

CHAPTER 22: EROSION CONTROL & NPDES REQUIREMENTS

22.01 Introduction and Goals

22.02 Administration

22.03 Standards

22.04 Standard Attachments

22.01 INTRODUCTION AND GOALS

The purpose of this chapter is to limit the pollution of waterways by construction caused sediment, to limit the siltation of storm sewers and detention basins during construction, to maintain safe, clean, and drivable streets, and to inform the public of NPDES requirements.

22.02 ADMINISTRATION

- A. General:** Water-caused erosion and eroded soil sediments are considered a form of pollution by the Federal Clean Water Act and the United States Environmental Protection Agency (USEPA). The current National Pollutant Discharge Elimination System (NPDES) program of the Federal Clean Water Act requires that construction sites disturbing five acres and greater be covered by a NPDES permit. The Illinois Environmental Protection Agency (IEPA) has issued a statewide general permit (NPDES Permit No. ILR10) that details the NPDES requirements for construction projects that meet or exceed the threshold for permit applicability. This chapter and these regulations recognize the NPDES permit requirements as one of the components that influence the City of Champaign's erosion and sediment control policies and procedures on applicable projects.

NPDES Phase II regulations require that anyone responsible for land disturbance on sites one acre and greater file an NPDES permit with the IEPA. In 2008, the City of Champaign adopted Erosion and Sediment Control Regulations which lowered the threshold for permitting to one-half acre. Those regulations are the City's primary guidelines for land disturbance monitoring and reporting. They have been incorporated in the City of Champaign Municipal Code and are including here as Standard Attachments 22.08a and 22.08b.

- B. Required Documentation:** The permit requirements include the execution and record maintenance of the following forms and reports (see also the Erosion Control Plan Action Matrix, see Standard Attachment 22.01).
1. *Storm Water Pollution Prevention Plan (SWPPP)* is to be prepared by the designer or resident engineer and is to be kept in the project erosion control file. Use current IDOT SWPPP Template (form BDE 2342, see Standard Attachment 22.02).
 2. *Contractor Certification Statement (CCS)* prepared prior to the start of construction by contractor responsible for erosion control and is to be kept in the erosion control file. A copy of the executed IEPA NPDES statewide permit ILR10 shall be given to the contractor prior to receipt of the CCS. The form used for the CCS shall be the current IDOT CCS Template (form BDE 2342a, see Standard Attachment 22.03).
 3. *Notice of Intent (NOI)* shall be filed at least 48 hours prior to the start of construction and shall be prepared by the resident engineer (the original sent by certified mail to the IEPA with transmittal copy to the City Engineer and a copy kept in the project erosion control file). Use current IDOT NOI Template (Found in Forms Section of the IDOT Construction Manual WPC 623, see Standard Attachment 22.04). Although hard copies of these forms/notices are attached, the responsible party **shall use the most current version of the forms available on the IDOT Website.**
 4. *NPDES / Erosion Control Inspection Report (ECIR)* shall be prepared by the resident / inspector on a weekly basis and after any 1/2-inch rainfall (to be kept in project erosion control file). Use current IDOT ECIR template (BC 2259, see Standard Attachment 22.05).

5. *Incidence of Non-Compliance (ION)* and corrective action shall be filed by the resident engineer within five working days of the incident (the original sent by certified mail to the IEPA with transmittal copy to the City Engineer and a copy kept in the project erosion control file). Use current IDOT ION Template (Found in Forms Section of the IDOT Construction Manual WPC 624, see Standard Attachment 22.06).
6. *Notice of Termination (NOT)* shall be filed upon final stabilization of erosion (minimum 70% viable vegetative growth) by the resident engineer (the original sent by certified mail to the IEPA with transmittal copy to the City Engineer and a copy kept in the project erosion-control file). Use current IDOT NOT Template V (found in Forms Section of the IDOT Construction Manual WPC 621, see Standard Attachment 22.07).

Use IDOT/IEPA standard forms for all of the above. The latest version of the forms can be found at:

<http://idot.illinois.gov/home/resources/forms-folder/d> (BDE Forms)
<http://idot.illinois.gov/home/resources/Forms-Folder/c> (BC Forms)
<http://www.epa.illinois.gov/topics/forms/water-permits/index> (WPC Forms)

Although hard copies of these forms/notices are attached, the responsible party **shall use the most current version of the forms available on the IDOT and IEPA Websites.**

The executed project erosion control documents are required to be kept on file at the construction site or at a nearby field office and must be made available to the general public upon request.

- C. **Responsible Parties:** All Notices of Intent shall be signed as per part VI-G of the statewide IEPA NPDES Permit No. ILR10. In summary, all notices shall be signed as follows:
 1. *For a corporation:* by a responsible corporate officer as defined by ILR10.
 2. *For a partnership:* by a general partner or the proprietor.
 3. *For a municipality:* by the principal executive officer or ranking elected official. For the City of Champaign, this shall be considered to be the City Engineer or the City Engineer's designee.
- D. **Applicability and Guidelines:** This chapter applies to all new developments or subdivisions within the City limits and the 1-1/2 mile extra territorial jurisdiction, to any permitted construction within the City limits, and to any other construction project under the jurisdiction of the City. All construction / grading operations that meet or exceed the threshold requirements of the statewide permit shall follow the permit requirements. The following erosion control guidelines shall apply:
 1. All developments and subdivisions that meet or exceed threshold requirements shall require submittal of an erosion control plan with the subdivision construction plans for approval by the City Engineer.
 2. It is the responsibility of the owner to prepare and maintain documentation to meet the NPDES permit requirements for private grading and construction projects.

