GENERAL IRRIGATION NOTES:

1. IRRIGATION SYSTEM DESIGN REQUIREMENTS: 28 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.
2. 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.
3. 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.
4. IF REQUIRED, THE IRRIGATION CONTRACTOR SHALL PROVIDE THE NECESSARY "RIGHT OF WAY" USE PERMITS.
5. PIPE SIZES SHALL CONFORM TO THOSE ON THE DRAWINGS. SUBSTITUTING WITH SMALLER PIPE SIZES WILL NOT BE PERMITTED.
6. MAINLINE IS TO BE INSTALLED WITH A MINIMUM OF 18" DEPTH OF COVER. LATERAL LINES ARE TO BE INSTALLED WITH A MINIMUM OF 12" DEPTH OF COVER.
7. 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".
8. WHEREVER PRACTICAL, INSTALL VALVES IN MULCHED BEDS AND/OR OUT OF HIGH TRAFFIC AREAS. ALL VALVES , FLUSH VALVES AND WIRE SPLICES SHALL BE INSTALLED IN RAIN BIRD WIDE FLANGED, STRUCTURAL FOAM "PLASTIC" VALVES BOXES AS FOLLOWS:

REMOTE CONTROL VALVES	#VB-STD (16"W X 21"L X 12"H) STD. RECT. BOX
ISOLATION GATE VALVES	#VB-7RND (9"DIA. X 9"H) 7" ROUND BOX
WIRE SPLICES	#VB-10RND (13"DIA. X 10"H) 10" ROUND BOX
DRIP ZONE VALVE / FILTER ASSY	#VB-SPR (23"W X 33"L X 15"H) SUPER JUMBO RECT. BOX

9. REFER TO VALVE DESIGNATION SYMBOLS FOR CONTROLLER, STATION NUMBER AND DESIGNED FLOW RATE FOR EACH REMOTE CONTROL VALVE.
10. 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 #14 OR LARGER AND WHITE IN COLOR.
HOT WIRES	- SIZE AWG #16 OR LARGER AND RED IN COLOR.
SPARE WIRES	- SIZE AWG #16 OR LARGER AND BLUE IN COLOR.

11. ALL SPLICES TO THE 24 VOLT CONTROL WIRING SHALL BE MADE WITH RAIN BIRD #DBTWC 600 VOLT, DIRECT BURY SPLICE KITS.
12. ALL CONTROL VALVE WIRES SHALL BE BUNDLED AND TAPED TOGETHER AT 20' INTERVALS AND PLACED ALONG THE SIDE OF THE MAINLINE PIPE.
13. 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	12" OF HEAVY WALL PVC IPS HOSE
3/4" INLET ROTOR HEADS	18" OF HEAVY WALL PVC IPS HOSE

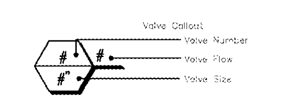
14. THE TOPS OF ALL SHRUB SPRINKLERS SHALL BE INSTALLED 12" ABOVE THE HEIGHT OF THE SURROUNDING PLANT MATERIAL. FOR PLANT HEIGHTS OF 12" OR MORE, SUPPORT THE RISER WITH A #5 REBAR STAKE AND NYLON CABLE TIES. ALL RISERS SHALL BE PLACED A MINIMUM OF 12" FROM ANY SIDEWALK, EDGE OF PAVEMENT OR STRUCTURE.
15. 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.
16. INSTALL DRIP TUBING AT GRADE AND COVER WITH MULCH. TYPICAL SPACING FOR DRIP TUBING IS 18" TO 24" ON CENTER. SPACING TO BE DETERMINED BY PLANT LAYOUT. REFER TO LANDSCAPE PLAN. ANCHOR TUBING EVERY 7' WITH 8" LONG WIRE TUBING STAKES. INSTALL FLUSH VALVE ASSEMBLIES AT ALL TUBING "DEAD ENDS".
17. 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).
18. AT EACH IRRIGATION CONTROLLER, INSTALL A "SECONDARY SURGE ARRESTER" TO THE INCOMING (120 VOLT) POWER SUPPLY (INTERMATIC #AG2401 OR EQUAL).
19. 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.
20. A RAIN SWITCH SHALL BE CONNECTED TO THE IRRIGATION CONTROLLER. THE SWITCH 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.
21. 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.
22. 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.
23. ANY OTHER EQUIPMENT REQUIRED THAT IS NOT OTHER WISE DETAILED OR SPECIFIED SHALL BE INSTALLED AS PER MANUFACTURER'S RECOMMENDATIONS AND LOCAL CODE.

IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
EST LBS RCS CST SST	HUNTER PROS-06-PRS30 5' STRIP SPRAY TURF SPRAY, 30 PSI REGULATED 6.0" POP-UP. CO-MOLDED WIPER SEAL WITH UV RESISTANT MATERIAL.	21
Q T H F	HUNTER PROS-06-PRS30 8' RADIUS TURF SPRAY, 30 PSI REGULATED 6.0" POP-UP. CO-MOLDED WIPER SEAL WITH UV RESISTANT MATERIAL.	20
EST CST SST	HUNTER PROS-06-PRS30 9' SIDE STRIP SPRAY TURF SPRAY, 30 PSI REGULATED 6.0" POP-UP. CO-MOLDED WIPER SEAL WITH UV RESISTANT MATERIAL.	31
Q T H F	HUNTER PROS-06-PRS30 10' RADIUS TURF SPRAY, 30 PSI REGULATED 6.0" POP-UP. CO-MOLDED WIPER SEAL WITH UV RESISTANT MATERIAL.	19
Q T H TT TQ F	HUNTER PROS-06-PRS30 12' RADIUS TURF SPRAY, 30 PSI REGULATED 6.0" POP-UP. CO-MOLDED WIPER SEAL WITH UV RESISTANT MATERIAL.	10
Q T H TT TQ F	HUNTER PROS-06-PRS30 15' RADIUS TURF SPRAY, 30 PSI REGULATED 6.0" POP-UP. CO-MOLDED WIPER SEAL WITH UV RESISTANT MATERIAL.	13
4 6 8 10 12 15 17	HUNTER PROS-06-PRS30 ADJ TURF SPRAY, 30 PSI REGULATED 6.0" POP-UP. CO-MOLDED WIPER SEAL WITH UV RESISTANT MATERIAL.	41
M L O	HUNTER MP1000 PROS-06-PRS40-CV TURF ROTATOR, 6" (15.24 CM) POP-UP WITH CHECK VALVE, PRESSURE REGULATED TO 40 PSI (2.76 BAR), MP ROTATOR NOZZLE ON PRS40 BODY. M=MAROON ADJ ARC 90 TO 210, L=LIGHT BLUE 210 TO 270 ARC, O=OLIVE 360 ARC.	2
K G R	HUNTER MP2000 PROS-06-PRS40-CV TURF ROTATOR, 6" (15.24 CM) POP-UP WITH FACTORY INSTALLED CHECK VALVE, PRESSURE REGULATED TO 40 PSI (2.76 BAR), MP ROTATOR NOZZLE ON PRS40 BODY. K=BLACK ADJ ARC 90-210, G=GREEN ADJ ARC 210-270, R=RED 360 ARC.	29
B Y A	HUNTER MP3000 PROS-06-PRS40-CV TURF ROTATOR, 6" (15.24 CM) POP-UP WITH FACTORY INSTALLED CHECK VALVE, PRESSURE REGULATED TO 40 PSI (2.76 BAR), MP ROTATOR NOZZLE ON PRS40 BODY. B=BLUE ADJ ARC 90-210, Y=YELLOW ADJ ARC 210-270, A=GRAY 360 ARC.	93
T	HUNTER MP CORNER PROS-06-PRS40-CV TURF ROTATOR, 6" (15.24CM) POP-UP WITH FACTORY INSTALLED CHECK VALVE, PRESSURE REGULATED TO 40 PSI (2.76 BAR), MP ROTATOR NOZZLE ON PRS40 BODY. T=TURQUOISE ADJ ARC 45-105.	2
25 50 10 20	HUNTER PCB FLOOD BUBBLER, 1/2" FIPT.	103

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	HUNTER ICZ-101-25 DRIP CONTROL ZONE KIT. 1" ICV GLOBE VALVE WITH 1" HY100 FILTER SYSTEM. PRESSURE REGULATION: 25PSI. FLOW RANGE: 2 GPM TO 20 GPM. 150 MESH STAINLESS STEEL SCREEN.	1
	HUNTER ICZ-151-40 DRIP CONTROL ZONE KIT. 1-1/2" ICV GLOBE VALVE WITH 1" HY100 FILTER SYSTEM. PRESSURE REGULATION: 40PSI. FLOW RANGE: 20 GPM TO 60 GPM. 120 MESH STAINLESS STEEL SCREEN.	1
	AREA TO RECEIVE DRIPLINE HUNTER PLD-10-12 (18) IN-LINE PRESSURE COMPENSATING LANDSCAPE DRIPLINE WITH BUILT-IN CHECK VALVE. 1.0GPH EMITTERS AT 12.0" O.C. DRIPLINE LATERALS SPACED AT 18.0" APART, WITH EMITTERS OFFSET FOR TRIANGULAR PATTERN. UV RESISTANT.	2,726 S.F.

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	HUNTER ICV-G 1", 1-1/2", 2", AND 3" PLASTIC ELECTRIC REMOTE CONTROL VALVES, GLOBE CONFIGURATION, WITH NPT THREADED INLET/OUTLET, FOR COMMERCIAL/MUNICIPAL USE.	19
C	HUNTER IC-2400-PL MODULAR CONTROLLER, 24 STATIONS, OUTDOOR MODEL, PLASTIC CABINET. COMMERCIAL USE. WITH THREE ICM-600 MODULES INCLUDED.	1
WS	HUNTER WSS-SEN WIRELESS SOLAR, RAIN FREEZE SENSOR WITH OUTDOOR INTERFACE. CONNECTS TO HUNTER X-CORE AND ACC CONTROLLERS. INSTALL AS NOTED. INCLUDES GUTTER MOUNT BRACKET. MODULE NOT INCLUDED.	1
IR	WATER METER AND BACKFLOW DEVICE REFER TO UTILITY PLANS, 28 GPM AT 60 PSI REQUIRED	1
	IRRIGATION LATERAL LINE: PVC CLASS 160 SDR 26	8,778 L.F.
	IRRIGATION MAINLINE: PVC SCHEDULE 40	870.6 L.F.
	PIPE SLEEVE: PVC SCHEDULE 40 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.	624.4 L.F.



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REV	DATE	COMMENT	BY
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2	07/10/17	PER CITY COMMENTS	MR
3	09/15/17	PER CITY COMMENTS	KS

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LA 6666899
STATE OF FLORIDA

SHEET TITLE:
IRRIGATION NOTES & SCHEDULE

SHEET NUMBER:
LI-6.01