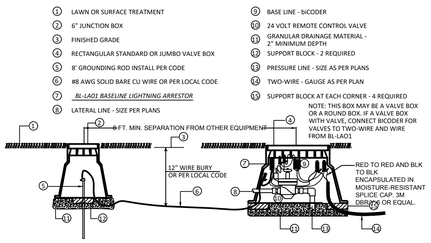
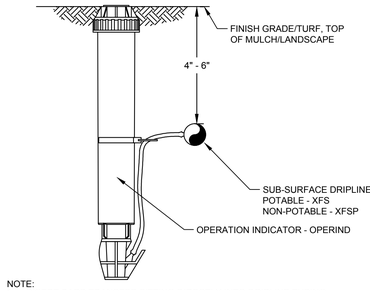


1 BL-LA01 LIGHTNING ARRESTOR

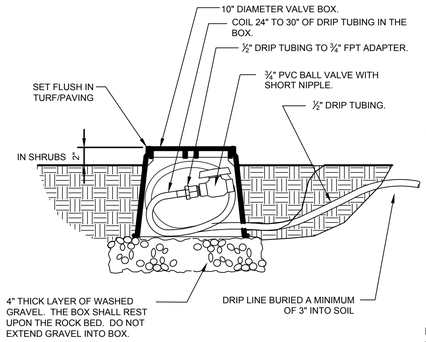
3/4" = 1'-0" 328409.79-04



NOTE:
1. INSERT BARB TRANSFER FITTING DIRECTLY INTO DRIPLINE TUBING.
2. VAN NOZZLE MAY BE SET TO CLOSED, OR IF IT IS DESIRED TO SEE SPRAY FROM THE NOZZLE, SET THE ARC TO ¼ PATTERN. THE FLOW FROM THE NOZZLE, 0.3 GPM, SHOULD BE ACCOUNTED FOR IN THE SYSTEM DESIGN.

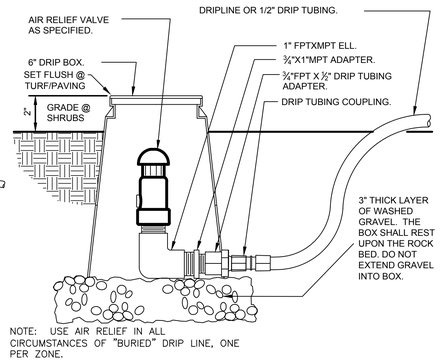
2 XFS OPERATION INDICATOR

3/4" = 1'-0" 328413.26-02



3 DRIP FLUSH VALVE

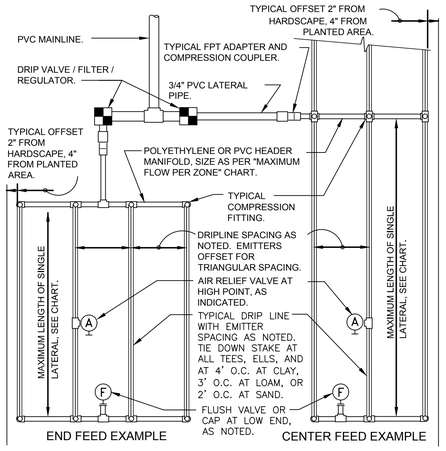
1 1/2" = 1'-0" 328413.49-03



NOTE: USE AIR RELIEF IN ALL CIRCUMSTANCES OF "BURIED" DRIP LINE, ONE PER ZONE.

4 DRIP AIR RELIEF VALVE IN BOX

3" = 1'-0" 328413.53-03



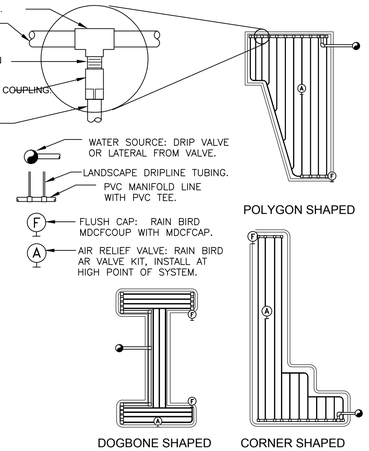
MAXIMUM LATERAL LENGTH (FEET)						
	EMITTER FLOW RATE GPH					
	12" SPACING		18" SPACING		24" SPACING	
PSI	0.6	0.9	0.6	0.9	0.6	0.9
10	125	96	175	135	218	171
20	249	191	350	171	442	340
30	307	236	434	333	550	422
40	350	268	495	380	627	171
50	125	96	175	135	218	171
60	125	96	175	135	218	171

GRID PRECIPITATION RATES (IN/HR)			
		EMITTER FLOW RATE	
EMITTER SPACING	LATERAL SPACING	0.6	0.9
12	12	0.96	1.44
18	18	0.69	1.03
24	24	0.28	0.41

LATERAL FLOW PER 100 FT (GPM)			
EMITTER FLOW	12" SPACING	18" SPACING	24" SPACING
0.6 GPH	1.0 GPM	0.67 GPM	0.50 GPM
0.9 GPH	1.5 GPM	1.0 GPM	0.75 GPM

