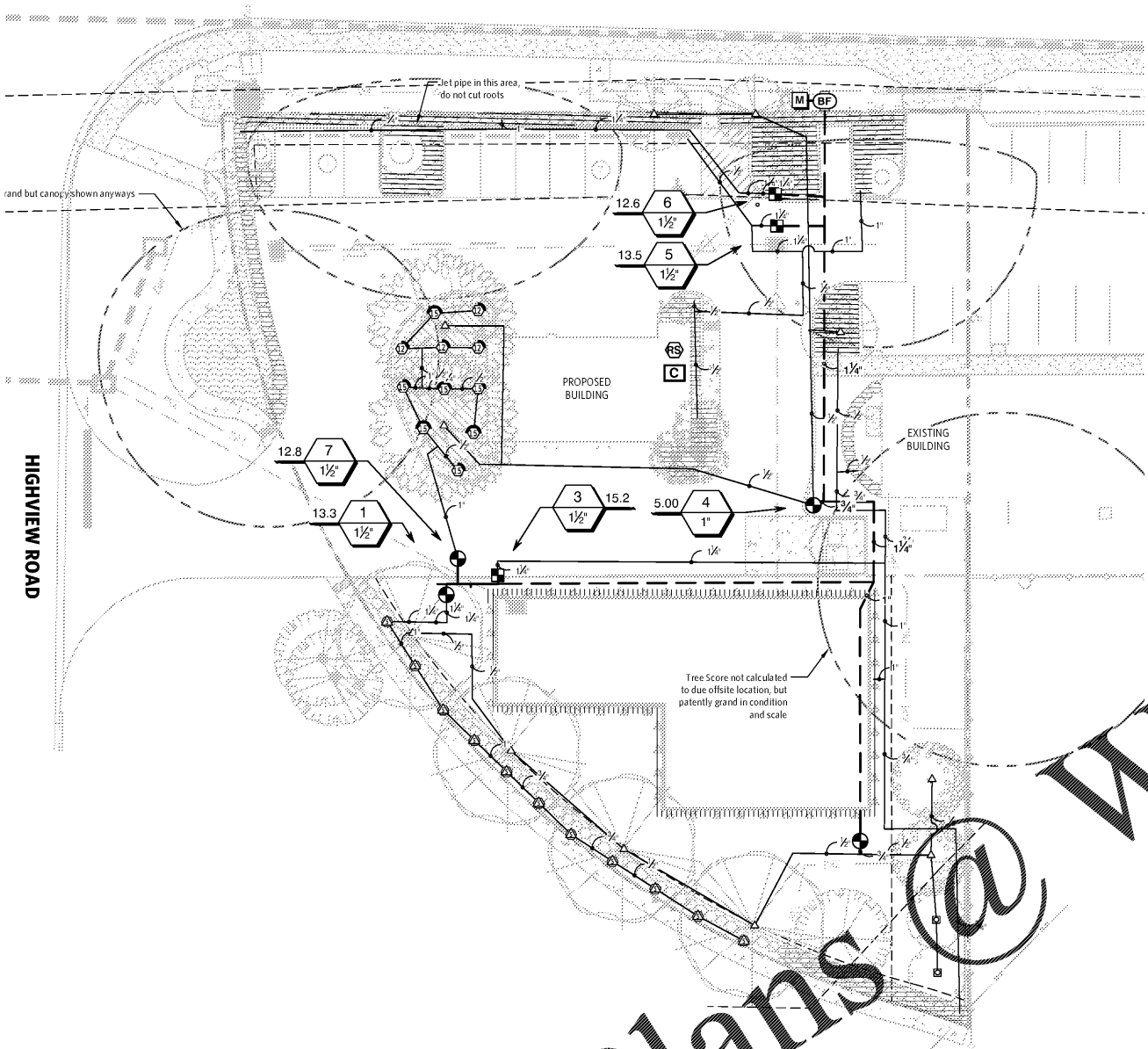


E DR MARTIN LUTHER KING JR BLVD

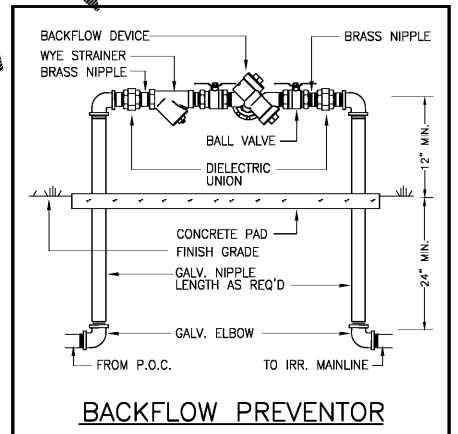


IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI	DETAIL
ES, ES, ES, ES, ES	Rain Bird 1806-SAM-PRS 15 Strip Series Shrub Spray 6.0" Pop-Up Sprinkler with Co-Molded Wiper Seal. 1/2" NPT Female Threaded Inlet. With Seal-A-Matic Check Valve, and Pressure Regulating Device.	11	30	
17, 17, 17, 17	Rain Bird 1806-SAM-PRS 12 Series MPR Shrub Spray 6.0" Pop-Up Sprinkler with Co-Molded Wiper Seal. 1/2" NPT Female Threaded Inlet. With Seal-A-Matic Check Valve, and Pressure Regulating Device.	4	30	
15, 15, 15, 15	Rain Bird 1806-SAM-PRS 15 Series MPR Shrub Spray 6.0" Pop-Up Sprinkler with Co-Molded Wiper Seal. 1/2" NPT Female Threaded Inlet. With Seal-A-Matic Check Valve, and Pressure Regulating Device.	7	30	
