

STATEMENT OF WORK
Open Channel (582)
Kentucky

These deliverables apply to this individual practice. For other planned practice deliverables refer to those specific Statements of Work.

DESIGN

Deliverables:

1. Design documentation that will demonstrate that the criteria in NRCS practice standard have been met and are compatible with other planned and applied practices.
 - a. Practice purpose(s) as identified in the conservation plan.
 - b. List of required permits to be obtained by the client.
 - c. Impacts on adjacent properties and structures.
 - d. Compliance with NRCS national and state utility safety policy (NEM Part 503-Safety, Section 503.00 through 503.22). It is the client's responsibility to contact Kentucky811, Call 811 Before You Dig. See www.kentucky811.org for more information.
 - e. Practice standard criteria related computations and analyses to develop plans and specifications including but not limited to:
 - i. Hydrology/Hydraulics and Appurtenance Design
 - ii. Channel Stability
 - iii. Vegetation and Erosion Control
2. Written plans and specifications including sketches and drawings shall be provided to the client that adequately describes the requirements to install the practice and obtain necessary permits.
3. Design Report and Inspection Plan as appropriate (NEM Part 511, Subpart B Documentation, 511.11 and Part 512, Subpart D Quality Assurance Activities, 512.30 through 512.32).
4. Operation and Maintenance Plan
5. Certifications that the design meets practice standard criteria and comply with applicable laws and regulations (NEM Subpart A, 505.03(b) (2)).
6. Design modifications during installation as required.

INSTALLATION

Deliverables

1. Pre Installation conference with client and contractor.
2. Verification that client has obtained required permits.
3. Staking and layout according to plans and specifications including applicable layout notes.
4. Installation inspection (according to inspection plan as appropriate).
 - a. Actual materials used.
 - b. Inspection records
5. Facilitate and implement required design modifications with client and original designer.
6. Advise client/NRCS on compliance issues with all federal, state, tribal, and local laws, regulations and NRCS policies during installation.
7. Certification that the installation process and materials meets design and permit requirements.

CHECK OUT

Deliverables

1. As-Built documentation.
 - a. Extent of practice units applied
 - b. Drawings
 - c. Final quantities
2. Certification that the installation meets NRCS standards and specifications and is in compliance with permits (NEM Subpart A, 505.03(c) (1)).
3. Progress reporting.
4. Photo documentation recommended

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SPECIAL REQUIREMENTS FOR COST SHARED PRACTICES

As noted in GM KY Supplement 450-407.12: Certifying Performance for Cost Sharing (June 2008)

A. All practices will be located and identified using Global Positioning Systems (GPS) unit. (See GM KY 450-407.12 for additional guidance.)

B. Practices receiving cost share assistance will be photo identified with no less than one before picture and no less than one after picture. (See GM KY 450-407.12 for additional guidance)

A quick link to the policy is: ftp://ftp-fc.sc.egov.usda.gov/KY/GM_Supplement_450.pdf

SUPPORTING DATA AND DOCUMENTATION

The following is a list of the minimum data and documentation to be recorded in the case file:

1. Location of the open channel(s) on the conservation map.
2. Assistance notes which include dates of site visits, name or initials of the person who made the visit, specifics as to alternatives discussed, decisions made, and by whom.

Field Data and Survey Notes

Record on survey notepaper, NRCS-ENG-28, ENG-29, or on other paper or media as appropriate.

1. Sketch of area, indicating field conditions, structures, size and location; side drainage, location and section; control points, etc.
2. Establish and describe a temporary benchmark.
3. Profile along centerline of open channel at 100-foot intervals.
4. Cross sections, one per design reach not to exceed 500-foot intervals taken perpendicular to flow and extending 25 feet beyond the top of each bank.
5. Location and description of fallen trees and other debris that may need to be removed.
6. Soil investigation, auger logs to determine any special construction needs.
7. Low bank at each station (if needed for critical depth).

Design Data

Record design data on appropriate forms and/or engineering paper. For guidance on the preparation of engineering plans see Chapter 5 of the EFH, Part 650. The following is a list of the minimum required design data:

1. Show on the plans the job class, the plan view of open channel in relation to an identifiable point, location map with the tract number, field number and field acreage labeled, utility notification, and construction specifications.
2. Design computations including the watershed map, drainage area, channel retardance and design velocity and discharge.
3. Plan, cross-section and profile of open channel. Record design grade, bottom width, average depth, side slopes, hydraulic gradient, and berm width for each design section of the drain.
4. Soil borings, where applicable.
5. Structures, where applicable.
6. Method of disposal for the debris and for the spoil.
7. Vegetative plan. Include the seedbed preparation, seeding species and rate, lime, fertilizer and mulching requirements.
8. Provide for erosion protection at the ends of crossing pipes, as appropriate.
9. Provide for the control of erosion during and following construction. Construction sequence to include stream channel diversion and sediment control measures.
10. Estimated quantities.
11. Written Operation and Maintenance plan.
12. Job Class
13. Signature of someone with appropriate design approval authority

Construction Check Data

Record the construction check data on survey notepaper, NRCS- ENG-28 and ENG-29, or other appropriate engineering paper. Survey data shall be plotted in red on the as-built plans. The following is a list of minimum data needed for As-built documentation.

1. Documentation of site visits on CPA-6. Include the date, who performed the inspection, specifics as to what was inspected, all alternatives discussed, and decisions made and by whom;
2. Check notes recorded during or after completion of construction showing cross sections, profiles of constructed components, lengths, widths, and elevations of all components;

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3. Cross-section notes, one per design reach on the completed open channel or as needed to determine whether planned grade and dimensions have been met.
4. Profile notes along centerline of constructed open channel at 100-foot intervals.
5. Location of spoil spreading and measurements to support special features installed.
6. Location, size, type, grade, and/or pertinent elevations of any structures used for stabilization.
7. Statement as to the condition or adequacy of vegetation on the banks, and other disturbed areas.
8. Final quantities and documentation for quantity changes and materials certifications.
9. Sign and date statement that practices meets or exceeds plans and NRCS practice standards and specifications.

REFERENCES

- NRCS Field Office Technical Guide (eFOTG), Section IV, Conservation Practice Standard - Open Channel, 582.
- NRCS National Engineering Manual (NEM).
- NRCS National Environmental Compliance Handbook
- NRCS Cultural Resources Handbook