

Instructions

Data Sheet for Flowmeter

NE-ENG-83

Instructions for use of NE-ENG-83

This form is to be used for the design and documentation and of irrigation flowmeters. Instruction on the use of this form can be found in the National Irrigation Guide (NIG) Chapter 7 within the Nebraska Supplements (Part 652.0710). Blank forms are located in the irrigation Guide in Chapter 15.

1. Fill in NRD, Field Office, Cooperator's name, location and complete the location map with legal description and sketch location on map.
2. If water source is a well complete well registration (this is one way to track meters if several are installed on the same cooperator. Mark type of water source. If surface water, a cleanout may be recommended to remove trash and debris that may collect on the meter. Mark if cleanout is recommended and the appropriate location, either upstream or downstream of meter. Note the cleanout location depends on meter type and meter configuration.
3. List the unobstructed straight pipe upstream and downstream of the proposed meter location. If adequate straight distance is unavailable as recommended by the manufacturer (or if data unavailable as listed in the specification or on the data sheet), straightening vanes may be required. Mark if straightening vanes are required and show location of straightening vanes on plan view. If distance is still inadequate with straightening vanes included, change meter location or change pipeline configuration.
4. Mark if full pipe flow will be guaranteed (yes or no). For example is the pipe is delivering to a center pivot under pressure full pipe flow is guaranteed. For gravity flow or pumped flow into gated pipe the gated pipe grade may be steep enough that water will flow open channel away from the outlet. In this case full pipe flow would not be guaranteed and a "hump" would be needed to create full pipe flow for measurement. Mark if the "hump" is needed or not.
5. Complete meter brand, model, diameter, serial number (after installation), and type of meter. Documentation of the serial number will help track meter information if the cooperator has numerous flow meters.
6. Sketch plan view of the meter installation layout. Document (minimum acceptable) distances to upstream and downstream obstructions. Document location of cleanout if used. Document other pertinent information as needed to describe the installation or site.
7. Sketch profile (optional) of meter installation layout as needed. This may be required to insure full pipe flow measurement at the meter. For example, a sketch may be required to show elevation of bottom of the middle section of the "hump" is higher than the top of the pipe at the meter location.

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