

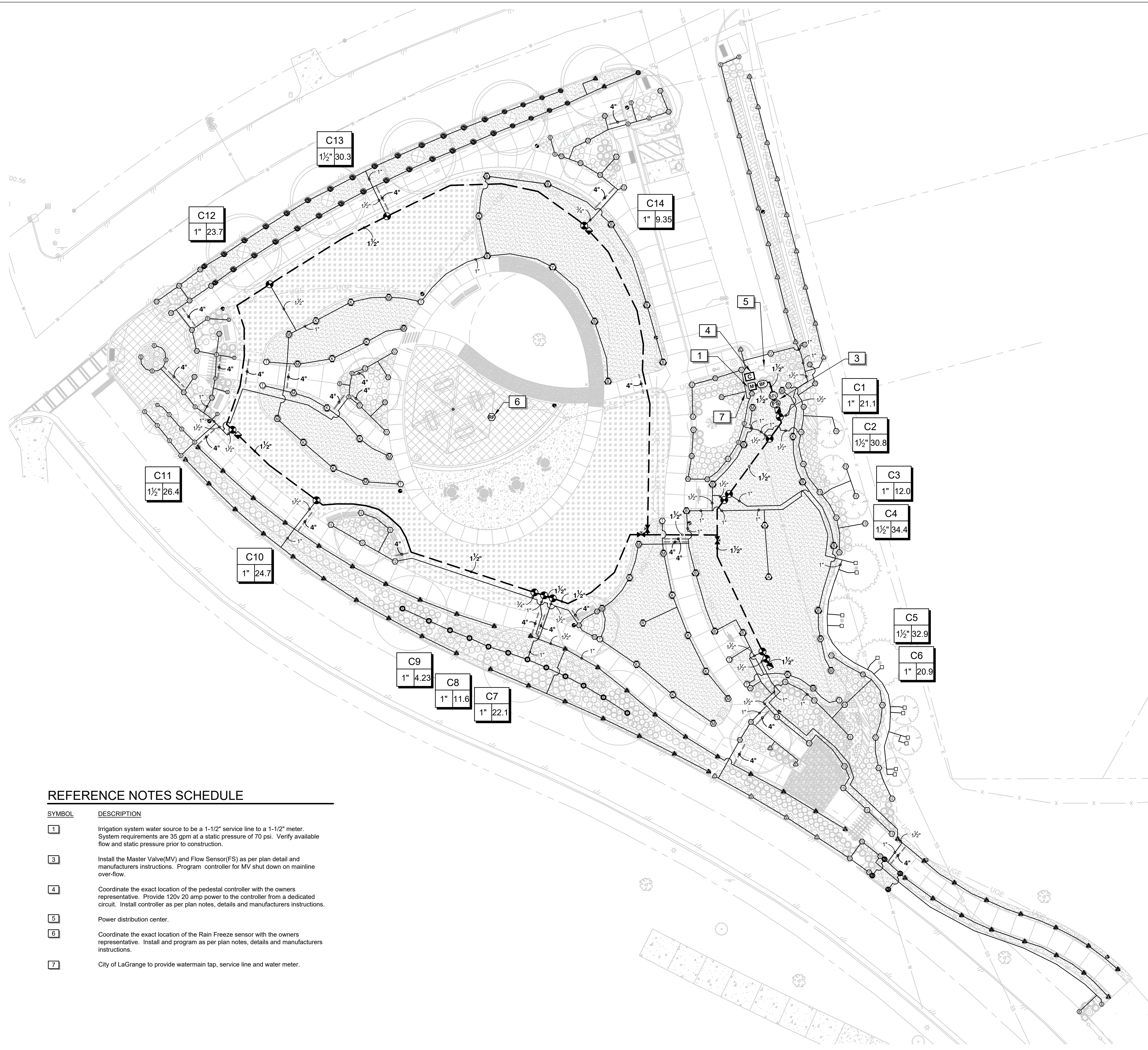
ADDENDUM NO. 1
GRANGER PARK
CITY OF LAGRAGE
LAGRANGE, GEORGIA

DRAWINGS

Add
SHEET IR1.01 – IR1.03

Bidder Must Acknowledge Receipt of this Addendum on Bid Form

August 18, 2021
Barge Design Solutions, Inc.
1201 Front Ave, Suite F
Columbus, Georgia 31901
706-321-4590

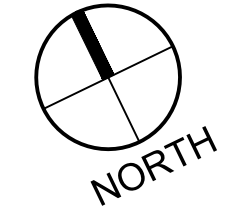
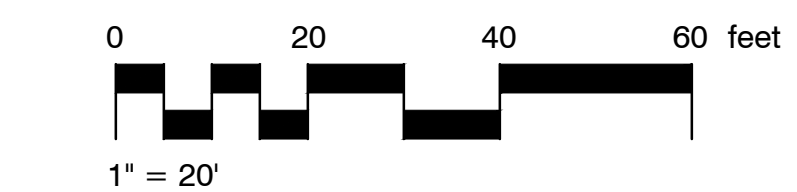


IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION
ES LCS RCS CS SS	Hunter PROS-06-PRS30-CV-F 5' strip spray Turf Spray, 30 psi regulated 6" Pop-Up with factory installed Drain Check Valve & flo-guard. Co-molded wiper seal with UV Resistant Material.
Q T H F	Hunter PROS-06-PRS30-CV-F 8' radius Turf Spray, 30 psi regulated 6" Pop-Up with factory installed Drain Check Valve & flo-guard. Co-molded wiper seal with UV Resistant Material.
10 10 10 10 10	Hunter PROS-06-PRS30-CV-F 10' radius Turf Spray, 30 psi regulated 6" Pop-Up with factory installed Drain Check Valve & flo-guard. Co-molded wiper seal with UV Resistant Material.
1 4 8 10 12 15 17	Hunter PROS-06-PRS30-CV-F adjustable arc Turf Spray, 30 psi regulated 6" Pop-Up with factory installed Drain Check Valve & flo-guard. Co-molded wiper seal with UV Resistant Material.
ES LCS RCS CS SS	Hunter PROS-12-PRS30-CV-F 5' strip spray Shrub Spray, 30 psi regulated 12" Pop-Up. With Factory Installed Drain Check Valve and FloGuard. Co-molded wiper seal with UV Resistant Material. Reclaimed Purple Cap.
Q T H F	Hunter PROS-12-PRS30-CV-F 8' radius Shrub Spray, 30 psi regulated 12" Pop-Up. With Factory Installed Drain Check Valve and FloGuard. Co-molded wiper seal with UV Resistant Material. Reclaimed Purple Cap.
10 10 10 10 10 17	Hunter PROS-12-PRS30-CV-F Adjustable Arc Shrub Spray, 30 psi regulated 12" Pop-Up. With Factory Installed Drain Check Valve and FloGuard. Co-molded wiper seal with UV Resistant Material. Reclaimed Purple Cap.
T	Hunter MP Corner PROS-06-PRS40-CV-F Turf Rotator, 6" pop-up with factory installed check valve, flo-guard, pressure regulated to 40 psi, MP Rotator nozzle. T=Turquoise adj arc 45-105.
M L O	Hunter MP1000 PROS-06-PRS40-CV-F Turf Rotator, 6" pop-up with check valve, flo-guard, pressure regulated to 40 psi, MP Rotator nozzle. M=Maroon adj arc 90 to 210, L=Light Blue 210 to 270 arc, O=Olive 360 arc.
K G R	Hunter MP2000 PROS-06-PRS40-CV-F Turf Rotator, 6" pop-up with factory installed check valve, flo-guard, pressure regulated to 40 psi, MP Rotator nozzle. K=Black adj arc 90-210, G=Green adj arc 210-270, R=Red 360 arc.
B Y A	Hunter MP3000 PROS-06-PRS40-CV-F Turf Rotator, 6" pop-up with factory installed check valve, flo-guard, pressure regulated to 40 psi, MP Rotator nozzle. B=Blue adj arc 90-210, Y=Yellow adj arc 210-270, A=Gray 360 arc.
252 500 50H 10H 10P 20P	Hunter PROS-PRS30-06-CV-MSBN 10F Multi-Stream Bubblers, 6" pop-up, factory installed drain check valve, 25=25gpm, 50=50gpm, 10=10gpm, 20=20gpm.

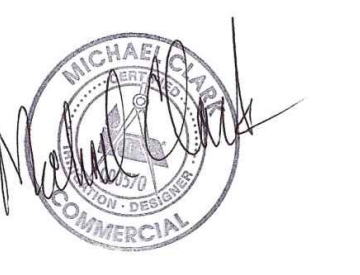
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION
☉	Rain Bird PEB 1", 1-1/2", 2" Plastic Industrial Valves. Low Flow Operating Capability, Globe Configuration.
☐	Hunter HQ-44LRC-AW Quick coupler valve, yellow rubber locking cover, red brass and stainless steel, with 1" NPT inlet, 2-piece body. Acme Key with Anti-Rotation Wings.
☒	Nibco T-113 Class 125 bronze gate shut off valve with wheel handle, same size as mainline pipe diameter at valve location. Size Range - 1/4" - 3"
MV	Buckner-Superior 3100-PRS 1-1/2" Normally Open Brass Master Valve that Provides Dirty Water Protection. Available in 3/4", 1", 1-1/4", 1-1/2", 2", 2-1/2", and 3". Pressure Regulation Feature.
BF	Watts 007 1-1/2" max. flow rate is 7.5 ft/s.
C	Rain Bird ESP8LXMEF-LXMM-LXMPED with (01) ESPLXMSM12 20 Station Capable Commercial Controller. Mounted on a Powder-Coated Metal Pedestal. Flow Sensing and Water Management Capabilities.
RF	Rain Bird WR2-RFS Wireless Rain/Freeze Sensor.
FS	Creative Sensor Technology FSI-T15-001 1.5" (40mm) PVC tee type flow sensor w/socket ends, custom mounting tee and ultra lightweight impeller enhances low flow measurement. 2 wire digital output compatible w/all irrigation controllers. Flow range 1.8-108 GPM.
M	Water Meter 1-1/2" Irrigation Meter

