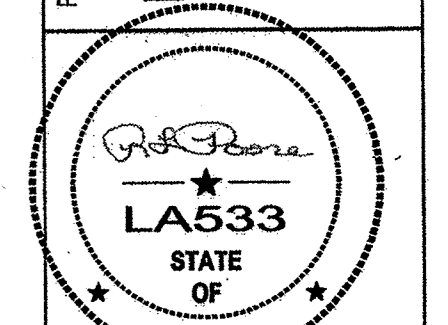


**RICHARD L. POORE, LA**  
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REVISIONS	DATE	DESCRIPTION

IRRIGATION PLAN

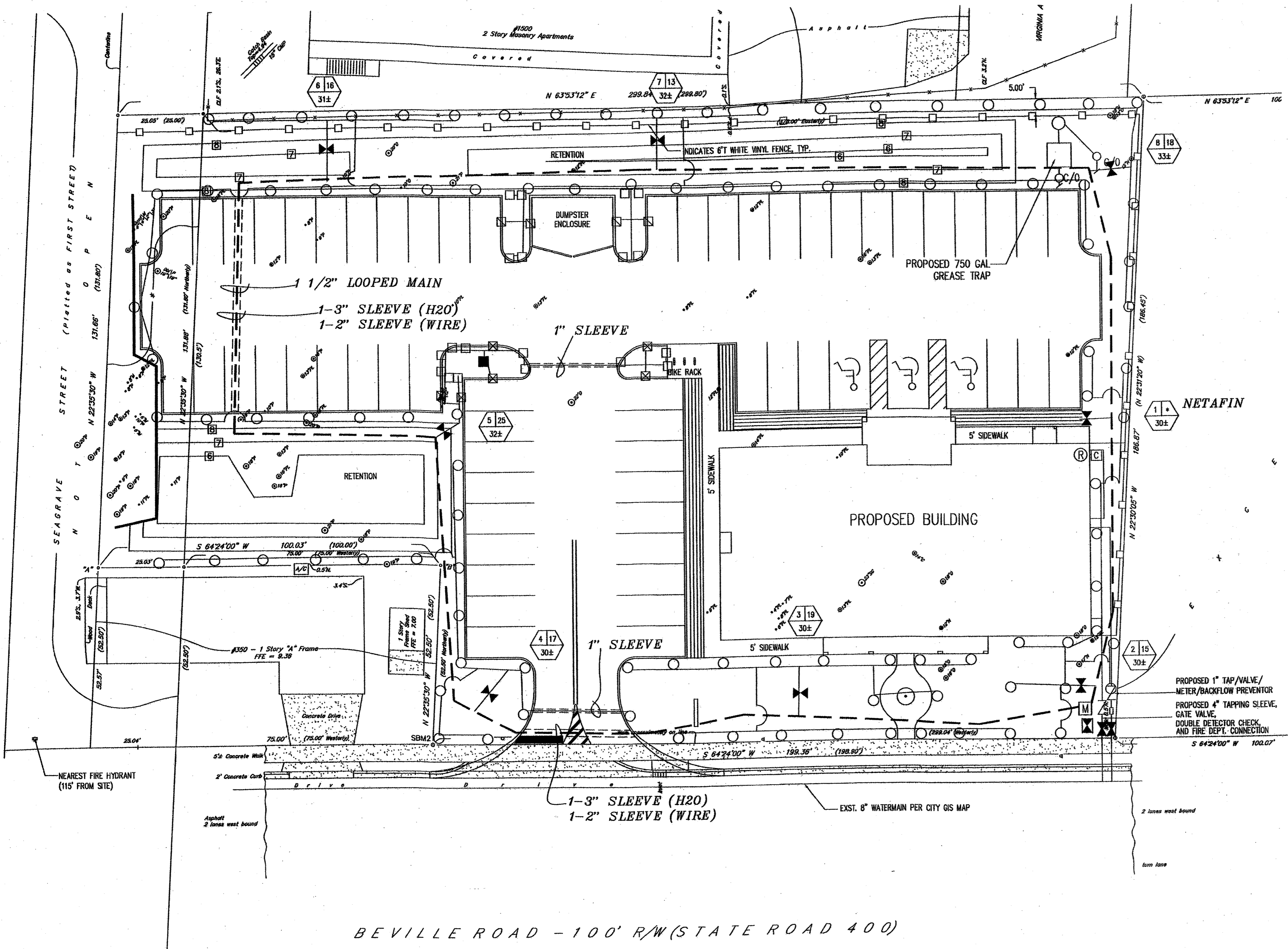
PROJECT TITLE:  
 FRATERNAL ORDER OF EAGLES  
 #4401 BEVILLE ROAD  
 DAYTONA BEACH, FLORIDA