1401, 1402, 1404, 1408	Rain Bird 1800-1400 Flood 1401 Fixed flow rate (0.25-2.0GPM), full circle bubbler, 1/2" FIPT.	13	30	

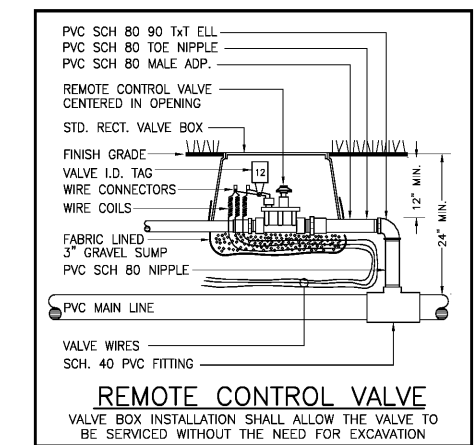
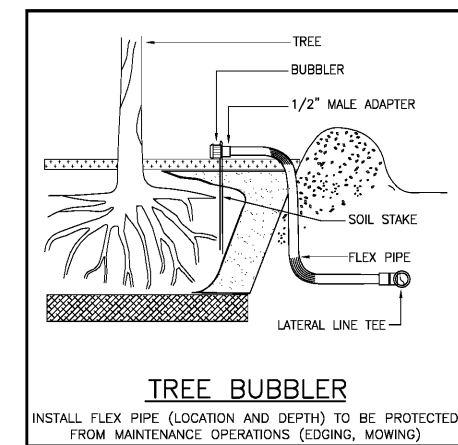
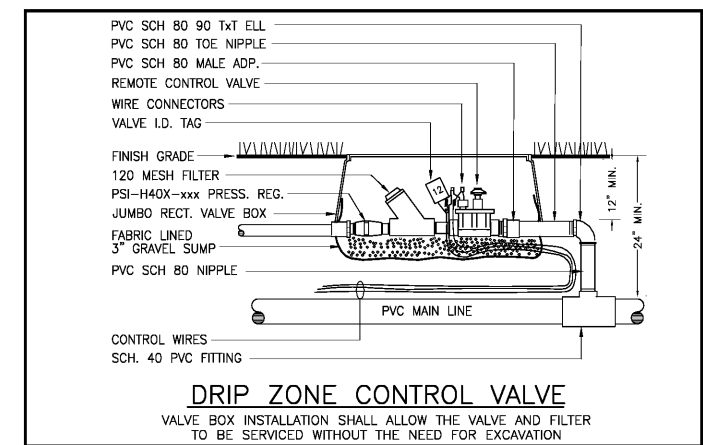
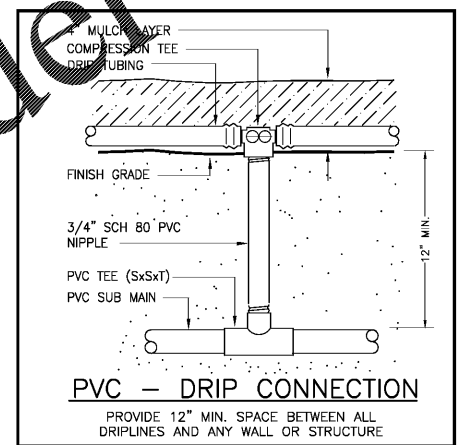
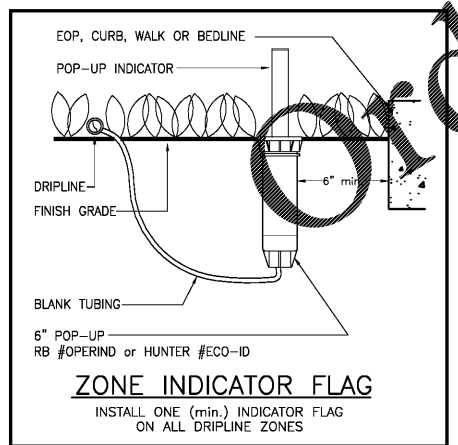
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	DETAIL
+	Rain Bird XCZ-150-PRB-COM High Flow Control Zone Kit, for Large Commercial Drip Zones. 1-1/2" PESB Valve with two 1" Pressure Regulating (40psi) Quick-Check Basket Filters. Flow range: 15-40gpm.	3	
[Hatched Box]	Area to Receive Dripline Rain Bird XFD-09-12 XFD On-Surface Pressure Compensating Landscape Dripline. 0.9 GPH emitters at 12" O.C. Dripline laterals spaced at 12" apart, with emitters offset for triangular pattern. UV Resistant. Specify XF insert fittings.	2,746 l.f.	

