The sprinkler shall be of the gear-driven rotary type, capable of covering a \_\_\_\_\_\_\_\_ foot (meter) radius at \_\_\_\_\_\_\_\_ PSI (bars; kPa) with a discharge rate of \_\_\_\_\_\_\_\_ GPM (m3/hr; I/min).

The sprinkler shall have available eight (8) interchangeable standard 22.5° trajectory nozzles and eight (8) 15° trajectory low-angle nozzles discharging 30.5 to 83.3 GPM (6,93 to 18,92 m3/hr; 115,5 to 315,3 I/min).

The sprinkler shall be a full-circle equipped with triple opposing nozzles. The sprinkler’s short/mid-range nozzles shall have a pressure and velocity reduction system to ensure even short/mid-range water distribution efficiency through the creation of large water droplets. This pressure reduction system shall minimize wind drift while protecting newly planted seeds from washout. The sprinkler shall have “back-nozzle” capability by removing one or two rear-facing plugs and installing nozzles. Available “back-nozzles” shall include any short or mid-range G900 Series nozzles, G70 primary nozzles or any PGP style nozzle.

The sprinkler shall have four model variations available:

**G990C – Check-O-Matic and N. O. Hydraulic Valve-In-Head**

The sprinkler shall be equipped with a check valve that will prevent system drainage caused by elevation changes up to 25 feet (7,6 m). The sprinkler shall also be easily convertible for connection to a normally open hydraulic system. This valve shall be located within the base of the sprinkler body.

The sprinkler shall provide the means to perform the following without digging or disruption of the surrounding turf: connections of the hydraulic tubing, testing of hydraulic tubing line pressure and flushing of hydraulic tubing.

**G990E – Electric Valve-In-Head**

The sprinkler shall be equipped with a solenoid actuated, electric valve. The valve shall be an integrated design that includes valve, valve seat, seat seal and inlet rock screen. This valve shall be located within the base of the sprinkler body and be removed/replaced with needle nose pliers or valve servicing tool.

The sprinkler shall be equipped with a pilot valve assembly with an on-off-auto selector, variable pressure regulation and internal porting of discharged water to prevent excess water around the head. Pressure regulation shall occur in both auto and manual modes. The sprinkler’s design shall prevent tampering of the pressure regulation adjustments from the installed exposed surface of the sprinkler.

The sprinkler’s solenoid shall be a 24 VAC, 50/60 cycle version requiring .350 mA inrush current and a .190 mA holding current at 60 cycles and .370 mA inrush current and a .210 mA holding current at 50 cycles. The solenoid shall have a serviceable plunger and be captive within the solenoid coil.

The sprinkler shall provide the means to perform the following without digging or disruption of the surrounding turf: making electrical connections, servicing solenoid, adjusting and servicing pressure regulator, servicing pilot valve and connecting pilot valve tubing.

The sprinkler’s inlet valve shall be equipped with a filtering system that is equivalent to a minimum 120-mesh screen. The inlet valve shall have a velocity control disc to slow the water velocity and minimize surge/hammer during valve opening and closure. The inlet valve shall have a tapered valve seat for enhanced sealing and contamination resistance.

**G990D – Single Station Decoder-In-Head**

The sprinkler shall include all the features of the G990E described above. The sprinkler shall include a single station integrated decoder module. The decoder and solenoid shall be two separate assemblies in order to minimize long-term servicing costs. The separate decoder and solenoid assemblies shall not have splice connectors between them. The decoder and solenoid assemblies shall be accessible for service and replacement from the turf surface without excavation. The decoder’s station address and diagnostics shall be accessible and programmable wirelessly from the sprinkler’s upper flange surface with no disassembly of the sprinkler.

**G990DD – Two Station Decoder-In-Head**

The sprinkler shall include all the features of the G990D described above. In lieu of the single station decoder, the sprinkler shall have a two-station decoder. The wire leads for the second station shall protrude beneath the sprinkler’s flange compartment to facilitate connection of the second sprinkler.

The sprinkler shall have a minimum 3” (8 cm) pop-up stroke that raises the rotating nozzle above normally maintained turf grass heights and protects the water distribution profile. The sprinkler shall have a 1½” female ACME inlet. The sprinkler shall be constructed such that all internal body components can be serviced from the surface and through the top of the sprinkler without disturbing the turfgrass. The sprinkler shall have an integrated snap ring with wiper seal to retain the pop-up riser. The integrated snap ring shall be attached to the sprinkler’s flange creating a closed-case design.

The sprinkler shall be equipped with a flanged body for stabilization and protection from heavy equipment. The flange compartment lid’s upper surface shall include a large recessed area for installation of a yardage marker placard. An optional flange compartment lid shall be available with a large raised yardage marker area for direct-engraving and paint-filling of the yardage marker numbers. The body of the sprinkler shall be constructed of corrosion-resistant, impact resistant, heavy-duty A.B.S. plastic. Sprinkler shall have optional identification for reclaimed water applications via a field-installed purple logo cap on the riser assembly.

The sprinkler shall be manufactured by Hunter Industries Incorporated, San Marcos, California.