



REFER TO SHEET L-3.1 FOR UPPER LEVEL IRRIGATION AND IRRIGATION NOTES, AND SHEET L-3.2 FOR IRRIGATION DETAILS.

IT IS REQUIRED TO HAVE A PRE-CONSTRUCTION MEETING WITH THE URBAN FORESTRY STAFF PRIOR TO COMMENCEMENT OF ANY LANDSCAPE WORK OR SITE WORK AFFECTING EXISTING TREES. CONTACT MARK BRUMET AT 954-786-4523 or mark.brumet@copbfl.com

IRRIGATION SYSTEM TO PROVIDE 100% COVERAGE WITH 50% OVERLAP.

IRRIGATION SCHEDULE SITE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI
	Rain Bird 1806-PRS 8 Series MPR Turf Spray 6" pop up with pressure regulator.	6	30
	Rain Bird 1806-PRS 10 Series MPR Turf Spray 6" pop up with pressure regulator.	2	30
	Rain Bird 1806-PRS 12 Series MPR Turf Spray 6" pop up with pressure regulator.	26	30
	Rain Bird 1806-PRS 15 Series MPR Turf Spray 6" pop up with pressure regulator.	30	30
	Rain Bird 1806-PRS ADJ Turf Spray 6" pop up with pressure regulator.	5	30
	Rain Bird 1812-PRS-NP-U 15 Strip Series Shrub Spray, 12" Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet, 1/2" NPT Female Threaded Inlet. With Pressure Regulating Device and Non-Potable Purple Cap.	9	30
	Rain Bird 1812-PRS-NP-U 15 Strip Series Shrub Spray, 12" Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet, 1/2" NPT Female Threaded Inlet. With Pressure Regulating Device and Non-Potable Purple Cap.	11	30
	Rain Bird 1804-1400 Flood Flood Bubbler 4" pop up	62	40

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	Rain Bird XCZ-100-PRF-BF Drip Control Kit, 1" (25mm) DV valve, 1" (25mm) pressure regulating back flush filter.	1
	Rain Bird MDCFCAP Dripline Flush Valve cap in compression fitting coupler.	4
	Rain Bird AR Valve Kit 1" Air Relief Valve kit with 6" drip valve box.	4
	Area to Receive Dripline Netafim TLCV6-18(18) Landscape Dripline with 0.6gph emitters at 18" o.c. (2.2 lph @ 0.45 m) with check valve, pressure compensation, 14.7psi min. to 50psi max. (1 to 3.5 bar). Dripline laterals spaced at 18" (0.46 m) apart, with emitters offset for triangular pattern.	1,075 s.f.

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	Rain Bird PEB Electric Remote Control Valve	8
	Febco 825YA 1" Reduced Pressure Backflow Preventer	1
	Rain Bird ESPLXME2P-LXMM-LXMPMPED w/ (1) ESPLXMSM12 24 Station, Traditionally-Wired, PRO Smart (Module Included), Commercial Controller. (1) ESPLXME2P 12-Station, Indoor/Outdoor, Plastic Wall-Mount Enclosure w/ (1) ESPLXMSM12 - 12-Station Expansion Module. Install in LXMM-LXMPMPED Powder Coated, Metal Wall-Mounted Cabinet w/Pedestal.	1
	Rain Bird RSD-BEX Rain Sensor, with bracket, extension wire	1
	Water Meter 1-1/2" Existig 1 1/2" Water Meter	1
	Irrigation Lateral Line: PVC Class 160 SDR 26	2,524 l.f.
	Irrigation Mainline: PVC Class 200 SDR 21	832.5 l.f.

	Pipe Sleeve: PVC Schedule 80 Typical pipe sleeve for irrigation pipe. Pipe sleeve size shall allow for irrigation piping and their related couplings to easily slide through sleeving material. Extend sleeves 18 inches beyond edges of paving or construction.	154.6 l.f.
	Valve Callout: - Valve Number - Valve Flow - Valve Size	

CRITICAL ANALYSIS

Generated:	2022-12-16 10:38
P.O.C. NUMBER: 01	
Water Source Information:	Existig 1 1/2" Water Meter
FLOW AVAILABLE	
Water Meter Size:	1-1/2"
Flow Available:	93 GPM
PRESSURE AVAILABLE	
Static Pressure at POC:	60 PSI
Elevation Change:	0.00 ft
Service Line Size:	3"
Length of Service Line:	5 ft
Pressure Available:	60 PSI
DESIGN ANALYSIS	
Maximum Station Flow:	28.39 GPM
Flow Available at POC:	93 GPM
Residual Flow Available:	64.61 GPM
Critical Station:	4
Design Pressure:	40 PSI
Friction Loss:	3.11 PSI
Fittings Loss:	0.31 PSI
Elevation Loss:	0 PSI
Loss through Valve:	1.76 PSI
Pressure Req. at Critical Station:	45.2 PSI
Loss for Fittings:	0.02 PSI
Loss for Main Line:	0.2 PSI
Loss for POC to Valve Elevation:	0 PSI
Loss for Backflow:	10.9 PSI
Loss for Water Meter:	0.1 PSI
Critical Station Pressure at POC:	56.4 PSI
Pressure Available:	60 PSI
Residual Pressure Available:	3.56 PSI

