

## MICRO IRRIGATION DESIGN DATA WORKSHEET

LANDOWNER NAME \_\_\_\_\_ Field Or Unit \_\_\_\_\_

Designed by: \_\_\_\_\_ Date \_\_\_\_\_

Checked by: \_\_\_\_\_ Date \_\_\_\_\_

Approved by: \_\_\_\_\_ Date \_\_\_\_\_ NRCSEngr Job Class \_\_\_\_\_

LOCATION: \_\_\_\_\_ 1/4 Section \_\_\_\_\_ Township \_\_\_\_\_ Range \_\_\_\_\_ County: \_\_\_\_\_

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### SYSTEM DATA

System Size \_\_\_\_\_ acres

Available water supply \_\_\_\_\_ gpm at \_\_\_\_\_ psi

Gallons per minute per system acre \_\_\_\_\_ gpm/ac

Number and size of zones \_\_\_\_\_ no \_\_\_\_\_ acres

Zones concurrently irrigated

a) Zone(s) \_\_\_\_\_

b) Zone(s) \_\_\_\_\_

c) Zone(s) \_\_\_\_\_

d) Zone(s) \_\_\_\_\_

System design capacity \_\_\_\_\_ gpm at \_\_\_\_\_ psi

Application rate for each zone \_\_\_\_\_ inches/hour

Describe IWM Plan / Irrigation Schedule

Set time

a) Zone(s) 1,2,3... \_\_\_\_\_ hrs

b) Zone(s) 1,2,3... \_\_\_\_\_ hrs

c) Zone(s) 1,2,3... \_\_\_\_\_ hrs

d) Zone(s) 1,2,3... \_\_\_\_\_ hrs

Net application depth \_\_\_\_\_ inches

Supplemental Irrigation will be needed ( YES or NO ) circle one

Lateral line material \_\_\_\_\_ Inside diameter \_\_\_\_\_ inches

Drip tape/line material \_\_\_\_\_

Drip tape/line spacing \_\_\_\_\_ inches

Drip tape/line planned depth \_\_\_\_\_ inches

Flushing velocity \_\_\_\_\_ ft/s

Flushing end pressure \_\_\_\_\_ psi

Max. required system flushing capacity \_\_\_\_\_ gpm at \_\_\_\_\_ psi

Emitter data

a) Make \_\_\_\_\_

b) Model \_\_\_\_\_

c) Type \_\_\_\_\_

Emitter spacing \_\_\_\_\_ inches

Emitter discharge \_\_\_\_\_ gph at \_\_\_\_\_ psi

Emitter factors:  $C_v$  \_\_\_\_\_ X \_\_\_\_\_  $K_d$  \_\_\_\_\_

## SYSTEM DATA (continued)

### Filter system data

- a) Make \_\_\_\_\_
- b) Model \_\_\_\_\_
- c) Capacity \_\_\_\_\_ gpm
- d) Pressure loss across filter \_\_\_\_\_ psi
- e) Total Head required at filter discharge \_\_\_\_\_ psi

### Sand separator data

- a) Make \_\_\_\_\_
- b) Model \_\_\_\_\_
- c) Capacity \_\_\_\_\_ gpm

### Chemigation valve data

- a) Make \_\_\_\_\_
- b) Model \_\_\_\_\_
- c) Capacity \_\_\_\_\_ gpm

### Check valve data

- a) Make \_\_\_\_\_
- b) Model \_\_\_\_\_
- c) Capacity \_\_\_\_\_ gpm

**ZONE / BLOCK DATA (Submit a complete data set for each zone / block)**

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Zone number \_\_\_\_\_

Type of drip tape/line \_\_\_\_\_

Average design emitter discharge \_\_\_\_\_ gph at \_\_\_\_\_ psi

Maximum emitter discharge \_\_\_\_\_ gph at \_\_\_\_\_ psi

Location of maximum discharge emitter \_\_\_\_\_

Minimum emitter discharge \_\_\_\_\_ gph at \_\_\_\_\_ psi

Location of minimum discharge emitter \_\_\_\_\_

Flow Rate Variation =  $\frac{\text{Maximum Discharge} - \text{Minimum Discharge}}{\text{Average Design Emitter Discharge}} \times 100 = \text{_____} \%$

EU (emission uniformity) \_\_\_\_\_

Design manifold inlet pressure downstream of valve \_\_\_\_\_ psi

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EU (emission uniformity) \_\_\_\_\_

Design manifold inlet pressure downstream of valve \_\_\_\_\_ psi

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### **ZONE / BLOCK DATA - Continued**

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Location of maximum discharge emitter \_\_\_\_\_

Minimum emitter discharge \_\_\_\_\_ gph at \_\_\_\_\_ psi

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