# **Maintenance and Construction Helper (3115)**

#### Task List

## Street Work and Maintenance:

- 1. Repairs asphalt surfaces such as parking lots, airport runways, and streets, by patching holes with rock and oil based asphalt, spreading and raking asphalt, and pushing hand rollers to flatten or level asphalt surfaces to ensure these surfaces are safe to travel on.
- 2. Excavates at various construction site areas such as, underground tunnels and conduits, sidewalks, curbs, streets, ditches, trenches, and grading abutments by digging earth, concrete, and asphalt, backfilling these areas with earth, and tampering earth using shovels, picks, and pneumatic equipment, such as air tampers, clay spades, jackhammers, and pavement breakers under direct supervision to help prepare the ground for construction or reconstruction and repair.
- 3. Installs traffic signs and their related fixtures, such as a steel base plate or a clamp on device by drilling holes into sidewalks using hand, power, and powder actuated tools, such as power drills, roto hammer, and impact drills following the work orders to ensure the signs are installed correctly, securely and in the correct location.
- 4. Installs transformers, ballasts, luminaries, and burned out fuses for streetlights by assembling, erecting, repairing, removing, and replacing electroliers and cutting, pulling, and splicing electrical cable in conduits in order to provide illumination in streetlights.
- 5. Maintains and repairs fire hydrants, fire hoses, nozzles, pumps and detector check meters (i.e. back flow valve) by troubleshooting, disassembling, removing any damaged/worn parts and reassembly under direct supervision to ensure proper functioning of the fire hydrants, fire hoses, nozzles, pumps and detector check meters.

## Building Construction:

- 6. Installs doors, walls, ceilings, floors, storage cabinets, and other furniture in various City buildings by first demolishing the existing materials using various electric, pneumatic, hand and power tools, clearing the demolition by placing in dumpsters, and installing the various components using the various tools under direct supervision to ensure the specific work order and supervisor instructions per job site are adhered to.
- 7. Supplies demolition and construction materials, such as lumber, drywall, and hardware to various City building job sites by driving to shops and yards located at various City locations loading onto the truck bed using a dolly as

- needed, driving them to the site, and unloading to ensure the correct materials are distributed to each job site according to work orders provided by the supervisors.
- 8. Installs and demobilizes scaffolding and platforms used in construction jobs by lifting, hoisting, carrying and bolting scaffolding boards, planks, rails, toe boards, swivels, and related components using basic hand tools, such as saws, screwdrivers, wrenches under direct supervision to utilize the scaffolds while working on various construction projects, such as window repairs, exterior coating, or painting.
- 9. Changes and cleans air filters and air ducts using small power and hand tools such as, drills, screwdrivers, and blast systems under the direct supervision of Air Conditioning Mechanics to assist in the maintenance of air conditioning units and systems in various City buildings.
- 10. Installs form lumber into green or hardened concrete by cleaning and stripping the form rods and lumber by hammering the form lumber into the freshly poured concrete and by securing the form lumber using clamps prior to the concrete hardening under direct supervision to ensure concrete used for building foundations is supported and finished properly.
- 11. Installs supporting equipment and materials used in underground construction, such as shoring boxes, cribbing, timbering, shoring and piling into the bottom of dug out ditches and excavated areas by bracing and securing the materials into the excavated trench using bolts to secure and mount it under direct supervision to be able to use it as a foundational support to hold heavy materials and to prevent cave-ins.

## Vehicle Maintenance and Operation:

- 12. Repairs and maintains City trucks, trailers and their related components, such as truck beds, sides, trailer decks, as well as structural equipment such as ramps and grease racks using small hand and power tools, such as power drills, impact wrenches, grinders, screwdrivers, wrenches and pliers under direct supervision to help maintain various City vehicles and related structural equipment.
- 13. Operates various vehicles and other light equipment such as towing trailers to and from job sites to transport passengers, debris and other materials to assist with various construction projects, paving projects trenching projects, and waterline repairs.

