



Helping People Help the Land

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**TECHNICAL GUIDE
NOTICE #232 (electronic)**

Purpose: To transmit information regarding the electronic NRCS Field Office Technical Guide (eFOTG).

Effective Date: This notice is effective upon receipt.

Notice of Changes

SECTION I: General Resource References

Michigan Technical Notes

Grazing Technical Note #8, Photo-Point Monitoring for Brush, Weed and Pasture Changes

This technical note provides information for the planner on photo-point monitoring. This technique involves establishing permanent photo locations and returning annually to take photographs at these locations. Photo-Point monitoring provides a visual record of changes. Over time, these images will show a trend in resource conditions that can be used to guide management decisions.

Technical questions should be addressed to Betsy Dierberger, Grassland/Forage Specialist, at (517) 324-5265.

SECTION IV: Practice Standards and Specifications

Conservation Practices

Road/Trail/Landing Closure and Treatment (654):

This practice, new to Michigan, is for the closure, decommissioning, or abandonment of roads, trails, and/or landings and associated treatment to achieve conservation objectives.

Technical questions regarding this practice standard should be addressed to Andy Henriksen, State Forester, at (517) 324-5234.

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DIST: All Holders of the Field Office Technical Guide

Engineering Practice Standards

Unless otherwise noted, technical questions regarding the following Engineering Conservation Practice Standards and supporting documents should be addressed to Steve Davis, State Conservation Engineer at (517) 324-5232.

REVIEW ONLY

The practice standard below is only being reviewed this year. There is no change to the recently updated national version of this practice standard, but the 5-year cycle requires that we at least review it. There were no changes at all made to the Michigan standard and Statement of Work. Only minor word changes were made to the O&M Plan.

- Terrace (600)

UPDATED STANDARDS

- Anaerobic Digester (366) [Anaerobic Digester – Ambient Temperature (365) and Anaerobic Digester – Controlled Temperature (366)]
- Animal Trails and Walkways (575)
- Aquaculture Pond (397)
- Irrigation Pipeline (430)
- Irrigation Reservoir (436) [formerly Irrigation Storage Reservoir (436) and Irrigation Regulating Reservoir (552)]
- Obstruction Removal (500)
- Pumping Plant (533)
- Roof Runoff Structure (558)
- Sediment Basin (350)
- Surface Drain, Field Ditch (607)
- Surface Drain, Main or Lateral (608)
- Terrace (600)
- Trails and Walkways (568) [formerly Recreation Trails and Walkways]

Anerobic Digester (366)

- Revision to the Definition and Purpose to conform with updated national standard
- Allows suitable organic feedstock where available.
- Includes the well isolation distance criteria cited in Waste Storage Facility (313) practice standard.
- Requires leak detection devices, distance requirement for flares from the biogas source and minimum height requirement.
- Added criteria for the minimum collection and transfer pipe size for wet biogas applications.
- For a gas control facility it now requires that electrical wire, fixtures and equipment to meet the National Electrical Code and local and state requirements.
- Added Considerations related to the following:
 - Digester Design.
 - Grounding and Cathodic Protection.
 - Electrical Component Protection.
 - Temperature Maintenance.
 - Gas Transfer Pipe.

- Plans and Specifications of the practice standard now includes:
 - Materials and structural details as appropriate to the complete system.
 - Details of biogas collection, control, and utilization system.
 - Specific insulation, heat exchanger capacity, and energy requirements for maintaining the digester operating temperature within acceptable limits.
 - Process flow diagram.

Technical questions on the Anaerobic Digester (366) conservation practice standard should be addressed to Sue Reamer, Environmental Engineer, at (231) 941-0951 ext. 113.

Animal Trails and Walkways (575)

- Revisions made to address updates from most recent national standard.
- Proposed revisions are limited, but include greater emphasis of potential impacts to water courses and other environmental and cultural resources.
- No change to O&M Plan.
- No change to Statement of Work.

Aquaculture Pond (397)

- Revisions made to address updates from most recent national standard.
- Definition and Purposes changed to remove reference to “commercial”.
- Criteria added:
 - Ramps for vehicular access shall have a slope of 8H:1V or flatter.
- Considerations added:
 - Measures to avoid damage to flexible membrane liners should be included in the design, as appropriate.
 - Supplemental aeration in collection facilities should be considered in the design
- O&M Plan added: “17. Monitor for predation and take appropriate measures to remove or limit access by predators.”
- No change to Statement of Work.

Irrigation Pipeline (430)

- Adopted most recent national standard in its entirety with the exception of the Plans & Specifications and Operation & Maintenance sections. Used the standardized Michigan text for those sections.
- Title changed from “Irrigation Water Conveyance, Pipeline, (various)”, combining six previous separate standards for High-Pressure, Underground Plastic (DD), Low-Pressure, Underground Plastic (EE).
- No change to O&M Plan.
- No change to Statement of Work.

Irrigation Reservoir (436) [formerly Irrigation Storage Reservoir (436) and Irrigation Regulating Reservoir (552)]

- Adopted most recent national standard in its entirety with the exception of the Plans & Specifications and Operation & Maintenance sections. Used the standardized Michigan text for those sections.
- Criteria refers to NEH-636, Chapter 52 “Structural Design of Flexible Conduits.”
- Criteria added Langelier Saturation Index equation.