—	Irrigation Lateral Line: PVC Class 200 SDR 21
—	Irrigation Mainline: PVC Class 200 SDR 21
---	Pipe Sleeve: PVC Schedule 40
○	Valve Callout
#	Valve Number
#	Valve Flow
#	Valve Size

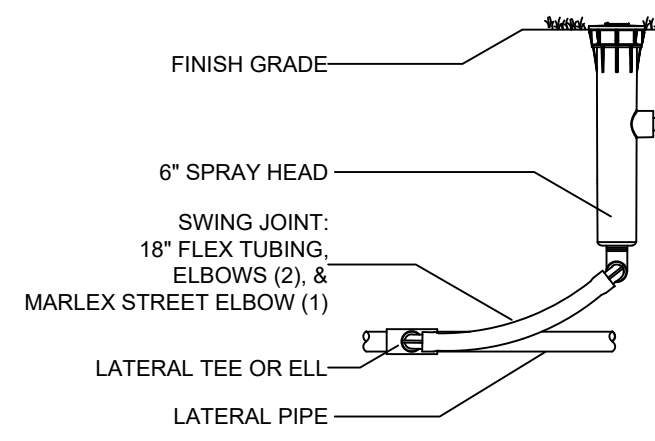


REFERENCE NOTES SCHEDULE

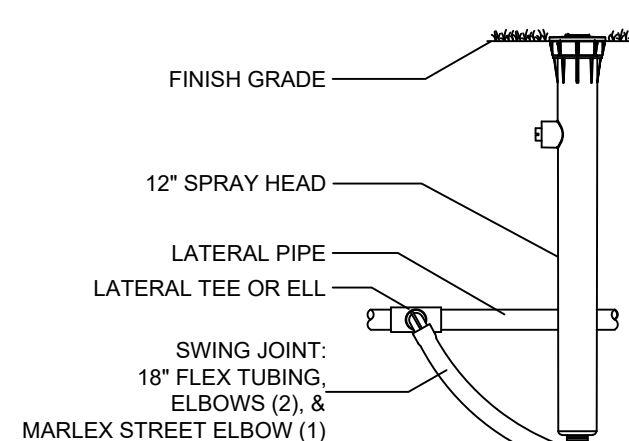
SYMBOL	DESCRIPTION
1	Irrigation system water source to be a 1-1/2" service line to a 1-1/2" meter. System requirements are 35 gpm at a static pressure of 70 psi. Verify available flow and static pressure prior to construction.
3	Install the Master Valve(MV) and Flow Sensor(FS) as per plan detail and manufacturers instructions. Program controller for MV shut down on mainline over-flow.
4	Coordinate the exact location of the pedestal controller with the owners representative. Provide 120v 20 amp power to the controller from a dedicated circuit. Install controller as per plan notes, details and manufacturers instructions.
5	Power distribution center.
6	Coordinate the exact location of the Rain Freeze sensor with the owners representative. Install and program as per plan notes, details and manufacturers instructions.
7	City of LaGrange to provide watermain tap, service line and water meter.



