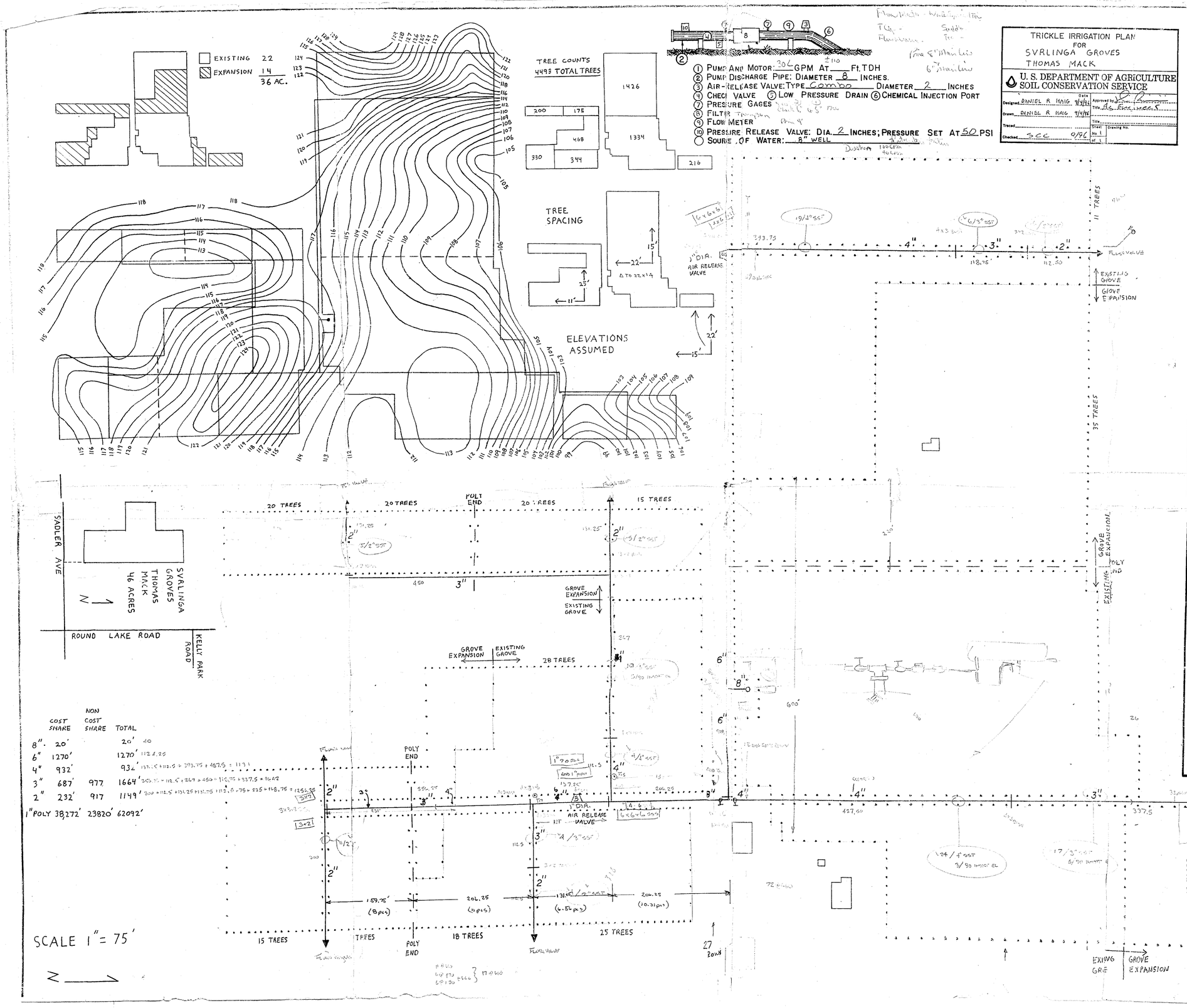

	COST SHARE	NON COST SHARE	TOTAL
8"	20'		20'
6"	1270'		1270'
4"	932'		932'
3"	687'	977	1664'
2"	232'	917	1149'
1" POLY	38,272'	23820'	62092'

TRICKLE IRRIGATION PLAN FOR SVRLINGA GROVES THOMAS MACK

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

Designed DANIEL R HAIG 9/4/96
Drawn DANIEL R HAIG 9/4/96
Traced
Checked S.C.C. 9/96
Approved by
Title
Sheet No. 1 of 1
Drawing No.

