

## **Aerial Lift Bridge Supervisor**

### **SUMMARY/PURPOSE**

To supervise assigned personnel in order to ensure safe passage of ships, pedestrians, and motorists by operating and maintaining the Aerial Lift Bridge, Pedestrian Lift Bridge, and related equipment.

### **SUPERVISION RECEIVED**

The supervisor makes assignments by defining objectives, priorities, and deadlines and assists incumbents with unusual situations, which do not have clear precedents. Incumbents plan and carry out the successive steps and handle problems and deviations in the work assignment in accordance with instructions, policies, previous training, or accepted practices in the occupation.

### **SUPERVISION GIVEN**

Does have supervisory responsibility, typically for employees with little discretion. Makes decisions and/or recommendations about hire, termination, pay, and performance.

### **ESSENTIAL DUTIES AND RESPONSIBILITIES**

1. Supervise and assist in the operation of the Aerial Lift Bridge and the Minnesota Slip Pedestrian Bridge.
2. Supervise and assist in the maintenance, troubleshooting, and repair of electrical and mechanical systems for the Aerial Lift Bridge and the Minnesota Slip Pedestrian Bridge.
3. Maintain computer-controlled AC and DC electric drive systems and associated electrical equipment including batteries, motors, brakes, transformers, relays, etc., using test equipment and technical schematics and manuals.
4. Prioritize, schedule, and assign work.
5. Delegate authority and responsibilities to others as needed. Disseminate instructions and information to employees through oral and written instructions.
6. Layout, design, schedule, and assign larger maintenance projects to be performed during the off-season winter shutdown.
7. Maintain employee records, prepare time reports for personnel, and perform annual employee evaluations.
8. Maintain supply and part inventories, research and order supplies, materials, and equipment as needed within a yearly budget.
9. Coordinate and assist engineering in bridge inspections for the Aerial Lift Bridge; LHB yearly Routine Bridge Inspection, DOT Fracture Critical Inspection, and DOT & LHB Complex Bridge Inspections.
10. Follow all required regulations, rules, and policies for the City of Duluth, U.S. Coast Guard, U.S. Army Corps of Engineers, and Minnesota Department of Transportation.
11. Perform media interviews as needed and coordinate with the City of Duluth communication office to issue press releases regarding either of the bridges.
12. Manage employee performance, and provide training, coaching, and mentoring for employees.
13. Provide clear, sufficient, and timely direction and information to the employees about plans, expectations, tasks, and activities.
14. Demonstrate highly-effective leadership by promoting and supporting the mission and vision of the organization, recognizing and defining issues, and taking initiative towards improvements.
15. Recommend the hire, transfer, assignment, promotion, employee grievance resolution, discipline, suspension, or discharge of assigned personnel.
16. Provide for ongoing training of employees in emerging methods, trends, technologies, and proper and safe work methods and procedures.
17. Coordinate with various City departments, other government agencies, and community groups to develop methods of sharing resources, minimizing duplication, and simplifying procedures.
18. Establish and maintain positive working relationship with the 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.

19. 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 two (2) years of related specialized electrical training, plus three (3) years of experience working with large industrial electrically operated machinery; OR a minimum of four (4) years of experience working with complex industrial equipment; OR a minimum of five (5) years of related education and/or full-time, verifiable professional experience to include electrically operated, complex mechanized, or computer-controlled equipment as a primary responsibility.
- B. Two (2) years of experience must be in a supervisory/lead position of similar complexity and level of responsibility.

2. License Requirements

- A. Must possess and maintain a Minnesota State Electrical Journeyman License.

