WATERING FACILITY
Conservation Practice Job Sheet 614

Natural Resources Conservation Service (NRCS) **January 2008**

DEFINITION

A device (tank, trough, or other watertight container) for providing animal access to water.

WHERE PRACTICE APPLIES

This practice applies to all land uses where there is a need for new or improved watering facilities.

COMPONENTS

Watering Facility. Watering facility size shall be selected based on the type and number of animals using the facility. Minimum requirements of individual watering facilities are shown in Table 1.

Table 1. Minimum Requirements of Individual Watering Facilities.

Type of Livestock	Daily Requirement[1/] gal/head/day	Min. Trough Size	
		Capacity gal	Depth inches
Beef cattle	12	70	12
Horse	12	70	12
Dairy Cattle			
Lactating	25	70	12
Non-lactating	15	70	12
Sheep and Goats	2	15	6
Swine	4	15	6

[1/] These requirements vary with climatic conditions, kinds of feed, size of animals, and other factors and may be increased as necessary.

Access space to the watering facility shall also be considered. As a minimum, design the watering facility to accommodate 5% of the herd at one time. Allow 20 inches of perimeter per animal for circular tanks and 30 inches per animal for straight side tanks.

Watering facilities shall be constructed of commercially available galvanized metal, concrete, or other approved materials. Watering facilities shall be equipped with automatic flow control to keep the water in the watering facility at a constant level and to prevent overflow.

Pipeline. Pipelines shall be located so that they are protected from hazards imposed by traffic, farming operations, and freezing temperatures. See pipeline plan for pipeline type, diameter, length, pressure rating, and depth of cover.

Pump. The pump shall be selected based on the required flow rate, range of operating pressure and efficiency.

Pressure Tank. The pressure tank shall be sized to allow the pump to run at least one minute to cool the start winding. Larger tanks will allow more storage between pump cycles. The operating range of the pressure tank shall be compatible with pump and pipeline.

Well. All wells shall comply with state water laws, rules and regulations and must be installed by a licensed well driller in the State of Florida. A copy of the well driller's log should be maintained for your records. Wells should be located a safe distance from sources of contamination.

Design Flow Rate. Design the watering facility so that the inflow of water in a 2-hour period plus the individual watering facility (trough/tank) capacity equals or exceeds one-half the daily requirements for the livestock using the facility. Also, the flow rate shall be adequate enough to re-fill the watering facility in 10 hours or less. Minimum flow rate shall be 2 gpm.

For specific criteria in applying this practice, review Florida NRCS conservation practice standard Watering Facility, Code 614.

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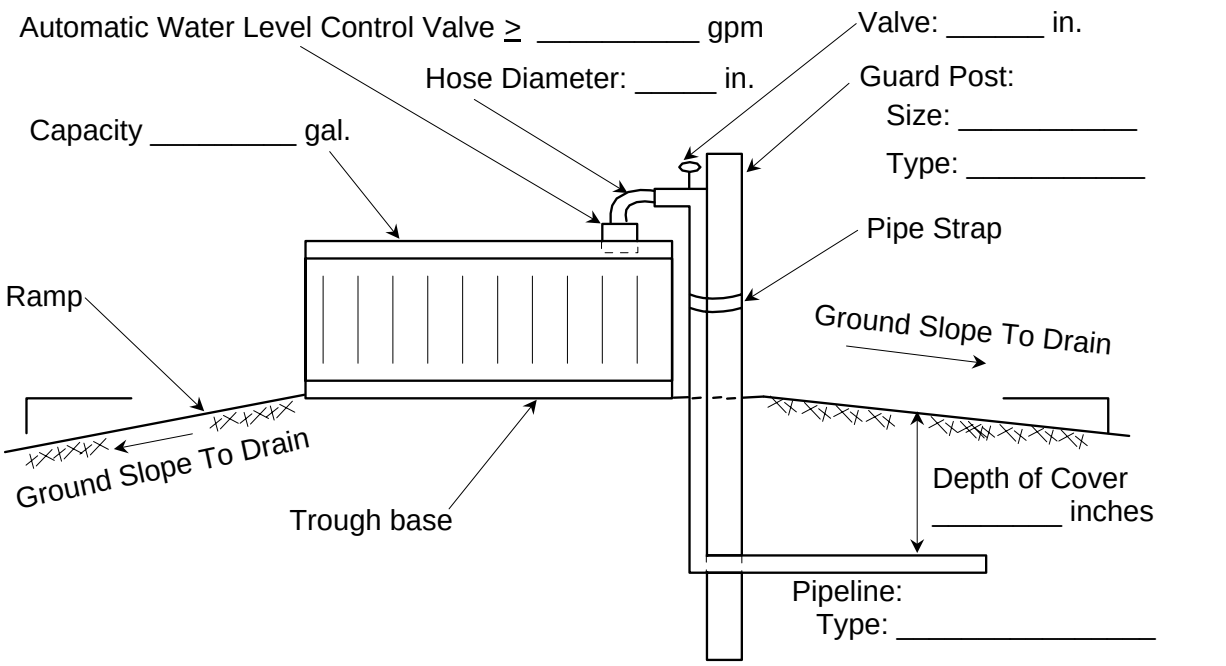
WATERING FACILITY - CHECK SHEET