SEAL: RLA #533  
 DRAWN BY: RL POORE  
 CHECKED: RP  
 DATE: 11/11/2011  
 SCALE: 1" = 10'  
 JOB NO: 2011-1111  
 DRAWING NUMBER:  
 L - 2  
 OF 2

**IRRIGATION NOTES:**

- THE CONTRACTOR SHALL VERIFY THE EXISTENCE AND LOCATION OF ALL EXISTING UTILITIES AND CONDITIONS PRIOR TO HIS COMMENCEMENT OF THE IRRIGATION WORK.
- CHECK PRESSURE AND GPM OF WATER SUPPLY BEFORE BEGINNING JOB AND REPORT FINDINGS TO LANDSCAPE ARCHITECT. LANDSCAPE ARCHITECT WILL MAKE ANY ADJUSTMENT NECESSARY TO MAKE SYSTEM WORK AT ITS BEST.
- THIS PLAN IS SCHEMATIC ONLY.** THE CONTRACTOR SHALL INSTALL PIPING IN A MINIMUM NUMBER OF TRENCHES AND SHALL INSTALL PIPE IN A MINIMUM LENGTH.
- QUANTITIES FOR IRRIGATION MATERIALS ARE NOT GIVEN. THE CONTRACTOR SHALL DETERMINE THIS FROM THE PLAN.
- INSTALL SLEEVE PIPING WHERE SHOWN ON THE DRAWINGS AT THE PROPER DEPTH.
- ALL SLEEVE PIPE SHALL BE SCHEDULE 40 PVC PIPE INSTALLED A MINIMUM OF 20" BELOW FINISHED PAVING GRADES.
- ALL SLEEVES WHEN PLACED IN FIELD ARE TO BE LOCATED BY A METAL PIPE AT EACH END AND LOCATED FROM TWO STATIONARY POINTS BY TAPE MEASUREMENTS.
- ALL PIPE SHALL BE INSTALLED A MINIMUM OF 20" BELOW GRADE.
- ALL TRENCHING SHALL BE KEPT OUT OF THE DRIP LINE AREA OF ALL EXISTING TREES. USE RADIAL LINES OR TUNNELING WHEN NECESSARY TO ENOUGH INTO THE DRIP LINE AREA OF TREES.
- LOOK FOR ALL VALVES AND OTHER IRRIGATION EQUIPMENT IN PLANT BED AREAS WITHIN THE PROJECT LIMITS FOR CONCEALMENT PURPOSES.
- RISERS ARE TO BE HIDDEN COMPLETELY IN SHRUBBERY OR PAINTED BLACK AND IN NO CASE BE HIGHER THAN THE SHRUBBERY INSTALLED.
- ALL PIPE EXPOSED ABOVE GRADE AND TO VIEW SHALL BE SCHEDULE 40 GALVANIZED STEEL PIPE OF THE NOTED SIZE.
- ALL IRRIGATION EQUIPMENT (PUMP, CONTROLLER, ETC.) SHALL BE PLACED WITHIN FENCED ENCLOSURE.
- ALL VALVES SHALL BE INSTALLED IN METER TYPE SIZE BOXES EQUAL TO AMETEK POLY-IRON.
- PROVIDE A 6" GRNSEL SUMP AT THE BOTTOM OF ALL METER BOXES AND INSTALL 1/2" TO 1" DIAMETER GRNSEL AT THE BOTTOM OF THE VALVE PIT.
- IRRIGATION SHALL MEET ALL APPLICABLE CURRENT MUNICIPAL, COUNTY, STATE OR FEDERAL CODES, ORDINANCES AND REGULATIONS THAT HAVE JURISDICTION.
- ALL PIPE 1/2" TO 2 1/2" IN SIZE SHALL BE PRESSURE RATED 160 PVC (EXCEPT FOR RECLAIM SYSTEM).
- ALL FITTINGS SHALL BE SCHEDULE 40 PVC (EXCEPT FOR RECLAIM SYSTEM).
- ALL SPRAY HEADS ARE TO BE A MINIMUM OF 6" POP-UP AND ALL HEADS IN PLANTING AREAS TO BE 12" POP-UP OR RISERS. RISERS SHALL BE PAINTED GREEN OR BLACK.
- SEE PIPE SIZE SCHEDULE THIS SHEET.
- ELECTRICAL TO CONTROLLER SHALL BE SUPPLIED BY ELECTRICAL CONTRACTOR (NOT IRRIGATION CONTRACTOR).