3. Knowledge Requirements

- A. Knowledge of electrical systems, instruments, and equipment and their applications.
- B. Knowledge of electrical and electronic troubleshooting procedures.
- C. Knowledge of mechanical troubleshooting procedures.
- D. Knowledge of the basic principles of welding, metal working, and machine shop practices.
- E. Knowledge of the basic principles of plumbing, air, and hydraulic systems.
- F. Knowledge of basic carpentry methods, tools, equipment, and materials.
- G. Knowledge of safety and fire prevention methods, especially those related to electrical work.
- H. Knowledge of first aid and CPR procedures.
- I. Knowledge of problem-solving and conflict-resolution techniques.
- J. Knowledge of applicable safety requirements.
- K. Knowledge of, or the ability to learn, City policies and procedures.
- L. Knowledge of federal, state, and local laws, statutes, regulations, codes, and standards related to the area of responsibility.
- M. Knowledge of effective leadership and personnel practices.
- N. Knowledge of business and management principles involved in strategic planning, resource allocation, human resources practices, leadership techniques, and coordination of people and resources.
- O. Knowledge of budgetary and management principles, practices, and procedures.
- P. Knowledge of the structure and content of the English language, including the meaning and spelling of words, rules of composition, and grammar.

4. Skill Requirements

- A. Skill in working with hand and power tools.
- B. Skill in evaluating and analyzing operations and procedures related to bridge operations.
- C. Skill in resolving complaints and concerns from the public.
- D. Skill in supervising others in an open and participative work environment.
- E. 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.
- F. Skill in managing one's own time and the time of others.
- G. Skill in completing assignments accurately and with attention to detail.
- H. Skill in mediation and dispute resolution.
- I. Skill in using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions, or approaches to problems.
- J. Skill in motivating, developing, and leading people.

5. Ability Requirements

- A. Ability to read and interpret drawings, blueprints, and schematics.
- B. 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.
- C. Ability to communicate and interact effectively with members of the public.
- D. Ability to communicate effectively both orally and in writing.
- E. Ability to recognize, analyze, and problem-solve a variety of situations.
- F. Ability to consistently and independently prioritize one's own work and the work of others, including scheduling, assigning staff, and securing resources.
- G. Ability to handle difficult and stressful situations with professional composure.
- H. Ability to establish goals and objectives.
- I. Ability to set expectations and provide training in safe and proper work methods, development, and coaching for employees.
- J. Ability to interpret and apply laws, contracts, regulations, policies, and procedures.
- K. Ability to manage a budget and work within the constraints of that budget.
- L. Ability to enforce safety rules and regulations.
- M. Ability to maintain confidential information.
- N. Ability to demonstrate dependability, responsibility, and consistency in job performance.
- O. Ability to exercise sound judgment in making critical decisions.
- P. Ability to analyze, organize, and prioritize work while meeting multiple deadlines.
- Q. Exhibits leadership qualities of dependability and accountability.
- R. Ability to attend work as scheduled and/or required.

Physical Demands

The work requires some physical exertion such as long periods of standing; walking over rough, uneven, or rocky surfaces; recurring bending, crouching, stooping, stretching, reaching, or similar activities; recurring lifting of moderately heavy items such as record boxes. The work may require specific, but common, physical characteristics and abilities such as above.

Work Environment

The work environment involves moderate risks or discomforts requiring special safety precautions (e.g., working around moving parts, carts, or machines, or with contagious diseases or irritant chemicals, working at great heights under extreme outdoor weather conditions, or in similar situations in which conditions cannot be controlled). Employees may be required to use protective clothing or gear such as masks, gowns, coats, boots, goggles, gloves, or shields.

HR: CK	Union: Supervisory	EEOC: Skilled Craft Workers	CSB: 11/01/2022	Class No: 1526
WC: 9015	Pay: 1075-1090	EEOF: Streets and Highways	CC:	Resolution:
FLSA Exemption Type: Executive				

## **AERIAL LIFT BRIDGE SUPERVISOR**

### Aerial Lift Bridge Supervisor

#### SUMMARY/PURPOSE: ~~Supervise~~

To supervise assigned personnel in order to ensure safe passage of ships, pedestrians, and motorists by operating and maintaining the Aerial Lift Bridge, Pedestrian Lift Bridge, ~~foghorn~~, and related equipment.

