

COUNTY OF SOLANO

CLASS SPECIFICATION

PUBLIC WORKS MAINTENANCE WORKER (SENIOR)

CLASS SUMMARY:

Under general supervision, performs construction and maintenance work on Public Works projects acting primarily as heavy equipment operator. This senior level class can perform a wide variety of tasks related to construction, repair, and maintenance of roads, flood control channels, roadside drainage, bridges, and traffic markings and signs. This is an advanced level class in the Public Works Maintenance Worker Series. Incumbents are responsible for operating heavy equipment used in construction, repair, and maintenance of roads, flood control channels, and/or bridges. Positions in the class require skill in operating several types of construction equipment. Incumbents may also guide and/or otherwise lead the work of a small crew, but these functions are supplemental to tasks performed as a member of the crew. Assignments may be regular and/or rotational to the various units and crews within Public Works.

DISTINGUISHING CHARACTERISTICS:

This class is distinguished from the:

- **Public Works Maintenance Worker** class which is the journey level class in the series and performs a wide variety of tasks related to construction, repair, and maintenance of roads, flood control channels, roadside drainage, bridges, and traffic signs; and the
- **Public Works Maintenance Supervisor** class which supervises a unit within the Public Works Division of the Department of Resource Management.

SUPERVISION RECEIVED AND EXERCISED:

- Supervision is provided by a Public Works Maintenance Supervisor.
- Provides lead over Public Works Maintenance Worker and/or Trainee
- No supervision is exercised over others.

ESSENTIAL DUTIES: *This class specification represents the core area of responsibilities; specific position assignments will vary depending on the needs of the department.*

- Performs lead worker duties over Public Worker Maintenance Workers and Public Maintenance Worker Trainee such as:
 - providing on-the-job training;
 - passing on instructions received from supervisor and getting work started;
 - distributing work among staff;

- monitoring status of work being performed and keeping supervisor informed of work progress and likelihood of meeting timelines and required deadlines;
 - reviewing work of assigned crew, informing supervisor of customer feedback, work quality, conduct problems, etc. and providing input on performance to supervisor; and
 - ensuring work is performed safely and efficiently.
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- Operates heavy equipment used in construction, repair, and maintenance of roads, flood control channels, and/or bridges to perform the following:
 - Operating a variety of heavy and light construction equipment, turning valves to control air and water output and adjusts hand wheels and depresses pedals to drive machines and control attachments, such as blades, buckets, scrapers and swing booms; checks and performs minor maintenance on equipment;
 - Operating a dump truck and attached equipment to haul asphalt or other materials and spread material on roadways for chip sealing or dust coating; installs guardrails along County roads.
 - Transporting light and heavy equipment
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- Performs the same duties as the work being led such as the following:
 - Drains roadside water and clears fallen trees and tree limbs and other road hazards during winter storm months; clears and trims brush, trees, tree limbs and other material from the roadside, channels, channel roads, bridges or levees; operates shears, chain saws, clipper, and a variety of light and heavy mowers; sweeps intersections clear of debris and loose gravel. May participate in vegetation management using herbicides and rodent control.
 - Installs and repairs road signs and sign posts at proper height and angle and regularly inspects all signs on an assigned route; washes all signs as needed and maintains a traffic sign log book; fabricates road signs using various materials, color and lettering in accordance with highway regulations and current needs; operates computerized sign making equipment.
 - Assists in permanent patch, pothole patch, chip seal, dust coat, blade patch, crack sealing, and pavement removal and replacement on various road projects; applies oils, aggregates, and blacktop to roadways; uses level lute, and various manual and power rollers to spread, level and compact road materials; installs pipe culverts under roadways; may keep track of bottom dumps of road aggregates during road reconstruction and use calculator to compute amounts delivered.
 - Reconstructs damaged bridges, channels or levee and places rip rap; repairs access road washouts, fences, and access gates on wood and chain link fences by using small hand tools and welders as needed; repairs, installs or replaces culverts using backhoes and a variety of power equipment, replaces water channel flap gates.
 - Stencils traffic lettering and speed limits on roadway using stencils and spray paint equipment and maintains a stenciling log; helps stripe roads by finding the center of the roadway and marking the center using "cat pawing" techniques or by operating the lead car for the striper and filling the striper with paint and reflective beads. Performs operator maintenance, according to lube chart or owner's manual, on equipment; fuels mobile

equipment and check fluid levels; change oil on small engines, lube vehicles, inspect brakes, inspect steering and suspension systems, check tires and lighting systems.

- Performs other duties as assigned.

EDUCATION AND EXPERIENCE:

- **Education:** High School Diploma, GED, or equivalent; **AND**
- **Experience:**
 - **Either:** Two years of full-time paid experience construction and road maintenance work equivalent to journey level public works maintenance worker which includes familiarity with the operation of a grader, backhoe, and/or loader; **OR**
 - Two years of full-time paid experience in the Solano County class of Public Works Maintenance Worker.

LICENSING, CERTIFICATION AND REGISTRATION REQUIREMENTS:

- Applicants are required to possess a valid California Driver's License, Class A with any required endorsements.

Notes: The driver's license must be kept current while employed in this class. A Hazmat certification may be required.

REQUIRED KNOWLEDGE, SKILLS AND ABILITIES:

Knowledge of:

- Standard and accepted principles of leadership, on-the-job training, and work review.
- Methods, techniques and materials used in road work such as chip sealing, patching, dust coating and oiling activity.
- Operation of equipment and tools commonly used in road construction, traffic signing and pavement marking, and channel/bridge maintenance.
- Construction signing for safety of motorist and workers.
- Procedures used in road repair and reconstruction.
- Motor vehicle code as it relates to operation of construction equipment.
- Traffic sign construction/fabrication.
- Traffic sign regulations and requirements.
- Tree trimming methods and techniques.
- Pavement marking and reflector button regulations and methods techniques.
- Guardrail installation and repair methods.
- Use of herbicides and maintenance of spray equipment.
- Carpentry tools and methods as they relate to concrete forms and fences.
- Methods and techniques of lifting and cribbing bridges.
- Methods of working with asphalt and concrete.

