

Landowner's Guide to Constructing Conservation Practices



This guide will help you to understand your responsibility in all phases of the conservation practice construction from planning and design through construction and maintenance. By understanding your role and providing adequate time for each phase of the project, you can avoid inconvenient and costly delays.

I have reviewed this information and understand my role in implementing the conservation practices.

REVIEW SIGNATURES

Landowner/Operator: _____ **Date:** _____

District Conservationist: _____ **Date:** _____

“Landowner” as used here is the person responsible for making decisions for the property. In most cases, that is the owner, but it may also be an operator or farm manager. This person is ultimately responsible for the construction of the project according to NRCS standards and specifications, complying with all permit requirements, and operating and maintaining the conservation practices.

	Landowner
During Planning	<ul style="list-style-type: none"> • Obtains an Engineering Provider for all phases of the project and agrees on timeline. • Sets up a pre-design meeting with NRCS and Engineering Provider. • Selects from alternatives. • Checks utility locations. • Assists with identifying needed federal, state, and local permits. • Notifies state historical society, if needed. • Provides excavator for soil investigations. • Considers costs and maintenance requirements. • Investigates/applies for program financial assistance, if desired.
During Design	<ul style="list-style-type: none"> • Be sure design meets your objectives. • Be available for consultation. • Obtains necessary permits and easements. • Contacts utility company to identify utility locations, including buried utilities. • Notifies contractor of utility location. • Follows up with state historical society, if required. • Reviews and agrees to the final design. • Concurs with Operation and Maintenance Plan.
Before Construction	<ul style="list-style-type: none"> • May serve as the General Contractor. • Be available for consultations. • Hosts site showing/pre-construction meeting. • Hires competent contractors. • Verifies that the contractor has contacted Diggers Hotline. • Notifies utilities prior to construction activities. • Notifies NRCS before starting construction.
During Construction	<ul style="list-style-type: none"> • Authorizes the contractor to start work. • Keeps NRCS informed of progress. • Be available for consultations. • Ensures cultural and historical resources are protected when necessary. • Follows all federal, state, and local laws and zoning regulations. • Verifies plans, specifications, and all permitting requirements (if required) are met. • Implements landowner part of Construction Quality Assurance Plan (QAP). • Shuts down job for safety reasons. • Stops work of contractor, when justified. • Pays bills. • Completes items in construction plan not contracted out (seeding, fencing). • Submits “as-built” plans and construction verification documentation to NRCS for acceptance when consultant is involved.
Maintenance	<ul style="list-style-type: none"> • Follows the Operation and Maintenance Plan. • Makes repairs as needed. • Contacts NRCS for additional assistance, if needed.

The “Engineering Provider” may be staff from the USDA-Natural Resources Conservation Service, the local Conservation District, a technical service provider (TSP), or engineering consultant hired by the landowner. The engineering provider is responsible for practice design, quality control measures for construction, and communication with the landowner concerning the progress of construction and any items needing addressing.

	Engineering Provider/Consultant
During Planning	<ul style="list-style-type: none"> • Attends the pre-design meeting with the landowner and NRCS. • Develops alternatives that solve the landowner’s resource concerns and are compatible with their operation. • Discusses alternatives with the landowner. • Conducts foundation investigations and surveys as needed. • Alerts landowner to potential wetland, threatened and endangered species, archaeological sites, utilities, and needed permits. • Informs landowner of operation and maintenance responsibilities. • Prepares planning cost estimates.
During Design	<ul style="list-style-type: none"> • Surveys the site. • Develops construction plans based on the landowner’s objectives and decisions. • Reviews the system based on the planning and site conditions. • Reviews the design and specifications with the landowner. • Assists landowner with completing permit applications. • Develops Construction Quality Assurance Plan. • Prepares a construction cost estimate. • Provides NRCS an approval statement that practices meet NRCS standards. • Alerts landowner of any safety responsibilities associated with operating and maintaining conservation measures.
During Construction	<ul style="list-style-type: none"> • Assists landowner with the site showing/pre-construction meeting. • Follows the Construction Quality Assurance Plan. • Observes and inspects construction and makes tests to determine if work meets requirements of construction plan and specifications. Informs landowner and contractor of inspection results. • Keeps a daily diary of construction activities. • Alerts landowner and contractor of any possible safety issues regarding installation of conservation measure. • Informs landowner of presence of unexpected conditions or cultural and historical resources. • Informs landowner if contractor is not following construction plan. • Assesses need for design changes and provides alternatives as appropriate. • Prepares as-built drawings. • Submits as-built plans and construction verification documentation to landowner. • Certifies components and entire system as meeting standards and specifications.
Maintenance	Follows up with Operation and Maintenance Plan and periodically assists landowner to update plan.