#### FUNCTIONAL AREAS: ~~\_\_\_\_\_~~

#### SUPERVISION RECEIVED

The supervisor makes assignments by defining objectives, priorities, and deadlines and assists incumbents with unusual situations, which do not have clear precedents. Incumbents plan and carry out the successive steps and handle problems and deviations in the work assignment in accordance with instructions, policies, previous training, or accepted practices in the occupation.

#### SUPERVISION GIVEN

Does have supervisory responsibility, typically for employees with little discretion. Makes decisions and/or recommendations about hire, termination, pay, and performance.

#### ESSENTIAL DUTIES AND RESPONSIBILITIES

1. Supervise ~~assigned personnel~~ and assist in the operation ~~and~~ of the Aerial Lift Bridge and the Minnesota Slip Pedestrian Bridge.
2. Supervise and assist in the ~~maintenance of the lift bridges~~, troubleshooting, and repair of electrical and mechanical systems for the Aerial Lift Bridge and the Minnesota Slip Pedestrian Bridge.
- ~~4.3.~~ Maintain computer-controlled AC and DC electric drive systems and associated electrical equipment including batteries, motors, brakes, transformers, relays, etc., using test equipment and technical schematics and manuals.
- ~~\*A.4.~~ Prioritize, schedule, and assign work.
  - ~~\*B. Effectively recommend the hire, transfer, promotion, and suspension or discharge of subordinate personnel.~~
  - ~~\*C. Establish work standards, provide feedback and coaching, and conduct employee evaluations.~~
  - ~~\*D. Discipline assigned personnel as necessary.~~
  - ~~\*E. Provide for the training of employees in proper and safe work methods and procedures.~~
  - ~~\*F. Effectively recommend adjustments or other actions in employee grievances.~~
- ~~\*G.5.~~ Delegate authority and responsibilities to others as needed. Disseminate instructions and information to employees through oral and written instructions.
  - ~~\*H. Supervise the ordering of supplies, materials, and equipment.~~
  - ~~\*I. Supervise the Layout, design, schedule, and assign larger maintenance of records.~~
  - ~~\*J. Supervise the operation of the Aerial Lift Bridge and Pedestrian Lift Bridge.~~
  - ~~\*K. Supervise and perform the testing of equipment.~~
  - ~~\*L. Supervise essential communications between bridge and vessels.~~
  - ~~\*M. Supervise and assist with greasing and oiling of bearings, gears, cables, and guides.~~
  - ~~\*N. Supervise and assist with replacement steel operating cables, electric cables, counterweight guides, roadway gates, walks, and other mechanical devices.~~
  - ~~\*O. Supervise and assist with adjustments of electrical equipment: batteries, motors, brakes, generators, transformers, relays, regulators, and other electrical devices.~~
  - ~~\*P. Supervise cleaning and other custodial activities.~~
  - ~~\*Q. Supervise minor repair work.~~
2. Operate lift bridges.
  - ~~\*A. Correspond with ships by watching and listening for their audible, visual, or implied~~