3. Per the public access requirements of the statewide permit, the City Engineer, as a representative of the public, shall be given immediate access to all required project NPDES documents.
4. All construction meeting or exceeding the threshold requirements of the statewide permit shall require submittal of the SWPPP for approval by the City Engineer. All notices sent to the IEPA shall be copied to the City Engineer.
5. All public / City construction projects under the jurisdiction of the City shall follow the NPDES program requirements, methods, and procedures necessary to achieve compliance as described in the erosion control section of the IDOT BDE manual.

E. Submittal Procedures: The following submittal procedures shall be followed:

1. If the project requires a building permit, then the grading and drainage permit form shall be obtained from the Building Safety Division and submitted in conjunction with copies of the required NPDES documents as part of the normal Building Plan / Permits submittal package.
2. If the project does not require a building permit, but does require a grading and drainage permit form, then the permit shall be obtained from the Engineering Division of Public Works and submitted in conjunction with the required NPDES documents to the Grading and Drainage Inspector.

22.03 STANDARDS

The following standards apply to Erosion Control:

- A. Referenced Standards:** Design standards for erosion and sediment control shall comply with the provisions of the USEPA regulations, IEPA regulations, IDOT Erosion Control / NPDES guidelines and per the "Illinois Urban Manual", prepared by the United States Department of Agriculture, Natural Resources Conservation Service, 1902 Fox Drive, Champaign, IL 61820, 217/353-6600 (electronic download available at <http://www.aiswcd.org/illinois-urban-manual/>), latest edition, unless otherwise stated by this Manual.
- B. Design:**
1. *Public / City Let Projects:* Public / City projects, such as major roadway projects, sewer projects, maintenance and rehabilitation projects, bike path projects, etc., shall follow the design guidelines of the IDOT BDE Manual.
 2. *SWPPP and Associated Erosion Control Plan Contents:* The SWPPP shall be completed as indicated in the SWPPP template (Form BDE 2342). Associated erosion control plans shall clearly indicate temporary and permanent erosion control measures under the requirements as outlined in the following sections. The erosion control plan sheet shall be combined with the grading plan to show temporary and permanent erosion control measures. IDOT and the City of Champaign require that all public projects list the erosion control measures as unit pay items to cover installation and repair with a contingency dollar amount for overall erosion control. The City strongly suggests that private developers follow this same practice. Experience has shown that a lump sum erosion control pay item does not sufficiently motivate the contractor to properly maintain erosion control. All erosion control should be included in bonding requirements.

3. *Limit of containment areas:* Reasonable limits shall be used for erosion containment areas. For example, a single line of silt fencing cannot contain the run-off from a 40-acre subdivision. Redundant systems should be used. BDE design guidelines for perimeter erosion control—silt fence, straw bales, aggregate, or combination systems shall be limited to the following thresholds.
4. *Soil Types:* Soil types should be researched for each individual site, and this information should be taken into consideration when designing an erosion control plan. Areas with highly erodible, fine-grained soils will need a more intensive erosion control plan.
5. *Bio-Engineering:* Bio-Engineering alternatives for erosion control may be used. The type and location of such improvements shall be submitted to the City Engineer for approval.

C. Construction:

1. *Timing:* Erosion control measures shall be implemented prior to the beginning of construction.
2. *Maintenance:* Erosion control measures shall be inspected weekly and any noted deficiencies shall be repaired immediately. Erosion control measures shall also be inspected after any significant rain event and any noted deficiencies repaired immediately. For the purposes of this chapter, a significant rain event shall be defined to be any rainfall accumulation of 1/2 in. within a 24-hour period.
3. *Construction Care:* Care shall be taken to not disturb the soil on any project site to a larger degree than is necessary. Tracking mud and soil debris off any site shall be avoided. Loose dirt and debris shall be knocked off equipment tires and truck beds. Tailgates shall be secured and trucks shall not be overloaded to the point that debris spill over during travel. Fully loaded trucks shall be tarped. In new subdivision construction on local streets, when debris is tracked off a site, it shall be cleaned up at the end of the workday. Haul routes shall avoid established residential areas. On commercial projects or large scale subdivision work, containment areas shall be defined, demudding rock aprons shall be used, and trucks shall be washed as necessary before they leave the site to prevent tracking mud off of the site. If blowing dust occurs, the site shall be sprayed down with water.
4. *Temporary Seeding:* All stripped areas not anticipated to have construction take place within 30 days, including individual lots that do not have complete perimeter erosion containment, shall be seeded immediately, weather and soil conditions permitting.
5. *Permanent Seeding:* Immediately after the completion of construction, permanent seeding shall be planted.
6. *Remediation Measures:* Ground areas shall be reseeded as necessary to establish a full stand of grass. A full stand of grass shall be established by November 15. Any unvegetated area greater than 2 sq. ft. shall be reseeded as soon as it is discovered.
7. *Retainage and Bond Reduction and Release:* Performance Bonds and retainage shall not be released until all public rights-of-way have permanent ground cover and all other areas have at temporary seeding at a minimum.

