

# WESTERN MICHIGAN UNIVERSITY

Final 11/13/14

**TITLE:** Lead Landscape Irrigation

**GRADE:** M - 6

**FUNCTIONS:**

This position provides journey level craft labor, working with tools to install, construct, repair, replace, overhaul, design, and perform preventive maintenance for irrigation sprinkling systems. The incumbent organizes and schedules assigned work crews so as to efficiently manage the materials and work-hours required for proper completion of work. The incumbent will also instruct and train others in the operation of irrigation clocks, systems, and maintenance. As appropriate, the incumbent will participate in the technical training of an apprentice as well as working with sub-contractors and vendors. The incumbent also determines inventory requirements for supplies and materials and notifies supervisory personnel when (re)ordering is necessary. It is also imperative that in the off-season months continuing education classes are attended to keep up on the most recent advances in irrigation technology. This position may operate heavy and light equipment required to install, maintain, and repair landscape grounds. The incumbent may operate air compressors and jack hammers to remove damaged or deteriorated cement and concrete and thus use any necessary tool when constructing finishing materials as needed for irrigation repairs.

Key duties and responsibilities include layouts and installation of existing system expansions. Pulls pipe as needed, installs and initializes controllers (Hunter, Rainbird, etc.), installs diagnoses and repairs wired and wireless rain sensors, troubleshoots irrigation systems and recommends solutions for repairs and more efficient water usage, adjusts heads and nozzles to ensure complete coverage of irrigated areas, locates existing zones and valves, prepares as-built drawings and zone charts for systems, properly turns on and tests irrigation systems in Spring, properly winterizes irrigation systems to prevent freeze damage to all exterior pipe and heads, professionally represents the University and the department by communicating the status of systems, water conservation recommendations, and proper watering schedules, etc.

In addition to maintaining irrigation inventory and systems this position may operate trucks with gross vehicle weights exceeding 26,001 lbs. with air brakes, forklifts, front-end loaders, backhoes, tractors with a variety of attachments, snowplows; tailgate trucks, and skid loaders with attachments. The incumbent will assist in snow removal with a shift in work time during winter months. During winter months, the incumbent operates snow removal equipment to remove snow anywhere on University property. These activities may be performed by heavy and/or light equipment, *or* done by hand.

The incumbent may use equipment to perform other landscape and grounds maintenance and installation functions. This position may have to attach trucks and tractors to accessory equipment. This position may utilize chain saws and other devices to remove dead, damaged, or diseased trees. The incumbent performs appropriate operational checks of all vehicles and equipment before, during,

and after each use. The incumbent inspects and tests all hitches to ensure that equipment/attachments are properly secured to vehicles. This position cleans and inspects heavy equipment after each use, and uncouples attachments.

This position maintains the work area, all tools, all equipment, all supplies, and assigned vehicles in a neat, clean, and orderly condition as well as performs all work in accordance with established safety practices. The incumbent must wear MIOSHA approved safety shoes at all times and must wear a hard hat, safety glasses, and ear protection when operating equipment and power tools. Other protective gear must be worn when appropriate. The incumbent must wear University uniform. This position may perform additional duties as requested by supervisory personnel.

### **QUALIFICATIONS:**

The incumbent must be able to read, write, comprehend written instructions, understand safety regulations governing the performance of job duties, and have basic computer knowledge to operate internet based operating systems. They must have sufficient writing and mathematical ability. The incumbent must be able to interpret complex blueprints, diagrams, written specifications and operating instructions. Completion of an apprenticeship program or an established certified training program recognized by the University and written verification of a minimum of five (5) years professional experience in landscape construction / installation work is required. Possession of a valid Michigan commercial driver's license (CDL) class "A" with air brake endorsement is required.

In order to perform the essential functions of the job, the incumbent must be able to lift 100 lbs. dead weight to/from a height of 36 inches. The incumbent must be able to lift 50 lb. bags of salt to a height of 4 feet to load salters. The incumbent must be able to exert 100 lbs. of pressure to hydraulic couplers to engage/disengage attachments/equipment. The incumbent must be able to exert 80 lbs. of force horizontally, vertically, and obliquely in order to pull-start equipment. The incumbent must be able to lift shovels filled with sand, slush and other debris, with total weight of 20 lbs., to shoulder height as many as 100 times per day.

Full range of repetitive motion in all major joint structures is required for essential job functions beyond operating equipment, lifting, carrying, and manual equipment. The incumbent must be able to use ladders for climbing up and down to a height of 20 feet. The incumbent must be able to climb up and down from heights up to 48 inches as often as 50 times per day in order to enter/exit from truck, tractor and backhoe cabs, and must be able to enter and maneuver in restricted spaces in order to enter cabs and operate vehicles and attached equipment. The incumbent must be able to open engine housings and exert 30 lbs. of force or more for inspections. The incumbent must be able to bend, flex, extend, and rotate the shoulder, waist, elbow, and wrist joints constantly and repeatedly. The incumbent must also be able to bend, flex, extend and rotate the hip, knee, and ankle joints constantly and repeatedly in order to complete essential job functions along with operating equipment mechanisms. In order to operate tractors and trucks with snow plows, salt trucks, and skid loaders with buckets and backhoe attachments, the incumbent must be able to use both hands and both feet simultaneously to operate steering mechanisms, vehicle controls and levers operating attachments. Full use of both hands is required to properly operate the high-ranger (man-lift) truck without jarring the occupant of the bucket, and to operate the lift device while riding in the bucket.

Excellent manual dexterity is required to operate, adjust timing mechanisms in, and splice wires in the electromechanical controllers in irrigation systems. The incumbent must be able to descend to, and rise from, a kneeling and a prone position as often as 20 - 30 times per day in order to access irrigation system components and to perform other grounds construction and maintenance work. The incumbent must be able to work below ground from a kneeling or prone position to perform the functions of the job. The incumbent must also be able to enter, exit, and work in confined spaces, such as manholes and irrigation meter vaults.

In order to obtain a valid Michigan commercial driver's license, the incumbent must possess 20/40 vision with or without corrective lenses. The incumbent must possess sufficient visual acuity with or without corrective lenses to visually inspect vehicles, engines, and equipment and to accurately align vehicles with couplers/hitches on equipment to be attached to vehicles. The incumbent must be able to identify debris and other road/ground hazards while operating vehicles and equipment. The incumbent must possess sufficient auditory acuity, with or without accommodation, to hear vehicle warning sounds signaling that vehicles/equipment are operating/moving in reverse. The incumbent must be able to tolerate, with some type of hearing protection, exposure to noise levels of 90 decibels.

The incumbent must be able to tolerate exposure to extreme temperatures ranging from -25<sup>0</sup> F to 120<sup>0</sup> F, depending on seasonal work assignments. The incumbent must be able to tolerate exposure to dust, dirt, pollen, grass and grass clippings, fertilizers, weed killers and other lawn care chemicals, as well as to road salt, sand and ice melt. The incumbent must be able to tolerate exposure to gasoline, diesel fuel, motor oil, other lubricants, antifreeze, hydraulic fluid and other petrochemicals. The incumbent must be able to tolerate prolonged exposure to sunlight.

A physical examination administered by the employer's designated physician is required to determine the incumbent's ability to perform the essential functions of the job without accommodation.