- signals, and by sending audible, visual, and/or radio signals in response.
- ~~\*B. Estimate speed and distance of approaching vessel~~projects to maintain a safe operating margin.
  - ~~\*C. Operate gates, pedestrian barriers, traffic control signals, and warning devices.~~
  - ~~\*D. Clear vehicle and/or pedestrian traffic from the spans.~~
  - ~~\*E. Operate controls to raise and lower the spans, and monitor their correct sequence of operation.~~
  - ~~\*F. Operate support equipment including radar, marine radios, weather instruments, telephone, intercoms, scanners, closed circuit television, loudspeaker system, intrusion alarms, and malfunction indicators.~~
3. ~~Perform maintenance work on the Aerial Lift Bridge and Pedestrian Lift Bridge and their operating mechanisms.~~
- ~~\*A. Test drive control computer and back-up computer using CRT terminal; test remote I/O units and programmable controllers.~~
  - ~~\*B. Troubleshoot computer-controlled AC and DC electric drive systems using test equipment and technical schematics and manuals.~~
  - ~~\*C. Test and maintain diesel and natural gas power plants which supply auxiliary power.~~
  - ~~\*D. Inspect, adjust, and maintain a variety of electrical systems, equipment, and wiring.~~
  - ~~\*E. Inspect and adjust a variety of mechanical equipment.~~
  - ~~\*F. Maintain equipment by greasing and oiling bearings, gears, cables, guides, and chains.~~
  - ~~\*G. Replace operating cables, electric traveling cables, counterweight guide shoes, roadway gates, sidewalks, and bridge decking.~~
  - ~~\*H. Maintain traffic lanes so they are clear of obstructions.~~
  - ~~\*I. Perform painting, cleaning, and maintenance of the control room, machinery rooms, generator room, shops and storage areas.~~
  - ~~\*J. Inspect and perform minor repairs to weather instruments, communication equipment, radar and antennae.~~
  - ~~\*K. Inspect and maintain miscellaneous electronic devices such as gas and smoke detectors, closed circuit TV systems, and power supplies.~~
4. ~~Perform related work as required.~~
- ~~\*A. Maintain the Duluth ship canal foghorn by inspecting, adjusting, and maintaining air compressors, air receiver and piping, pneumatic controls, electric and electronic controls, diaphone foghorns, and miscellaneous equipment.~~
  - ~~\*B. Maintain approaches, sidewalks, and decks so that they are free from ice, snow, and other safety hazards.~~
  - ~~\*C. Record and report weather information, vessel traffic reports, and other information requests to appropriate agencies.~~
  - ~~\*D.6. Perform a variety of mechanical and electrical maintenance repair work in another Public Works division~~be performed during the off-season winter shutdown.
  - ~~\*E. Attend specialized training to upgrade knowledge necessary for effective job performance.~~
  - ~~\*F. Respond to questions from the public concerning the Aerial Lift Bridge and Pedestrian Lift Bridge.~~
  - ~~\*G. Verify maintenance and repairs performed by contractors.~~
  - ~~\*H. Prepare~~Maintain employee records, prepare time reports for personnel.
  - ~~\*I.7. Conduct, and perform~~ annual inspections on all portions of the Aerial Lift Bridge and Pedestrian Lift Bridgeemployee evaluations.
8. ~~Coordinate fracture critical inspections with~~ Maintain supply and part inventories, research and order supplies, materials, and equipment as needed within a yearly budget.

HR: KG	Union: Supervisory	EEOC: Skilled Craft Workers	CSB: 20050304	Class No: 1526
WC: 9015	Pay: 1075	EEOC: Streets and Highways	CC: 20050314	Resolution: 05-0169R

9. Coordinate and assist engineering in bridge inspections for the Aerial Lift Bridge; LHB yearly Routine Bridge Inspection, DOT Fracture Critical Inspection, and DOT & LHB Complex Bridge Inspections.
- \*~~J~~. 10. Follow all required regulations, rules, and policies for the City of Duluth, U.S. Coast Guard, U.S. Army Corps of Engineers, and Minnesota Department of Transportation-Bridge Office.
11. Perform media interviews as needed and coordinate with the City of Duluth communication office to issue press releases regarding either of the bridges.
12. Manage employee performance, and provide training, coaching, and mentoring for employees.
13. Provide clear, sufficient, and timely direction and information to the employees about plans, expectations, tasks, and activities.
14. Demonstrate highly-effective leadership by promoting and supporting the mission and vision of the organization, recognizing and defining issues, and taking initiative towards improvements.
15. Recommend the hire, transfer, assignment, promotion, employee grievance resolution, discipline, suspension, or discharge of assigned personnel.
16. Provide for ongoing training of employees in emerging methods, trends, technologies, and proper and safe work methods and procedures.
17. Coordinate with various City departments, other government agencies, and community groups to develop methods of sharing resources, minimizing duplication, and simplifying procedures.
18. Establish and maintain positive working relationship with the 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.
19. 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 and~~ Experience Requirements
  - A. ~~Two~~ A minimum of two (2) years of related specialized electrical training, plus three (3) years of experience working with large industrial electrically operated machinery; ~~or~~ OR a minimum of four (4) years of experience working with complex ~~mechanized~~ industrial equipment; ~~or~~ two (2) years of experience working with OR a minimum of five (5) years of related education and/or full-time, verifiable professional experience to include electrically operated, complex mechanized, or computer-controlled electrical equipment; or as a combination primary responsibility.
  - ~~A.B. Two (2) years of education, training, and experience must be in the above areas which is accepted as equivalent~~ a supervisory/lead position of similar complexity and level of responsibility.
2. ~~Physical~~ License Requirements
  - ~~A. Vision correctable to 20/30.~~
  - ~~B. No hearing loss.~~
  - ~~C. Manual dexterity.~~
  - ~~D. Good depth perception.~~
  - ~~E. Ability to scale bridgework.~~
  - ~~F. Ability to work at heights.~~
  - ~~G. Ability to work in enclosed spaces.~~
  - ~~H. Ability to work outside in inclement weather.~~
  - ~~I. Ability to frequently pull, climb and balance.~~
  - ~~J. Ability to occasionally lift and carry objects such as grease barrels and welding tanks weighing up to 100 pounds, and to frequently lift and carry objects weighing up to 50 pounds.~~