8. *Site Stripping*: Total stripping should be avoided. Construction sites should not be stripped bare of vegetation if the site will not be worked on within the given construction season; i.e. avoid leaving a site stripped over the winter and early spring.

D. Materials and Construction Notes:

1. *Silt Fence*: Material requirements shall meet the requirements of the Illinois Urban Manual. Silt fence shall be installed per the requirements of IDOT, except that 6 in. square wire mesh shall be used as a backing as shown in the Illinois Urban Manual. It is imperative that the base of the silt fence be buried a minimum of 6 in. as specified by IDOT.
2. *Erosion Control Blankets*: Material and construction requirements shall be as per Illinois Urban Manual.
3. *Bales*: Material and construction requirements shall be as per Illinois Urban Manual.
4. *Coconut Fiber*: Material and construction requirements shall be as per Illinois Urban Manual.
5. *Seeding*: Material and construction requirements shall be as per Illinois Urban Manual.
6. *Rip Rap*: Material and construction requirements shall be as per Illinois Urban Manual.

- E. **Testing and Inspection**: Use the IDOT Construction Manual construction inspection checklist for erosion control in conjunction with the Residents Weekly NPDES / Erosion Control Inspection Report BC 2259.

22.04 STANDARD ATTACHMENTS

The following items are attached as reinforcement to the policies stated above. Where applicable, these standards should be followed and incorporated into project plans and specifications. In any case where a conflict is noted, the specifications outlined in this chapter shall supersede any of the referenced standards.

Standard Attachment Number 22.01 – NPDES Action Matrix IDOT

Standard Attachment Number 22.02 – SWPPP Template BDE 2342

Standard Attachment Number 22.03 – CCS Template BDE 2342a

Standard Attachment Number 22.04a – NOI Template WPC 623

Standard Attachment Number 22.04b – Guidelines for Completion of NOI

Standard Attachment Number 22.05 – ECIR Template BC2259

Standard Attachment Number 22.06a – ION Template

Standard Attachment Number 22.06b – Guidelines for Completion of ION

Standard Attachment Number 22.07a – NOT Template

Standard Attachment Number 22.07b – Guidelines for Completion of NOT

Standard Attachment Number 22.08a – Class I and Class III Erosion Control Permit

Standard Attachment Number 22.08b – Class II Erosion Control Permit

IN ORDER TO SATISFY THE EROSION CONTROL REQUIREMENTS AS OUTLINED IN THE NPDES PERMIT AND CONSTRUCTION MEMORANDUM 00-60, THE FOLLOWING FORMS ARE REQUIRED:

FORM	RESPONSIBILITY	WHEN	WHERE TO SEND
1) Storm Water Pollution Prevention Plan or Erosion Control Plan (on ALL Projects)	Designer/*Resident	During Design/Construction	Keep in Project Erosion Control File
2) Contractor Certification Statement **	Contractor and all Subcontractors involved in Erosion Control	At Preconstruction Meeting	Keep in Project Erosion Control File
3) Notice of Intent (WPC 623) #	Resident ***	**** 48 Hours BEFORE Construction begins	Post at Jobsite Original by Certified Mail to IEPA Copy to Project Erosion File
4) NPDES/Erosion Control Inspection Report BC 2259 (REQUIRED on ALL Projects)	Resident/Inspector	Weekly & After more than 0.5" rainfall	Keep in Project Erosion File Copy to Contractor
5) Incidence of Non-Compliance (WPC 624) #	Resident ***	Within 5 Days	Original by Certified Mail to IEPA Copy to Project Erosion File
6) Notice of Termination (WPC 621) #	Resident ***	Final Stabilization *****	Original by Certified Mail to IEPA Copy to Project Erosion File

- NOTES:
- * This form must be signed by the District Engineer or the Implementation Engineer
 - ** Resident portion of the Report should be completed before the actual construction starts.
 - *** Contractor should be given a copy of the NPDES Permit.
 - **** If prior environmental clearance has been received from all resource agencies, otherwise 30 days before construction begins.
 - ***** Final stabilization is defined as 70% viable vegetative growth.
 - # Found in Forms Section of Construction Manual.



Storm Water Pollution Prevention Plan

Route _____ Marked Rte. _____
Section _____ Project No. _____
County _____ Contract No. _____

This plan has been prepared to comply with the provisions of the National Pollutant Discharge Elimination System (NPDES) Permit No. ILR10 (Permit ILR10), issued by the Illinois Environmental Protection Agency (IEPA) for storm water discharges from construction site activities.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

_____	_____
Print Name	Signature
_____	_____
Title	Date

Agency	

I. Site Description:

- A. Provide a description of the project location (include latitude and longitude):

- B. Provide a description of the construction activity which is the subject of this plan:

- C. Provide the estimated duration of this project:

- D. The total area of the construction site is estimated to be _____ acres.
The total area of the site estimated to be disturbed by excavation, grading or other activities is _____ acres.
- E. The following is a weighted average of the runoff coefficient for this project after construction activities are completed:

- F. List all soils found within project boundaries. Include map unit name, slope information, and erosivity:

- G. Provide an aerial extent of wetland acreage at the site:

- H. Provide a description of potentially erosive areas associated with this project:

- I. The following is a description of soil disturbing activities by stages, their locations, and their erosive factors (e.g. steepness of slopes, length of slopes, etc):