GENERAL NOTES

1. Installation and materials shall meet the Soil Conservation Service (SCS) Standards and Specifications Irrigation System, Trickle Code 441 and Irrigation Water Conveyance, HIGH PRESSURE, Underground, Plastic Pipeline, Code 430 DD. Any plan modification shall be clearly indicated on this drawing and shall be approved by the SCS prior to installation.

2. The installer shall certify that his installation complies with the specifications listed above. 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 not less than one year. Copies shall be provided for SCS records.

3. All permits needed to install and operate this system shall be the responsibility of the owner.

MATERIAL NOTES

1. Pipe Material-Mains and Submains

Nom. Pipe Size, in.	PIP or IPS	SDR No.	Mat'l (PVC 1120, etc.)	Pressure Rating, psi	Inside Diam., in.	Length ft
8	IPS	41	1120	100	8.205	20
6	IPS	41	1120	100	6.301	1270
4	IPS	41	1120	100	4.280	932
3	IPS	32.5	1120	125	3.284	1664
2	IPS	32.5	1120	125	2.229	1149

2. Laterals (tubing) shall withstand a working pressure based on manufacturer's data.

Working Pressure, psi	Inside Diam., in. (mm)	Length, ft
POLY 50	1.049 ( )	62092

3. The filter mesh opening diameter shall not exceed 0.01" or as recommended by the emitter manufacturer when available.

4. Emitters: Discharge Rate 10.5 gph at 20 psi; wetted diameter 16.5 ft
Spacing SEE DESIGN ft x ft or 1 per tree
Orifice Size .04 in. No. of Emitters 4493 Riser Length in.
Manufacturer and/or brand name (specified by owner) MAXI JET GLUE TWO PIECE JETS

5. Appurtenances (thrust blocks, valves, etc.)

Type	Size	Number	Location
FLUSH VALVES	2"	5	SEE DESIGN
AIR RELEASE	2"	1	AT PUMP
AIR RELEASE	1"	2	6" PIPE SUMMIT - SEE DESIGN

CONSTRUCTION NOTES

1. See specifications Code 430 for additional construction requirements.

2. Pipeline, Mains and Submains Depth of Cover

Diameter, in.	8"	6"	4"	3"	2"
*Depth of Cover, in.	30	30	24	24	18

3. Laterals (tubing): ✓ Installed above ground and anchored ~~on~~ AT ENDS ~~ft intervals or~~
Installed underground at a depth of ____ in. (may be lesser depth at base of tree).

4. Emitters shall be stabilized to maintain spray integrity.

5. Pressure relief valves shall be set to open at a pressure no greater than 5 psi above the 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.

6. Plastic pipe exposed to direct sunlight shall be made of ultraviolet resistant materials or protected by coating or shielding. PAINT EXPOSED PIPE

7. Pipelines crossing roads, canals, etc., shall be protected and/or supported.

8. Air-release valves shall be installed on all summits, which are not permanently and adequately vented to the atmosphere, 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.

9. Backflow prevention device shall be installed where required by law. ~~(Toxic)~~ (Non-Toxic) chemicals (Will) ~~(Will not)~~ be injected into the system.
*RECOMMEND DOUBLE BACKFLOW PREVENTION DEVICES

10. Flush valves shall be installed at the end of all submains.

11. Joints and connections shall be installed in conformance with specifications Code 430. Emitter connections to the lateral lines (tubing) shall be in accordance with the manufacturer's recommendations.

12. The head loss in a clean filter shall not exceed 5 psi. Head loss through sand separators shall be based on manufacturer's data and recommendations.

13. Pump, power unit, filter, chemical injectors and appurtenances to the system shall be installed on a firm base and in proper alignment. Installation shall be in accordance with the manufacturer's recommendation and all pertinent safety codes.

14. The system shall be tested for operating pressures, discharge rates, strength, leakage and proper functioning. 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.