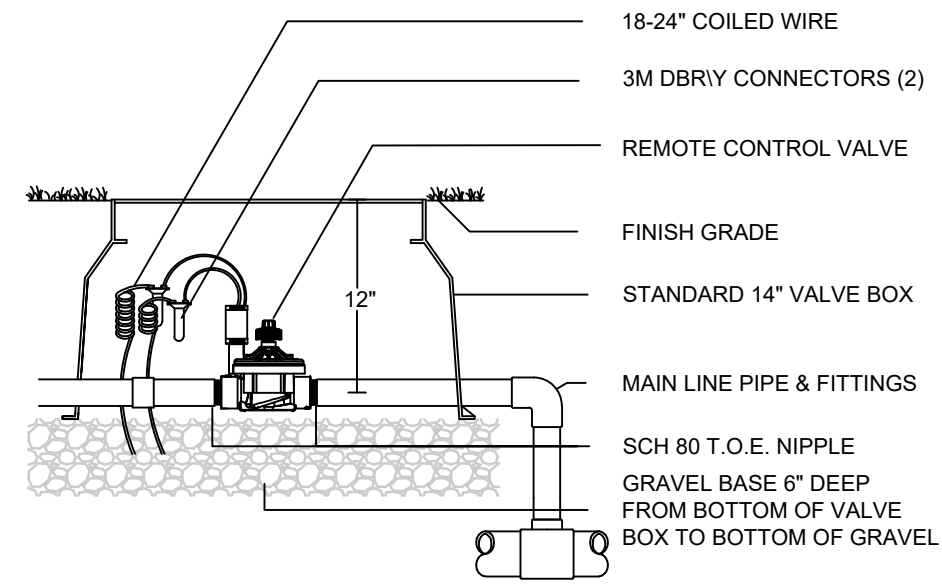
REV.	DR.	CHK.	DATE	DESCRIPTION



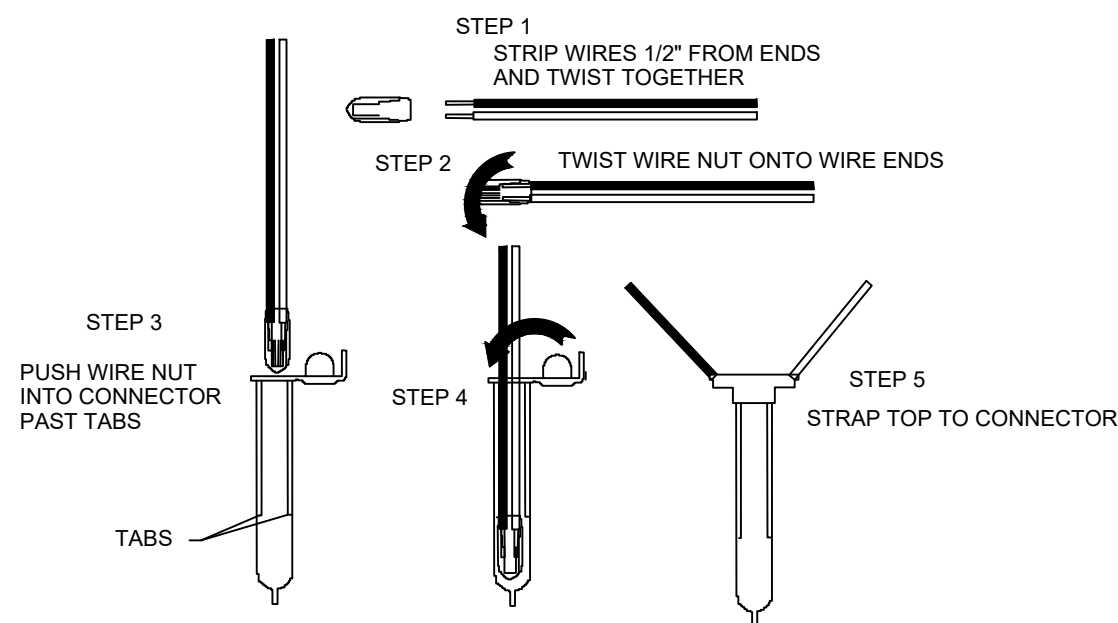
1 6" SPRAY BODY
NTS



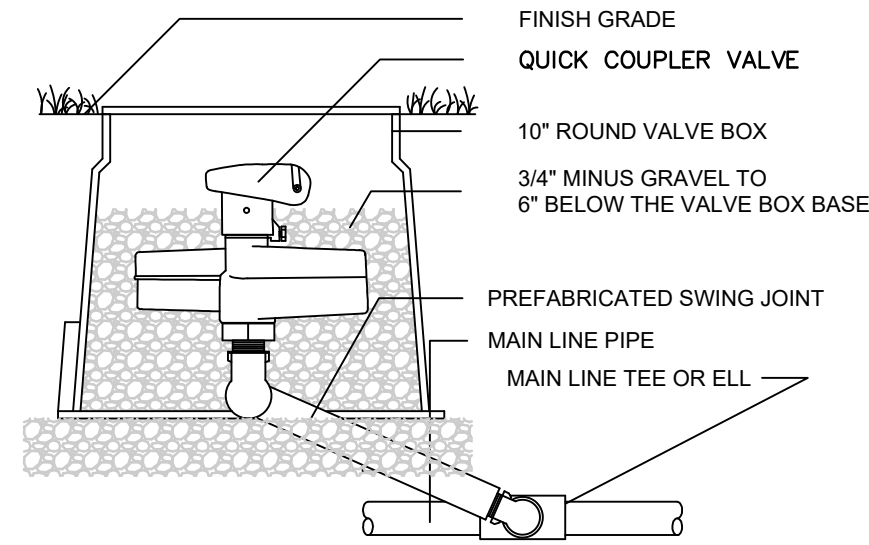
2 12" SPRAY BODY
NTS



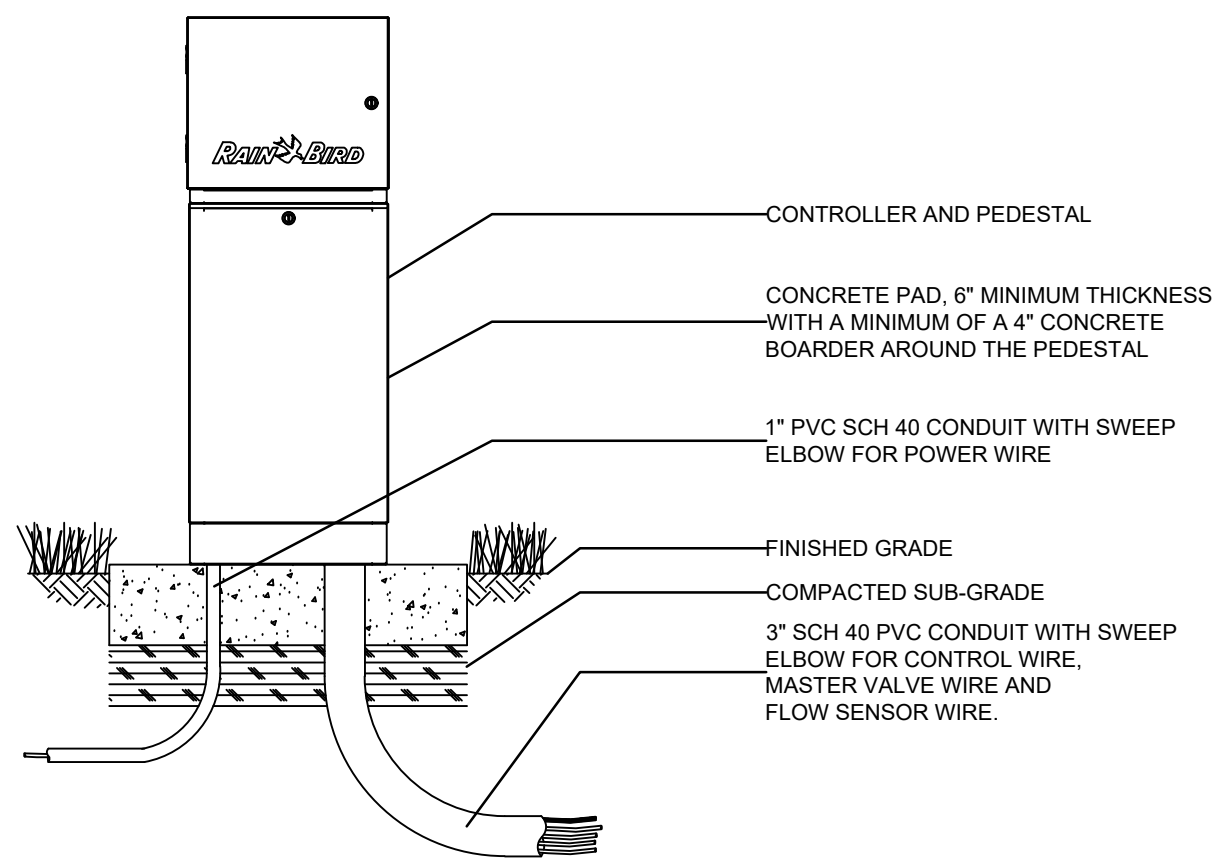
3 ELECTRIC CONTROL VALVE
NTS



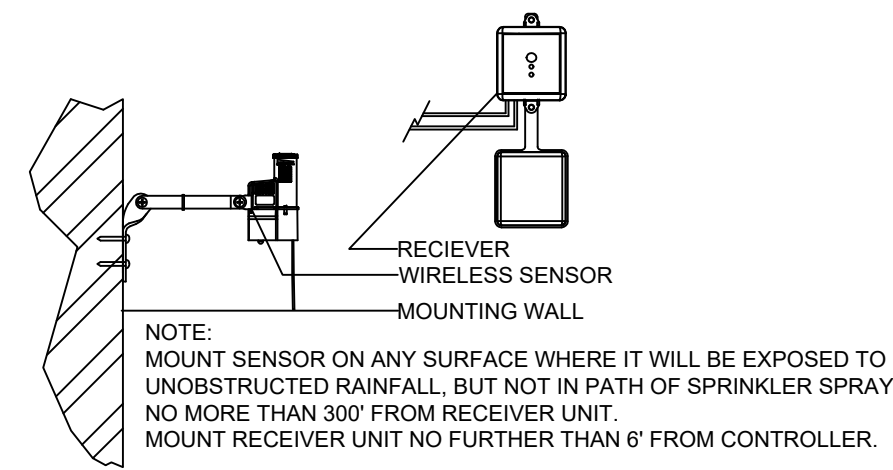
4 WIRE CONNECTION 3M-DBR6-Y
NTS



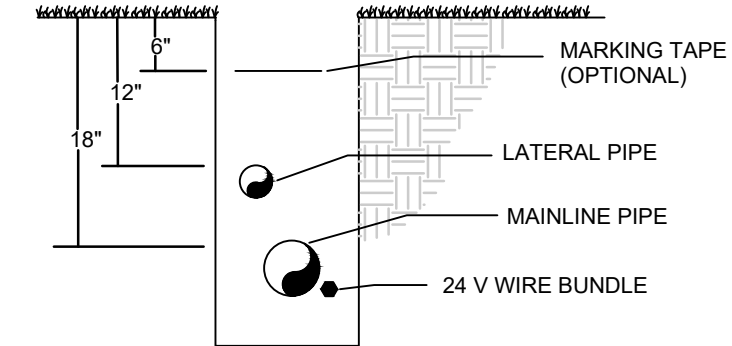
5 QUICK COUPLER VALVE
NTS



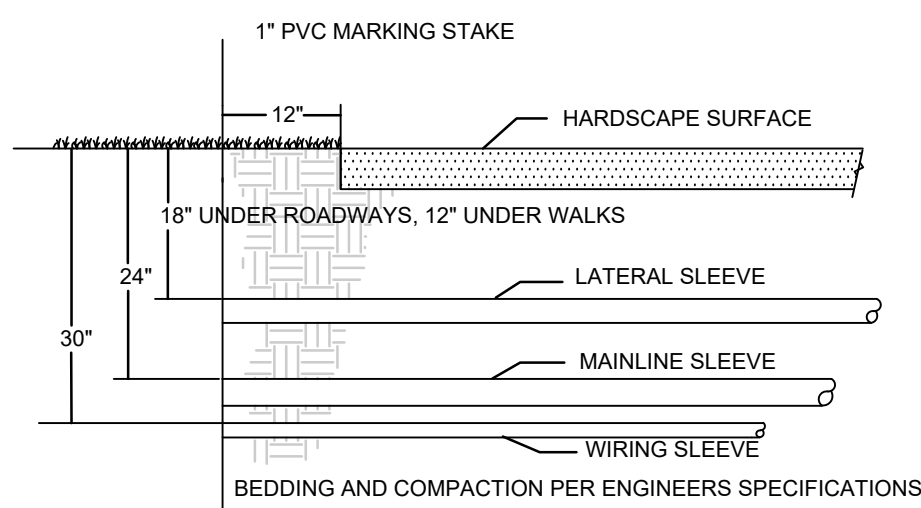
6 PEDESTAL MOUNT CONTROLLER
NTS



7 WIRELESS RAIN SENSOR
NTS



8 TRENCH, PIPE AND WIRE
NTS



9 SLEEVING
NTS

GENERAL NOTES

1. ALL TRENCHING TO BE OUTSIDE OF TREE DRIP LINE, IF TRENCHING MUST BE DONE WITHIN TREE DRIPLINE FOLLOW TREE PRESERVATION GUIDELINES FOR THE PROJECT OR LOCAL MUNICIPALITY
2. MAINLINE TO HAVE MINIMUM OF 18" OF COVER AND A MINIMUM OF 18" OFF OF THE HARDSCAPE
3. LATERALS TO HAVE MINIMUM OF 12" OF COVER AND A MINIMUM OF 12" OFF OF THE HARDSCAPE
4. NO ROCKS, BOULDERS OR SHARP OBJECTS TO BE IN TRENCH BACKFILL
5. ALL PIPE TO BE INSTALLED AS PER MANUFACTURES SPECIFICATIONS
6. SPRINKLERS AND RELATED EQUIPMENT TO BE INSTALLED AS PER DETAILS
