Approved Materials List for Parks & Right of Ways

2020

IRRIGATION CONTROLLER(S)

The irrigation controller have been field tested a minimum of two years and approved for use by the Parks Department. This control is used for our overall water conservation strategy in the City of Goodyear. All electric controllers shall be hard wired on 120VAC single phase, 1 amp on their own circuit. Output shall be 24VAC, 1.5 amp max

Parks and Right of Ways

Calsense Controller CS3000 – (X) – (X) – (LR)

City of Goodyear Standard Detail # G-3620-2

IRRIGATION CONTROL VALVES

No brass or bronze valves will be accepted. Minimum valve size shall be 1". All parts manufactured to ASTM Standards. A ball valve shall be installed with each zoned electric valve. All valves shall be purchased for their desired use of potable or non- potable water.

Electric Valves

- Rainbird- model PEB(NPT) Turf w/ Potable Water
- Rainbird- model PESB(NPT) Turf or Drip w/ Non-Potable Water
- RainBird- model DVF(NPT) Drip or Bubblers w/ Potable Water
- Hunter- model ICV potable water –for turf or drip areas
- Hunter model ICV- non potable water for turf or drip areas
- Hunter model PGV potable water– for drip and bubbler valves (1"0 only)

City of Goodyear Standard Detail # G-3620-5 & G-3620-6

Ball Valve

- PVC- Schedule 80(SxS) model Spears IPS 2622 Size ½"- 4"
- Bronze Full Port- Watts, Febco. Used only on main lines between meter & backflow device

City of Goodyear Standard Detail # G-3620-8

Ductile Iron 3"- 12" Gate Valves

a. American Flow - Model AFC 2500-1b. Claw - Style 2638 or 2639

c. M&H - Style 7000d. Kennedy - Style 7000

e. Mueller - Series 2361 or 2362

f. US Pipe - Model HSP1

City of Goodyear Standard Detail # G-3620-9

Master Valve and Flow Sensor

Model Rainbird PEB - Normally closed (only) 1" to 2"

- Hunter ICV Normally closed (only) 1" to 3"
- Netafim Octave Ultrasonic Sensor Model 360ct06gal10
- Flow Sensor Flomec QS200 1" to 4"

City of Goodyear Standard Detail # G-3620-07

Valve Boxes

- Jumbo Boxes used on all valves Rainbird Model VB-JMB or equivalent approved by parks department
- 10"round boxes Rainbird Model VB-10RND used on ball valves, isolation valves, wire splices, quick couplers,
- 7" round boxes Rainbird Model VB -7 RND used for flush caps and manifold outlets use same colors schemes Jumbo Boxes
- All round and valve boxes shall be engraved with controller and station numbers on lids and inside of boxes
- All Jumbo boxes located in turf to have bricks under box for support (would prefer that valve boxes be located in granite areas when possible)
- Color scheme green in turf, tan in granite and purple for reclaimed

Sprinklers

Spray heads

- Rain Bird- 1800 series with adjustable Van Nozzles
- Hunter- adjustable Pro-Spray with pro spray adjustable nozzles

Rotor Heads

- Rain Bird- 3500, 5000+, 6504, 8005
- Hunter- PGJ, I-20, I-25, I-40, I-40/ON (Full Circle)

Bubblers

• Rainbird 1404 1 Gal Fixed or equivalent

Pressure reducers and filters

Rainbird model PRF-100-RBY or equivalent

Emitters

- Rain Bird model XERI bug emitter .5-gal -2.0 gal per hour or equivalent approved by parks department
- Hunter Model HE self-piercing barb .5 gal 2.0 gal

Manifold

- Bowsmith model M200L10 1.0 gal /hour
- Bowsmith model M200L20 2.0 gal / hour
- Rain Bird model EMT- 6XERI, 6 outlet manifold

Micro tubing

• Rainbird XQ -100' or 1000' roll of ¼ " tubing or equivalent approved by parks department

Cross Connection Devices

Reduced Pressure Backflow Preventer Assembly

- 1-2" Febco-825Y, 825YA Reduced Pressure
- 2-1/2" + Febco- LF860, LF 880V

City of Goodyear Standard Detail # G-3620-1

• Enclosure – GuardShack Model – GS-(1,2,3)-INT-T

Piping

Exposed Piping

• Copper-Type K

Pipe between Water Meter and Vacuum Breaker

• Copper-Type K

Main & Lateral Lines (PVC Pipe)

- Schedule 40 up to 2.5"
- Class 200 3" +
- Connections shall be solvent welded

Note *

Fittings to match pipe material type and ratings, Schedule 80 to be used on all threaded fittings

Connections

- PVC to Metal- Male end shall be PVC Schedule 80, female end shall be of metal
- Glue
 - o Purple primer
 - o 725 Wet n Dry Glue up to 6"

Note*

Appropriate glue must be used for size /type of pipe

<u>Sleeves</u>

- Shall be Schedule Class 200 PVC or better
- Recommend 6" separation between sleeves
- 2 times the size of pipe(s) for which it is used for with a minimum of 2"

City of Goodyear Standard Detail # G-3620-11

Miscellaneous Items

Pump Systems

• Approved by the Parks Department

Electrical Wire & Connections

- UL Type UF-600V, No. 14 gauge min., solid copper, PVC insulated, feeder cable
- Dri-Splice- DS-400 pre-filled only
- 3M DB Series

Slip Fix

- Dawn Quick Repair Model KRC429 ½" to 2"
- ROMEC Compression fittings for 2-1/2" 6"

Coupling for larger fixes

• ROMEC Ductile Iron Coupling -4" - 10" or equivalent approved by parks department

Unions

• Flo by NDS – Slip types ¾"- 2"

Swing joints

- RainBird Model TSJ PRS sizes ½"-1"
- Hunter Model SJ swing joint ½" 1"

Quick couplers

- Rainbird Model 44-RC- 1" threaded
- Rainbird Model 7 1.5" threaded
- Hunter- Model HQ-5-RC –1 piece body threaded