U.S. DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE
NEW YORK CONSERVATION PRACTICE GUIDELINE

HEAVY USE AREA PROTECTION

(ACRE)

CODE 561

REFERENCE

National Handbook of Conservation Practices – Code 561 Heavy Use Area Protection

Commonly Associated Practices or Processes

The following conservation practices are commonly used in conjunction with this practice to address natural resource concerns and opportunities in New York. This does not imply that any or all of the listed practices must be included or that others may not be included in a conservation management system (CMS). Consult Section III of the Field Office Technical Guide for assistance in developing CMS.

To determine whether a National or New York Conservation Standard applies to this and any other associated practices, check the following website: www.ny.nrcs.usda.gov. Click on the Technical Resources button, and look in the left-hand column for "eFOTG" on the next screen. Next, click on the "eFOTG" link, and look for the Conservation Standards in Section IV.

TABLE A: COMMONLY ASSOCIATED PROCESSES OR PRACTICES

Number	Name	Job/Engineering Sheets
313	Waste Storage Facility	
342	Critical Area Planting	
362	Diversion	NY ENG 22 and 23
382	Fence	
NY393a	Filter Strip — Area	NY Jobsheets 17 and 19
412	Grassed Waterway	NY ENG 24 and 25, and/or 24A and 25A
468	Lined Waterway or Outlet	
472	Use Exclusion	
528	Prescribed Grazing	
558	Roof Runoff Structure	
560	Access Road	
566	Recreation Land Grading & Shaping	
568	Recreation Trail & Walkway	
575	Animal Trails and Walkways	
606	Subsurface Drain	NY ENG 28 and 29
608	Surface Drainage – Main or Lateral	

614	Animal Watering Facility	
620	Underground Outlet	NY ENG 28 and 29
634	Manure Transfer	
655	Forest Trails and Landings	
NY702	Agrichemical Mixing Facility	
NY707	Barnyard Water Management System	
NY749	Manure Pile Area	

OTHER REFERENCES

Engineering Field Handbook – Chapter 1-Engineering Surveys, Chapter 2-Estimating Runoff and Peak Discharges, Chapter 3-Hydraulics, Chapter 17-Construction and Construction Materials.

Agricultural Waste Management Field Handbook.

Design Note No. 24, Guide for the use of Geotextiles.

New York Plant Materials Technical Reference No. 11, "A Guide to Conservation Plantings on Critical Erosion Areas".

Conservation Standard 313, Waste Storage Structure, Structural Design Criteria, page 6, “Slabs on Grade”.

New York State Department of Transportation, Design quality Assurance Bureau. 2002 Standard Specification Book.

http://dotweb1.dot.state.ny.us/specs/2002specbook.html

New York Drainage Guide, September 1987.

Current Soil Survey Data.

NYS Consolidated Laws, Environmental Conservation Title 10, Water Pollution Control, Section 17-0803, SPDES Permits; Application.

Article 17 Environmental Conservation Law, 6NYCRR, Part 750, State Pollution Discharge Elimination System (SPDES).

http://www.dec.state.ny.us/website/dow/PhaseII.html

NRCS: National Environmental Compliance Handbook

http://policy.nrcs.usda.gov/scripts/lpsiis.dll/H/H_190_610_Content.htm

National Engineering Handbook, Part 620.20. Soil and Water Recreation Development – Implementing Accessibility Requirements. 1992.

Additional references for other methods of surface treatment may need to be located by the designer of this practice.

CULTURAL RESOURCES

Cultural resource reviews will be conducted for all ground disturbing practices, components, or other activities, as per the State Level Agreement between NRCS and the New York State Historic Preservation Officer.

PERMITS AND NOTIFICATIONS

All permits, easements, and rights-of-way are the responsibility of the landowner. **Dig Safely NY** (formerly the Underground Facilities Protection Organization, or UFPO) and non-member local utilities will be contacted according to the time required before construction to mark all applicable facilities in the construction area. This is the responsibility of the excavator.

Identification and the location of all other underground or overhead facilities is the responsibility of the landowner**.**

INVENTORY AND EVALUATION

1. Prior to investigating the site, determine your job approval authority. If the scope of the project is beyond your approval authority, contact the appropriate individual(s).
2. Determine landowner/operator needs whether agricultural, recreational, urban, or other landuse area.
3. Determine watershed and/or water quality concerns and objectives.
4. Consider the level of intensity, frequency, and duration of use by people, animals and vehicles for the planned area to determine treatments and/or practices needed to address the resource concerns.
5. Review the current soil survey information and evaluate soil conditions at the site for permeability, bearing strength, stability, drainage, depth to seasonal water table, etc.
6. Determine the feasibility of materials and their effective uses for the surface treatment. These include vegetative treatment, concrete, bituminous pavement, other cementitious materials, aggregate, etc.
7. Determine the impact and the need for practices that protect the area from erosion, excessive runoff, access, etc. Consider the exclusion of traffic which can contribute to the degradation of the site.
8. Assess the need for landscaping measures adjacent to the site. These could include visual screens, windbreaks, vegetative sound barriers. Consider plant suitability for soil and climate conditions.
9. Evaluate the operation, maintenance, and management requirements for the project.
10. Review the completed NRCS-CPA-52 for the project for accuracy and to assure that no additional analysis is required.