The “Contractor” as used here is the person responsible for installing the conservation practice according to NRCS standards and specifications and following quality assurance plan (QAP).

	Contractor
During Design	May provide assistance for survey and site investigation.
During Construction	<ul style="list-style-type: none"> • Contacts Diggers Hotline to verify located utilities. • Follows OSHA requirements and practices safety. • Provides adequate notice to NRCS before starting job. • Attends site showing/pre-construction meeting. • Informs landowner of planned construction schedule. • Reads and complies with construction plans, specifications, and workmanship. • Has a foreman and appropriately skilled workers on site. • Has all required materials and equipment on site. • Uses materials specified in construction plan (no substitutions without PRIOR approval by the engineering provider). • Documents construction materials used. • Uses dimensions in construction plan (no alterations without PRIOR approval by the engineering provider). • Keeps NRCS informed of progress. • May provide layout and construction check surveys. • Implements contractor’s part of Construction Quality Assurance Plan. • Repairs improper construction. • Provides measurements and other needed information for certification of completion.
Maintenance	Provides various warranties, written and verbal, that installations meet plans and specifications and will perform for length of design requirements.

CONSTRUCTION PLANS

DRAWINGS: The drawings are a visual representation of the project which show the location and describe the work to be done. The drawings include plan views, sections, profile details, and notes which are necessary to supplement the construction specifications for a site specific installation.

SPECIFICATIONS: The construction specifications describe the quality of work which is to be done. The specifications may also reference a commercial standard such as the American Society for Testing and Materials (ASTM) which is identifiable for all products or procedures where referenced. If a conflict arises between the drawings and specifications, the specification governs the work or product.

COST ESTIMATES: The estimated cost is for comparison purposes and should not be shown or given to the contractor. The estimated cost is based on quantities calculated for the specific design. Actual construction may vary if the practice is changed during construction or differing site conditions are encountered (e.g. bedrock, excessive moisture, etc.).

It is the landowner’s responsibility to contact one or more contractors and obtain a contractor’s bid. Prices may vary from contractor to contractor. It is best to obtain bids from several qualified contractors before selecting someone to construct the practice. The Natural Resources Conservation Service does not guarantee that the estimated cost will be the final cost of the project.

PERMITS: All permits or approvals that are applicable for the construction and/or operation of the practice are the responsibility of the landowner and shall be obtained prior to the start of construction.

PUBLIC AND PRIVATE UTILITIES: If the existence of underground utilities in the vicinity of the proposed work area is known, it is the landowner’s responsibility to notify NRCS so that appropriate action can be implemented. It is the excavating contractor’s responsibility to contact Diggers Hotline prior to start of construction.

PRE-CONSTRUCTION MEETING: Construction of the practice(s) shall NOT start before a thorough pre-construction meeting is held between the landowner/operator, contractor, engineering provider, and the NRCS representative to review the plans, specifications, and other details of the project.

ACCEPTANCE OF CONSTRUCTION: The final step will be an inspection and review by NRCS to ensure the project meets site specific drawings and construction specifications for this practice. Failure to install a practice according to the plans and specifications or provide adequate documentation of the construction would warrant any forfeiture of financial assistance or violation of permit.

Additional information is available at www.tn.nrcs.usda.gov

Tennessee
January 2015

The USDA is an equal opportunity provider and employer.