Chapter 22: Erosion Control and NPDES Requirements

- J. See the erosion control plans and/or drainage plans for this contract for information regarding drainage patterns, approximate slopes anticipated before and after major grading activities, locations where vehicles enter or exit the site and controls to prevent offsite sediment tracking (to be added after contractor identifies locations), areas of soil disturbance, the location of major structural and non-structural controls identified in the plan, the location of areas where stabilization practices are expected to occur, surface waters (including wetlands) and locations where storm water is discharged to surface water including wetlands.
- K. Identify who owns the drainage system (municipality or agency) this project will drain into:
- L. The following is a list of General NPDES ILR40 permittees within whose reporting jurisdiction this project is located.
- M. The following is a list of receiving water(s) and the ultimate receiving water(s) for this site. The location of the receiving waters can be found on the erosion and sediment control plans:
- N. Describe areas of the site that are to be protected or remain undisturbed. These areas may include steep slopes, highly erodible soils, streams, stream buffers, specimen trees, natural vegetation, nature preserves, etc.
- O. The following sensitive environmental resources are associated with this project, and may have the potential to be impacted by the proposed development:
- Floodplain
 - Wetland Riparian
 - Threatened and Endangered Species
 - Historic Preservation
 - 303(d) Listed receiving waters for suspended solids, turbidity, or siltation
 - Receiving waters with Total Maximum Daily Load (TMDL) for sediment, total suspended solids, turbidity or siltation
 - Applicable Federal, Tribal, State or Local Programs
 - Other
1. 303(d) Listed receiving waters (fill out this section if checked above):
- a. The name(s) of the listed water body, and identification of all pollutants causing impairment:

 - b. Provide a description of how erosion and sediment control practices will prevent a discharge of sediment resulting from a storm event equal to or greater than a twenty-five (25) year, twenty-four (24) hour rainfall event:

 - c. Provide a description of the location(s) of direct discharge from the project site to the 303(d) water body:

 - d. Provide a description of the location(s) of any dewatering discharges to the MS4 and/or water body:
2. TMDL (fill out this section if checked above)
- a. The name(s) of the listed water body:

Chapter 22: Erosion Control and NPDES Requirements

- b. Provide a description of the erosion and sediment control strategy that will be incorporated into the site design that is consistent with the assumptions and requirements of the TMDL:
- c. If a specific numeric waste load allocation has been established that would apply to the project's discharges, provide a description of the necessary steps to meet that allocation:

P. The following pollutants of concern will be associated with this construction project:

- | | |
|--|---|
| <input type="checkbox"/> Soil Sediment | <input type="checkbox"/> Petroleum (gas, diesel, oil, kerosene, hydraulic oil / fluids) |
| <input type="checkbox"/> Concrete | <input type="checkbox"/> Antifreeze / Coolants |
| <input type="checkbox"/> Concrete Truck Waste | <input type="checkbox"/> Waste water from cleaning construction equipment |
| <input type="checkbox"/> Concrete Curing Compounds | <input type="checkbox"/> Other (specify) |
| <input type="checkbox"/> Solid Waste Debris | <input type="checkbox"/> Other (specify) |
| <input type="checkbox"/> Paints | <input type="checkbox"/> Other (specify) |
| <input type="checkbox"/> Solvents | <input type="checkbox"/> Other (specify) |
| <input type="checkbox"/> Fertilizers / Pesticides | <input type="checkbox"/> Other (specify) |

II. Controls:

This section of the plan addresses the controls that will be implemented for each of the major construction activities described in I.C. above and for all use areas, borrow sites, and waste sites. For each measure discussed, the Contractor will be responsible for its implementation as indicated. The Contractor shall provide to the Resident Engineer a plan for the implementation of the measures indicated. The Contractor, and subcontractors, will notify the Resident Engineer of any proposed changes, maintenance, or modifications to keep construction activities compliant with the Permit ILR10. Each such Contractor has signed the required certification on forms which are attached to, and are a part of, this plan:

A. **Erosion and Sediment Controls:** At a minimum, controls must be coordinated, installed and maintained to:

1. Minimize the amount of soil exposed during construction activity;
2. Minimize the disturbance of steep slopes;
3. Maintain natural buffers around surface waters, direct storm water to vegetated areas to increase sediment removal and maximize storm water infiltration, unless infeasible;
4. Minimize soil compaction and, unless infeasible, preserve topsoil.

B. **Stabilization Practices:** Provided below is a description of interim and permanent stabilization practices, including site- specific scheduling of the implementation of the practices. Site plans will ensure that existing vegetation is preserved where attainable and disturbed portions of the site will be stabilized. Stabilization practices may include but are not limited to: temporary seeding, permanent seeding, mulching, geotextiles, sodding, vegetative buffer strips, protection of trees, preservation of mature vegetation, and other appropriate measures. Except as provided below in II(B)(1) and II(B)(2), stabilization measures shall be initiated **immediately** where construction activities have temporarily or permanently ceased, but in no case more than **one (1) day** after the construction activity in that portion of the site has temporarily or permanently ceases on all disturbed portions of the site where construction will not occur for a period of fourteen (14) or more calendar days.

1. Where the initiation of stabilization measures is precluded by snow cover, stabilization measures shall be initiated as soon as practicable.
2. On areas where construction activity has temporarily ceased and will resume after fourteen (14) days, a temporary stabilization method can be used.