7. CONTROL WIRE TO BE 14 GA UL APPROVED, SINGLE CONDUCTOR, PE JACKETED
8. WIRE SPLICES TO BE DONE AS PER DETAILS
9. ALL WIRE SPLICES OUTSIDE OF CONTROL VALVE BOX TO BE IN 10" VALVE BOX
10. WIRE TO BE COLOR CODED, RED FOR POWER AND WHITE FOR COMMON
11. CONTRACTOR SHALL INSTALL MANUFACTURES GROUNDING EQUIPMENT ON BOTH THE POWER AND OUTPUT SIDES
12. CONTRACTOR SHALL PROVIDE EXPANSION COILS AT EACH WIRE CONNECTION BY WRAPPING WIRE AROUND 3/4" PIPE 12 TIMES
13. AT EACH CHANGE IN MAINLINE DIRECTION CONTRACTOR TO INSTALL A 30" LOOP OF EXTRA WIRE
14. WIRE TO BE BUNDLED WITH ZIP-TIE EVERY 15'
15. SPRINKLERS ARE TO BE ADJUSTED TO AVOID OVER-SPRAY INTO NON-IRRIGATED AREAS
16. ELECTRIC CONTROL VALVES ARE TO BE INSTALLED IN VALVE BOXES AS FOLLOWS
14" RECTANGULAR FOR EACH ELECTRIC CONTROL VALVE
17. SPRINKLERS TO BE INSTALLED 12" FROM FOUNDATIONS AND 2" FROM HARDSCAPE
18. CONTRACTOR TO ADD RISER EXTENSIONS TO SPRINKLERS IF REQUIRED TO MAINTAIN PROPER COVERAGE
19. ALL PIPING TO BE FLUSHED PRIOR TO INSTALLATION OF SPRINKLERS
20. ALL VALVES, QUICK COUPLER VALVES, WIRE SPLICES TO BE IN LANDSCAPED BEDS WHEREVER POSSIBLE
