

KEYMAP SCALE: 1"=200'





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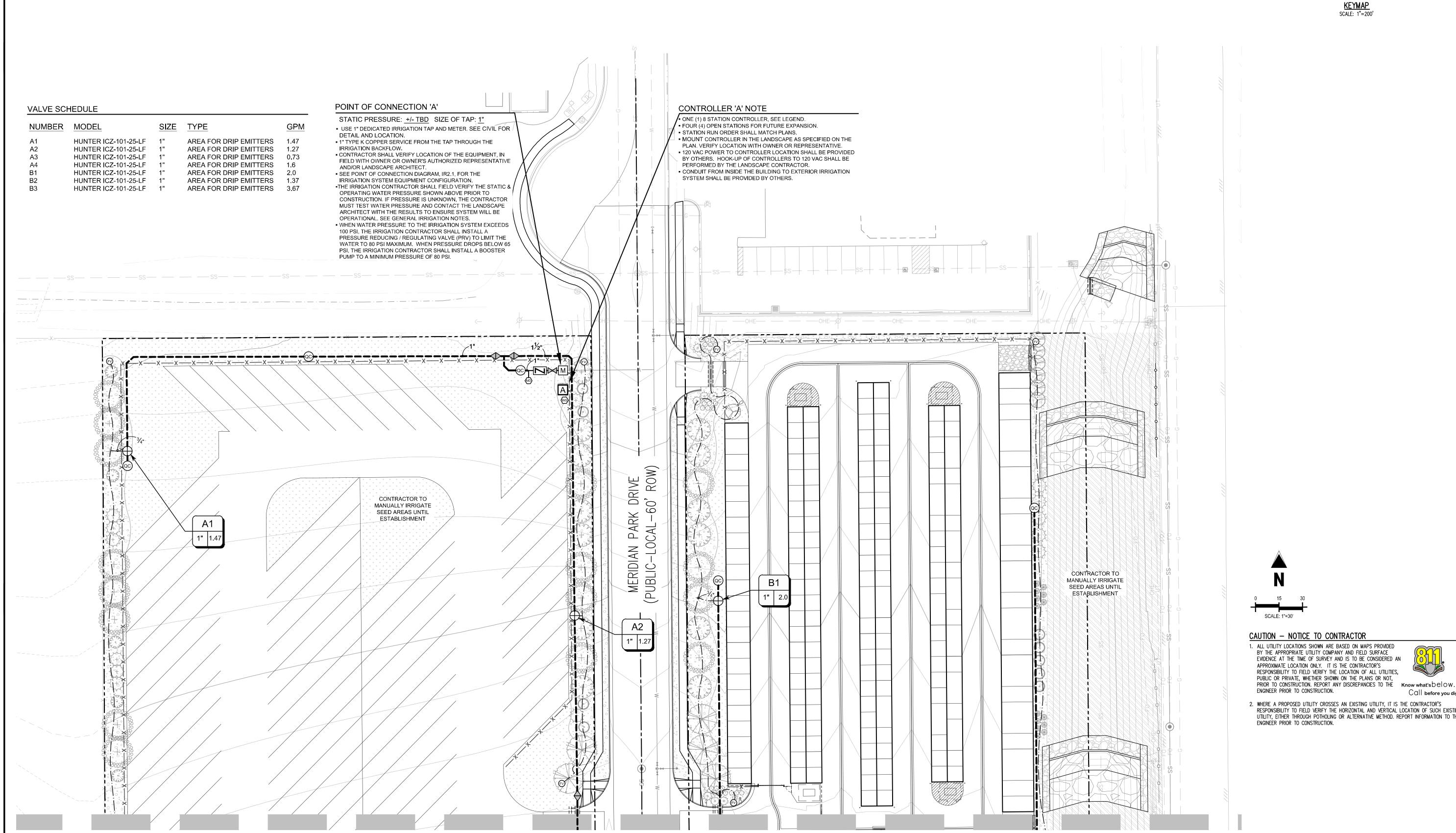
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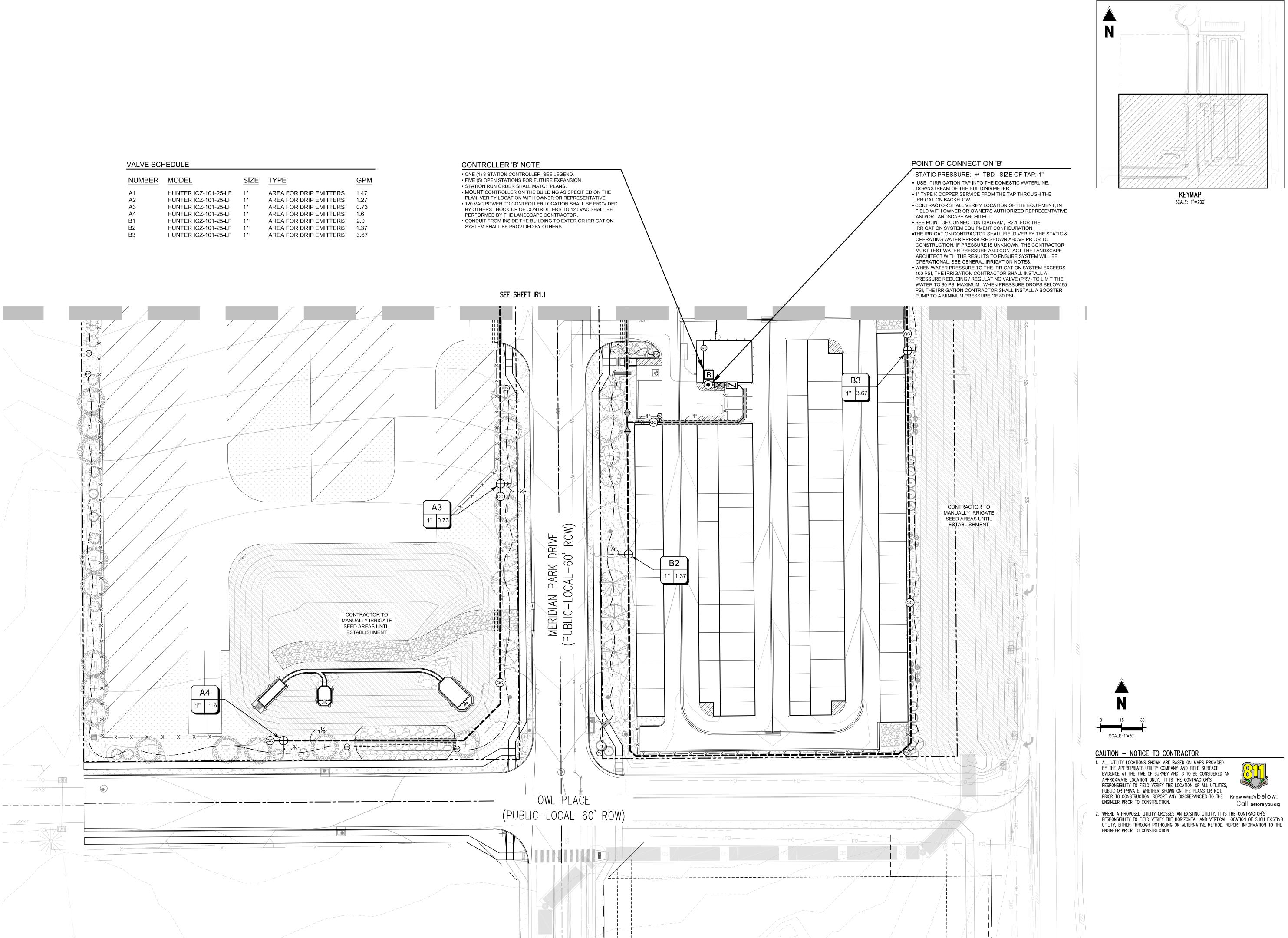
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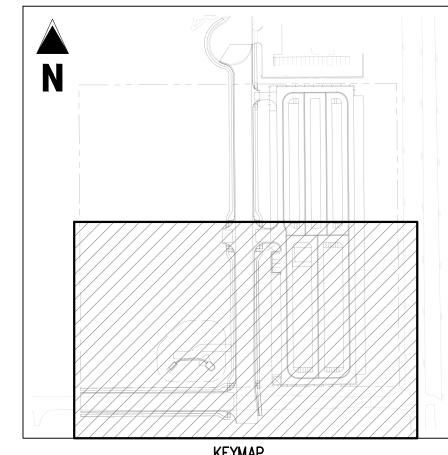
RESPONSIBILITY TO FIELD VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF SUCH EXISTING UTILITY, EITHER THROUGH POTHOLING OR ALTERNATIVE METHOD. REPORT INFORMATION TO THE

