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

**DESIGN**

**Deliverables**

1. Design documents that demonstrate criteria in practice standard have been met and are compatible with planned and applied practices.
   a. Practice purpose(s) as identified in the conservation plan.
   b. Compliance with NRCS national and state utility safety policy (NEM Part 503-Safety, Subpart A – Engineering Activities Affecting Utilities, 503.00-503.06). Kentucky811, Call 811 Before You Dig notification is client’s responsibility. See www.kentucky811.org for more information.
   c. Practice standard criteria related computations and analyses to develop plans and specifications including, but not limited to:
      i. Location/alignment.
      ii. Hydrology/drainage.
      iii. Construction operations.
      iv. Vegetation.
   d. Evaluation and completion of ECS – Form NRCS-CPA-52, Environmental Evaluation Worksheet

2. Written plans and specifications including sketches and drawings shall be provided to the client that adequately describe the requirements to install the practice and obtain necessary permits.

3. Operation and maintenance plan.

4. Certification that the design meets practice standard criteria and complies with applicable laws and regulations [NEM Subpart A, 505.03(a)(3)].

5. 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.
   a. Actual materials used (NEM Part 512, Subpart D, Quality Assurance Activities, 512.33).
   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 meet design 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 [NEM, Subpart A, 505.03(c)(1)].

3. Progress reporting.

4. Photo documentation recommended.

**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)
SUPPORTING DATA AND DOCUMENTATION

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

1. Location and extent of the practice on the conservation plan 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**

Make a full investigation of the topography of the site, soil conditions, farming operations, erosion, hydrology, water quality and degree and type of usage before a specific plan is prepared for the area. Record field data and survey notes on NRCS-ENG-28, ENG-29, or on other paper or media, as appropriate. The following is a list of the minimum data needed:

1. Location and extent of the heavy use area protection.
2. Description of the objectives of the practice, including the desired functions which the heavy use area protection is expected to provide.
3. Soils information, as appropriate for site conditions and the proposed design. Soil survey map with the site identified. Documentation should include soil texture, depth to seasonal high water table, depth to bedrock and permeability of the soil.

**Design Data**

Record design data on appropriate KY forms and engineering paper. For guidance on the preparation of engineering plans, see Chapter 5 of the Engineering Field Handbook. The following is a list of the minimum required design data:

1. Show on the plans the job class, the plan view showing the extent of the area treated, location map, design assumptions, utility notification and construction specifications.
2. Comprehensive Nutrient Management Plan or Waste Management Plan, as appropriate, when animals are involved.
3. Description of surface treatment with material description. Show profiles and cross sections, as appropriate, of the heavy use area with grades and thickness of the base course and surface treatment.
4. Runoff treatment design.
5. Grading and drainage plan for the site where appropriate.
6. Vegetative plan. Include the seedbed preparation, seeding species and rate, lime, fertilizer and mulching requirements according to Kentucky conservation practice standard Critical Area Planting (Code 342).
7. Estimated quantities.
8. Approval signature of someone with proper authority for design.
9. Written operation and management plan.

**Construction Check Data/As-built**

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

1. Document site visits on CPA-6. Include the date, name of recorder, and specifics about discussions, inspections, activities, personnel on site and decisions made and by whom.
2. Installation and construction check notes are to be recorded in sufficient detail to show that the practice meets this standard and applicable specification. Minimum requirements are:
   a. Measurements to show length, width, and grades of completed heavy use area protection marked in red on the “as-built” plans;
   b. Statement as to the materials installed and thickness, to be placed on the “asbuilt” plans;
   c. Statement on seeding installation.
3. Final quantities and documentation for quantity changes.
5. Sign and date statement on plans that "Construction meets or exceeds plans and NRCS practice standards and specifications." Statement to be signed and dated by a person with appropriate engineering job approval authority for construction.

REFERENCES

- NRCS Kentucky Field Office Technical Guide (e-FOTG), Section IV, Conservation Practice Standard – Heavy Use Area Protection (561).
- NRCS Cultural Resources Handbook.