

STATEMENT OF WORK
Roofs and Covers (367)
Ohio

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. 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. Practice standard criteria related computations and analyses to develop plans and specifications including but not limited to:
 - i. Type of Cover
 - ii. Geology and Soil Mechanics (NEM Subpart 531a), as applicable for foundation analysis.
 - iii. Structural, Mechanical and Appurtenances
 - iv. Safety
 - v. Environmental Considerations (e.g. air quality, water quality)
 - vi. When applicable - design approval from the Ohio Department of Agriculture (ODA) Livestock Permit section, and/or Ohio Environmental Protection Agency (OEPA)
2. Written plans and specifications including sketches and drawings shall be provided to the client that adequately describes the details and requirements for a competent construction contractor to install the practice, and for the client to obtain necessary permits. Specific requirements for preparation of construction drawings as applicable to the type of structure are listed below. Drawings and specification are to be prepared and stamped by a Professional Engineer or Architect licensed in State of Ohio. Any additional information necessary to completely describe the facility shall be included on the drawings.
 - (a) All Drawings
 - Title block, name, practice, and county.
 - Location map, township, section, roads, watercourses, etc.
 - The location within construction area of all roads, fences, buildings, utilities, bridges, culverts, property lines, and landowners important to the project.
 - Benchmarks and legends.
 - Underground utilities notification information and 'Notice to Excavator'.
 - Statement referring to attached construction standards.
 - Soil types.
 - Job class.
 - Construction approval block.
 - Delineated wetlands in area – where applicable.
 - Certification on cover sheet of construction drawings stating: *"To the best of my professional knowledge, judgment and belief, these plans meet applicable NRCS standards"*
 - Certification on cover sheet of "As-Built" drawings (see check out deliverables on page 3) stating: *"To the best of my professional knowledge, judgment and belief, this practice is installed in accordance with the plans and specifications, and meets applicable NRCS standards"*
 - (b) Roofs and covers
 - Plan view of system layout.
 - Separation distance from the facility to the nearest well and neighboring residence
 - Structural details for all components.
 - State applicable design loads (manure, earth, vehicular, surcharge, wind & snow, exposure and occupancy category)
 - Listing of quality standards (such as lumber grade); and applicable strength requirements (such as allowable shear & bending stress) for structural members
 - Details and quality standards for fasteners
 - When concrete is used, statement that concrete is required to meet NRCS-Ohio Construction Specification- Concrete

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- References to components supplied by others and applicable certifications (such as stamped truss designs conforming to roof dimensions and drawing details, engineered timber products, “hoop” roof assemblies, and fabricated fasteners).
- Connection details when roof structure is integrated with a manure storage facility
- Foundation details for roof support (posts and walls)
- Special safety requirements.
- Special surface water diversion considerations when applicable.
- Seeding, fertilizing, and mulching requirements.
- Roofing details.
- Gutter, downspout, and downspout outlet details.
- Quantities

When applicable - design approval from the Ohio Department of Agriculture (ODA) Livestock Permit section, and/or Ohio Environmental Protection Agency (OEPA)

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). The design report is to include design manure/ wastewater volumes and storage interval conforming to the comprehensive nutrient management plan (CNMP), or other planning document acknowledged by NRCS to initially size the facility for USDA program participation.
4. Operation and Maintenance Plan
5. Certifications that the design meets practice standard criteria and complies with applicable laws and regulations (NEM Subpart A, 505.3).
6. Design modifications during installation as required.
7. The client is to be provided with a minimum of two copies of the design report and quality assurance plan (one for the clients records, and one for the NRCS Field Office)

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. Verification that delivered materials meet the design requirements and applicable certifications are on site prior to material installation
5. Installation inspection (according to inspection plan as appropriate).
 - a. Actual materials used.
 - b. Inspection records
 - c. Testing records (when applicable)
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. 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. Two copies of drawings clearly showing both the original design and “As-Built” changes
 - c. Final quantities
 - d. Inspection records
2. Written certification that the installation meets Ohio NRCS Conservation Practice Standard 367, conforms to the as-built drawings; and when applicable, obtain written construction approval from ODA and/or OEPA (NEM Subpart A, 505.03(c)(1)).
3. “Warranty of Technical Services Provided” found at the end of the following Ohio TSP publication:
http://ftp-fc.sc.egov.usda.gov/OH/pub/Programs/tsp/tsp_booklet_3_21_05.pdf

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REFERENCES

- NRCS Field Office Technical Guide (eFOTG), Section IV, Conservation Practice Standard - Waste Storage Facility, 313. Ohio FOTG: http://efotg.nrcs.usda.gov/efotg_locator.aspx?map=OH
- NRCS Agricultural Waste Management Field Handbook (AWMFH) and design software: http://www.oh.nrcs.usda.gov/technical/engineering/engineering_software.html
- NRCS National Engineering Manual (NEM): <http://www.info.usda.gov/CED/ftp/CED/NEM.html>
- Ohio NRCS supplements to the NEM: <http://www.oh.nrcs.usda.gov/intranet/NEM/supplements.html>
- NRCS National Environmental Compliance Handbook: http://policy.nrcs.usda.gov/scripts/lpsiis.dll/H/H_190_610_Content.htm
- NRCS Cultural Resources Handbook: http://policy.nrcs.usda.gov/scripts/lpsiis.dll/H/H_190_601_Content.htm
- NRCS-Ohio Construction Specification - Concrete <http://www.oh.nrcs.usda.gov/technical/engineering/neh20.html>
- Ohio Department of Agriculture - Livestock Environmental Permitting Program Rules <http://www.ohioagriculture.gov/pubs/divs/lepp/curr/rules/lepp-rl-front-021304.htm>