IRRIGATION PLAN



SEE SHEET IR1.2



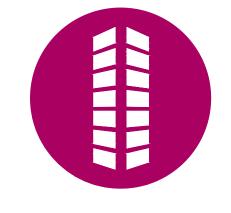


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Date	Issue / Description	lnit.
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Project No:	MRS01.2
Drawn By:	JAC
Checked By:	TDN
Date:	MARCH 2024

IRRIGATION PLAN

### GENERAL IRRIGATION NOTES

- IRRIGATION DESIGN IS BASED ON THEORIES, ASSUMPTIONS, AND/OR INFORMATION PROVIDED BY CIVIL MODELS/UTILITIES/MUNICIPAL ENTITIES AND THUS, IS DIAGRAMMATIC IN NATURE. ALL PIPING, VALVES, AND OTHER EQUIPMENT SHOWN WITHIN PAVED AREAS OR OUT OF PROPERTY BOUNDARIES ARE FOR GRAPHIC CLARIFICATION ONLY, AND SHALL BE INSTALLED IN PLANTING AREAS WITHIN THE PROPERTY LINES OR LIMITS INDICATED ON PLAN. THE IRRIGATION CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL ABOVE-GRADE IRRIGATION EQUIPMENT WITH THE OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO INSTALLATION, OR IRRIGATION CONTRACTOR MAY BE REQUIRED TO MOVE SUCH ITEMS AT HIS OWN COST
- REFER TO SPECIFICATIONS (AS APPROPRIATE) FOR SUBMITTALS, INSPECTIONS AND OTHER APPLICABLE INFORMATION. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING A COPY OF THE PROJECT SPECIFICATIONS PRIOR TO BIDDING. THE PROJECT SPECIFICATIONS ARE A PART OF THESE PLANS AND SHALL BE CONSULTED BY THE IRRIGATION CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTING WORK AS SPECIFIED IN THE PROJECT SPECIFICATIONS AND ON THE PLANS.
- THE IRRIGATION CONTRACTOR SHALL MEET WITH THE OWNER'S REPRESENTATIVE PRIOR TO COMMENCEMENT OF WORK, AND SHALL OBTAIN ALL ENGINEERING, LANDSCAPE, AND OTHER APPLICABLE PLANS & DOCUMENTS. CONTRACTOR SHALL THOROUGHLY REVIEW PLANS & REPORT ANY CONFLICTS OR DISCREPANCIES TO OWNER'S REPRESENTATIVE IMMEDIATELY.
- CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS, EQUIPMENT QUANTITIES, AND UTILITY LOCATIONS PRIOR TO BEGINNING WORK. DO NOT INSTALL THE IRRIGATION SYSTEM AS SHOWN ON THE DRAWINGS WHEN IT IS OBVIOUS IN THE FIELD THAT OBSTRUCTIONS, GRADE DIFFERENCES, OR DIFFERENCES IN THE AREA DIMENSIONS EXIST. THAT MIGHT NOT HAVE EXISTED AT THE TIME OF THE IRRIGATION DESIGN PREPARATION. SUCH OBSTRUCTIONS OR DIFFERENCES SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER'S AUTHORIZED REPRESENTATIVE AND LANDSCAPE ARCHITECT. IN THE EVENT THIS NOTIFICATION IS NOT GIVEN, THE IRRIGATION CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY REVISIONS NECESSARY TO BRING THE SYSTEM TO A PROPER WORKING CONDITION, AND TO THE OWNER'S SATISFACTION.
- IT IS THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR TO FAMILIARIZE HIMSELF WITH ALL GRADE DIFFERENCES, LOCATIONS OF WALLS, RETAINING WALLS, ETC. THE IRRIGATION CONTRACTOR SHALL COORDINATE HIS WORK WITH THE GENERAL CONTRACTOR AND OTHER SUBCONTRACTORS FOR THE LOCATION AND INSTALLATION OF PIPE SLEEVES THROUGH WALL, UNDER ROADWAY PAVING, ETC.
- 6. THE CONTRACTOR SHALL MAKE NO SUBSTITUTIONS, DELETIONS, OR ADDITIONS TO THIS PLAN WITHOUT APPROVAL OF THE LANDSCAPE ARCHITECT.
- SEE CIVIL ENGINEER'S DRAWINGS FOR IRRIGATION POINT OF CONNECTION (TAP) AND DOMESTIC WATER SUPPLY.

IRRIGATION SCHEDULE

HUNTER ICZ-101-25-LF 1"

STEEL SCREEN.

NIBCO 4660-T

**HUNTER HE-B** 

CAP (HE) AVAILABLE.

PLANT (6 GPH TOTAL)

HUNTER HQ-44LRC 1"

INLET, 2-PIECE BODY.

VALVE LOCATION. SIZE - 1"

NIBCO T-113-K

NIBCO 4660-S

**HUNTER I2C-0800-M** 

AND GUTTER MOUNT BRACKET.

POINT OF CONNECTION 1"

**HANDLE** 

(1 GPH TOTAL)

BLOWOUT.

SYMBOL

SYMBOL

QC)

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—————— SIZE: 2"

- B. ALL CONSTRUCTION SHALL CONFORM TO CITY, COUNTY, STATE, AND FEDERAL REQUIREMENTS. IT SHALL BE THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR TO ENSURE THAT ALL IRRIGATION EQUIPMENT MEETS GOVERNMENT REGULATIONS. CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR OBTAINING ANY NECESSARY PERMITS OR
- . THE IRRIGATION SYSTEM DESIGN IS BASED ON THE MINIMUM OPERATING PRESSURE AND THE MAXIMUM FLOW DEMAND SHOWN ON THE POINT OF CONNECTION NOTE TAG(S) ON THE DRAWINGS. THE IRRIGATION CONTRACTOR SHALL FIELD VERIFY THE STATIC & OPERATING WATER PRESSURE PRIOR TO CONSTRUCTION, AND SHALL REPORT ANY DIFFERENCES BETWEEN THE WATER PRESSURE INDICATED ON THE DRAWINGS AND THE ACTUAL PRESSURE READING AT THE IRRIGATION POINT OF CONNECTION TO THE OWNER'S AUTHORIZED REPRESENTATIVE AND LANDSCAPE ARCHITECT. IN THE EVENT PRESSURE DIFFERENCES ARE NOT REPORTED OR PRESSURES HAVE GREATLY. CHANGED PRIOR TO THE START OF THE IRRIGATION SYSTEM CONSTRUCTION, THE IRRIGATION CONTRACTOR SHALL BE RESPONSIBLE FOR RECOMMENDING A SOLUTION AND PROVIDING AN ADD ALTERNATE BID FOR IRRIGATION COSTS.
- 10. CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT IF AVAILABLE WATER PRESSURE EXCEEDS 5 PSI HIGHER OR LOWER THAN AVAILABLE WATER PRESSURE.

