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COUNTY OF KENOSHA
Department of Planning and Development

EROSION CONTROL PLAN REQUIREMENTS CHECKLIST

All land disturbing projects shall protect downstream water resources and property owners from water pollution and other damage caused by sediment runoff from construction sites. Erosion control plan designs should, to the maximum extent practicable, adhere to the following guiding principles:

1) Propose grading that best fits the terrain of the site, avoiding steep slopes, wetlands, floodplains and environmental corridors;
2) Minimize, through project phasing and construction sequencing, the time the disturbed soil surface is exposed to erosive forces;
3) Minimize soil compaction, the loss of trees and other natural vegetation and the size of the disturbed area at any one time;
4) Locate storm water Best Management Practices (BMP) upstream from where runoff leaves the site or enters waters of the state and outside of wetlands, floodplains, primary and secondary environmental corridors, or isolated natural areas;
5) Emphasize the use of BMPs that prevent soil detachment and transport over those aimed to reduce soil deposition (sedimentation) or repair erosion damage;
6) Construction erosion control measures should be consistent with the applicable WDNR construction site erosion and sediment control standards that can be downloaded at the WDNR Website.

A subdivision or development that requires a site plan review or any other project that may result in the land disturbance of 1.0 acre or more shall go through a mandatory planning phase prior to submitting a final plat or commencing any land disturbing activity[i]. Kenosha County encourages open communication between Department of Planning & Development (P&D) staff and the landowner, developer and project engineer throughout the planning, engineering and construction phases to facilitate an expedient and trouble-free project approval process.

- ✓ A meeting to discuss concept/sketch plans should be scheduled early in planning stage with P&D and Township planning staff (multiple meetings may be necessary). At this meeting(s), it will be determined if preliminary stormwater and erosion control plans will be necessary.
- ✓ The applicant may then submit complete preliminary stormwater and erosion control applications, if necessary, to P&D for review and approval.
- ✓ Upon preliminary plan approvals or at the discretion of P&D, the applicant can submit final stormwater and erosion control plans for review and approval. It should be noted that at any time during the review process, P&D may require the landowner, developer, and project engineer meet to discuss any outstanding issues or review comments in an effort to avoid an unnecessary number of project reviews in an effort to shorten the review process time. Stormwater and erosion control permits shall be issued upon approval of the final plans. A stormwater permit is required prior to final plat application or prior to any land disturbing activity.
- ✓ After the financial assurance has been secured, the applicant shall schedule a pre-construction meeting with P&D staff and required attendees (owner, developer, project engineer, and their contractors) to lay out the expectations that the County and Town will have during the construction process. Additionally, the construction schedule and any last minute changes will be finalized before beginning construction.
- ✓ After construction and once the site has been stabilized, the applicant shall verify the construction of all stormwater management facilities by submitting an as-built stormwater facilities survey and detention pond compliance report to P&D for review and approval.
- ✓ Upon approval of the as-built survey, the contractor shall remove any remaining erosion control measures.
- ✓ At the request of the owner, P&D shall complete a final inspection. If all of the requirements of the stormwater ordinance have been met, P&D shall issue a notice of termination indicating the conditions of this permit have been satisfied at which time the financial assurance will be released.

Preliminary Erosion Control Plans must include:

____ 1. A site map in accordance with the County Stormwater and Erosion Control Site Plan Map Requirements and Checklist. Digital submittal required consistent with County Mapping Standards

____ 2. A **brief narrative** describing the proposed land disturbing activity, **construction timeline** and sequencing, and a general review of the **major erosion and sediment control BMPs** proposed to be used to minimize off-site impacts during the construction phase and to stabilize the site following construction.

____ 3. Delineation of the following on the site map under #1 above:

- ____ a. The area and size (in acres) of the proposed land disturbance;
- ____ b. The woodland and wetland areas, and the size (in acres) of each that is proposed to be lost during construction and a general description of the current vegetation types and tree sizes;
- ____ c. The general **location of BMPs**.

Final Erosion Control Plans must include:

____ 1. A **site map** in accordance with the County Stormwater and Erosion Control Site Plan Map Requirements and Checklist. All other map elements listed below shall be delineated and labeled at a scale of 1 inch equals no more than 100 feet, unless otherwise noted. Digital submittal required consistent with County Mapping Standards;

____ 2. North arrow, graphic scale, draft date, name and **contact information** for project engineer or planner and designation of **source documents** for all map features;

____ 3. Proposed site topography at contour intervals not to exceed two feet, proposed percent slope for all open channels and side slopes and all runoff **discharge points** from the site;

____ 4. Proposed building envelopes and other **land area to be disturbed** and size in acres;

____ 5. Temporary **access drive** and detail consistent with WDNR Conservation Practice Standards 1057;

____ 6. Temporary **flow diversion** devices for upslope or roof runoff until site is stabilized and detail consistent with WDNR Conservation Practice Standards 1066;

____ 7. Temporary **sediment trapping devices** for site perimeter and inlets to culverts and storm drains consistent with WDNR Conservation Practice Standards 1063;

