



IRRIGATION NOTES:

- Irrigation system design requirements: 60 GPM @ a minimum of 60 PSI at the point of connection. The Irrigation Contractor shall verify the available GPM and PSI prior to installation of the system.
- Do not willfully install the irrigation system as shown on the drawings when it is obvious in the field that conditions exist that might not have been considered in the design process. For example : obstructions, grade differences, water levels, dimensional differences, etc. Refer to the Landscape Plan to avoid conflicts with proposed trees or shrubs.
- Piping may sometimes be indicated as being located in unlikely areas: i.e., under buildings or pavement, outside of property lines, in lakes or ditches, etc. This is done for graphic clarity only. Whenever possible, piping is to be installed in open, green areas.
- If required, the Irrigation Contractor shall provide the necessary "Right of Way" use permits.
- Pipe sizes shall conform to those on the drawings. Substituting with smaller pipe sizes will not be permitted.
- Mainline is to be installed with a minimum of 24" depth of cover. Lateral lines are to be installed with a minimum of 12" depth of cover.
- Unless otherwise indicated, all sleeves are to be PVC Sch 40 and two (2) nominal sizes larger than the pipe to be sleeved. For example: The sleeve for a 2" pipe shall be 3". No irrigation sleeve shall be smaller than 2". Sleeves under paved surfaces shall be installed by the SITE CONTRACTOR UNDER ALL PAVED SURFACES. Sleeves shall extend beyond paved surfaces a minimum of 8-inches and end of pipes shall be ducted taped. A 3/2"x2 inch stake shall be staked at each end of stake irrigation sleeve. Blue for potable irrigation sleeve; Purple for reclaim sleeves, stake shall be driving a minimum of 1 foot into the ground and 2 feet of above the finish grade. Irrigation contractor shall coordinate location with the site contractor.
- Wherever practical, install valves in mulched beds and/or out of high traffic areas. All valves and wire splices shall be installed in fiber concrete valve boxes with diamond plated steel lids (available from Ferguson Waterworks):  

Remote Control Valves	(16"w x 25 1/2" x 12") std. rect. box
Isolation Gate Valves	(16"w x 25 1/2" x 12") std. rect. box
Wire Splices	(16"w x 25 1/2" x 12") std. rect. box
- The bottom and sides of the valve boxes shall be lined with landscape fabric. Install a 3" deep bed of gravel on the landscape fabric to create a drainage sump.
- All valve box are fiber concrete 13" 24"x12" BX W.C.I RDR Lid Model No. SP-A0132412M with metal flap LIDS to be painted "PURPLE" for reclaim and painted "BLUE" for irrigation potable water BY IRRIGATION CONTRACTOR provide sample paint colors to Owner for approval prior to painting lids. Unpainted FDOT traffic rated boxes are available from Ferguson Waterworks, FEL-Tampa FL Waterworks #044, 8008 E. Sligh Ave. Tampa, FL. 33610-0000, phone 813-627-1240, fax 813-627-1299 approx. cost \$124.40 each at time of this post on plan. No substitution will be accepted for this line item unless approved by Owner.
- Refer to Valve Designation Symbols for controller, station number and designed flow rate for each remote control valve.
- The two-wire path between the controller and the decoders shall be two (2) UL Listed, single strand, type UF 600 Volt control cables (12-1 AWG). Use one (1) RED and one (1) BLUE colored wire to match color coded connections on the Decoders. Maximum distance from the controller to the furthest decoder shall be 1,500'. Install Decoder Cable in a 1" PVC conduit.
- All Decoders shall be installed in the valve box along with the solenoid that they are connected to.
- All splices to the control wiring shall be made with 3M #DB, 6 600 volt, UL Listed direct bury splice kits Use "yellow" or "red" kits as needed. All control wires shall be installed in electrical conduits no small than 1 inch diameter with 90 degree sweeps.
- All pop-up sprinkler heads shall be installed level and flush to grade. Mount all sprinklers on flexible connections as follows:  

