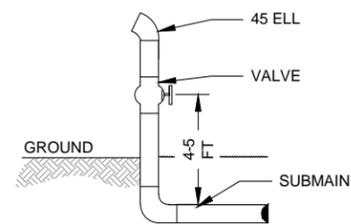


- ① PUMP AND MOTOR \_\_\_\_\_ GPM AT \_\_\_\_\_ PSI @ FILTER DISCHARGE
- ② PUMP DISCHARGE PIPE: DIAMETER \_\_\_\_\_ INCHES
- ③ AIR-VACUUM RELEASE VALVE: TYPE \_\_\_\_\_ DIAMETER \_\_\_\_\_ INCHES
- ④ CHECK VALVE 5 LOW PRESSURE DRAIN 11 CHEMICAL INJECTION PORT
- ⑥ PRESSURE GAGE
- ⑦ FILTER
- ⑧ FLOW METER
- ⑨ PRESSURE RELEASE VALVE: DIA \_\_\_\_\_ INCH; PRESSURE SET AT \_\_\_\_\_ PSI
- ⑩ SOURCE OF WATER: \_\_\_\_\_

**PUMP SCHEMATIC**  
n.t.s.



**SUBMAIN FLUSHOUT DETAIL**  
n.t.s.

**MICROIRRIGATION PLAN VIEW**

- \_\_\_\_\_ No. of Trees
- \_\_\_\_\_ Tree Spacing
- \_\_\_\_\_ Row Spacing
- \_\_\_\_\_ Acres Irrigated

**LEGEND**

- EXISTING PUMP: \_\_\_\_\_
- WELL: \_\_\_\_\_
- PIPELINE, MAIN (M) & SUBMAIN (SM): \_\_\_\_\_
- LATERAL, (L\_\_\_ SIZE): \_\_\_\_\_
- LATERAL, (L\_\_\_ SIZE): \_\_\_\_\_
- LATERAL, (L\_\_\_ SIZE): \_\_\_\_\_
- TREE: \_\_\_\_\_
- THRUST BLOCK: \_\_\_\_\_
- VALVES: \_\_\_\_\_
- FLUSH: \_\_\_\_\_
- SHUTOFF: \_\_\_\_\_
- AIR RELEASE: \_\_\_\_\_

Microirrigation System Design Plan View	
Standard DWG. No.	FL-441A Plan View
Date	Sheet 1 of 2



Revisions		
Date	Approved	Title

Designed	_____	Date	_____
Drawn	_____		
Checked	_____		
Approved	_____		

**SHEET TITLE**  
Microirrigation System Design  
Plan View



File No.  
FL-441.dwg  
Drawing No.

**GENERAL NOTES**

1. Installation and materials shall meet the Natural Resources Conservation Service (NRCS) conservation practice and specifications Irrigation System, Microirrigation code 441, and Irrigation Pipeline code 430. Any plan modification shall be clearly indicated on this drawing and shall be approved by the NRCS prior to installation.
2. The installer shall certify that his/her installation complies with the standards and specifications listed above and as specified on these plans. The certification shall identify the manufacturer and markings of the pipe used. The installer (when other than the owner) shall furnish a written guarantee to the owner that protects the owner against defective workmanship and materials for no less than one year. Copies shall be provided for NRCS records.
3. All permits needed to install and operate this system shall be the responsibility of the owner.
4. The irrigation system shall be operated in accordance with the irrigation water management plan.

**MATERIAL NOTES**

1. Pipe material- mains and submains.

Nom Pipe Size (in)	PIP OR IPS	SDR No.	Material (PVC, 1120, etc.)	Pressure Rating (psi)	Inside Diameter (in)	Length (ft)

Laterals- tubing shall withstand a working pressure based on manufacturer's data.

Working Pressure (psi)	Inside Diameter (in/mm)	Length (ft)

2. The filter net opening diameter shall not exceed \_\_\_\_\_, or as recommended by the emitter manufacturer when available.

3. Emitters:

Irrigation Unit		
Discharge Rate GPS / at psi		
Orifice Size (in)		
Wetted Diameter (ft)		
Spacing (ftxft)		
Total No. Emitters		
Riser Length (in)		
Manufacturer/Brand		
Plant Spacing		
Row Spacing		

4. Appurtenances (Thrust Blocks, Valves, etc.)

Type	Size	Number	Location

**CONSTRUCTION NOTES**

1. See Conservation Practice Standard Irrigation Pipeline code 430 specifications for additional construction requirements.

Depth of Cover Over Pipeline- Mains and Submains							
Pipe Diameter (in)							
Depth of Cover (in)							

2. Laterals (Tubing):  
 \_\_\_\_\_ installed above ground and anchored on \_\_\_\_\_ft intervals \_\_\_\_\_ installed underground at a depth of \_\_\_\_\_in (may be lesser depth at base of tree)
3. Emitters shall be stabilized to maintain spray integrity.
4. Pressure relief valves shall be set to open at a pressure not greater than 5 psi about the pressure rating of the pipe. Pressure relief valves shall be marked at the pressure they start to open. Adjustable valves shall be sealed or otherwise altered to prevent changing the pressure marked on the valve.
5. Plastic pipe exposed to direct sunlight shall be made of ultraviolet resistant materials or protected by coating or shielding.
6. Pipelines crossing roads, canals, etc., shall be protected and/or supported.
7. Air-release valves shall be installed on all summits, which are not permanently and adequately vented to the atmosphere, and all summits encountered during construction although not shown on the drawings. Air-release valves at summits shown on the drawings may be eliminated when trench construction removes the summit.
8. Backflow prevention device shall be installed where required by law. (toxic) (non-toxic) chemicals (will) (will not) be injected into the system.
9. Flush valves shall be installed at the end of all submains.
10. Joints and connections shall be installed in conformance with conservation practice standard, Irrigation Pipeline, Code 430. Emitter connections to the lateral lines (tubing) shall be in accordance with the manufacturer's recommendations.
11. The head loss through a clean filter shall not exceed 5 psi. Head loss through sand separators shall be based on manufacturer's data and recommendations.
12. Pump, power unit, filter, chemical injectors and other appurtenances shall be installed on a firm base and in proper alignment. Installation shall be in accordance with the manufacturer's recommendations and all pertinent safety codes.
13. The irrigation system shall be tested for design operating pressures, discharge rates, leakage and proper functionality. During the initial start-up the pipelines and laterals shall be flushed for sufficient time to remove any sediment or foreign material prior to the placement of end plugs or closure of flush valves.

Date \_\_\_\_\_  
 Designed \_\_\_\_\_  
 Drawn \_\_\_\_\_  
 Checked \_\_\_\_\_  
 Approved \_\_\_\_\_

\_\_\_\_\_, Florida

**SHEET TITLE**  
 Microirrigation System Design  
 System Details



File No.  
 FL-441.dwg

Drawing No.

Revisions		
Date	Approved	Title

<b>Microirrigation System Design System Details</b>	
Standard DWG. No.	FL-441B System Details
Date	Sheet 2 of 2