

Welder Tompkins County

Department: Highway
Classification: Non-competitive
Labor Grade: Blue Collar grade 13
Approved: 10/26/82
Revised: 5/91; 12/93; 5/96; 9/07; 1/17; 9/17; 6/25
By: LG, Deputy Commissioner of Human Resources

MINIMUM QUALIFICATIONS:

- (a) Graduation from a certified welding program **AND** two years of experience as a welder performing a variety of fabrication and repair; **OR**
- (b) Graduation from High School or possession of a high school equivalency diploma **AND** four years (or the equivalent part-time or volunteer) experience working in agriculture, construction, or for a highway department, which must have involved welding while performing a variety of fabrication and repair.

Tompkins County is Committed to Equity and Inclusion. We encourage those with similar values to apply.

SPECIAL REQUIREMENTS :

Possession of a valid New York State Class D license (A or B license preferred) at the time of application and maintain in good standing throughout life of employment.

The employee must obtain an A or B license with a Tank Endorsement within six months of appointment and maintain such license for the duration of employment. This six-month period of time may, at the discretion of the department head, be extended to a maximum of one year. Once the A or B license is in place, there can be no Air brakes restriction.

Must have NYSDOT welder certification for horizontal and vertical within 6 months of employment and maintain certification for duration of employment.

DISTINGUISHING FEATURES OF THE CLASS:

This is skilled work primarily involving welding tasks in the repair, fabrication, installation and reconstruction of catch basins, culverts, bridge railings, loader buckets, truck bodies, trailer hitches and other metal pieces owned or maintained by the County Highway Department. The incumbent also uses schematic drawings, blue prints and mathematical formulas for the construction, repair and maintenance of bridges, culverts, and other highway structures. The primary responsibility of this is the performance of welding tasks in the field, although a variety of in-shop tasks are performed. This position requires the operation of equipment such as front end loaders, boom trucks, backhoes and trucks. The work is performed under the general supervision of the General Highway Supervisor with wide leeway for the choice of materials, equipment and techniques used. The employee will perform all related duties as required.

TYPICAL WORK ACTIVITIES:

- Welds heavy steel culverts, storm sewer and catch basin assemblies, bridge supports, railings and other metal pieces in the field;
- Repairs and/or rebuilds loader buckets, snow plows, dump boxes, cinder spreaders and other pieces of equipment;
- Designs and fabricates parts for loader buckets, truck bodies, building supports, building railing or other equipment or facilities for use in their construction or maintenance;
- Performs body work and related maintenance on automotive and heavy equipment, which includes disassembling, rebuilding and repairing;
- Fabricates equipment stands, frames and other special pieces from exact diagrams, rough sketches or general oral directions;
- Read and understand schematic drawings, blueprints, and specifications, and implements changes related to construction, repair and maintenance of bridges, culverts and other highway structures;

- Uses basic knowledge of mathematical formulas for the construction, repair and maintenance of bridges, culverts and other highway structures;
- Operates a builders level to set and transfer grades;
- Fabricates and installs decking, stringers, braces, hand rails and other structural steel components;
- Operates equipment such as front end loaders, backhoes, boom trucks and trucks;
- Operates and maintains pumps, electric breakers, electric drills, compressors, saws, mechanical wrenches and hoists and other tools as the job requires;
- Erects scaffolds, rigs, slings and boatswain chairs and operates under bridge inspection equipment, repair and maintenance of bridge super and substructures;
- Installs trailer hitches and other devices to equipment to OSHA and/or manufacturers standards;
- Operates trucks and other equipment to assist in a variety of department activities, including snow and ice removal, as required;
- Performs a variety of semi-skilled or unskilled tasks as required.
- May supervise small groups of workers;
- Prepares a brief written daily report on sub-crew and resource used and an explanation of problems encountered and time delays.

KNOWLEDGE, SKILLS, ABILITIES AND PERSONAL CHARACTERISTICS:

- Good knowledge of NYSDOT certified practices, procedures and safety precautions of the welding trade and OSHA and IMSDAA standards;
- Good knowledge of equipment and materials used in welding trade to obtain and maintain NYSDOT certification;
- Working knowledge of methods, materials, tools and equipment used in the assigned trades as they apply to repair and maintenance operations of bridges, culverts and other highway structures;
- Skill in use of welding equipment to perform a variety of repair, maintenance, or fabrication tasks;
- Skill in selecting the proper material and techniques to perform assigned welding tasks;
- Skill and ability to design and visualize end products prior to commencement of project;
- Ability to read and understand schematic drawings, blueprints and specifications concerning construction, repair and maintenance of bridges, culverts and other highway structures;
- Ability to carry out complex oral and written directions;
- Ability to work independently;
- Working knowledge of Highway Maintenance Operational Guidelines as they apply to repair and maintenance for bridges, culverts and other highway structures;
- Ability to work with and explain information to others including subordinates, residents, suppliers and vendors;
- Ability to perform heavy physical labor, and work in an air supplied helmet;
- Willingness to work outside under adverse weather conditions;
- Willingness to respond to emergencies and overtime work;
- Good eye/hand coordination, and manual dexterity.
- The employee's physical and mental condition shall be commensurate with the demands of the position, either with or without reasonable accommodations.

ESSENTIAL FUNCTIONS - PHYSICAL, MENTAL AND ENVIRONMENTAL: Please note that these are illustrative only and do not attempt to address every type of physical, mental or environmental factor that may exist when performing the typical work activities outlined above.

Physical: The employee is routinely required to stand, walk, kneel, stoop, crouch, bend, reach and twist multiple times during an eight-hour, or occasionally longer, work day. He or she must be able to lift, carry and/or hoist overhead as much as 60 pounds. An individual in this role is required to have sufficient visual and auditory acuity to be able to perform acceptably and avoid risks and dangers to him or herself and co-workers. He or she is required to speak and communicate sufficiently to avoid risks and dangers to him or herself and co-workers. The employee must be able to firmly grasp tools, equipment and machinery parts. He or she is required to have fine motor skills and sufficient hand/eye coordination necessary to manipulate, repair and install large and small parts. Head, hands, arms, legs and feet must all work together in coordination in order to enable an individual to perform the essential functions of this job. He or she must have the full physical ability to operate and drive all kinds of heavy and light equipment as well as trucks, most with a clutch and standard transmission configuration, some with many gear options.

Mental: The employee must possess a psychological makeup and the interpersonal skills necessary for him or her to work cooperatively with others. The employee must not have an unreasonable fear of heights.

Environmental: . He or she must be able to walk on slippery or uneven surfaces, have the ability to work alone, both inside and outside, and may be exposed to welding arc, dust, dirt, grease, humidity, excessive heat (occasionally above 100°) and excessive

cold (often below 32°).

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