Michael D Gross wirth

Digitally signed by Michael D Grosswirth
DN: c=US,
o=THOMAS
ENGINEERING GROUP
LLC,
ou=A01410C0000017
20E31831F0000EFAC,
cn=Michael D
Grosswirth
Date: 2023.01.31
12:30:38 -05'00'

VALVE SCHEDULE

NUMBER	MODEL	SIZE	TYPE	GPM	HEADS	PIPE	WIRE	DESIGN PSI	FRICTION LOSS	PSI	PSI @ POC	PRECIP
1	Rain Bird PEB	1"	Turf Spray	18.5	14	166.5	342.8	30	2.35	35.1	48.0	0.89 in/h
2	Rain Bird XCZ-100-PRF-BF	1"	Area for Dripline	4.69	221.7	350.5	40	0.43	40.4	51.6	0.45 in/h	
3	Rain Bird PEB	1-1/2"	Shrub Spray	27.04	20	282.5	295.9	30	2.05	35.7	51.2	1.58 in/h
4	Rain Bird PEB	1"	Bubbler	8	32	635.0	183.5	40	3.42	45.2	56.4	7.66 in/h
5	Rain Bird PEB	1"	Turf Spray	17.14	14	189.4	145.6	30	1.58	34.2	46.5	0.94 in/h
6	Rain Bird PEB	1-1/2"	Turf Spray	30.13	20	298.7	92.2	30	2.97	36.6	50.8	0.96 in/h
7	Rain Bird PEB	1-1/2"	Turf Spray	29.6	8	112.8	165.0	30	1.45	35.1	50.2	0.77 in/h
8	Rain Bird PEB	1"	Bubbler	7.5	30	396.8	207.0	40	1.87	43.6	54.9	7.66 in/h
9	Rain Bird PEB	1-1/2"	Turf Spray	23.59	13	211.7	240.9	30	2.93	36.7	50.8	0.83 in/h
	Common Wire						832.5					

WATERING SCHEDULE

NUMBER	MODEL	TYPE	PRECIP	IN./WEEK	MIN./WEEK	GAL./WEEK	GAL./DAY
1	Rain Bird PEB	Turf Spray	0.89 in/h	1	68	1,258	
2	Rain Bird XCZ-100-PRF-BF	Area for Dripline	0.45 in/h	1	133	623	
3	Rain Bird PEB	Shrub Spray	1.58 in/h	1	39	1,055	
4	Rain Bird PEB	Bubbler	7.66 in/h	1	8	64	
5	Rain Bird PEB	Turf Spray	0.84 in/h	1	72	1,234	
6	Rain Bird PEB	Turf Spray	0.94 in/h	1	64	1,817	
7	Rain Bird PEB	Turf Spray	0.77 in/h	1	78	2,020	
8	Rain Bird PEB	Bubbler	7.66 in/h	1	8	60	
9	Rain Bird PEB	Turf Spray	0.83 in/h	1	73	1,722	
	TOTALS:				543	9,853	

THOMAS
ENGINEERING GROUP

CIVIL ENGINEERS - PROJECT MANAGERS - LANDSCAPE ARCHITECTS

4850 W. KENNEDY BLVD.
SUITE 200
TAMPA, FL 33609
P: 813-379-4100
P: 813-203-7603

125 W. INDIANTOWN RD.
SUITE 100
JUPITER, FL 33458
P: 561-203-7603

REV.	DATE	REVISIONS	BY:
1	01/26/2023	COMMENTS	MDG

Sunshine 811

Call 811 or visit sunshine811.com two full business days before digging to have buried facilities located and marked.

Check positive response codes before you dig!

PROJECT No.:	F220017
DRAWN BY:	LD
CHECKED BY:	MDG
DATE:	03/09/2022
CAD I.D.:	F220017 IRRIGATION

PROJECT:

**ENTOURAGE
IN THE SUN**

407 RIVERSIDE DRIVE

FOR

IDEA ARCHITECT

POMPANO BEACH
FLORIDA

THOMAS
ENGINEERING GROUP

6300 NW 31ST AVENUE
FORT LAUDERDALE, FL 33309
PH: (954) 202-7000
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SHEET TITLE:

IRRIGATION PLAN

SHEET NUMBER:

L-3.1

AAC

PZ22-12000011

03/07/2023

AAC

PZ22-12000011

07/02/2024