IRRIGATION PLAN

1" = 20'

## IRRIGATION NOTES

- This drawing is for diagrammatic purposes only. Actual layout of sprinkler heads, valves, controller and other equipment shall be determined on site. Minor field adjustments shall be made
- at no additional cost to the owner. 2. Contractor is responsible for verifying location of all site utilities and making the necessary adjustments to the irrigation system
- to accommodate the infrastructure. 3. Mainline shall be 1.5" diameter Class 200 PVC pipe. Lateral lines
- shall be Class 160 PVC, sized as shown on plan. Minimum lateral size shall be 1". (All solvent—weld pipe)
- 4. All zones shall be connected to the mainline with Class 200 PVC, sized as follows: 0-16 gpm use 1"; 17-28 gpm use 1.25".

  5. All fittings are to be solvent weld Schedule 40 PVC. 6. Remote control valves shall be as noted in legend.
- All valves shall be installed in valve boxes with the lid mounted at ground level. Valve boxes shall be Carson 12"x18" rectangular or 10" round types. All valve boxes shall contain 1/2" pea gravel from the bottom of the box up to the bottom of the pipe.
  7. Quick coupling valves (1") shall be mounted on 1" triple elbow swing joints. One quick coupling key shall be provided with the
- 8. All pop—up irrigation heads shall be installed on FunnyPipe, or flexible cut—off risers, with a clearance of 6" (minimum) from the edge of any nearby paved area.
- 9. Contractor is résponsible for installing a Rainbrain rain sensor in vicinity of controller; coordinate mounting of equipment with owner.
- 10. All piping shall be installed: mainline at 18" below grade, laterals at 12"-16" below grade.
- 11. This irrigation system was designed assuming that at least 28 gpm will be available, at 57 PSI (min.) at the point of connection. 12. All lateral pipe shall be pulled with a vibratory plow. The 'slit—dome' shall be compacted to its original grade. 13. Contractor is responsible for settling of all trenches and sprinkler
- heads for a period of one year. 14. The irrigation controller shall be as noted in the legend. The controller shall be mounted as directed by the owner. The owner shall provide 120V—AC power to the controller's location. Electrical connections and installations shall be performed in accordance with
- local code requirements. 15. All station wire shall be #14. The common wire shall be #14 gauge and colored white," while the station wire shall be of
- one other color. 16. The 1" Quick coupling valve located at the irrigation water supply point shall provide a point of injection of compressed air (40 psi maximum) to purge the system of retained water in preparation
- for winter shut-down of the system. 17. All sleeves 4" and smaller shall be Schedule 40 PVC. Sleeves 6" and larger shall be Class 200 PVC. All sleeves shall be twice the nominal size of the pipe to be carried. Sleeves to carry wire only shall be 2". Depth of the top of the sleeve shall be 18" below subgrade. Irrigation contractor shall place all sleeves as shown, unless directed otherwise.
- 18. All heads shall be 4" pop-ups except in groundcover/perennial areas where plant material will be less than 18" high. In these areas, use 12" pop-ups.
- 19. Contractor shall warranty the system for one full year from the date of acceptance.
- 20. Contractor shall provide 'As—Built' drawings of the completed installation to the owner on reproducible vellum (30"x42").
- 21. Contractor shall conduct a training session with the owner (or representatives) demonstrating the operation of the system
- and the controller. 22. Contractor shall verify location of property lines, right-of-ways, and easements on the site. They shall confirm these locations with the owner, then obtain the necessary permits/approvals before installation commences.

## IRRIGATION LEGEND

— — Mainline (1.5" Class 200 PVC)

- ————— Laterals (Class 160 or 200 PVC); sized as shown on plan.
- $\equiv$   $\equiv$   $\equiv$   $\equiv$  Schedule 40 PVC Sleeves 2" unless noted otherwise, #" Sleeve size

Controller:
Toro Turf Pro Controller (#TP-06-0D)
Weathermatic LMC (#LMC14)
Rainbird ESP (#ESP-6LX)

- ▶◀ Pressure Vacuum Breaker backflow preventer (Febco #765—15)

- → Quick Coupling Valves:
  Toro #474—00, Weathermatic #V100, or Rainbird #5RC on swing joints, in valve boxes.
- Electric Control Valves:
  Toro's #254-06-04, Weathermatic's #12024EF-10, or Rainbird's 100-PGA (1")

● ● ● ● ● Toro 570-Z, Weathermatic LX, or Rainbird's 1800 spray heads with MPR nozzles. Use PC option on all nozzles. To accommodate site plan variations, contractor shall select from MPR nozzles: 5,8,10,12 or 15' series and/or appropriate special-pattern nozzles, when necessary. Contractor is responsible for the appropriate nozzle selection and arc adjustment to provide 100% coverage of the conditions as they exist on site.

Top = Zone/Controller station assignment Bottom Left = Size of valve Bottom Right = Gallons per minute for that zone

CERTIFICATION

CONSTRUCTION DOCUMENTS

> CARDINAL PARK NATATORIUM

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DAY MULLINS

DIERDORF

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Planning

302-01-12-Natatorium-Orig-2003-Arch-irrigation-I1.01-site plan-BD-TIFF

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IRRIGATION PLANS & DETAILS

OFFICIAL BID DOCUMENT