a valid Minnesota 1st Class Engineer license.

C. ❖ C. Possession of Possess and maintain a valid Minnesota Class D driver's license or equivalent privilege.

2. EXPERIENCE:

❖ Two (2) years of verifiable full-time experience as a licensed Master Plumber or equivalent.

3. KNOWLEDGE:

~~D.~~ ~~◆~~ ~~A.~~ Ability to obtain and maintain a Minnesota Backflow Prevention Rebuilder license within twelve (12) months of hire.

3. Knowledge Requirements

- A. Extensive knowledge of Minnesota plumbing codes.
- ~~B.~~ ~~B.~~ Extensive knowledge of all other laws and rules regulating plumbing practices.
- ~~C.~~ ~~◆~~ ~~C.~~ Extensive knowledge of the techniques, tools, equipment, and materials used in the plumbing trade.
- ~~D.~~ ~~D.~~ Knowledge of hydraulics as related to flow rates, pipe sizes, and water pressure.
- ~~E.~~ ~~◆~~ ~~E.~~ Knowledge of wiring involved with heating, ventilation, and cooling controls.
- ~~F.~~ ~~◆~~ ~~F.~~ Knowledge of pneumatic controls.
- ~~G.~~ ~~◆~~ ~~G.~~ Knowledge of various types of pumps involved in plumbing, heating, ventilation, and cooling.
- ~~H.~~ ~~◆~~ ~~H.~~ Knowledge of the methods used in the installation, operation, and maintenance of irrigation systems.
- ~~I.~~ ~~I.~~ Knowledge of sheet metal and ducting.
- ~~J.~~ ~~◆~~ ~~J.~~ Knowledge of applicable safe work practices and procedures.

4. SKILLS:

- ~~K.~~ ~~◆~~ ~~A.~~ Knowledge of problem-solving and conflict-resolution techniques.
- ~~L.~~ Knowledge of applicable safety requirements.
- ~~M.~~ Knowledge of, or the ability to learn, City policies and procedures.
- ~~N.~~ Knowledge of federal, state, and local laws, statutes, regulations, codes, and standards related to the area of responsibility.
- ~~O.~~ Knowledge of effective leadership and personnel practices.

4. Skill Requirements

- A. Skill in the installation, operation, and maintenance of plumbing systems and fixtures.
- ~~B.~~ ~~◆~~ ~~B.~~ Skill in the installation, operation, and maintenance of steam and hot water heating systems.
- ~~C.~~ ~~◆~~ ~~C.~~ Skill in the installation, operation, and repair of oil and gas warm air heating systems.
- ~~D.~~ ~~◆~~ ~~D.~~ Skill in the operation and maintenance of aquatic pools, including filtration systems, circulation pumps, injection pumps, and related equipment.
- ~~E.~~ ~~◆~~ ~~E.~~ Skill in the operation and maintenance of decorative fountains.
- ~~F.~~ ~~◆~~ ~~F.~~ Skill in the operation of large compressors (up to 1000 CFM), generators, and power threading equipment.

5. ABILITIES:

- ~~G.~~ ~~◆~~ ~~A.~~ Skill in the operation of office equipment including, but not limited to, general computer systems, job required software applications, the internet, and modern office equipment.
- ~~H.~~ Skill in managing one's own time and the time of others.
- ~~I.~~ Skill in completing assignments accurately and with attention to detail.
- ~~J.~~ Skill in using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions, or approaches to problems.

5. Ability Requirements

A. Ability to read and interpret blueprints, diagrams, and manuals.

~~B. ♦ B. Ability to calculate materials costs.~~

~~C. ♦ C. Ability to estimate time and materials necessary to complete a job.~~

~~D. ♦ D. Ability to weld/braze.~~

~~E. ♦ E. Ability to perform mechanical work, especially that involved in plumbing.~~

~~F. ♦ F. Ability to understand and follow oral and written instructions.~~

~~♦ G. Ability to direct helpers.~~

~~G. ♦ H. Ability to erect ladders and scaffolding and operate scissors lifts, boom trucks, and related devices in a safe manner.~~

~~H. ♦ I. Ability to use power hand tools.~~

~~I. ♦ J. Ability to recognize safety hazards and to take appropriate precautions.~~

~~J. ♦ K. Ability to establish work on-call after completion of regular assigned work hours.~~

~~K. Ability to create and maintain effective a positive working environment that welcomes diversity, ensures cooperation, and promotes respect by sharing expertise with team members, fostering safe work practices, and developing trusting work relationships with co-workers, subordinates, and~~

~~L. Ability to communicate and interact effectively with members of the general public.~~

~~M. ♦ L. Ability to communicate effectively both orally and in writing.~~

~~N. Ability to recognize, analyze, and solve a variety of problems.~~

~~O. Ability to organize and prioritize work while meeting multiple deadlines.~~

~~P. Ability to handle difficult and stressful situations with professional composure.~~

~~Q. Ability to work successfully as a member of a team and independently with minimal supervision.~~

~~R. Ability to train and lead others.~~

~~S. Ability to interpret and apply laws, contracts, regulations, policies, and procedures.~~

~~T. Ability to enforce safety rules and regulations.~~

~~U. Ability to maintain confidential information.~~

~~V. Ability to demonstrate dependability, responsibility, and consistency in their job performance.~~

~~W. Ability to attend work on a regular basis as scheduled and/or required.~~

6. PHYSICAL ABILITIES:

~~♦ A. Ability to stand, walk, kneel, crouch, stoop, and crawl as needed to perform plumbing activities.~~

~~♦ B. Ability to lift and transport (usually by carrying) supplies, tools, and equipment such as a power threader weighing 90 pounds.~~

~~* Essential functions of the classification.~~

~~♦ Minimum requirements necessary on the first day of employment. Physical Demands~~

~~The work requires considerable and strenuous physical exertion such as frequent climbing of tall ladders, lifting heavy objects over 50 pounds, crouching or crawling in restricted areas.~~

Work Environment

The work environment involves high risks with exposure to potentially dangerous situations or unusual environmental stress requiring a range of safety and other precautions (e.g., working at great heights under extreme outdoor weather conditions, or in similar situations in which conditions cannot be controlled).

<u>HR: LD</u>	<u>Union: Basic</u>	<u>EEOC: Skilled Craft Workers</u>	<u>CSB: _____</u>	<u>Class No: 1820</u>
<u>WC: 5183</u>	<u>Pay: _____</u>	<u>EEOF: Admin/Finance</u>	<u>CC: _____</u>	<u>Resolution: _____</u>