STATEMENT OF WORK
GRADE STABILIZATION STRUCTURE (410)
SOUTH DAKOTA
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These deliverables apply to this individual practice. For practice deliverables for other planned practices, refer to those specific Statements of Work.

DESIGN

Deliverables:

1. Pre-design conference with client and Natural Resources Conservation Service (NRCS) representative.
2. Provide design documentation demonstrating compliance with the criteria in NRCS practice standard and compatibility with other planned and applied practices.
    a. Identify practice purpose(s) in accordance with the conservation plan
    b. Provide a list of required permits to be obtained by the client
    c. Assure compliance with NRCS national and state utility safety policy (NEM Part 503-Safety, Subpart A - Engineering Activities Affecting Utilities 503.00 through 503.06)
    d. Provide practice standard criteria related computations and analyses to develop plans and specifications including but not limited to:
        i. Hazard Class (NEM Part 520; Subpart C-Dams)
        ii. Geology and Soil Mechanics (NEM Part 531-Geology;NEM Part 533 – Soil Engineering)
        iii. Hydrology/Hydraulics (NEM Part 530-Hydrology)
        iv. Structural (NEM Part 536-Structural Design)
        v. Vegetation
        vi. Environmental Considerations
        vii. Safety Considerations (NEM Part 503-Safety, Subpart A, 503.10 through 503.12)
3. Provide sufficient copies of written plans and specifications, including sketches and drawings, to the client that adequately describes the requirements to install the practice and obtain necessary permits.
4. Specific detailed requirements for Grade Stabilization Structure design and the development of construction plans and specifications are outlined in the South Dakota Engineering and Spot Checking Manual (SDEDSCM), under the Grade Stabilization Structure practice requirements. For an earth embankment Grade Stabilization Structure, refer to the Earth Dams Practice Requirements in the SDEDSCM. Where specific forms or job sheets are mentioned in the SDEDSCM, an equivalent may be substituted. The guidance contained in this manual shall be considered as the minimum acceptable for this practice.
5. Provide Design Report and Quality Assurance Plan as appropriate (NEM Part 511, Subpart B Documentation, 511.11 and Part 512-Construction, Subpart D-Quality Assurance Activities, 512.30 through 512.32).
6. Provide Operation and Maintenance Plan
7. Provide certification that the design meets practice standard criteria and complies with applicable laws and regulations (NEM Part 501- Authorizations, Subpart A-Review and Approval, 501.3).
8. Develop and sign an engineer's cost estimate based on project quantities. Provide revised cost estimates in the event of changes to project quantities or completion of final design.
9. Develop a list of practices for the project that includes the practice unit and extent. Provide a revised list of practices, practice units, and extents in the event of changes to these values or completion of the final design.
10. Provide an anticipated installation schedule.
11. Provide design modifications during installation as required.

INSTALLATION

Deliverables:

1. Conduct a pre-installation conference with client, NRCS representative, and contractor.
2. Verify that client has obtained required permits.
3. Stake and layout the practice according to plans and specifications, including applicable layout notes.
4. Provide quality assurance of installation (according to Quality Assurance plan as appropriate).
    a. Actual materials used (Part 512, Subchapter D Quality Assurance Activities, 512.33)
    b. Inspection records
5. Specific detailed requirements for Grade Stabilization Structure installation are outlined in the SDEDSCM, under the SDEDSCM, an equivalent may be substituted. The guidance contained in this manual shall be considered as the minimum acceptable for this practice.
6. Facilitate and implement required design modifications with client and original designer
7. Advise client/NRCS on compliance issues with all federal, state, Tribal, and local laws, regulations, and NRCS policies during installation.
8. Provide certification that the installation process and materials meets design and permit requirements.

CHECK OUT

Deliverables:

1. Provide as-Built documentation.
    a. Extent of practice units applied
    b. Drawings
    c. Final quantities
2. Specific detailed requirements for Grade Stabilization Structure checkout design and the development on construction plans and specifications are outlined in the SDEDSCM, under the Grade Stabilization Structure Practice Requirements. Where specific forms or job sheets are mentioned in the SDEDSCM, an equivalent may be substituted. The guidance contained in this manual shall be considered as the minimum acceptable for this practice.
3. Provide certification that the installation meets NRCS standards and specifications and complies with permits (NEM Part 501-Authorizations, Subpart A-Review and Approval, 501.3).
4. Report progress.

REFERENCES

- NRCS South Dakota Field Office Technical Guide (eFOTG), Section IV, Conservation Practice Standard - Grade Stabilization Structure, 410
- NRCS National Engineering Manual (NEM).
- NRCS Technical Release 60, Earth Dams and Reservoirs
- NRCS National Environmental Compliance Handbook
- NRCS Cultural Resources Handbook
- SDEDSCM