

GUIDANCE DOCUMENT

Watering Facility, Code 614

I. References

A. Design Criteria

1. Georgia FOTG Section IV, conservation practice standard, Watering Facility, Code 614.

B. Design/Layout Surveys

1. TR-62 Engineering Layout, Notes, Staking & Calculations.
2. NEFH Part 650, Chapter 1, Engineering Surveys.

C. Computer Software Design Aids

1. Georgia NRCS spreadsheet "Watering System Design."

II. Documentation

- ##### A. Preliminary Investigation
- Make a preliminary investigation to determine the approved location of the watering facility. Consider location, size, soil condition and costs in making this determination.

B. Engineering Surveys

1. An engineering survey is normally not required. Location of the watering facility should be recorded on an aerial photograph and/or topographic quad sheet. Elevations and distances obtained from topographic maps are usually sufficient for design purposes. Where suction pumps are to be utilized to draw water from streams or other surface water sources, survey the elevations of the surface of the water source and suction pump location.
2. Note the location of any utilities or utility markers.

C. Design

1. Determine material type, size of trough or tank required, pipe sizes and lengths, pump, pressure tank and other plumbing requirements, and ramp protection needed. For solar powered systems determine the pump power requirement, required water storage volume, and minimum solar panel power requirement.
2. Develop engineering plans and specifications. As a minimum the plans and specifications shall include:
 - a. Location of watering facility.
 - b. Size and number of watering facilities.
 - c. Details of all appurtenances of watering facility including overflow preparations.
 - d. Foundation requirements including type and size.
 - e. Location of alternative water source, if applicable.
 - f. Location of utilities and notification requirements.
3. Develop a site specific O&M Plan for the practice.

D. Construction Layout

Review the plans and specifications with the landowner and contractor prior to the start of construction. Ensure the landowner/contractor thoroughly understand their responsibilities including obtaining all permits, easements, etc.

Record layout data in the engineering field book.

1. Stake the location of the watering facility in the field.

E. Construction

Adequate site visits and checks shall be made during construction to verify that the plans and specifications are followed. Any changes in the design must be reviewed and concurred by the landowner and shall be approved by the designer and person with appropriate engineering design job approval authority.

F. Construction Checkout

Record the following data in the engineering field book.

1. Measurements of watering facility including trough and tank pads, heavy use area dimensions, watering ramp dimensions, pipe lengths, and other structure measurements where size or dimension is critical for the proper functioning of the installation.
2. Trough or tank sizes and material used.
3. Dimensions of facility pad and type of material used for watering ramps or heavy use areas. Record in the engineering field book.
4. Prepare as-built drawings showing final construction dimensions, details, etc. where significant changes were made during construction.
5. If the practice meets NRCS standards and specifications, then the statement "This practice meets NRCS practice standards and specifications" shall be placed on the checkout document and signed and dated by the responsible person with appropriate level of engineering job approval authority.

G. Reporting and/or Certifying

After it has been determined and documented that the practice meets NRCS plans and specifications, it can be reported and certified. The extent of the practice to be reported is the number of watering facilities installed. The extent of this practice to be certified is the quantities used as the basis for payment such as number of each size and type of watering facility, volume of ramp material, etc.