21. CONTRACTOR IS RESPONSIBLE FOR OBTAINING PROPER COVERAGE OF AREA TO BE IRRIGATED, MAKE ADJUSTMENTS AS NECESSARY
22. CONTRACTOR SHALL EXERCISE CARE NOT TO DAMAGE EXISTING UTILITIES REPAIRING ANY DAMAGES AT HIS OWN COST
23. PLAN IS DIAGRAMMATIC TO IMPROVE CLARITY ALL IRRIGATION EQUIPMENT TO BE INSTALLED WITHIN PROPERTY LINES AND LANDSCAPED AREAS
24. ANY DISCREPANCIES BETWEEN THE PLAN AND THE SITE TO BE REFERRED TO THE OWNERS REPRESENTATIVE PRIOR TO CONSTRUCTION
25. CONTRACTOR TO PROVIDE 1 YEAR WARRANTY OF ALL PRODUCTS AND WORKMANSHIP TO INCLUDE WINTERIZATION AND SPRING START-UP
26. CONTRACTOR TO PROVIDE OWNER AND OR LANDSCAPE ARCHITECT RECORD DRAWING PRIOR TO SUBSTANTIAL COMPLETION
27. INSTALLATION OF IRRIGATION SLEEVES IS THE IRRIGATION CONTRACTORS RESPONSIBILITY IRRIGATION CONTRACTOR TO COORDINATE WITH GENERAL CONTRACTOR SLEEVE INSTALLATION PRIOR TO PAVEMENT INSTALLATION
28. CLEANUP AND DISPOSE OF ALL DEBRIS, WASTE AND EXCESS CONSTRUCTION MATERIALS LEAVE AREA NEAT, CLEAN AND READY FOR OWNERS USE PROVIDE CLEAN PAVEMENT SURFACES INCLUDING AREAS OF PUBLIC R.O.W.