The following stabilization practices will be used for this project:

- | | |
|--|---|
| <input type="checkbox"/> Preservation of Mature Vegetation | <input type="checkbox"/> Erosion Control Blanket / Mulching |
| <input type="checkbox"/> Vegetated Buffer Strips | <input type="checkbox"/> Sodding |
| <input type="checkbox"/> Protection of Trees | <input type="checkbox"/> Geotextiles |
| <input type="checkbox"/> Temporary Erosion Control Seeding | <input type="checkbox"/> Other (specify) |
| <input type="checkbox"/> Temporary Turf (Seeding, Class 7) | <input type="checkbox"/> Other (specify) |
| <input type="checkbox"/> Temporary Mulching | <input type="checkbox"/> Other (specify) |
| <input type="checkbox"/> Permanent Seeding | <input type="checkbox"/> Other (specify) |

Chapter 22: Erosion Control and NPDES Requirements

Describe how the stabilization practices listed above will be utilized during construction:

Describe how the stabilization practices listed above will be utilized after construction activities have been completed:

- C. **Structural Practices:** Provided below is a description of structural practices that will be implemented, to the degree attainable, to divert flows from exposed soils, store flows or otherwise limit runoff and the discharge of pollutants from exposed areas of the site. Such practices may include but are not limited to: perimeter erosion barrier, earth dikes, drainage swales, sediment traps, ditch checks, subsurface drains, pipe slope drains, level spreaders, storm drain inlet protection, rock outlet protection, reinforced soil retaining systems, gabions, and temporary or permanent sediment basins. The installation of these devices may be subject to Section 404 of the Clean Water Act.

The following structural practices will be used for this project:

- | | |
|--|--|
| <input type="checkbox"/> Perimeter Erosion Barrier | <input type="checkbox"/> Rock Outlet Protection |
| <input type="checkbox"/> Temporary Ditch Check | <input type="checkbox"/> Riprap |
| <input type="checkbox"/> Storm Drain Inlet Protection | <input type="checkbox"/> Gabions |
| <input type="checkbox"/> Sediment Trap | <input type="checkbox"/> Slope Mattress |
| <input type="checkbox"/> Temporary Pipe Slope Drain | <input type="checkbox"/> Retaining Walls |
| <input type="checkbox"/> Temporary Sediment Basin | <input type="checkbox"/> Slope Walls |
| <input type="checkbox"/> Temporary Stream Crossing | <input type="checkbox"/> Concrete Revetment Mats |
| <input type="checkbox"/> Stabilized Construction Exits | <input type="checkbox"/> Level Spreaders |
| <input type="checkbox"/> Turf Reinforcement Mats | <input type="checkbox"/> Other (specify) |
| <input type="checkbox"/> Permanent Check Dams | <input type="checkbox"/> Other (specify) |
| <input type="checkbox"/> Permanent Sediment Basin | <input type="checkbox"/> Other (specify) |
| <input type="checkbox"/> Aggregate Ditch | <input type="checkbox"/> Other (specify) |
| <input type="checkbox"/> Paved Ditch | <input type="checkbox"/> Other (specify) |

Describe how the structural practices listed above will be utilized during construction:

Describe how the structural practices listed above will be utilized after construction activities have been completed:

- D. **Treatment Chemicals**

Will polymer flocculants or treatment chemicals be utilized on this project: Yes No

If yes above, identify where and how polymer flocculants or treatment chemicals will be utilized on this project.

- E. **Permanent Storm Water Management Controls:** Provided below is a description of measures that will be installed during the construction process to control volume and pollutants in storm water discharges that will occur after construction operations have been completed. The installation of these devices may be subject to Section 404 of the Clean Water Act.

- Such practices may include but are not limited to: storm water detention structures (including wet ponds), storm water retention structures, flow attenuation by use of open vegetated swales and natural depressions, infiltration of runoff on site, and sequential systems (which combine several practices).

The practices selected for implementation were determined on the basis of the technical guidance in Chapter 41 (Construction Site Storm Water Pollution Control) of the IDOT Bureau of Design and Environment Manual. If practices other than those discussed in Chapter 41 are selected for implementation or if practices are applied to situations different from those covered in Chapter 41, the technical basis for such decisions will be explained below.

2. Velocity dissipation devices will be placed at discharge locations and along the length of any outfall channel as necessary to provide a non-erosive velocity flow from the structure to a water course so that the natural physical and biological characteristics and functions are maintained and protected (e.g. maintenance of hydrologic conditions such as the hydroperiod and hydrodynamics present prior to the initiation of construction activities).

Description of permanent storm water management controls:

- F. **Approved State or Local Laws:** The management practices, controls and provisions contained in this plan will be in accordance with IDOT specifications, which are at least as protective as the requirements contained in the Illinois Environmental Protection Agency's Illinois Urban Manual. Procedures and requirements specified in applicable sediment and erosion site plans or storm water management plans approved by local officials shall be described or incorporated by reference in the space provided below. Requirements specified in sediment and erosion site plans, site permits, storm water management site plans or site permits approved by local officials that are applicable to protecting surface water resources are, upon submittal of an NOI, to be authorized to discharge under the Permit ILR10 incorporated by reference and are enforceable under this permit even if they are not specifically included in the plan.