MANUFACTURER/MODEL/DESCRIPTION

HY100 FILTER SYSTEM. PRESSURE REGULATION: 25 PSI. FLOW RANGE: .5 GPM - 15 GPM. 150 MESH STAINLESS

SCHEDULE DESCRIPTION: 3/4" SCHEDULE 40 MANUAL

POINT SOURCE DRIP EMITTER WITH SELF PIERCING BARB COLOR CODED EMITTERS FOR FLOW RATES OF 0.5 GPH, 1.0 GPH, 2.0 GPH, 4.0 GPH, AND 6.0 GPH. CAN BE INSERTED

COMPENSATING FROM 15 PSI-50 PSI. OPTIONAL DIFFUSER

-1 GALLON AND SMALLER: 2, HEB-5-B EMITTER PER PLANT DETAIL 3

FLUSH VALVE. CONNECT TO DRIP POLYTUBING FOR

INTO 1/2IN. AND 3/4IN. TUBING AND HAVE PRESSURE

-5 GALLON: 2, HEB-10-B EMITTERS PER PLANT (2 GPH

-1" TO 2-1/2" CALIPER TREES: 4, HEB-10-B EMITTERS PER

MANUFACTURER/MODEL/DESCRIPTION

COVER, RED BRASS AND STAINLESS STEEL, WITH 1IN. NPT DETAIL 4

CLASS 125 BRONZE GATE SHUT OFF VALVE WITH CROSS SHEET IR2.1

1" CLASS 125 BRONZE MANUAL DRAIN VALVE WITH CROSS DETAIL 7

INTERFACE, CONNECTS TO HUNTER PCC, PRO-C, AND SHEET IR2.1 I-CORE CONTROLLERS, INSTALL AS NOTED. INCLUDES 10 DETAIL 10

QUICK COUPLER VALVE, YELLOW RUBBER LOCKING

HANDLE, SAME SIZE AS MAINLINE PIPE DIAMETER AT

MAINLINE PIPE DIAMETER AT VALVE LOCATION. SIZE - 1".

SCHEDULE 40 MANUAL BALL VALVE, SAME SIZE AS

REDUCED PRESSURE BACKFLOW PREVENTER

USE 1" TAP INTO THE DOMESTIC WATERLINE

DOWNSTREAM OF THE BUILDING METER.

IRRIGATION MAINLINE: CLASS 200 PVC

8 STATION OUTDOOR MODULAR CONTROLLER. NO

MODULE REQUIRED. COMMERCIAL USE. METAL CABINET.

WIRELESS SOLAR, RAIN FREEZE SENSOR WITH OUTDOOR

YEAR LITHIUM BATTERY AND RUBBER MODULE COVER,

IRRIGATION DRIP SUPPLY TUBING: POLYETHYLENE PIPE

SIZE: 1" UNLESS OTHERWISE NOTED ON THE PLAN

IRRIGATION SERVICE LINE: TYPE K COPPER PIPE

-3" TO 4" CALIPER TREES: 6, HEB-10-B EMITTERS PER

-10-15 GALLONS & UPRIGHT JUNIPERS: 3. HEB-10-B

EMITTERS PER PLANT (3 GPH TOTAL)

AREA TO RECEIVE DRIP EMITTERS

DRIP CONTROL ZONE KIT. 1IN. ICV GLOBE VALVE WITH 1IN.
SHEET IR2.1

11. NO MORE THAN 90% OF AVAILABLE MINIMUM STATIC WATER PRESSURE WAS USED IN PREPARATION OF THESE PLANS, FURTHERMORE, THE MAXIMUM FLOW THROUGH THE METER SHOULD NOT EXCEED 75% OF THE MAXIMUM SAFE FLOW.

SHEET IR2.1

DETAIL

SHEET IR2.1

SHEET IR2.1

SHEET IR2.1

SHEET IR2.1

DETAIL 11

SHEET IR2.1 DETAIL 12

SHEET IR2.1

DETAIL 12

SHEET IR2.1

SHEET IR2.1

DETAIL 12

SHEET IR2.1

DETAIL 12

DETAIL 12

DETAIL 8

DETAIL 9

DETAIL 6

DETAIL 2

## 12. SUPPLY LINE AND METER TO BE PROVIDED BY GENERAL CONTRACTOR. BACKFLOW PREVENTER TO BE PROVIDED BY IRRIGATION CONTRACTOR. IRRIGATION CONTRACTOR'S 13. INSTALL ALL MATERIALS AND EQUIPMENT AS SHOWN ON THE PLANS AND DETAILS. NO SUBSTITUTIONS OF EQUIPMENT WILL BE ACCEPTABLE WITHOUT PRIOR WRITTEN