DESIGN

1. Develop a site survey and soil investigation based on the complexity of the site.
2. Prepare a plan view or topographic map depending upon the requirements of the job. This will allow for practices to be planned and designed, so that they function as a unit. This is also necessary to confirm that all planned practices are feasible for the site.
3. Determine the configuration, calculate the size, and select the material type for the heavy use area based on its intended frequency of use and potential loads. Factors include the type of traffic (vehicular, animal, or human), the travel patterns, and intensity of usage. Safety and accessibility considerations shall be incorporated into the design.

4. Determine the finish grade elevations. Design treatment thickness and sub-base materials based on an evaluation of the foundation. Consider soil bearing capacity, loads, and loading rates, *in situ* sub-base materials, in place density, any need for excavation and/or fill, during the design process. Additional considerations may apply, based on the material selected and site conditions.
5. For the planned configuration, consider the direction of slope and grade, overhead and step clearances, and ramp or access width for the surface treatment.
6. Surface and subsurface drainage concerns should be addressed. Collection, storage and treatment of contaminated runoff from the surface may be required.
7. Consider the need for appurtenances, such as reinforced edges, curbs, buck walls, speed bumps, fencing, access points, safety rails, surface inlets, etc.
8. Consider the surface finish requirements as appropriate to the planned use.
9. Develop detailed construction drawings including plan view, profiles and cross sections. Standard details may be available for inclusion in the final drawings.
10. Develop construction specifications.
11. Calculate quantities for all materials and work items required for construction. Develop a cost estimate for the project.
12. Develop an Operation and Maintenance Plan (O&M) and an inspection plan for the project. Be certain to review these and the construction drawings with the landowner prior to layout and construction.
13. A statement requiring landowner/contractor to notify **Dig Safely NY** for proper utility notification is **REQUIRED** on the plan view drawing.
14. Determine your level of Job Approval Authority for the design class of this project, obtain approval from appropriate individual, if not qualified.
15. Assemble a complete final construction package.

INSTALLATION

1. Provide copies of the construction specifications and drawings to the landowner. Explain all aspects of the job before a contractor is secured. Review the O&M plan with the landowner to assure proper maintenance of the completed practice.
2. Thoroughly review the job with the landowner and contractor prior to construction. Insure that all utilities applicable to the job site have been notified and are marked prior to construction. Review the critical construction items to be checked during the construction process.
3. Schedule the construction start with the landowner and contractor. Coordination of all staking and construction timing with the contractor and landowner can assure an efficient use of manpower.
4. Set stakes to delineate heavy use area shape or layout. Mark the stakes with proposed cuts or fill, set and mark offset grade stakes if needed. Set stakes at locations to show grade changes, and any other critical elevations.

5. Make random construction checks during implementation. The checks should include:
   5.1. Adherence to the layout, dimensions, grades, and elevations;
   5.2. Proper installation of the sub-grade for the site;
   5.3. Proper installation and grading of the surface treatment (type and materials);
   5.4. Proper installation of associated practices and appurtenances;
6. During the final construction check, assure that the:
   6.1. Surface treatment is stable and free of spoil and debris;
   6.2. Construction spoil and debris are properly disposed of;
   6.3. Completed earthwork is suitable for seeding establishment; and,
   6.4. Final seeding requirements (if applicable) have been installed in accordance with the seeding plan.

CHECKOUT

All properly planned, designed, and installed conservation practices require documentation in the appropriate case file. Documentation must be sufficient to show:
1. The design conforms to the applicable standard;
2. The prepared construction drawings and specifications accurately reflect the design;
3. The installed practice meets the requirements of the construction drawings and specifications; And,
4. The "As Built" condition of the practice. All drawings shall be identified "As Built" as drawn in red, and all changes shall be made in red.

REPORTING

Enter all documentation on the Conservation Plan (Toolkit), contract document (Protracts) and Conservation Assistance Notes (NRCS-CPA-6/6A) or similar documentation.

Report the practice and applicable components in the NRCS progress reporting system. Be certain to report benefits for all applicable resources and resource concerns as allowed in the NRCS progress reporting system.

OPERATION AND MAINTENANCE

Facilities, structures, and practices must be operated and maintained to ensure proper function and longevity. Periodic follow-up with the landowner is essential to ensure that all operation and maintenance (O&M) requirements are understood and followed.