Description of procedures and requirements specified in applicable sediment and erosion site plans or storm water management plans approved by local officials:

- G. **Contractor Required Submittals:** Prior to conducting any professional services at the site covered by this plan, the Contractor and each subcontractor responsible for compliance with the permit shall submit to the Resident Engineer a Contractor Certification Statement, BDE 2342a.
 1. The Contractor shall provide a construction schedule containing an adequate level of detail to show major activities with implementation of pollution prevention BMPs, including the following items:
 - Approximate duration of the project, including each stage of the project
 - Rainy season, dry season, and winter shutdown dates
 - Temporary stabilization measures to be employed by contract phases
 - Mobilization timeframe
 - Mass clearing and grubbing/roadside clearing dates
 - Deployment of Erosion Control Practices
 - Deployment of Sediment Control Practices (including stabilized construction entrances/exits)
 - Deployment of Construction Site Management Practices (including concrete washout facilities, chemical storage, refueling locations, etc.)
 - Paving, saw-cutting, and any other pavement related operations
 - Major planned stockpiling operations
 - Timeframe for other significant long-term operations or activities that may plan non-storm water discharges such as dewatering, grinding, etc.
 - Permanent stabilization activities for each area of the project
 2. The Contractor and each subcontractor shall provide, as an attachment to their signed Contractor Certification Statement, a discussion of how they will comply with the requirements of the permit in regard to the following items and provide a graphical representation showing location and type of BMPs to be used when applicable:

Chapter 22: Erosion Control and NPDES Requirements

- Vehicle Entrances and Exits – Identify type and location of stabilized construction entrances and exits to be used and how they will be maintained.
- Material Delivery, Storage and Use – Discuss where and how materials including chemicals, concrete curing compounds, petroleum products, etc. will be stored for this project.
- Stockpile Management – Identify the location of both on-site and off-site stockpiles. Discuss what BMPs will be used to prevent pollution of storm water from stockpiles.
- Waste Disposal – Discuss methods of waste disposal that will be used for this project.
- Spill Prevention and Control – Discuss steps that will be taken in the event of a material spill (chemicals, concrete curing compounds, petroleum, etc.)
- Concrete Residuals and Washout Wastes – Discuss the location and type of concrete washout facilities to be used on this project and how they will be signed and maintained.
- Litter Management – Discuss how litter will be maintained for this project (education of employees, number of dumpsters, frequency of dumpster pick-up, etc.)
- Vehicle and Equipment Fueling – Identify equipment fueling locations for this project and what BMPs will be used to ensure containment and spill prevention.
- Vehicle and Equipment Cleaning and Maintenance – Identify where equipment cleaning and maintenance locations for this project and what BMPs will be used to ensure containment and spill prevention.
- Dewatering Activities – Identify the controls which will be used during dewatering operations to ensure sediments will not leave the construction site.
- Polymer Flocculants and Treatment Chemicals – Identify the use and dosage of treatment chemicals and provide the Resident Engineer with Material Safety Data Sheets. Describe procedures on how the chemicals will be used and identify who will be responsible for the use and application of these chemicals. The selected individual must be trained on the established procedures.
- Additional measures indicated in the plan.

III. Maintenance:

When requested by the Contractor, the Resident Engineer will provide general maintenance guides to the Contractor for the practices associated with this project. The following additional procedures will be used to maintain, in good and effective operating conditions, the vegetation, erosion and sediment control measures and other protective measures identified in this plan. It will be the Contractor's responsibility to attain maintenance guidelines for any manufactured BMPs which are to be installed and maintained per manufacture's specifications.

IV. Inspections:

Qualified personnel shall inspect disturbed areas of the construction site which have not yet been finally stabilized, structural control measures, and locations where vehicles and equipment enter and exit the site using IDOT Storm Water Pollution Prevention Plan Erosion Control Inspection Report (BC 2259). Such inspections shall be conducted at least once every seven (7) calendar days and within twenty-four (24) hours of the end of a storm or by the end of the following business or work day that is 0.5 inch or greater or equivalent snowfall.

Inspections may be reduced to once per month when construction activities have ceased due to frozen conditions. Weekly inspections will recommence when construction activities are conducted, or if there is 0.5" or greater rain event, or a discharge due to snowmelt occurs.

If any violation of the provisions of this plan is identified during the conduct of the construction work covered by this plan, the Resident Engineer shall notify the appropriate IEPA Field Operations Section office by email at: epa.swnoncomp@illinois.gov, telephone or fax within twenty-four (24) hours of the incident. The Resident Engineer shall then complete and submit an "Incidence of Non-Compliance" (ION) report for the identified violation within five (5) days of the incident. The Resident Engineer shall use forms provided by IEPA and shall include specific information on the cause of noncompliance, actions which were taken to prevent any further causes of noncompliance, and a statement detailing any environmental impact which may have resulted from the noncompliance. All reports of non-compliance shall be signed by a responsible authority in accordance with Part VI. G of the Permit ILR10.

The Incidence of Non-Compliance shall be mailed to the following address:

Chapter 22: Erosion Control and NPDES Requirements

Illinois Environmental Protection Agency
Division of Water Pollution Control
Attn: Compliance Assurance Section
1021 North Grand East
Post Office Box 19276
Springfield, Illinois 62794-9276

Additional Inspections Required:

V. Failure to Comply:

Failure to comply with any provisions of this Storm Water Pollution Prevention Plan will result in the implementation of a National Pollutant Discharge Elimination System/Erosion and Sediment Control Deficiency Deduction against the Contractor and/or penalties under the Permit ILR10 which could be passed on to the Contractor.