- Materials, compaction methods and placement of material for rip rapping, backfill, and run off protection around bridges, channel slopes, and levee slopes.
- Safe work methods around heavy equipment in traffic, canals and streambeds.
- Safe and efficient use of construction equipment and tools.
- Customer service techniques for dealing with customers and the public.
- Basic english composition, spelling, grammar, vocabulary, and punctuation for both written and oral communications.
- Basic mathematics for routine arithmetical calculations.
- Standard office procedures, practices, equipment, personal computers, and software.

Skill and/or Ability to:

- Distribute work and provide work directions, review work performance and conduct of staff, and provide on-the-job training to staff led.
- Operate a motor grader, backhoe, dump truck, crane and other such power construction equipment.
- Operate a variety of construction equipment in a safe and efficient manner.
- Service and make minor adjustments and repairs to construction equipment.
- Follow and understand verbal and written directions.
- Detect uneven surfaces and level them out.
- Establish and maintain cooperative working relationships.
- Demonstrate tact and diplomacy.
- Work safely around vehicular traffic.
- Proofread and/or edit for errors in spelling, grammar and punctuation on road signs.
- Read and understand highway manuals regarding traffic signing and marking
- Operate hand and power pruning tools, power washers and spray painting and equipment
- Work at heights.
- Make routine arithmetical calculations.
- Determine the center of a roadway.
- Determine proper sign placement and alignment.
- Work around and mix paints, solvents, and glues.
- Weld and construct fences and concrete forms.
- Work with asphalt and concrete.
- Maintain balance in and around streams.
- Communicate information and ideas clearly and concisely, both orally and in writing.
- Work with and speak to various cultural and ethnic individuals and groups in a tactful and effective manner.
- Establish good relationships with the public and internal customers.
- Maintain accurate records and document actions taken.
- Use modern office equipment to include computers and related software applications.
- Operate and maintain a variety of hand and power tools properly and safely.

PHYSICAL REQUIREMENTS:

- **Mobility and Dexterity:** This class typically requires employees to perform the following: (1) balancing, stooping, kneeling, reaching, crawling, fingering, grasping, and repetitive motion; (2) climbing and working safely on ladders and step ladders with a total weight that does not exceed the weight capacity of the ladder or the highest rated capacity of the harnesses and lanyards used for fall; and (3) standing or walking during normal work hours on uneven surfaces.
- **Lifting, Carrying, Pushing and Pulling – Heavy work:** This class typically requires employees to perform the following: exerting up to 100 pounds of force occasionally with assistance, and/or up to 50 pounds of force frequently, and /or up to 20 pounds of force constantly to move objects.
- **Vision:** This class requires employees to have close visual acuity, with or without correction, to prepare and analyze data and figures, view a computer terminal, read, and to distinguish between normal and off shade colors and to read gauges and meters in dimly lighted areas etc. Employees are also required to have depth perception and good eye-to-hand coordination in order to operate a motor vehicle and to operate a variety of hand and power tools.
- **Hearing/Talking:** This class requires employees to perceive the nature of sounds at normal speaking levels with or without correction, and have the ability to receive detailed information through oral communication. Employees in this class are also required to be able to communicate to express or exchange ideas. Detailed or important instructions must occasionally be conveyed to others accurately, loudly, and/or quickly.
- **Other:** This class typically requires employees to have sufficient sense of smell, and touch to observe equipment functions for normal and abnormal occurrences.

WORKING CONDITIONS:

- **Outdoor Work:** Employees in this class will often be working outdoors and thus may be subject to exposure to intense noises, fumes, odors, pollens, dust, inadequate lighting, and to unpleasant field conditions including rainy, windy, cold, or hot weather; may be exposed to e.g. insects, rodents, snakes, bees, wasps, spiders, ants, etc. employees may work in high water streams, rivers and channels; employees may be required to work with hot paving materials;
- **Work in an Industrial Area:** Employees in this class will often be working in an industrial area and thus will be subject to exposure to moving mechanical parts, electrical currents, toxic agents, fuel, oil, gases, smoke, fumes, odors, dust, and vibrations. Employees may be subject to injuries when working with hand and power tools and equipment.
- **Traffic Hazards:** Employees in this class will be required to operate a vehicle and thus may be subject to traffic hazards while driving.
- **Working at Heights:** Employees in this class may be required to work at heights 50-75 feet above the ground on equipment and structures.

OTHER REQUIREMENTS:

- **Background Checks, Reference Checks and Physicals:** The County will conduct a background check, a reference check and a physical on candidates prior to appointment to a position within this class.

- Independent Travel: Incumbents are required to travel independently, to perform work at other work sites, etc.
- Hours of Work: Incumbents may be required to work weekends, holidays, irregular hours, on-call, and after normal business hours.
- Drug and Alcohol Testing: Candidates applying for positions in this class are subject to, drug and alcohol testing as required under the Federal Omnibus Transportation Employee Testing Act of 1991. Testing of incumbents includes post-accident, as well as random and reasonable suspicion testing as required by law.

CLASS HISTORY AND CLASS INFORMATION:

- Date Approved by the Civil Service Commission: October, 1992
- Date(s) Revised: February, 1996, March, 2006, September, 2016
- Class Code: 974030