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	DETAIL
+	Rain Bird PGA Globe 1", 1-1/2", 2" Electric Remote Control Valve, Globe.		
BF	Watts LF909 1" Lead Free Reduced Pressure Backflow Preventer.	1	
C	Rain Bird ESP4ME3 with (1) ESP-SMD 7 Station, Hybrid Modular Outdoor Controller. For Residential or Commercial Use. LNK WiFi Module and Flow Sensor Ready.	1	
ES	Rain Bird RSD-REX Rain Sensor with metal hatching bracket, extension.	1	
M	Water Meter 1" Meter Counting 1/2" Meter Counting	1	
	Irrigation Mainline: PVC Schedule 40	1,466 l.f.	
	Irrigation Valve: PVC Schedule 40	364.8 l.f.	



IRRIGATION NOTES:

- Irrigation system design requirements: 30 GPM @ 60 PSI at the inlet side of the water meter). 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) minimal sizes larger than the pipe to be sleeved. For example: The sleeve for a 2" pipe shall be 3". Non-ferrous sleeves shall be no smaller than 2".
- Wherever practical, install valves in mulched bed and/or other high traffic areas. All valves, flush valves and wire splices shall be installed in Rain Bird wide flame resistant foam "plastic" valves boxes as follows:
Remote Control Valves #VB-S (13"dia x 21"l x 12"h) std. rect. box
Isolation Gate Valves #VGRND (9"dia. x 9"h) 7" round box
Wire Splices #10RND (13"dia. x 10"h) 10" round box
Drip Zone Valve #DZ-SPR (23"l x 33"l x 15"h) Super Jumbo 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.
- Remote Valve Designation Symbols for controller, station number and designed flow rate for each remote control valve.
- All 24 volt control cable to be UL Listed, single strand, type UF 600 Volt control cable. Size and color as follows:
Common Wires - size AWG #12 or larger and WHITE in color.
Hot Wires - size AWG #14 or larger and RED in color.
Spare Wires - size AWG #14 or larger and BLUE in color.
- All splices to the 24 volt control wiring shall be made with Rain Bird #DBTWC 24-600 volt, direct bury splice kits.
- All control valve wires shall be bundled and taped together at 20' intervals and placed along the side of the mainline pipe.
- 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 Heavy Wall PVC IPS Hose
3/4" inlet rotor heads 18" of Heavy Wall PVC IPS Hose
1" inlet rotor heads Three Elbow, Sch. 80 PVC Swing Joint
- 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 #5 rebar stake and nylon cable ties. All risers shall be placed a minimum of 12" from any sidewalk, edge of pavement or structure.
- 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.
- Install drip tubing, supply header and exhaust header at grade and cover with mulch. Typical spacing for drip tubing is 18" on center. Spacing to be determined by plant layout, refer to Landscape Plan. Anchor drip tubing every 5' with 8" long wire tubing stakes. Install vacuum relief valves and flush valve assemblies as needed.
- 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 #AQ2401 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 15 ohms or less resistance. Use more plates or grounding rods as needed to achieve the desired resistance reading.
- A weather based sensor with interface shall be connected to the irrigation controller. The sensor/ interface shall adjust the irrigation program based on daily weather readings. The sensor 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.
- Exact pump location(s) shall be coordinated with an Owner's Representative prior to installation of irrigation system. Unless otherwise stated, the Owner / General Contractor shall provide 200 volt, THREE phase service and disconnect (per local code) to the pump location(s). The Irrigation Contractor is responsible for the connection from the disconnect to the pump(s).
- 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 valves, 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 otherwise detailed or specified shall be installed as per manufacturer's recommendations and local code.



dark moss
 BEACON CIVIL ENGINEERING, LLC
 PROJECT: TAKE 5 SEFFNER
 LOCATION: SEFFNER, FLORIDA
 PREPARED FOR: BEACON CIVIL ENGINEERING, LLC
 ISSUE DATE: 2020-05-15
 PHASE: PERMIT NOT FOR BID
 SHEET TITLE: IRRIGATION PLAN AND DETAILS
 REVISION:
 SHEET NUMBER: LA2.0