Contractor Certification Statement

Prior to conducting any professional services at the site covered by this contract, the Contractor and every subcontractor must complete and return to the Resident Engineer the following certification. A separate certification must be submitted by each firm. Attach to this certification all items required by Section II.G of the Storm Water Pollution Prevention Plan (SWPPP) which will be handled by the Contractor/subcontractor completing this form.

Route _____ Marked Rte. _____
Section _____ Project No. _____
County _____ Contract No. _____

This certification statement is a part of SWPPP for the project described above, in accordance with the General NPDES Permit No. ILR10 issued by the Illinois Environmental Protection Agency.

I certify under penalty of law that I understand the terms of the Permit No. ILR 10 that authorizes the storm water discharges associated with industrial activity from the construction site identified as part of this certification.

In addition, I have read and understand all of the information and requirements stated in SWPPP for the above mentioned project; I have received copies of all appropriate maintenance procedures; and, I have provided all documentation required to be in compliance with the Permit ILR10 and SWPPP and will provide timely updates to these documents as necessary.

- Contractor
Sub-Contractor

Print Name Signature
Title Date
Name of Firm Telephone
Street Address City/State/ZIP

Items which this Contractor/subcontractor will be responsible for as required in Section II.G. of SWPPP:

**ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
NOTICE OF INTENT (NOI)
GENERAL PERMIT TO DISCHARGE STORM WATER
CONSTRUCTION SITE ACTIVITIES**

OWNER INFORMATION

NAME:	LAST	FIRST	MIDDLE INITIAL	OWNER TYPE:	(SELECT ONE)
MAILING ADDRESS:				<input type="checkbox"/> PRIVATE	<input type="checkbox"/> COUNTY
				<input type="checkbox"/> CITY	<input type="checkbox"/> SPECIAL DISTRICT
				<input type="checkbox"/> FEDERAL	<input type="checkbox"/> STATE
CITY:			STATE:	ZIP:	
CONTACT PERSON:			TELEPHONE NUMBER:	AREA CODE	NUMBER

CONTRACTOR INFORMATION

NAME:			TELEPHONE NUMBER:	AREA CODE	NUMBER
MAILING ADDRESS:	CITY:	STATE:	ZIP:		

CONSTRUCTION SITE INFORMATION

SELECT ONE:	<input type="checkbox"/> EXISTING SITE	<input type="checkbox"/> NEW SITE	<input type="checkbox"/> CHANGE OF INFORMATION	GENERAL NPDES PERMIT NUMBER:	ILR10 _____
FACILITY NAME:	OTHER NPDES PERMIT NUMBERS:				
FACILITY LOCATION:	(Not necessarily the mailing address)			TELEPHONE NUMBER:	AREA CODE NUMBER
CITY:	STATE:	IL	ZIP:	LATITUDE:	DEG. MIN. SEC. LONGITUDE: DEG. MIN. SEC.
COUNTY:	SECTION:	TOWNSHIP:	RANGE:		
CONSTRUCTION START DATE:	CONSTRUCTION END DATE:	TOTAL SIZE OF CONSTRUCTION SITE IN ACRES:			

TYPE OF CONSTRUCTION (SELECT ALL THAT APPLY)

RESIDENTIAL COMMERCIAL INDUSTRIAL RECONSTRUCTION TRANSPORTATION OTHER

HISTORIC PRESERVATION AND ENDANGERED SPECIES COMPLIANCE

HAS THIS PROJECT SATISFIED APPLICABLE REQUIREMENTS FOR COMPLIANCE WITH ILLINOIS LAW ON:

HISTORIC PRESERVATION	<input type="checkbox"/> YES	<input type="checkbox"/> NO
ENDANGERED SPECIES	<input type="checkbox"/> YES	<input type="checkbox"/> NO

I certify under penalty of law that this document and all attachments were prepared under my direction and supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage this system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. In addition, I certify that the provisions of the permit, including the development and implementation of a storm water pollution prevention plan and a monitoring program plan, will be complied with.

OWNER SIGNATURE: _____ DATE: _____

MAIL COMPLETED FORM TO:
(DO NOT SUBMIT ADDITIONAL DOCUMENTATION UNLESS REQUESTED)

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF WATER POLLUTION CONTROL
ATTN: PERMIT SECTION
POST OFFICE BOX 19276
SPRINGFIELD, ILLINOIS 62794-9276

FOR OFFICE USE ONLY	
LOG:	
PERMIT NO. ILR10 _____	
DATE:	

Information required by this form must be provided to comply with 415 ILCS 5/39 (1996). Failure to do so may prevent this form from being processed and could result in your application being denied. This form has been approved by the Forms Management Center.

IL 532 2104
WPC 623 Rev. 5/99

GUIDELINES FOR COMPLETION OF NOTICE OF INTENT (NOI) FORM

Please adhere to the following guidelines:

Submit original, photocopy or facsimile copies. Facsimile and/or photo copies should be followed-up with an original signature copy as soon as possible. Please write "copy" under the "For Office Use Only" box in the lower right hand corner.