____ 8. Temporary settling basin or other BMP to be used for **site dewatering** during utility or other subsurface work consistent with WDNR Conservation Practice Standards 1061;

____ 9. Temporary **soil stockpile sites** indicating setbacks (minimum 25 feet) from channelized flow, nearby water resources or environmental corridors and the proposed erosion protection methods;

____ 10. **Detailed drawings** and **cross sections** for any sediment traps, basins or other major cut or fill areas showing side slopes and elevations;

____ 11. Final **stabilization measures** for open channels and erosion protection for pipe and channel inlets, outlets and emergency spillways;

____ 12. Location of **proposed utilities**, including standard cross–section for buried utilities, associated easements, labeling the type of utility and notes on erosion control and restoration plans;

____ 13. Final **site stabilization** instructions for all other disturbed areas, showing areas to be stabilized in acres, depth of applied topsoil (minimum 4 inches), seed types, rates and methodology, fertilizer, sod or erosion matting specifications, maintenance requirements until plants are well established, and other BMPs used to stabilize the site;

____ 14. Detailed **construction notes** clearly explaining all necessary procedures to be followed to properly implement the plan including estimated starting date of grading, timing and sequence of construction or demolition, any construction stages or phases, utility installation, dewatering plans, refuse disposal, inspection requirements, and the installation, use and maintenance of BMPs in the plan;

____ 15. Location of soil borings and **soil profile evaluations** with surface elevations and unique references to supplemental soil evaluations report forms. Also show estimated seasonal water table depths, which may be shown on a separate map, with sufficient references to the proposed site plan;

____ 16. Other items specified by the Department of Planning & Development as necessary to ensure compliance with these guidelines.

Provide Supporting Information:

____ 1. A **narrative summary** of the erosion control plan, briefly explaining the overall plan and any unique information that led to the selection of BMPs and how the plan meets the guiding principles above.

____ 2. **Summary of design data** for any structural BMP such as sediment basins or sediment traps. Sediment basins shall be sized to hold the 100-yr design storm in the stripped non-vegetated construction condition. A professional engineer, licensed in the State of Wisconsin, shall stamp and sign a statement approving all designs and certifying that they have read the requirements of this ordinance and that, to the best of their knowledge, the submitted plans comply with the requirements;

____ 3. Open channel design and stabilization data to support the selected BMPs for stabilization.

____ 4. **Soil profile evaluation reports** with unique references and elevations that match the map above.

____ 5. Estimated time soil stockpiles will exist to support the selected BMPs for erosion control.

____ 6. Documentation that proposed utility locations and installation scheduling has been coordinated with the affected utility companies.

____ 7. Documentation of any other calculations used to demonstrate compliance with the performance standards in this section.

____ 8. Identification of the **primary contacts** for:

- ____ a. Conducting erosion control **inspections** and how they will make the **inspection logs** available to the Department of Planning & Development.
- ____ b. Completing site grading and temporary **erosion control practices**.
- ____ c. Completing final **site restoration and stabilization**.

I, the landowner or their agent/representative, hereby certifies that to the best of my knowledge this checklist is complete and accurate:

PRINT NAME: _____DATE:_____

SIGNATURE: _____

All Erosion Control Submittals that meet the applicability requirements listed above shall include the following:

- A completed and signed Stormwater & Erosion Control Permit Application form
- A completed and signed Stormwater Management Plan Requirements Checklist
- A completed and signed Erosion Control Plan Requirements Checklist
- A completed Site Plan Map Requirements Checklist
- Two (2) paper copies of the site map(s), and all supporting documents
- Two (2) paper copies of the Stormwater Management Plans and all supporting documents
- Two (2) paper copies of the Erosion Control Plans and all supporting documents
- Digital files (AutoCAD .dwg format, v.2004 or later) georeferenced to the State Plane Coordinate System, Wisconsin South Zone, NAD 27, NGVD-29 of all existing contours, proposed contours, and elements of the site map to determine the accuracy of the proposed stormwater plan. Additionally, any stormwater model used to calculate runoff volumes and peak flow rates such as PondPack or Hydraflow Hydrographs shall be submitted as well.
- The appropriate application fee as determined from the Kenosha County Planning and Development Fee Schedule. A separate fee is required with each successive stormwater submittal.

NOTE: An erosion control plan requirements checklist is not required for projects that disturb less than 1.0 acre of land. Sites that disturb less than 1.0 acres of land shall be in accordance with Section 17.13-2 of the Kenosha County Code of Ordinance.