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WC: 9015	Pay: 1075	EEOF: Streets and Highways	CC: 20050314	Resolution: 05-0169R

A. Must possess and maintain a Minnesota State Electrical Journeyman License.

3. Knowledge Requirements

- ~~†A.~~ A. Knowledge of electrical systems, instruments, and equipment and their applications.
- ~~†B.~~ Knowledge of ~~the principles, methods, equipment, and materials used in~~ electrical installations and repairs.
- ~~†C.~~ B. ~~Knowledge of basic electronics and~~ electronic troubleshooting procedures.
- ~~†D.~~ C. Knowledge of ~~the basic principles of mechanics~~ mechanical troubleshooting procedures.
- ~~†E.~~ D. Knowledge of the basic principles of welding, metal working, and machine shop practices.
- ~~†F.~~ E. Knowledge of the basic principles of plumbing, air, and hydraulic systems.
- ~~†G.~~ F. Knowledge of basic carpentry methods, tools, equipment, and materials.
- ~~†H.~~ Knowledge of the operation, maintenance, and testing of industrial computer systems and programmable controllers.
- ~~†I.~~ G. Knowledge of safety and fire prevention methods, especially those related to electrical work.
- ~~†J.~~ H. Knowledge of first aid and CPR procedures.
- I. ~~K.~~ Knowledge of ~~correct supervisory practices~~ problem-solving and ~~ability to use them effectively~~ conflict-resolution techniques.
- J. ~~L.~~ Knowledge of applicable ~~labor relations~~ safety requirements.
- K. Knowledge of, or the ability to learn, City policies and ~~labor agreements.~~ procedures.
- L. Knowledge of federal, state, and local laws, statutes, regulations, codes, and standards related to the area of responsibility.
- M. Knowledge of effective leadership and personnel practices.
- N. Knowledge of business and management principles involved in strategic planning, resource allocation, human resources practices, leadership techniques, and coordination of people and resources.
- O. Knowledge of budgetary and management principles, practices, and procedures.
- P. Knowledge of the structure and content of the English language, including the meaning and spelling of words, rules of composition, and grammar.

4. Skill Requirements

- ~~†A.~~ A. Skill in working with hand and power tools.
- ~~†B.~~ Skill in ~~effectively communicating and preparing concise written and oral reports.~~
- ~~†C.~~ B. Skill in evaluating and analyzing operations and procedures related to ~~Bridge~~ bridge operations.
- ~~†D.~~ C. Skill in resolving complaints and concerns from the public.
- D. ~~E.~~ Skill in supervising others in an open and participative work environment.
- E. 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.
- F. Skill in managing one's own time and the time of others.
- G. Skill in completing assignments accurately and with attention to detail.
- H. Skill in mediation and dispute resolution.
- I. Skill in using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions, or approaches to problems.
- J. Skill in motivating, developing, and leading people.