- APPROVAL BY THE LANDSCAPE ARCHITECT OR THE OWNERS REPRESENTATIVE. THE IRRIGATION CONTRACTOR MAY BE REQUIRED TO REMOVE AND REPLACE ALL UNAPPROVED SUBSTITUTED FOUIPMENT AT HIS OWN COST IF SO DIRECTED BY THE OWNER
- 14. WHEN INSTALLING IRRIGATION PIPE AND EQUIPMENT NEXT TO HARDSCAPE (SUCH AS WALLS, CURBS, OR WALKS), PLACE PIPE AS CLOSE AS POSSIBLE TO HARDSCAPE TO AVOID CONFLICTS WITH PLANTING. REFER TO MAINLINE TRENCHING DETAILS FOR ADDITIONAL INFORMATION.
- THE IRRIGATION CONTRACTOR SHALL COORDINATE 120 V.A.C. ELECTRICAL POWER TO CONTROLLERS AND DEDICATE ONE (1) 20-AMP BREAKER FOR EACH CONTROLLER. IT SHALL BE THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR TO MAKE THE FINAL HOOK-UP FROM THE ELECTRICAL SOURCE TO THE CONTROLLER UNIT ONLY.
- 16. THE RAIN SENSOR SHALL BE LOCATED NEAR THE IRRIGATION CONTROLLER, AND SHALL BE MOUNTED AS SHOWN ON THE DETAIL AND/OR LEGEND. LOCATE SENSOR AWAY FROM TALL TREES, SHRUBS, AND OTHER POTENTIAL OBSTRUCTIONS.
- ALL VALVE CONTROL WIRE SHALL BE AWG 14 TYPE UF, 600 VOLT TEST, DIRECT BURIAL. NO SPLICES SHALL BE ALLOWED EXCEPT AT VALVES AND CONTROLLER. WHERE SPLICES MAY BE NECESSARY DUE TO EXCESSIVELY LONG WIRE RUNS, THE CONTRACTOR SHALL MAKE ALL SPLICES IN 6" ROUND VALVE BOXES WITH 3M'S "DBY-DIRECT BURIAL SPLICE KIT". THE CONTRACTOR SHALL LABEL ALL WIRES WITH WATERPROOF TAGS AND MARKERS AT ALL SPLICES AND VALVE MANIFOLDS, AND SHALL LEAVE A 24"
- 18. CONTRACTOR SHALL PROVIDE #10 COMMON WIRE, DIRECT BURIAL, TO ALL REMOTE CONTROL VALVES.
- 19. CONNECT ALL DIRECT BURIAL WIRES TO VALVES USING 3M'S "DBY-DIRECT BURIAL SPLICE KIT" (UNLESS OTHERWISE SPECIFIED).
- 20. PROVIDE ADDITIONAL IRRIGATION CONTROL WIRES TO THE AMOUNT OF OPEN ZONES ON THE CONTROLLER ALONG EACH BRANCH OF MAINLINE FOR FUTURE EXPANSION. STUB ADDITIONAL CONTROL WIRES INTO BACK OF IRRIGATION CONTROLLERS.
- 21. THE IRRIGATION CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING ALL CONTROL WIRE SLEEVES AND PIPE SLEEVES UNDER PAVED AREAS PRIOR TO PAVING. ELECTRICAL WIRES FOR IRRIGATION VALVES AND IRRIGATION LINES ARE TO BE PLACED IN SEPARATE SLEEVES. ALL SLEEVING SHALL BE PVC SCHEDULE 40 PIPE. SLEEVES FOR MAINLINE AND LATERAL LINES SHALL BE A MINIMUM TWICE THE DIAMETER OF THE ENCLOSED PIPE; SLEEVES FOR CONTROL WIRES SHALL BE AS PER THE SLEEVING / WIRING NOTE AND THE WIRING SLEEVE LEGEND ITEM AS SHOWN ON THESE DRAWINGS.
- TRENCH BACKFILL MATERIAL SHALL BE FREE OF ROCKS, GLASS, AND OTHER EXTRANEOUS MATERIALS LARGER THAN 1" IN DIAMETER. BACKFILL SHALL BE COMPACTED TO 90% MAXIMUM DRY DENSITY.
- 23. WHERE VALVES ARE LOCATED IN CLOSE PROXIMITY TO EACH OTHER, CLUSTER VALVES INTO MANIFOLDS. INSTALL NO MORE THAN ONE VALVE PER VALVE BOX.
- 24. MANUAL DRAIN VALVE, FOR FREEZE PROTECTION, ARE TO BE LOCATED AT ALL LOW POINTS OF IRRIGATION LATERAL LINES. WHERE THE LOW POINT IS AT THE END OF THE
- LINE, LOCATE DRAIN VALVE A MINIMUM OF 12" DOWNSTREAM FROM THE LAST SPRINKLER HEAD. SEE DETAIL FOR VALVE ORIENTATION.
- 25. USE TEFLON TAPE ON ALL PVC MALE PIPE THREADS ON ALL SWING JOINT AND VALVE ASSEMBLIES.

### STANDARD CITY OF COLORADO SPRINGS IRRIGATION NOTES

• "THE CITY HAS ADOPTED PERMANENT WATER-WISE REGULATIONS AS OF JANUARY 1, 2020, WHICH WILL AFFECT THE OVERALL OPERATION OF THE IRRIGATION SYSTEM. FROM MAY 1 TO OCTOBER 15, SPRINKLERS CAN BE OPERATED BEFORE 10 A.M. AND AFTER 6 P.M. WATERING IS LIMITED TO THREE DAYS A WEEK (DRIP IRRIGATION IS ALLOWED AT ANY TIME). ESTABLISHMENT PERMITS ARE REQUIRED FROM COLORADO SPRINGS UTILITIES FOR CUSTOMERS WHO NEED TO TEMPORARILY WATER MORE THAN THREE DAYS A WEEK TO ESTABLISH NEW LANDSCAPES. ALLOCATION PLANS ARE AVAILABLE FOR CUSTOMERS WHO NEED MORE WATERING SCHEDULE FLEXIBILITY FROM COLORADO SPRINGS UTILITIES."

• "FOR ALL DESIGN IRRIGATION SYSTEMS, IF MORE THAN THREE DAYS A WEEK ARE REQUIRED TO PROVIDE REQUIRED COVERAGE WITH SPRAY/ROTOR STATIONS/VALVES, A WATER ALLOCATION PLAN IS REQUIRED FROM COLORADO SPRINGS UTILITIES."

