

49 **(3) Restaking and Reguying.** Restake, retighten or repair
50 guys as necessary. Reset plants to their original position.

51
52 **(4) Replanting.** Notify the Engineer of trees, shrubs or ground
53 cover that are not in good growing condition and need to be
54 replaced. Remove and dispose of unwanted plants. Replace with
55 stock from the State’s nursery; location will be designated in the
56 contract documents. If State-furnished plants are not available, the
57 Engineer will request a proposal and negotiate for plants.

58
59 **(C) Weed Control.** Keep planted areas at least 90 percent free of
60 grasses that are incompatible with surroundings. The Engineer will decide
61 compatibility. Keep hardscaping, including boulder and aggregate beds,
62 free of weeds. Remove weeds by roots. Dispose of trash in appropriate
63 containers. Apply herbicides in accordance with Section 619 – Planting.
64 Obtain the Engineer’s acceptance of herbicidal program before
65 proceeding.

66
67 **(D) Disease and Insect Control.**

68
69 **(1) Inspection.** Inspect plants, including lawn grass, every
70 week for disease and insect infestation. Treat infected plants
71 immediately. Prune trees and shrubs to remove damaged or
72 diseased growth.

73
74 **(2) Replacement.** Remove immediately and replace dead or
75 dying plants. Replace with species and size originally planted, or
76 with plant obtained from the State’s nursery.

77
78 **(E) Fertilization.** Obtain the Engineer’s acceptance of fertilization
79 schedule before proceeding. Fertilize in accordance with manufacturer’s
80 recommendations. Exercise caution while fertilizing to prevent plant burn
81 and excessive runoff.

82
83 **(F) Irrigation Maintenance.** Irrigate plants to sustain healthy growth.
84 Keep ground moist but not saturated. Regulate rate of watering to prevent
85 erosion and formation of gullies.

86
87 **(1) System Operation.**

88
89 **(a)** Water automatically as much as possible. Water
90 manually if there is a problem with automatic system.

91
92 **(b)** Program automatic controllers to water between
93 midnight and 7 a.m. Set earlier start time if it is extremely
94 hot and plants need more water. Program drip systems to
95 run at any time.

96

- 97 (c) Adjust program for seasonal and situational variations
 98 in need for water. Provide additional personnel and
 99 materials if needed during extremely hot weather, during
 100 extended holiday periods, and in event of breakdown of
 101 automatic system.
 102
- 103 (d) Turn off irrigation system if it is raining and ground is
 104 damp enough to sustain plants.
 105
- 106 (e) Restore immediately neighboring properties that are
 107 damaged by excessive irrigation. The Contractor will be
 108 responsible for cost of these repairs.
 109
- 110 (f) Adjust irrigation program weekly at controller. Set
 111 initially each valve station for peak use, assuming hottest
 112 season and longest run time. Change run time every week,
 113 using controller's percentage function, to fit situation at site.
 114
- 115 **(2) System Repair.**
 116
- 117 (a) Keep controller and valve boxes clear of dirt and
 118 debris. Replace, repair, adjust, and perform other work to
 119 irrigation system to ensure continued optimal performance.
 120
- 121 (b) Replace or repair equipment as needed due to normal
 122 wear and tear, including mains, laterals, filters, screens, drip
 123 emitters, control valves, control wiring, controllers, back-up
 124 batteries, quick coupler valves, sprinkler heads, risers,
 125 sleeves, valve boxes, pullboxes, lids, covers, and hose
 126 bibbs.
 127
- 128 (c) Notify the Engineer immediately of damage to
 129 irrigation system during course of the contract due to
 130 vandalism, theft, accidents caused by others, and acts of
 131 God. The State will be responsible for these repairs and can
 132 negotiate additional cost with the Contractor if report is made
 133 promptly.
 134
- 135 (d) Replace irrigation components using new and original
 136 equipment. The State will allow substitute equipment only if
 137 original has been discontinued, there is no other source, and
 138 the State receives written request.
 139
- 140 (e) Perform repairs in accordance with the contract
 141 documents for original installation of irrigation system.
 142
- 143 (f) The State will not consider alteration of irrigation
 144 system to be landscape maintenance.

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(3) System Maintenance. Assign employee to become familiar with irrigation system and to run system manually at least once a week. Employee’s responsibilities shall include:

(a) Observing efficiency of watering, adjusting controllers for optimal performance, making minor adjustments and repairs.

(b) Checking watering for coverage and waste, cleaning and adjusting sprinkler heads as necessary, keeping drip emitters free of sediment, flushing drip systems once a year and whenever there is accumulation of sediment.

(c) Watching for broken sprinkler heads, damaged emitters, clogs, malfunctioning valves, leaks, and other performance-hampering situations.

(d) Being alert especially for plants that show signs of wilting. The Contractor will be responsible for plants that die from lack of water.

(4) Equipment Repair.

(a) Quick Coupler Valves. Replace flange packing, which will be leather or neoprene, when packing becomes worn through use.

(b) Remote Control Valves. Repair remote control valve if there is leak, valve does not open or close, or valve causes constant weeping of sprinkler heads. Replace defective part in accordance with manufacturer’s instructions in repair kit. Before reassembling valve, clean parts that will be needed for bleeding.

(c) Ball Valves. Replace ball valve that is faulty.

(d) Sprinkler Heads.

1. Use adjustment points to reset arc and radius of sprinkler heads that are overspraying. To clear clogs, remove internal assembly, clean screen filter, thread fine wire through orifice of nozzle, and reassemble head. Run test to confirm that clog has been cleared. Clean screen filters at least once a month. Replace screens that are damaged.

642.04

240 Provide five days advance notification to the Engineer for
241 scheduling of this meeting.

242
243 **(2)** Maintenance requirements are subject to adjustment as
244 plants mature. Coordinate work with the State Landscape Architect
245 to allow for timely changes.

246
247 **(3)** Schedule periodic walk-throughs with the Engineer to ensure
248 that work is being done in accordance with the contract.

249
250 **(4)** Provide written status report, detailing the following:
251
252 **(a)** Watering, fertilizing, herbicidal treatment, and
253 insecticidal treatment scheduled for current month.

254
255 **(b)** Landscape maintenance tasks that were completed
256 during previous month.

257
258 Submit status report to the Engineer by tenth day of month,
259 or next working day if tenth day falls on weekend or holiday.

260
261 **642.04 Measurement.** The Engineer will measure plant maintenance and
262 irrigation maintenance per month in accordance with the contract documents.

263
264 **642.05 Payment.** The Engineer will pay for the accepted plant
265 maintenance and irrigation maintenance at the contract unit price per month, as
266 shown in the proposal schedule. Payment will be full compensation for the work
267 prescribed in this section and the contract documents.

268
269 The Engineer will pay for each of the following pay items when included in
270 the proposal schedule:

| | Pay Item | Pay Unit |
|-----|------------------------|-----------------|
| 271 | | |
| 272 | | |
| 273 | | |
| 274 | Plant Maintenance | Month |
| 275 | | |
| 276 | Irrigation Maintenance | Month |
| 277 | | |
| 278 | | |
| 279 | | |

END OF SECTION 642