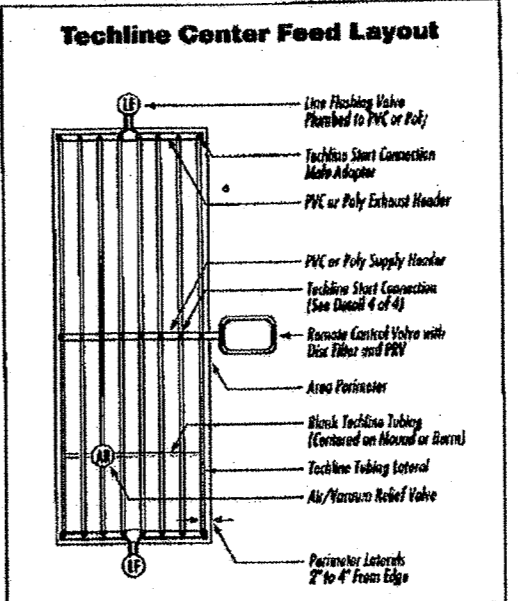


**TECHLINE™ Design Guide**

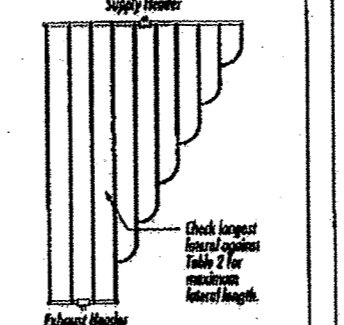


**BASIC DESIGN STEPS (continued)**

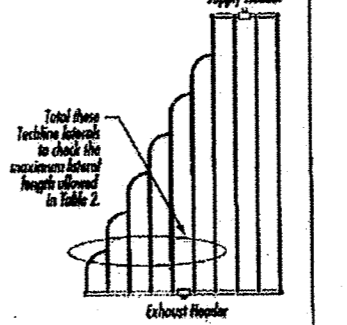
- CENTER FEED LAYOUTS:**
- Where layout flexibility exists, it is recommended that Center Feed layouts be used. This allows for the most even flow of water through the zone.
  - Center Feed layouts also allow you to maximize the lengths of Techline that can be run.
- OTHER PIPING LAYOUTS:**
- When branching out, or joining Techline, one of two rules apply. Rule 1 - when branching out Techline from the supply header, total all "branched out" drippers and check the sum against the maximum lateral length in Table 2.
  - Rule 2 - when joining drippers laterals from the supply header, check only the longest lateral against the maximum allowable in Table 2.
  - To reduce the number of glue joints, saddles or insert fittings in a header, transition to Techline and Techline fittings to make up sub-headers, making sure to follow the guideline of a maximum of 0.5 GPM in the "sub-header" zone.



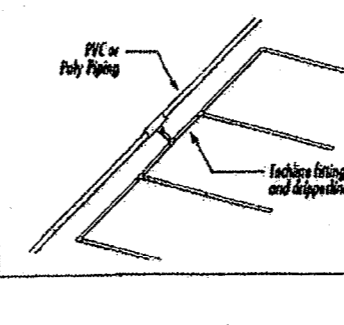
**Joining Techline Tubing**



**Branching Out Techline Tubing**



**Creating Sub-headers to Reduce Glue/Saddle Joints**



**ZONE WATER REQUIREMENTS:**

- Once you have laid out the Techline, you need to identify how many drippers there are, and their total output. This will help you determine mainline, submain and supply/exhaust header sizing, valve, filter, and regulator selection.

**IRRIGATION LEGEND (USE THE FOLLOWING IRRIGATION EQUIPMENT)**

- TORO HEADS (6" POP - UP) 570 MPR PLUS SPRAY NOZZLE 15' SERIES WITH 27° TRAJECTORY
- 15 SERIES VAN
- 15' EST
- 15' SST
- 9' SST
- 15' LST
- RAINBIRD CONTROLLER ESP - 8 8 STATION ON PEDESTAL MOUNT (PED - DD16)
- RAIN CHECK VALVE
- 1 1/2" ANGLE VALVES
- 1 1/2" IRRIGATED METER
- GATE VALVE

NOTE: OVER 50% OF THE OPEN/LANDSCAPE AREA IS IRRIGATED WITH LOW VOLUMN OR NO IRRIGATION.

**PIPE SLEEVE SCHEDULE**

PIPE SIZE	SLEEVE SIZE	0-6 GPM	h" PIPE
2 1/2"	6"	7-10 GPM	e" PIPE
2"	6"	11-16 GPM	1" PIPE
1" THRU 1 1/2"	4"	17-28 GPM	1q" PIPE
1/2" AND 3/4"	3"	19-35 GPM	1h" PIPE
		36-55 GPM	2" PIPE

NOTE: DO NOT TRENCH THROUGH EXISTING TREE ROOT ZONE GO AROUND.

- NOTES:**
- IRRIGATION LINES ARE SHOWN DIAGRAMATICALLY AND ARE INTENDED TO SHOW DISTRIBUTION ZONES ONLY. ALL VALVES SHALL BE LOCATED WITHIN PLANTING AREAS (NOT WITHIN PAVEMENT). LINES LOCATED UNDER PAVEMENT SHALL BE KEPT TO A MINIMUM AND ALL PIPING UNDER PAVED AREAS SHALL BE SLEEVED.