• "CITY AFFIDAVIT NOTE - THE DESIGN PROFESSIONAL OF RECORD IS TO COMPLETE THE IRRIGATION INSPECTION AFFIDAVIT BASED ON APPROVED IRRIGATION PLAN. THIS SHOULD REQUIRE LIMITED CONSTRUCTION OBSERVATION VISITS AND A FUNCTIONAL TEST OF THE IRRIGATION SYSTEM SHALL BE PERFORMED TO ACCURATELY COMPLETE THE AFFIDAVIT. FINAL CO OR FINANCIAL ASSURANCES RELEASE SHALL NOT BE PROCESSED UNTIL AN EXECUTED AND APPROVED AFFIDAVIT IS SUBMITTED TO CITY STAFF. WHEN READY TO CALL FOR INSPECTION AND SUBMIT AFFIDAVITS, FIRST CONTACT THE CITY PLANNER OF RECORD FOR THE PROJECT (719-385-5905) AND AS NECESSARY OUR DRE OFFICE (719-385-5982)".

### TOTAL IRRIGATED AREA

### VALVE SCHEDULE

NUMBER	MODEL	SIZE	TYPE	GPM
A1	HUNTER ICZ-101-25-LF	1"	AREA FOR DRIP EMITTERS	1.47
A2	HUNTER ICZ-101-25-LF	1"	AREA FOR DRIP EMITTERS	1.27
A3	HUNTER ICZ-101-25-LF	1"	AREA FOR DRIP EMITTERS	0.73
A4	HUNTER ICZ-101-25-LF	1"	AREA FOR DRIP EMITTERS	1.6
B1	HUNTER ICZ-101-25-LF	1"	AREA FOR DRIP EMITTERS	2.0
B2	HUNTER ICZ-101-25-LF	1"	AREA FOR DRIP EMITTERS	1.37
B3	HUNTER ICZ-101-25-LF	1"	AREA FOR DRIP EMITTERS	3.67

# IRRIGATION CONTROLLER CHART

Zone	Plant Type (turf, seed, shrubs, perennials, etc.	Head Type	Nozzle	Application Rate (inches/hour)	GPM	Inches/ Month	Run Time (minutes per month)	Run Time (Three times a week)
A1	Shrub Bed	HE-B	HEB-5-10-B	0.7	1.37	4	343	34
A2	Shrub Bed	HE-B	HEB-5-10-B	0.7	1.27	4	343	34
A3	Shrub Bed	HE-B	HEB-5-10-B	0.7	2	4	343	34
A4	Shrub Bed	HE-B	HEB-5-10-B	0.7	0.73	4	343	34
B1	Shrub Bed	HE-B	HEB-5-10-B	0.7	3.67	4	343	34
B2	Shrub Bed	HE-B	HEB-5-10-B	0.7	1.6	4	343	34
B3	Shrub Bed	HE-B	HEB-5-10-B	0.7	1.47	4	343	34
Contractor No	stes:		•		•	•		

# Contractor Notes:

- ~ Use the above schedule as a rough guide. Monitor plant health & soil moisture. Adjust water schedule, run times, & frequency accord
- ~ Abide by jurisdictional water window requirements when running the irrigation.

# WATER DEMAND ANALYSIS

Туре	Square Feet	Acreage	Inches /Month	Inches/ Year	Feet/ Year	Estimated Demand (Acre Ft/Yr)	Gallons/ Year
Plant Beds	15,629	0.36	4	24	2	0.72	233,825
Total:	15,629	0.36	4	24	2	0.72	233,825

- ~ Use the above demand as a rough guide. Demand may change based on numerous factors ~ Due to Point Source Irrigation in the Plant Beds, the amount in the Square Feet collumn is based on the
- estimated plant material coverage and may differ from the Plant Bed area on the landscape plan.

