

GUIDANCE DOCUMENT

Water Well, Code 642

I. References

A. Design Criteria

1. Georgia FOTG Section IV, conservation practice standard, Water Well, Code 642.

B. Design Procedures

1. NEFH, Part 631, Geology, Chapter 33.

II. Documentation

A. Preliminary Investigation

1. Determine the feasibility and need for the water well for the planned purpose(s).

B. Engineering Survey

1. Engineering surveys are not normally needed unless the elevation of the water well head is needed by the permitting agency. Note and record the latitude and longitude of well.
2. Note the location of any utilities or utility markers.

C. Design

1. The required capacity of the well shall be determined based on the planned use and purpose. The location (latitude and longitude) and water well head protection required shall be recorded on NRCS-ENG-523A (or equivalent). Develop engineering plans showing the details of the water well head protection including size, thickness, and quality of the concrete pad. Provide the design data and plans to the landowner.
2. Develop engineering plans and specifications. As a minimum the plans and specifications shall include:
 - a. Location of water well.
 - b. Well diameter.
 - c. Casing, type, gage and diameter.
 - d. Well capacity.
 - e. Surface sealing.
 - f. Well head protection.
 - g. 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. Stake the location of the well. This will not require a survey and can be noted on the conservation plan map.

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

Wells must be permitted and installed by licensed well contractors. Construction check out during installation is not necessary except to verify the water well is installed at the planned location. Documentation shall include the following information from the well driller:

1. Depth of well, casing, and screen or well casing perforations.
2. Depth and quantity of gravel pack.
3. Type and gage of well casing material.
4. Well driller's geophysical log.
5. Depth and method of sealing surface casing.
6. Water well capacity in gpm, must equal or exceed planned capacity.
7. The dimensions of the water well head protection slab or casing head above ground shall be measured and recorded in the engineering field book.
8. Prepare as-built drawings showing final construction dimensions, details, etc.
9. 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 wells installed. The extent of this practice to be reported is quantities used as the basis of payment.