5. Ability Requirements

- ~~†A.~~ ~~Ability to work shifts.~~
- ~~†B.~~ ~~Ability to obtain applicable licenses, such as a restricted Radio Telephone Operator's Permit, if required.~~
- ~~†C.~~ A. Ability to read and interpret drawings, blueprints, and schematics.
- ~~†D.~~ ~~Ability to act decisively under stress.~~

HR: <del>KG</del>	Union: <del>Supervisory</del>	EEOC: <del>Skilled Craft Workers</del>	CSB: <del>20050304</del>	Class No: <del>1526</del>
WC: <del>9015</del>	Pay: <del>1075</del>	EEOF: <del>Streets and Highways</del>	CC: <del>20050314</del>	Resolution: <del>05-0169R</del>

- B. 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.
- ~~†E.C.~~ Ability to ~~maintain accurate and complete records~~ communicate and interact effectively with members of the public.
- D. Ability to communicate effectively both orally and in writing.
- E. Ability to recognize, analyze, and problem-solve a variety of situations.
- F. Ability to consistently and independently prioritize one's own work and the work of others, including scheduling, assigning staff, and securing resources.
- G. Ability to handle difficult and stressful situations with professional composure.
- H. Ability to establish goals and objectives.
- I. Ability to set expectations and provide training in safe and proper work methods, development, and coaching for employees.
- J. Ability to interpret and apply laws, contracts, regulations, policies, and procedures.
- K. Ability to manage a budget and work within the constraints of that budget.
- ~~†F.L.~~ Ability to enforce safety rules and ~~apply them to various hazardous situations~~ regulations.
- ~~†G.M.~~ Ability to ~~participate in required training to update knowledge and skills~~ maintain confidential information.
- ~~†H.~~ ~~Ability to develop and maintain effective working relationships with supervisors, co-workers, outside agencies, and the general public.~~
- N. Ability to demonstrate dependability, responsibility, and consistency in job performance.
- O. Ability to ~~supervise assigned personnel~~ exercise sound judgment in making critical decisions.
- P. Ability to analyze, organize, and prioritize work while meeting multiple deadlines.
- ~~†I.Q.~~ Exhibits leadership qualities of dependability and accountability.
- ~~†J.R.~~ Ability to attend work ~~on a regular basis~~ as scheduled and/or required.

\* Essential functions of the position

H ~~Job requirements necessary on the first day of employment~~

### Physical Demands

The work requires some physical exertion such as long periods of standing; walking over rough, uneven, or rocky surfaces; recurring bending, crouching, stooping, stretching, reaching, or similar activities; recurring lifting of moderately heavy items such as record boxes. The work may require specific, but common, physical characteristics and abilities such as above.

### Work Environment

The work environment involves moderate risks or discomforts requiring special safety precautions (e.g., working around moving parts, carts, or machines, or with contagious diseases or irritant chemicals, working at great heights under extreme outdoor weather conditions, or in similar situations in which conditions cannot be controlled). Employees may be required to use protective clothing or gear such as masks, gowns, coats, boots, goggles, gloves, or shields.

<del>HR: KG</del> <u>HR: CK</u>	Union: Supervisory	EEOC: Skilled Craft Workers	CSB: <del>03/01/2005</del>	Class No: 1526
WC: 9015	Pay: <del>1075</del> _____	EEOF: Streets and Highways	CC: <del>03/14/2005</del>	Resolution: <del>05-0169R</del>
<u>FLSA Exemption Type: Executive</u>				

<del>HR: KG</del>	<del>Union: Supervisory</del>	<del>EEOC: Skilled Craft Workers</del>	<del>CSB: 20050304</del>	<del>Class No: 1526</del>
<del>WC: 9015</del>	<del>Pay: 1075</del>	<del>EEOF: Streets and Highways</del>	<del>CC: 20050314</del>	<del>Resolution: 05-0169R</del>