CONTROLLER INSTALLATION NOTES

1. IRRIGATION CONTRACTOR TO COORDINATE EXACT LOCATION OF CONTROLLER WITH OWNERS REPRESENTATIVE.
2. PROVIDE 120VAC 20 AMP POWER TO JUNCTION BOX IN THE CONTROLLER PEDESTAL.
3. IRRIGATION CONTRACTOR TO HARD WIRE CONTROLLER TO POWER SUPPLY AS PER PREVAILING CODE.
4. CONTROLLER TO BE SECURELY ATTACHED TO THE CONCRETE PEDESTAL BASE USING METALLIC FASTENERS MADE FOR CONCRETE.
5. ALL IRRIGATION CONTROL WIRE ABOVE GRADE TO BE ENCASED IN PVC ELECTRICAL CONDUIT.
6. IRRIGATION CONTRACTOR IS RESPONSIBLE FOR ALL POTENTIAL WALL PENETRATIONS AND THE SEALING OF THOSE PENETRATIONS.
7. CONTROLLER TO BE GROUNDED AS PER MANUFACTURERS RECOMMENDATIONS.

VALVE SCHEDULE

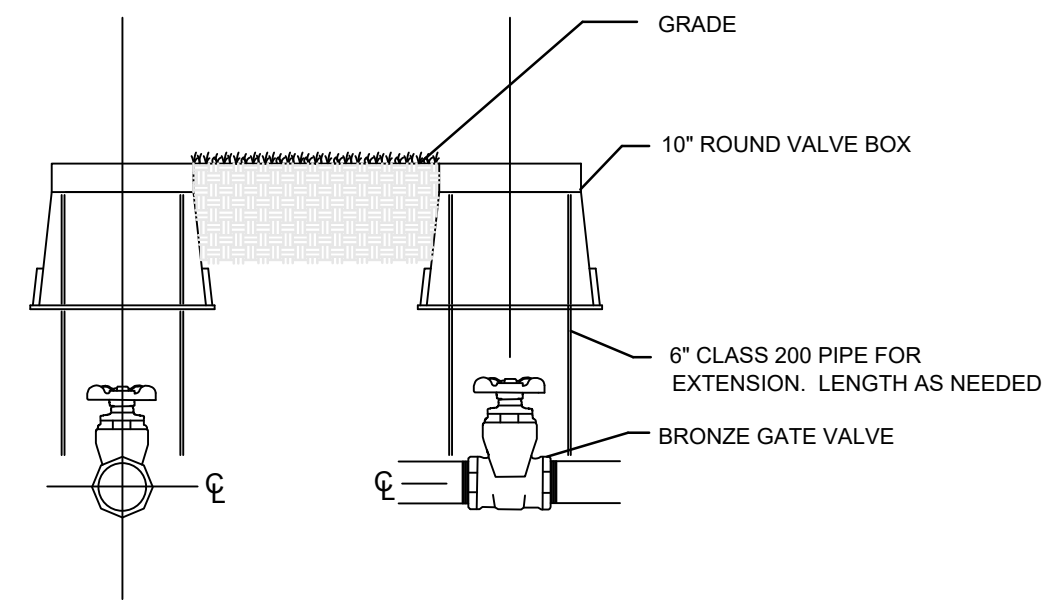
NUMBER	MODEL	SIZE	TYPE	GPM	PRECIP
C1	Rain Bird PEB	1"	Shrub Spray	21.12	1.6 in/h
C2	Rain Bird PEB	1-1/2"	Shrub Spray	30.83	1.4 in/h
C3	Rain Bird PEB	1"	Bubbler	12.00	30.64 in/h
C4	Rain Bird PEB	1-1/2"	Turf Rotary	34.41	0.48 in/h
C5	Rain Bird PEB	1-1/2"	Shrub Spray	32.95	1.37 in/h
C6	Rain Bird PEB	1"	Turf Spray	20.89	1.53 in/h
C7	Rain Bird PEB	1"	Turf Spray	22.10	1.45 in/h
C8	Rain Bird PEB	1"	Shrub Spray	11.64	0.66 in/h
C9	Rain Bird PEB	1"	Shrub Spray	4.23	1.15 in/h
C10	Rain Bird PEB	1"	Turf Spray	24.70	1.48 in/h
C11	Rain Bird PEB	1-1/2"	Shrub Spray	26.44	1.84 in/h
C12	Rain Bird PEB	1"	Turf Rotary	23.66	0.42 in/h
C13	Rain Bird PEB	1-1/2"	Turf Spray	30.25	1.67 in/h
C14	Rain Bird PEB	1"	Shrub Spray	9.35	1.43 in/h

