

**ILLINOIS STATEMENT OF WORK
Grade Stabilization Structure (410)**

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, Subpart A - Engineering Activities Affecting Utilities 503.00 through 503.06).
 - e. Practice standard criteria related computations and analyses to develop plans and specifications including but not limited to:
 - i. Geology and Soil Mechanics (NEM Subpart 531a)
 - ii. Hydrology/Hydraulics, including but not limited to;
 1. Drainage area, runoff curve number, watershed slope and hydraulic length
 2. Runoff hydrologic analysis
 3. Design storm requirements
 4. Principal and auxiliary spillway hydraulics
 5. Stage-storage and flood routing, if applicable
 - iii. Structural including hazard class and permit requirements as appropriate
 - iv. Design Survey
 1. Field survey notes shall conform to NEM Part 540 and present legible, clear and concise data. Include a hard copy of the raw data and reduced survey if using an electronic data collector.
 2. Include temporary benchmark elevations, descriptions, and locations.
 - v. Vegetation
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, including but not limited to:
 - a. Location map with legal description
 - b. Plan view drawing, to scale, showing the location of the practice to be constructed, along with relevant benchmark elevations and descriptions. Include borrow and spoil areas as needed.
 - c. Profile and cross section of embankment, including relevant constructed elevations (example – top of dam, auxiliary spillway, pipe inlet, etc.)
 - d. Detail drawings of structure and appurtenances
 - e. Construction and material specifications, including vegetative establishment
 - f. Construction notes as needed to clarify components and provide directions for installation
 - g. Utility safety statement requiring notification of the Illinois One-Call System prior to construction.
 - h. Additional notes as necessary to identify avoidance and protection areas and boundaries associated with cultural resources, threatened or endangered species, or other resources needing temporary protection during installation.
 - i. Signature/initials and date for design and design check. Design check to be completed by an individual other than the designer.
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 developed in accordance with the requirements of IL NRCS Conservation Practice Standard 410, Grade Stabilization Structure.
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.

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INSTALLATION

Deliverables

1. Preconstruction conference with client and contractor (NEM Part 512, Subpart B, IL 512.13(d)).
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. As-built plan is required when a significant change in design occurs during construction or when the job is designated Class V or higher. Identify "As Built" on plan. Superimpose changes on the as-built plan using a different color or otherwise clearly differentiating the as-built dimensions.
 - c. For practices not requiring an as-built plan, survey notes documenting critical dimensions, elevations, and materials are sufficient.
 - d. 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.

REFERENCES

- NRCS Field Office Technical Guide (eFOTG), Section IV, Conservation Practice Standard – Grade Stabilization Structure, 410.
- NRCS National Engineering Manual (NEM).
- NRCS National Environmental Compliance Handbook
- NRCS Cultural Resources Handbook