Cooperator: _____ Location: _____

Conservation District: _____ Field Office: _____

Identification No.: _____ Field No.: _____



(Not To Scale)

Trough or tank material: _____

Trough base material and thickness: _____

Ramp material and thickness: _____

Designed by: _____ Date: _____ Checked By: _____ Date: _____

Approved by: _____ Date: _____

Construction Check

Tank #								
Size of trough, gal								

Material used for trough: _____

Type of ramp used and condition: _____

Comments: _____

Condition of valves, outlet pipe, float, etc.:_____

_____

This practice meets NRCS standards and specifications. _____ Date: _____
(Signature)

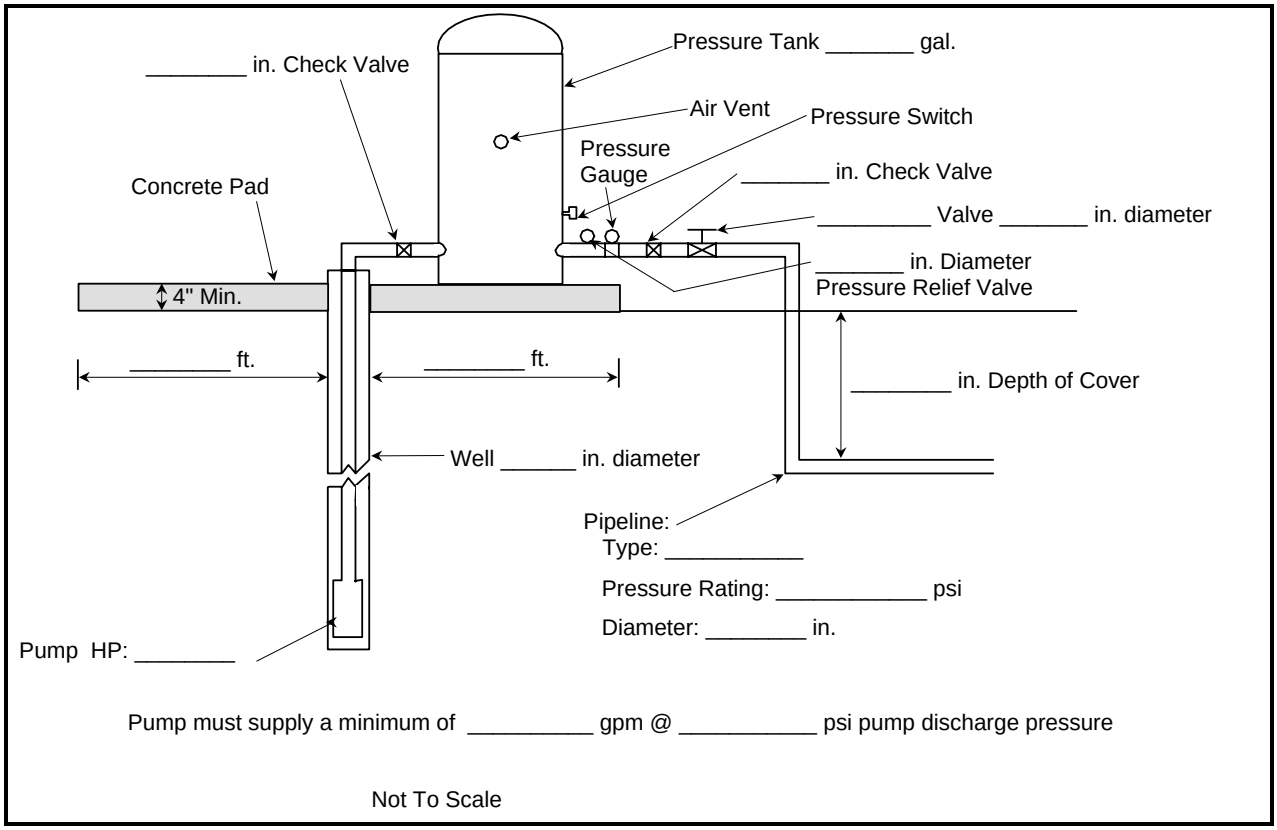
Sheet ___ of ___

WATERING FACILITY APPURTENANCES - CHECK SHEET

Cooperator: _____ Location: _____

Conservation District: _____ Field Office: _____

Identification No.: _____ Field No.: _____



Note: Cross out items in sketch not required. Attach additional drawings as needed.

Designed by: _____ Date: _____ Checked by: _____ Date: _____

Approved by: _____ Date: _____

Construction Check

	Well Capacity, gpm	Well Diameter, in.	Well Depth, feet	Pump Capacity, gpm
Planned				
Check				

Verify items on sketch by initialing by each item.

Length, quality and type of casing material: _____

_____

Well Driller's log attached: _____

Pump type, make, model, and stages: _____

Comments: _____

This practice meets NRCS standards and specifications. _____ Date: _____
(Signature)

Sheet ___ of ___

Specifications and Notes - Installation requirements are described below ☐ or attached ☐

Operation and Maintenance – Operation and Maintenance requirements are listed below ☐ or attached ☐