USER\MICHAEL CLARK
 FILE:\GIS\GISEO\Commercial Projects\Granger Park Lagrange GA\Design Files\Irrigation.dwg
 SAVER:8/11/2021
 PLOTED:8/11/2021

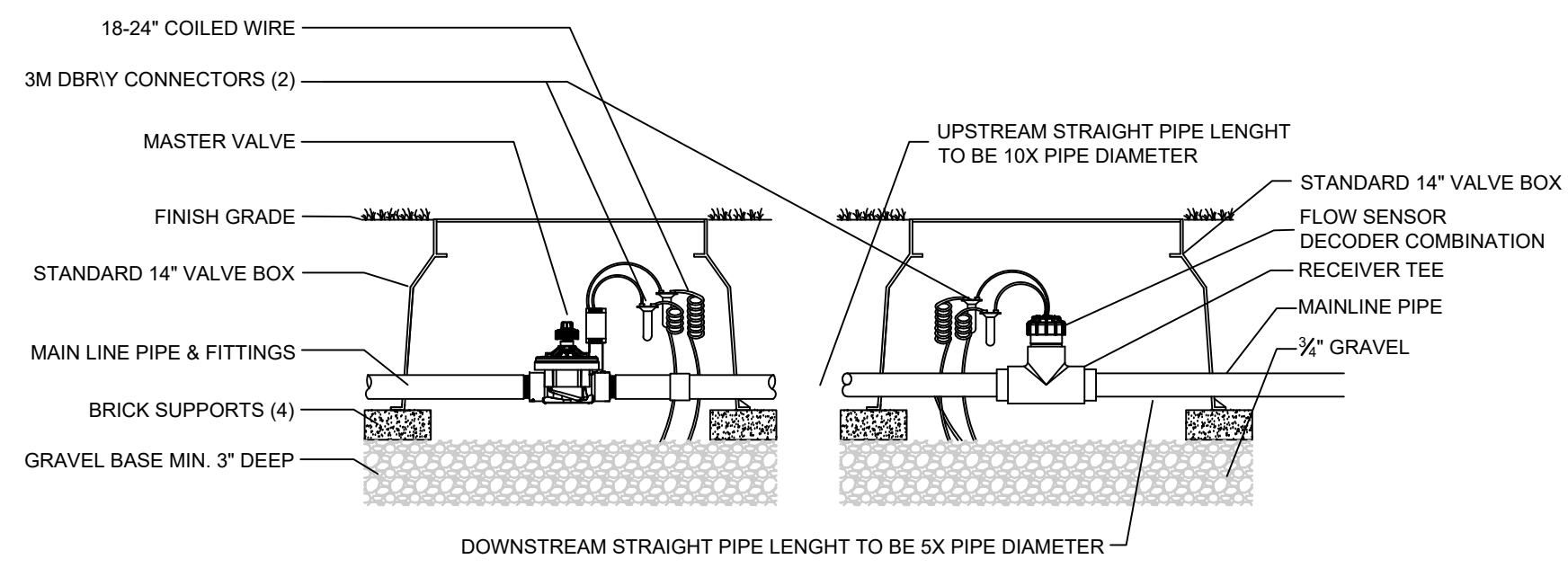


IRRIGATION PLAN
 CITY OF LAGRANGE
 GRANGER PARK
 LAGRANGE, GEORGIA

REV.	DR.	CHK.	DATE	DESCRIPTION
			07/30/21	INITIAL ISSUE



10 ISOLATION VALVE DETAIL
NTS



11 MASTER VALVE FLOW SENSOR
NTS

CRITICAL ANALYSIS

Generated:	2021-08-17 10:23
P.O.C. NUMBER:	01
Water Source Information:	Irrigation Meter
FLOW AVAILABLE	
Water Meter Size:	1-1/2"
Flow Available:	40.32 gpm
PRESSURE AVAILABLE	
Static Pressure at POC:	90.00 PSI
Elevation Change:	5.00 ft
Service Line Size:	1 1/2"
Length of Service Line:	20 ft
Pressure Available:	84.00 psi
DESIGN ANALYSIS	
Maximum Station Flow:	34.41 gpm
Flow Available at POC:	40.32 gpm
Residual Flow Available:	5.91 gpm
Critical Station:	C12
Design Pressure:	40.00 psi
Friction Loss:	4.18 psi
Fittings Loss:	0.42 psi
Elevation Loss:	0.00 psi
Loss through Valve:	3.89 psi
Pressure Req. at Critical Station:	48.48 psi
Loss for Fittings:	0.19 psi
Loss for Main Line:	1.93 psi
Loss for POC to Valve Elevation:	0.00 psi
Loss for Backflow:	4.25 psi
Loss for Master Valve:	0.65 psi
Loss for Water Meter:	1.17 psi
Critical Station Pressure at POC:	56.67 psi
Pressure Available:	84.00 psi
Residual Pressure Available:	27.33 psi



IRRIGATION PLAN
CITY OF LAGRANGE
GRANGER PARK
LAGRANGE, GEORGIA

REV.	DR.	CHK.	DATE	DESCRIPTION
			07/30/21	INITIAL ISSUE

IR1.03
PROJ. NO. 3643212