

STREAMBANK AND SHORELINE PROTECTION DESIGN AND CONSTRUCTION CHECKLISTS

DESIGN

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.
2. List of required permits to be obtained by the client.
3. Impacts on adjacent properties and structures.
4. Compliance with NRCS national and state utility safety policy (NEM Part 503-Safety, Subpart A - Engineering Activities Affecting Utilities 503.00 through 503.06).
5. List of facilitating practices
6. Practice standard criteria related computations and analyses to develop plans and specifications including but not limited to:
 - a. Geology/Soil Mechanics
 - b. Hydrology/Hydraulics
 - c. Structural
 - d. Vegetation/Soil Bioengineering
2. Construction Specifications
 - a. Were construction specifications for all practice standards associated with the closure included and modified to be fit the conditions for this closure
 - b. Were any additional specifications needed and included in the design
 - c. Construction sequence, if required
 - d. Liner removal or protection, if required
 - e. Special equipment requirements
3. Engineering Drawings
 - a. Plan View
 - North Arrow
 - Bench Marks
 - Scale
 - Legend
 - Road and Utilities
 - Access Roads
 - Existing Structures
 - Location of cross sections
 - Construction Limits
 - Location of pipes, appurtenances and structures
 - Property Lines
 - Erosion and Sediment Control BMPs
 - b. Cross Sections
 - Minimum of 2 cross sections
 - Scale
 - Existing ground
 - Finished subgrade
 - Typical details of planned treatment(s)
7. 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).
8. Operation and Maintenance Plan
9. Design modifications during installation as required.

INSTALLATION

1. Pre Installation conference with landowner 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).
 - Actual materials used.
 - Inspection records
5. Facilitate and implement required design modifications with landowner and original designer.
6. Advise landowner 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.

CHECKOUT

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)).