## Grounds Work, Maintenance, and Plumbing:

14. Installs new water mains, ranging in size from 4" and larger pipes, made of steel, ductile and other materials by digging trenches to remove existing pipes and placing new piping into the ground using basic hand and power tools,

- such as shovels, saws, drills, and grinders to supply potable water and water supply for fire suppression.
- 15. Installs, removes, and/or relocates water meters from various City buildings using various tools such as, shovels, channel locks, and pipe wrenches under direct supervision to ensure that the meters are located according to the work order and so that the meters accurately measure and keep records of water usage.
- 16. Installs new and/or repairs old link fences and gates by digging post holes using post hole shovels, setting fence posts in concrete and attaching fence fabric to posts to ensure fence lines are properly installed and secured.
- 17. Identifies the location of leaks in water pipes and mains by attaching clamps or patches to leaking pipes under direct supervision to identify the leak and/or by replacing sections of pipes to repair leaks.
- 18. Sets up and operates well drilling equipment, such as portable drill rigs, soil punches and augering equipment under direct supervision to assist in drilling wells, dams, and reservoirs and/or for drilling test holes to obtain core earth samples used by technicians for analyzing in the lab to determine the type of soil and water density/levels and to determine the needs and parameters for the project.
- 19. Constructs dikes and channels by digging and clearing channels of obstructions such as rock fall debris and vegetation using hand tools and heavy equipment, such as shovels, backhoes and excavators under direct supervision to help control the spread of irrigation, run-off and waste water in fields and channels.
- 20. Maintains City pools, fountains and water features by cleaning the tile, grout, concrete and/or metal surfaces with various chemicals and tools such as paint brush, scraper, grinder and roller by painting pool and fountain surfaces and by adding chemicals to the water such as chlorine, conditioner and base acid under direct supervision to help ensure the water in the pools/fountains are clean and safe for public use.
- 21. Replaces various water sprinkler components in City buildings, such as risers, valves, heads, pre-cut nipples, sections of plastic and galvanized and transit pipes using tools such as pliers and screwdrivers under direct supervision to repair broken water sprinkler lines and ensure they are working properly.

## Specialist Work and Maintenance:

22. Conducts timber-bridge and dock repair by cutting and placing heavy timbers into the docks using power saws, drills and basic hand tools under direct supervision to ensure the repairs are safe, follow work orders and supervisor's instructions.

- 23. Provides hand and power tools, such as drills, grinders, benders, shears, and saws to various journey-level specialists, such as Sheet Metal Workers, Structural Steel Workers, Plumbers, Pipefitters, and Welders by handing the tools over as needed during the installation, fabrication, repair and/or maintenance of various metal structures and piping systems, such as ducts, roof gutters, cornices, down spouts, tanks, and sinks and by providing measurements of ducts, spouts, and sheet metal using tape measure reels and digital tape measures to help maintain and repair various City buildings and piping systems.
- 24. Operates aqueduct, reservoir, and tower gates by manually raising and lowering them using gear reduction systems or cable winches under direct supervision in order to control the water flow in aqueducts and reservoirs.
- 25. Prepares for the recoating of roofs on City buildings by applying roofing paper to roofs using hand and power tools, such as a scraper, shovel, pneumatic nail gun or a skill saw in order to provide assistance to roofers in maintaining and repairing the roofing for various City buildings.
- 26. Prepares paint materials with the appropriate mixing techniques, paints lines, records measurements of lines painted and supplies painters with paint and other materials, such as brushes, rollers, and dryer guns to assist in the painting of various City buildings and structures.
- 27. Maintains recording pressure gauges and other hydrographic instruments, such as pressure recorders, elevation recorders and flow recorders by changing various parts, such as tubing and paper charts and by filling recorder pens with ink to ensure the readings are accurate.
- 28. Keeps shop, yard, and job site areas clean by gathering and disposing of trash and debris, and storing materials properly to easily locate materials at a later date and to maintain a safe and organized workspace.