1/2" inlet spray heads	18" of 3" Heavy Wall PVC IPS Hose
3/4" inlet rotor heads	18" of 3" Heavy Wall PVC IPS Hose
- All sports field turf irrigation heads shall be manufactured by HUNTER PGP ULTRA /I-20 with Blue Standard Nozzles no substitutions will be allowed.
- The tops of all shrub sprinklers shall be installed 12" above the height of the surrounding plant material. For plant heights of 12" or more, support the riser with a 1"x1" galvanized "L" stake and nylon cable ties. All risers shall be placed a minimum of 12" from any sidewalk, edge of pavement or structure and a minimum of 24" below finish grade and 2 inches below top of irrigation head.
- Location of all sprinkler heads shall be site adjusted to minimize water overthrow onto building surfaces and walkways. Throttle valves on spray zones as required to prevent fogging.
- Exact controller location(s) shall be coordinated with an Owner's Representative prior to installation. Unless otherwise stated, the General Contractor shall provide 110 volt power to the controller location(s). The Irrigation Contractor is responsible for the connection from the power source to the controller(s). For outdoor mounted controllers, the 110 volt service to the irrigation controller shall be in conduit. All 110 volt electrical work shall meet Local Code.
- At each irrigation controller, install a "secondary surge arrester" to the incoming (120 volt) power supply (Intermatic #AG2401 or equal).
- At each irrigation controller, install an "supplementary earth ground grid" with a minimum of two (2) 4" x 96" grounding plates. Test the resistance to earth per NFPA Standard #780. A acceptable earth ground should have 10 ohms or less resistance. Use more plates or grounding rods as needed to achieve the desired resistance reading.
- The wireless rain shutoff device shall be installed to meet local codes and/or minimum manufacturer's recommendations. Obstructions, vandalism and ease of service shall be considered in locating the device.
- The IRRIGATION CONTRACTOR shall prepare an AS-BUILT drawing on reproducible paper detailing the actual installation of the irrigation system. The AS-BUILT drawings shall locate all main line piping, control wires, wire splices, sleeves and valves by showing exact measurements from permanent features (buildings, edge of pavement, power poles, fire hydrants, etc.). Include depth of cover on mainline and sleeves.
- No product substitutions will be permitted without the written permission of the Owner's Representative. Irrigation Contractor to provide submittals to the Owner's Representative for approval prior to installation.
- Any other equipment required that is not other wise detailed or specified shall be installed as per manufacturer's recommendations and local code.

FIELD CHANGES:

This Irrigation Design was based on the most recent site and landscape plan available to the Irrigation Designer at the time of the design. The following irrigation principals were incorporated into this design:

- Dedicated bubbler zones for all new trees.
- Dedicated spray zones for all new annual beds.
- Landscape beds and sod are on separate zones.
- Spray heads and rotator / rotors are on separate zones.
- All sprinkler heads within a zone are "matched precipitation rate".
- "Single row" sprinklers (along edge of pavement, fence line, pond bank) are on separate zones from areas covered by "square" or "triangular" spaced sprinklers.

Site and / or Landscape changes that were made after the time of this design will require Field Changes. Field Changes made by the Irrigation Contractor that do not incorporate these irrigation principals will not be accepted and will be corrected at the Irrigation Contractors expense.



Know what's below.  
Call before you dig.

TICKET NUMBER(S): 005101564

RECORD DRAWINGS							
SURVEYED BY	DRAWN BY						
REVIEWED BY	PROJECT ENGINEER	DATE					
APPROVED BY	CITY ENGINEER MICHAEL D. GULLEN, P.E. # 33721	DATE					
				NO.	REVISION	BY	DATE
				2	IRRIGATION PLANS- PLAN NOTES	LC	5.14.21
				3	IRRIGATION PLANS	LC	3.24.21

	CITY OF CLEARWATER, FLORIDA PARKS & RECREATION DEPT. 100 S. Myrtle Ave. Clearwater, FL 33756
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PREPARED BY: <b>PENNONI ASSOCIATES INC.</b>	5755 Rio Vista Drive Clearwater, FL 33760 T 727.536.8772 Florida COA: 7819
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BELMONT PARK 1535 SOUTH DR. MLK JR. AVENUE SITE IMPROVEMENTS BID DOCUMENTS EXHIBIT B — IRRIGATION DETAILS	
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DRAWN BY MCE	DESIGNED BY MCE	CHECKED BY L. CHIN	CLEARWATER CONTRACT NO.
SCALE VERT. NONE	SURVEYED BY CITY OF CLEARWATER	BOOK NO.	CLEARWATER JOB NO.
HORIZ. N.T.S.	DATE DRAWN MAR. 24, 2021	DWG NAME CLWRC20007	SHEET NO. IR-2
LEROY CHIN FL RLA NO. 0001206			MARCH 24, 2021 DATE