- 26. ALL IRRIGATION HEADS, INCLUDING FIXED-SPRAY AND DRIP DEVICES, SHALL BE SET PERPENDICULAR TO THE FINISH GRADE OF THE AREA TO BE IRRIGATED.
- 27. ALL PRESSURIZED MAINLINES, VALVES, DRIP, AND ROTOR AND SPRAY HEADS SHALL BE INSTALLED A MINIMUM OF 3' AWAY FROM ANY BUILDING FOUNDATION. IF THIS EQUIPMENT IS SHOWN WITHIN THE 3' OFFSET ON THESE PLANS, IT IS FOR THE PURPOSE OF GRAPHIC CLARITY ONLY
- 28. EXCEPT WHERE SPECIFICALLY NOTED OTHERWISE, IT IS THE INTENT OF THE IRRIGATION DESIGN TO INDICATE ALL SPRAY HEADS AS "POP-UPS". IN THE EVENT THAT POP-UP HEADS HAVE NOT BEEN SPECIFIED IN TURF AREAS, IT SHALL BE THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR TO BRING THIS TO THE ATTENTION OF THE LANDSCAPE ARCHITECT PRIOR TO BIDDING AND CONSTRUCTION.
- 29. ALL SPRAY AND ROTOR HEAD LOCATIONS SHALL BE STAKED, FLAGGED AND/OR OTHERWISE CLEARLY MARKED ON THE GROUND PRIOR TO INSTALLATION. SPRINKLER HEAD STAKING SHALL BE INSPECTED AND APPROVED BY THE OWNER'S REPRESENTATIVE OR THE LANDSCAPE ARCHITECT BEFORE INSTALLATION. STAKED LOCATIONS SHALL BE SPACED TO PROVIDE HEAD-TO-HEAD COVERAGE. RECOMMENDED SETBACK DISTANCE OF ALL PROPOSED IRRIGATION HEADS IS 12" FROM BACK OF CURB AND EDGE OF
- 30. FLUSH AND ADJUST ALL SPRINKLER HEADS FOR OPTIMUM PERFORMANCE AND TO PREVENT OVERSPRAY ONTO WALKS, ROADWAYS, AND/OR BUILDINGS AS MUCH AS POSSIBLE. THIS SHALL INCLUDE SELECTING THE BEST NOZZLE ARC AND RADIUS TO FIT THE EXISTING SITE CONDITIONS.
- 31. ALL POP-UP TYPE SPRINKLER HEADS INSTALLED IN TURF AREAS SHALL BE INSTALLED SO THE TOP OF THE SPRINKLER HEAD IS FLUSH WITH THE ADJACENT SIDEWALK, OR PAVING. ALL POP-UP HEADS AWAY FROM HARDSCAPE EDGES IN TURF SHALL BE 1" ABOVE THE FINISH GRADE TO PREVENT CONTACT WITH MOWERS.
- 32. EXISTING TREES TO REMAIN ARE TO BE PROTECTED FROM DAMAGE. DO NOT TRENCH OR EXCAVATE WITHIN THE CRITICAL ROOT ZONE OF ANY TREE.
- 33. ALL PLANT MATERIAL IN TREE HOLDING AREAS SHALL BE MANUALLY WATERED/IRRIGATED TO KEEP MOIST UNTIL PLANTED.
- 34. UPON COMPLETION OF INSTALLATION OF IRRIGATION SYSTEM, IRRIGATION CONTRACTOR SHALL PROVIDE THE FOLLOWING: A. ACCURATE AND COMPLETE "AS BUILT" PLANS OF IRRIGATION SYSTEM INCLUDING 8-1/2" X 11" ZONE MAP TO BE PLACED INSIDE EACH CONTROLLER BOX. B. LOG ON ALL WATER WINDOWS, RUN SCHEDULE TIMES, AND OTHER CHANGES AND/OR MODIFICATIONS TO THE IRRIGATION SYSTEM SINCE INSTALLATION. . ONE HOUR OF TRAINING TO OWNER ON IRRIGATION SYSTEM AND CONTROLLER OPERATION.
- E. ONE OF EACH TYPE OF VALVE INSTALLED. F. REVIEW WINTERIZATION PROCEDURES FOR IRRIGATION SYSTEM WITH OWNERS REPRESENTATIVE.
- 35. PRIOR TO ACCEPTANCE OF IRRIGATION SYSTEM AT THE END OF THE MAINTENANCE PERIOD, THE IRRIGATION CONTRACTOR SHALL PROVIDE THE FOLLOWING: CURRENT SCHEDULE RUN TIME AND WATER WINDOW LOG, ALONG WITH NOTING ANY OTHER PERTINENT INFORMATION.
- 36. UNLESS OTHERWISE SPECIFIED, THE IRRIGATION CONTRACTOR SHALL REPAIR OR REPLACE ANYTHING DAMAGED BY HIS WORK AT NO ADDITIONAL COST TO THE OWNER. 37. CONTRACTOR SHALL INSTALL MAINLINES ±12" FROM PAVEMENT EDGE IN PLANTING AREAS. ALL PIPING, VALVES, AND OTHER EQUIPMENT. SHOWN WITHIN PAVED AREAS OR OUT OF PROPERTY BOUNDARIES ARE FOR DESIGN CLARIFICATION ONLY, AND SHALL BE INSTALLED IN PLANTING AREAS WITHIN THE PROPERTY LINES OR LIMITS AS
- 38. IN THE EVENT OF A DISCREPANCY BETWEEN THE PLAN AND SPECIFICATIONS, THE PLAN SHALL TAKE PRECEDENCE.
- 39. THE IRRIGATION SYSTEM SHALL BE INSTALLED BY A QUALIFIED IRRIGATION CONTRACTOR

D. THREE OF EACH TYPE OF HEAD AND EMITTER INSTALLED.

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P.O.C.: B	
Water Source Information:	Use 1" tap into the domestic waterline downstream of the building meter
FLOW AVAILABLE	
Water Meter Size:	1"
Flow Available	18.2 GPM
PRESSURE AVAILABLE	
Static Pressure at POC:	80 PSI
Elevation Change:	5 ft
Service Line Size:	1"
Length of Service Line:	20 ft
Pressure Available:	76 PSI
DESIGN ANALYSIS	
Maximum Station Flow:	1.6 GPM
Flow Available at POC:	18.2 GPM
Residual Flow Available:	16.6 GPM
Critical Station:	A6
Design Pressure:	40 PSI
Friction Loss:	0.03 PSI
Fittings Loss:	0 PSI
Elevation Loss:	0 PSI
Loss through Valve:	3 PSI
Deserving Deservet Cuitient Chatters	40.0 DCI

P.O.C.: A	
Water Source Information:	

Pressure Reg. at Critical Station:

Loss for POC to Valve Elevation:

Critical Station Pressure at POC:

Residual Pressure Available:

PRESSURE AVAILABLE

Loss for Fittings:

Loss for Backflow: Loss for Water Meter:

Pressure Available:

Use dedicated irrigation tap and meter. See civil for tap size and meter size and location. FLOW AVAILABLE

0.06 PSI

11.8 PSI

0.2 PSI

55.7 PSI

76 PSI

20.3 PSI

18.9 PSI

0 PSI

Point of Connection Size: 18.2 GPM Flow Available

Static Pressure at POC: 80 PSI 80 PSI Pressure Available:

