Precision™ Series Spray Nozzles

with H2O Chip Technology

1”/hr. Matched Precipitation

Bidding Specification

The 570Z or equivalent spray head shall be equipped with a PrecisionTM Series Spray Nozzle. The nozzle shall be capable of delivering \_\_\_\_\_\_\_\_ GPM to a radius of \_\_\_\_\_\_\_\_\_\_\_ feet at an operating pressure of \_\_\_\_\_\_\_\_ PSI. All Precision™ Series Spray Nozzles shall have a precipitation rate of 1”/hr. Any Precision™ Series Spray Nozzle shall be interchangeable to any other member of the nozzle family across all arcs and radii.

The Precision™ Series Spray Nozzles of any given radius shall be comprised of a selection for 60°, 90°, 120°, 150°, 180°, 210°, 240°, 270°, and 360° arcs. In addition, side and corner strips are available with 6 different models. Appropriate arcs shall be installed per the Irrigation Plan of this Project Specification.

The nozzle shall utilize an internal oscillating chamber (chip) to accomplish water distribution from the spray head. These chips shall be mounted in sequence around the circumference of the nozzle turret to deliver greater arcs than the standard 90° or 60° arcs.

The nozzles shall be constructed of a non-corrosive, impact-resistant, UV-resistant, heavy duty plastic material (PBT). The attached screen shall be molded of high density polypropylene. The chip material shall be PBT.

The screen mesh shall be constructed such that any material moving through the screen will be smaller than the smallest orifice of any Precision nozzle preventing any nozzle plugging from external or internal debris. Sprinklers shall be mounted at grade and check valves should be used on slopes to prevent low head drainage.

The nozzles shall have a stainless steel radius reduction screw. This screw shall allow reduction of radius of up to 25% of the original designated radius without affecting the precipitation rate.

The nozzles shall be color coded and stamped as follows:

• Color coding on top shall indicate radius—red for 5’, green for 8’, blue for 10’, brown for 12’, and black for 15’

• Arc shall be designated by a white stamping of top of the nozzle showing the pattern

• The model number shall be designated by a white stamping on the top of the nozzle. All model numbers shall begin with O followed by the radius and the arc.

The PrecisionTM Series Spray Nozzles, when properly spaced and maintained, shall deliver irrigation efficiency where SC values are ≤ 1.5 and CU values are ≥ 75.

Nozzle models O-X-X shall be able to be installed in popup bodies having a 5/8-27 UNS male threaded stem, at all common popup heights. Nozzles shall also be able to be attached to a 1/2 FIPT x 5/8-27 UNS male threaded adapter for use on fixed pipe risers. Models O-T-X-X shall be able to be installed in popup spray head bodies having a 5/8-28 UNS female threaded stem, at all common popup heights. Nozzles shall also be able to be attached to a 1/2 FIPT x 5/8-28 UNS female threaded adapter for use on fixed pipe risers.

The sprinkler shall be sold by the Toro Company, Irrigation Division, Riverside, California.