



Key Steps to Conservation Drainage Practice Implementation under Farm Bill Conservation Programs (such as EQIP and CRP)

For Non-NRCS Engineering Providers



1. OFF-SITE ASSESSMENT

Collect available data to determine if site is appropriate for practice. Refer to available guidance and standards for the practice. Available data may include tile map, USDA farm map, soil survey data, LiDAR topography, etc. *"Authorization to Release of Records" allows USDA NRCS info to be shared with outside parties.*

2. ON-SITE ASSESSMENT

Field verification includes geotechnical investigation (soil borings or pit), project area engineering survey with benchmarks, tile locations and depths, property boundaries, information about adjacent crops, site vegetation, etc. NRCS may be able to provide some of this information.



3. PRE-DESIGN CONFERENCE

If landowner is interested in proceeding, then communicate with the appropriate NRCS staff (District Conservationist and others) to go over approval process, staff involved, and financial assistance program deadlines. Remember that NRCS has to approve the design for both NRCS and FSA programs before construction can begin.

4. PRELIMINARY DESIGN

Prepare a preliminary engineering design showing the size, shape, and location of the project for the landowner/operator to provide feedback. Include an estimated cost. Check in with NRCS staff to get feedback prior to preparing the final design set. *Download from NRCS FOTG and NRCS engineering website the appropriate practice materials (e.g., standards, guidance, construction specifications, standard drawings, job sheets, O&M documents, and statements of work).*



5. FINAL DESIGN DOCUMENTS

Final design materials submitted to NRCS include a Professional Engineer (PE, licensed in Illinois) stamped set of construction plans and specifications* with materials list, written design documentation to show all NRCS practice standard requirements have been met, operation and maintenance plan, and a quality assurance/construction inspection plan. Refer to the Statement of Work for detailed requirements. NRCS will perform a functional review of the design package to confirm it meets NRCS standards and specifications. To be eligible for financial assistance programs, NRCS must approve the design before construction.

6. PERMITTING

Practice implementation may require local, state, and federal regulatory permits. Landowner or consultant (through a "Delegation of Authority" form) should submit a 404 joint application form to the appropriate agencies. Ask NRCS for a copy of the cultural resources review for the site to include with the permit application.



7. CONTRACTOR

Consultant can help locate and select contractors based on experience, qualifications, and bids. *A pre-construction meeting* must be led by the responsible PE, and include NRCS, any other consultants, contractors, and landowner/operators to review the approved design set and construction specifications. Best if held on site.

8. CONSTRUCTION

A responsible party as designated in the construction inspection plan must ensure the plan is followed and the implementation is in accordance to the design and in compliance with the permits. Changes needed during construction must first be approved by the PE and NRCS (if major).



9. AFTER CONSTRUCTION

Upon completion, submit a copy of the signed/stamped as-built drawings* with any changes clearly marked in red, final quantities, and required construction documentation to NRCS. Provide the landowner/operator with the practice operation & maintenance document and schedule.

* A certification statement must be included next to PE stamp. See the Illinois NRCS National Engineering Manual supplement, section 505 for the wording of the certification statements for design and as-built documents.