- References added.
- O&M Plan added: “15. Monitor and maintain cathodic protection systems.”
- No change to Statement of Work.

Obstruction Removal (500)

- Adopted most recent national standard in its entirety with the exception of the Plans & Specifications and Operation & Maintenance sections. Used the standardized Michigan text for those sections.
- Definition edited to add “works of improvement” and “debris,” while “landscape features” was eliminated.
- To the Conditions Where Practice Applies, two statements added: “public safety and infrastructure” and “does not apply to aquatic environments.”
- Criteria section completely re-written to add more detail, including safety and environmental concerns, and more detail for stabilization of the site after removal work.
- Considerations added related to recycling, dust suppression, erosion and sediment control, working in environmentally sensitive areas, and safety and wildlife habitat.
- References added.
- O&M Plan added: “4. When disposal of debris occurs on site, periodically check to ensure that the disposal site remains stable.”
- No change to Statement of Work.

Pumping Plant (533)

- Adopted most recent national standard in its entirety with the exception of the Plans & Specifications and Operation & Maintenance sections. Used the standardized Michigan text for those sections.
- Definition expanded to identify pumping plant components.
- Purposes expanded to address various resource concerns.
- Criteria added for Variable Frequency Drives, Photovoltaic Panels, Windmills, and Hydraulic Rams.
- Additional Criteria provided for to the newly expanded purposes.
- O&M Plan added: “5. Perform routine tests and inspections of all automated components of the pumping plant, to assure the proper functioning as designed.”
- No change to Statement of Work.

Roof Runoff Structure (558)

- Considerations added:
 - “Sinkholes” to list of areas to avoid near discharging outlets.
 - “Some designs may provide secondary benefits, e.g. rock pads may also reduce rodent problems around livestock and poultry barns.”
- No change to O&M Plan.
- No change to Statement of Work.

Sediment Basin (350)

- Adopted most recent national standard in its entirety with the exception of the Plans & Specifications and Operation & Maintenance sections. Used the standardized Michigan text for those sections.
- Definition changed to better define the type of basin.

- Purpose changed to reflect the sediment capturing function of the basin.
- Conditions Where Practice Applies changed to define land uses where the practice applies and the physical conditions where the practice is applicable, which are the same as Pond (378).
- Criteria were added for location, basin capacity, spillway design, basin shape, embankment and side slopes, vegetation, and safety. Drawing added to better define the storage capacities.
- Considerations added related to improved functioning of the basin, visual concerns, and safety and wildlife habitat
- References added.
- O&M Plan added:
 - Inspect safety components
 - Promptly repair or replace damaged components
 - Control of invasive species
- No change to Statement of Work.

Surface Drain, Field Ditch (607)

- Adopted most recent national standard in its entirety with the exception of the Plans & Specifications and Operation & Maintenance sections. Used the standardized Michigan text for those sections.
- Title changed from “Surface Drainage, Field Ditch.”
- Criteria capacity was added
- Considerations expanded
- References were added
- No change to O&M Plan
- No change to Statement of Work

Surface Drain, Main or Lateral (608)

- Adopted most recent national standard in its entirety with the exception of the Plans & Specifications and Operation & Maintenance sections. Used the standardized Michigan text for those sections.
- Minor changes to criteria, text reorganized for clarity.
- References added.
- No change to O&M Plan
- No change to Statement of Work

Trails and Walkways (568) [formerly Recreation Trails and Walkways]

- Adopted most recent national standard in its entirety with the exception of the Plans & Specifications and Operation & Maintenance sections. Used the standardized Michigan text for those sections.
- Title changed from Recreation Trail and Walkway.
- Definition changed to include farm workers, construction/maintenance access, and small walk-behind equipment.
- Purpose changed to include agricultural and construction/maintenance purposes.
- Conditions Where Practice Applies changed to cover recreational, agricultural, and non-agricultural installations.

- Criteria changed to include more detailed requirements for all land uses and information was added on accessibility of public access trails.
- Considerations added on maximum grades, drainage issues, parking issues, scenic values, fish and wildlife habitat, water quality, and wind erosion.
- References added.
- O&M Plan added: “7. For bridges and elevated walkways having a span greater than twenty feet and that are open or accessible to the public, conduct inspections in accordance with AASHTO Guide Manual for Condition Evaluation and Load and Resistance Factor Rating of Highway Bridges.”
- No change to Statement of Work

Michigan Conservation Sheets

The **Riparian Forest Buffer (391) CREP Job Sheet** and **Cost Estimator** tool are out of date and have been archived.

The **Tree/Shrub Site Preparation and Establishment (490-612) Conservation Sheet** has been placed in the Tree/Shrub Establishment (612) folder.

Technical questions regarding these forestry conservation sheets should be directed to Andy Henriksen, State Forester, at (517) 324-5234.

Questions regarding eFOTG content management should be directed to Ruth Shaffer, Water Quality Specialist, at (517) 324-5239.



JAMES G. SCOTT
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