Summary of Erosion Control Plan Technical Requirements

1. Access Drives and Tracking. Provide access drive(s) for construction vehicles that minimize tracking of soil off site using BMPs such as stone tracking pads, tire washing or grates. Minimize runoff and sediment from adjacent areas from flowing down or eroding access drive.
2. Diversion of Upslope Runoff. Divert excess runoff from upslope land, rooftops or other surfaces, if practicable, using BMPs such as earthen diversion berms, silt fence and downspout extenders. Prevent erosion of the flow path and the outlet.
3. Inlet Protection. Protect inlets to storm drains, culverts and other storm water conveyance systems from siltation until the site is stabilized.
4. Soil Stockpiles. Locate soil stockpiles away from channelized flow and no closer than 25 feet from roads, ditches, lakes, streams, ponds, wetlands or environmental corridors, unless otherwise approved by P&D. Control sediment from soil stockpiles. Any soil stockpile that remains for more than 30 days shall be stabilized.
5. Cut and Fill Slopes. Minimize the length and steepness of proposed cut and fill slopes and stabilize them as soon as practicable.
6. Channel Flow. Trap sediment in channelized flow before discharge from the site using BMPS such as sediment traps and sediment basins. Stabilize open channels in accordance with P&D standards as soon as practicable.
7. Outlet Protection. Protect outlets from erosion during site dewatering and storm water conveyance, including velocity dissipation at pipe outfalls or open channels entering or leaving a storm water management facility.
8. Overland Flow. Trap sediment in overland flow before discharge from the site using BMPs such as silt fence and vegetative filter strips.
9. Site Dewatering. Treat pumped water to remove sediment prior to discharge from the site, using BMPs such as sediment basins and portable sediment tanks.
10. Dust Control. Prevent excessive dust from leaving the construction site though construction phasing and timely stabilization or the use of BMPs such as site watering and mulch – especially with very dry or fine sandy soils.
11. Topsoil Application. Save existing topsoil and reapply a minimum of 4 inches to all disturbed areas for final stabilization, unless otherwise approved by P&D, such as for temporary seeding or storm water infiltration BMPs. If adequate topsoil does not exist on the site to meet this requirement, it shall be imported or a topsoil substitute such as compost may be used, upon approval by P&D.
12. Waste Material. Recycle or properly dispose all waste and unused building materials in a timely manner. Control runoff from waste materials until they are removed or reused.
13. Sediment Cleanup. By the end of each workday, clean up all off-site sediment deposits or tracked soil that originated from the construction site. Flushing shall not be allowed unless runoff is treated before discharge from the site.
14. Final Site Stabilization. All previous cropland areas where land-disturbing activities will not be occurring under the proposed grading plans shall be stabilized within 30 days from the start of construction. Stabilize all other disturbed areas within 7 days of final grading and topsoil application. Large sites shall be treated in stages as final grading is completed in each stage. Any soil erosion that occurs after final grading or the application of stabilization measures must be repaired and the stabilization work redone.
15. Temporary Site Stabilization. Temporary stabilization applies to disturbed areas that will not be brought to final grade or on which land-disturbing activities will not be performed for a period greater than 30 days, and requires vegetative cover for less than one year. For purposes of this subsection, “land-disturbing activities” mean that no site grading, landscaping or utility work is occurring on that portion of the site and that precipitation events are not limiting these activities. Frozen soils do not exclude the site from this requirement.
16. Removal of Practices. Remove all temporary BMPs such as silt fences, ditch checks and sediment traps as soon as all disturbed areas have been stabilized.
17. Site Drainage. Site drainage plans shall comply with Kenosha County Stormwater Management Plan Requirements and Checklist.

[i] ***Exemptions.*** *Land disturbing activities that meet the following criteria shall be exempt:*

1. *Planting, cultivating or harvesting any plant grown for human or livestock consumption or pasturing or yarding of livestock including sod farms and tree nurseries.*
2. *Land disturbing activities directly related to the installation and maintenance of private on-site waste disposal systems, regulated under Chapter 15 of the County Code of Ordinances.*
3. *Land disturbing activities conducted for a project designed, funded or implemented under the supervision of the county land & water conservation division, the USDA Natural Resources Conservation Service, or the WI Department of Agricultural Trade and Consumer Protection, if conducted according to county conservation standards.*
4. *Land development and land disturbing activities exempted by state or federal law, including highway construction and other projects conducted by a state agency, as defined under s. 227.01 (1), Wisconsin Statutes, or under a memorandum of understanding entered into under s. 281.33 (2), Wisconsin Statutes. To recognize an exemption under this paragraph, the P&D may require documentation of the person(s) and regulatory agency charged with enforcing erosion control and storm water management for the project.*
5. *Land disturbing activities required for the construction of <u>individual</u> one and two family residential buildings under COM. 21.125 Wis. Admin. Code. Note: The Wisconsin Uniform Dwelling Code (COM 21) includes erosion control requirements that apply statewide. This exemption applies to individual buildings only. Larger developments that include one and two family residential buildings such as subdivisions are not exempt from meeting the requirements of the Erosion Control Ordinance.*
6. *Nonmetallic mining activities that are covered under a nonmetallic mining reclamation permit under NR 135 Wis. Admin. Code and regulated under Chapter 13 of the County Code of Ordinances.*
7. *Placement of underground pipe or other utility that is plowed or bored into the ground outside areas of channelized runoff.*
8. *Other Exemptions. P&D may exempt a site or a portion of a site from meeting certain technical requirements or provision under unique site conditions.*