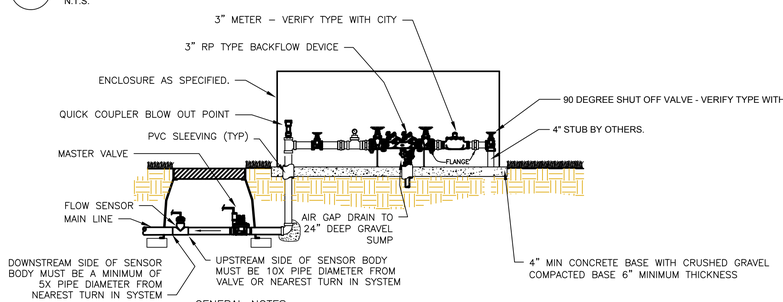
MAXIMUM FLOW PER ZONE		
	MAX GPM	PSI LOSS
SCHEDULE 40 PVC HEADER SIZE		
1/2"	4.7 GPM	7.7 PSI
3/4"	8.3 GPM	5.6 PSI
1"	13.5 GPM	4.2 PSI
1-1/2"	33.9 GPM	2.9 PSI
2"	52.4 GPM	1.9 PSI
POLY PIPE HEADER SIZE		
1/2"	4.7 GPM	8.8 PSI
3/4"	8.3 GPM	6.3 PSI
1"	13.5 GPM	4.8 PSI
1-1/2"	31.8 GPM	2.9 PSI
2"	52.4 GPM	2.2 PSI

SLOPED CONDITION NOTE:
1. DRIPLINE LATERALS SHOULD FOLLOW THE CONTOURS OF THE SLOPE WHENEVER POSSIBLE.
2. FURNISH & INSTALL ALL AIR RELIEF VALVE AT HIGHEST POINT.
3. NORMAL SPACING WITHIN THE TOP ⅔ OF SLOPE,
4. FURNISH & INSTALL DRIPLINE AT 25% GREATER SPACING AT THE BOTTOM ⅓ OF THE SLOPE.
5. WHEN ELEVATION CHANGE IS 10 FT OR MORE, ZONE THE BOTTOM ⅓ ON A SEPARATE VALVE.



5 TYPICAL RAIN BIRD DRIPLINE REQUIREMENTS

N.T.S. 328413.56-01



GENERAL NOTES:
1. CONTRACTOR TO VERIFY CITY REQUIREMENTS FOR CONNECTION TO 4" SOURCE.
2. SECURELY BOLT ENCLOSURE TO CONCRETE PAD. ENCLOSURE TO BE LOCKABLE.
3. GRAVEL SUMP TO BE LOCATED OUTSIDE OF ENCLOSURE AND DIRECTLY ADJACENT TO CONCRETE PAD. FIELD VERIFY FINAL LOCATION.

6 POINT OF CONNECTION DETAIL

1/4" = 1'-0" 328409.73-111

1. DESIGN BASED ON POC ANALYSIS (downstream of meter).
2. This irrigation design is from the point of connection only. This design is based on the pressure and volume indicated in item #1, which is furnished and verified by others. Booster pump may be required if pressure and flow do not meet listed requirements.
3. Contractor shall be responsible to field verify the information in the POC Analysis.
4. This irrigation design is diagrammatic. Adjustments to pipe, valve and/or head placement may be required of contractor.
5. FULL and COMPLETE coverage is required. The irrigation contractor shall make any necessary minor adjustments to the irrigation layout required to achieve FULL and COMPLETE coverage of irrigated areas at no additional cost to owner.
6. Bidding contractors shall become thoroughly familiar with all facets of the proposed irrigation system and the central control requirements. Failure to clarify misunderstandings or the intent of this drawing and/or specifications before submittal of bid shall be the sole responsibility of the contractor.
7. This irrigation system shall be installed as per manufactures specifications.
8. This irrigation design shows necessary materials, but certain other materials may have to be supplied and installed by the irrigation contractor in order to have, upon completion, a fully operational irrigation system.
9. The irrigation contractor shall locate ALL underground utilities, and they shall take every precaution not to damage or disturb such improvements. Coordinate with General Contractor as necessary.
10. The irrigation contractor shall arrange for any necessary permits and/or inspections required by local agencies or ordinances during the course of construction.
11. ALL PVC piping under continuous pressure shall be Class 200, all other PVC shall be Class 160.
12. ALL backflow devices shall be installed as per local code.
13. ALL wiring as per local code.
14. Electrical power shall be provided to within five (5) feet of controller(s) location. Coordinate with Owners Representative as to the final location of controller(s). Coordinate with Electrical Contractor as required.
15. Control wire shall be solid copper wire U.L. approved for direct burial in ground. Minimum gauge - #14 (#12 for runs over 2000') or as otherwise specified. Ground Wire (where applicable) shall be white.
16. 24VAC wire splicing material will be direct burial splice kit as manufactured by 3M, specifically DBY-6 & DBR-6.
17. Install rain sensors on vertical surfaces. Coordinate with Owners Representative as to final location of rain sensor, weather stations and any additional sensors.
18. ALL valves, quick-couplers and wire splices shall be located in valve boxes with labeled covers and buried flush with grade.
19. Winterization of the irrigation system shall be as per the manufacturers specifications.
20. Sleeving is required under ALL walks and roadways. Sleeves shall extend a minimum of 18" beyond edge of walk/roadway and be marked. Wire shall be contained in a separate, 1 ½" min., sleeve.

7 IRRIGATION GENERAL NOTES:

328409-02

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PART B: LIGHTING & LANDSCAPE PLANS FOR

STEEPLE BAY ADDITION

WICHITA, KANSAS

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IRRIGATION DETAILS

PROJECT NO.	1701010143
DATE	MAY 2019
SCALE	AS SHOWN

DESIGNED	DRAWN	CHECKED
JWR	JCM	JWR

NO.	REVISION	DATE

SHEET NO.

16 OF 16