DESIGN ANALYSIS 3.67 GPM Maximum Station Flow: Flow Available at POC: 18.2 GPM 14.53 GPM Residual Flow Available:

Critical Station:	A6
Design Pressure:	40 PSI
Friction Loss:	0.14 PSI
Fittings Loss:	0.01 PSI
Elevation Loss:	0 PSI
Loss through Valve:	4.12 PSI
Pressure Req. at Critical Station:	44.3 PSI
Loss for Fittings:	0.46 PSI
Loss for Main Line:	4.58 PSI
Loss for POC to Valve Elevation:	0 PSI
Loss for Backflow:	11.8 PSI
Critical Station Pressure at POC:	61.1 PSI
Pressure Available:	80 PSI

Residual Pressure Available:

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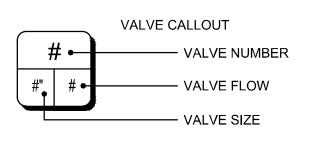
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# Date Issue / Description

Project No: Checked By

**IRRIGATION NOTES & DETAILS** 

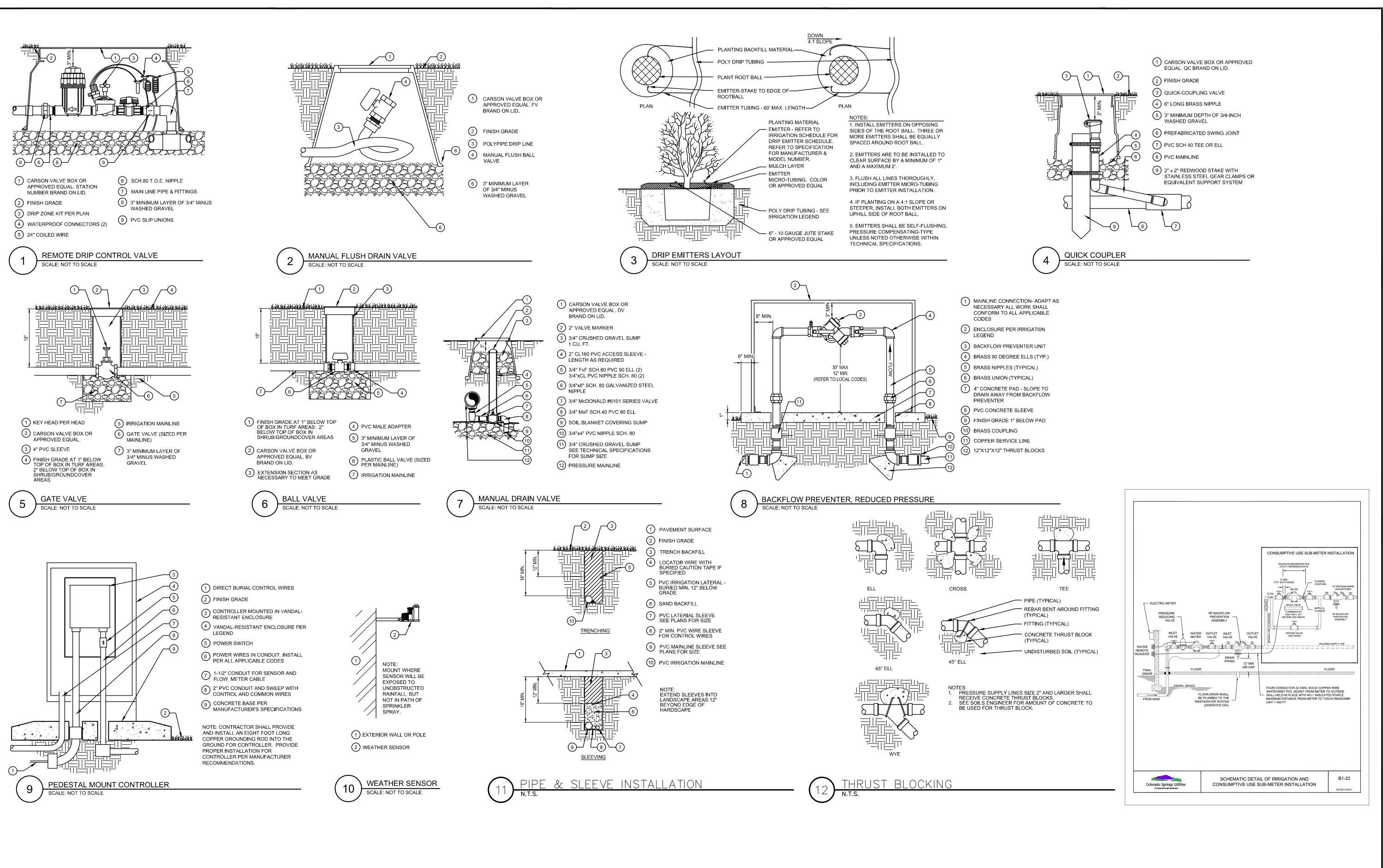
MARCH 2024



\_\_\_\_\_ PIPE SLEEVE: PVC SCHEDULE 40

PIPE SLEEVE: PVC SCHEDULE 40

SIZE: DOUBLE THE SIZE OF PIPE INSERTED

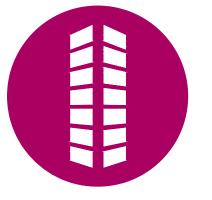


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 Project No:
 MRS01.2

 Drawn By:
 JAC

 Checked By:
 TDN

 Date:
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IRRIGATION DETAILS

IR2 1