- Submit completed forms to:

Illinois Environmental Protection Agency
Division of Water Pollution Control
Permit Section
Post Office Box 19276
Springfield, Illinois 62794-9276
or call (217)782-0610

- Reports must be typed or printed legibly and signed.
- If this is a change in your facility information, renewal, etc., please fill in your permit number on the appropriate line.
- **NOTE: FACILITY LOCATION IS NOT NECESSARILY THE FACILITY MAILING ADDRESS, BUT SHOULD DESCRIBE WHERE THE FACILITY IS LOCATED.**
- Use the formats given in the following examples for correct form completion.

	<u>Example</u>	<u>Format</u>
SECTION	12	1 or 2 numerical digits
TOWNSHIP	12N	1 or 2 numerical digits followed by "N" or "S"
RANGE	12W	1 or 2 numerical digits followed by "E" or "W"

Chapter 22: Erosion Control and NPDES Requirements



**Storm Water Pollution Prevention
Plan
Erosion Control Inspection Report**

Date of Inspection: _____ County: _____
 Name of Inspector: _____ Section: _____
 Type of Inspection: Weekly Route: _____
 >0.5" Precip. Precip. Amt: _____ " District: _____
 Contractor: _____ Contract No: _____
 Subs: _____ Job No. _____
 _____ Project: _____
 NPDES/ESC Deficiency Deduction: \$ _____ NPDES Permit No: _____
 Total Disturbed Area: _____ acre Ready for Final Cover: _____ acre
 Final Cover Established: _____ acre

Erosion and Sediment Control Practices

Item # / BMP	YES	NO	N/A
1. Slopes: Do all slopes and exposed areas where soil disturbing activities have temporarily or permanently ceased, and not permanently stabilized, have adequate temporary seed or other stabilization in accordance with the NPDES permitted 7 and 14 day rule?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Ditches Are all ditches (existing and temporary) clear of sediment and/or debris? Do all ditches have adequate stabilization and structural practices in place?	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
3. Perimeter Erosion Barrier: Are all perimeter erosion barriers in good working order? Has perimeter barrier no longer needed been removed and the area stabilized?	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
4. Temporary Ditch Checks: Are all temporary ditch checks in good working order? Are the current ditch checks adequate to control erosion?	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
5. Temp Diversions/ Slope Drains: Are all Temporary Diversions and Slope Drains functioning properly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Inlet Protection: Are ALL inlet protection devices in good working order? Are ALL inlet filters less than 25% full and fabric unobstructed?	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
7. Sediment Basins/Traps: Are ALL sediment basins/traps in good working order? Does sufficient capacity exist for the design stormwater event?	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
8. Areas of Interest – Wetland/Prairie/Tree Preservation: Has the contractor remained clear of all designated "no entry" areas? Are all "no intrusion" areas adequately marked to prevent accidental entry?	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
9. Stock Piles: Are all stockpiles properly situated and maintained to prevent runoff and protected to minimize discharge of materials or residue in case of erosion?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Borrow/Waste Sites: Are all borrow and waste locations, including those located offsite, in compliance with NPDES requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Other Installations: Are all other BMP installations shown in the plans properly functioning? (note in comments)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

General Site Maintenance Required of the Permit

12. Vehicle Tracking: Is the site free from mud, sediment and debris from the vehicles entering/leaving off road areas throughout the site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are Stabilized Construction field entrances properly located?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are Stabilized Construction field entrances in good working condition?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Chapter 22: Erosion Control and NPDES Requirements

Item # / BMP		YES	NO	N/A
13.	Concrete Washout Areas: Are concrete washout areas adequately signed and maintained? Has all washout occurred only at designated washout locations?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14.	Staging/Storage Areas: Are all staging/storage facilities free of litter, leaking containers, leaking equipment, spills, etc?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15.	Fuel/Chemical Storage: Are all fuels and chemicals stored only in designated locations? Are all designated locations free of evidence of leaks and or spills?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16.	Previous Inspection Follow Up: Have all corrections from the last report been properly completed? If not, has a NPDES/ESC Deficiency Deduction been assessed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17.	Update SWPPP: Have all changes to the projects SWPPP been noted on the graphic site plan, signed and dated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18.	Off-site Discharge of Sediment: Has sediment or other pollutants of concern been released from the project site? If Yes, has the Illinois Environmental Protection Agency been notified within 24 hours of your observation of the discharge and an Incidence of Non-Compliance (ION) mailed within 5 days?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Specific Instructions Related to "No" Answers From Above:

Item #	Station or Station to Station	Practice	Comments/Actions Required	Time for Repair

Other Comments:

Additional Pages (Attached As Needed)

- Outfalls / Receiving Waters Other: _____
 Drainage Structure/Ditch Check Locations _____
 Additional Instructions to Contractor _____

If the answer to any of Items 1-16 above is "No", the contractor is hereby ordered to correct the deficiency. Repairs and stabilization are to be completed within 24 hours of this report (or as indicated above) or the DAILY NPDES/ESC Deficiency Deduction will be assessed for each noted deficiency until the required action is completed.

Inspector's Signature _____ Date/Time: _____

Contractor's Signature _____ Date/Time: _____

Original: Project File
cc: Contractor

Chapter 22: Erosion Control and NPDES Requirements

**ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
CONSTRUCTION SITE STORM WATER DISCHARGE
INCIDENCE OF NON-COMPLIANCE (ION)**

PERMITTEE NAME:	LAST	FIRST	MIDDLE INITIAL	AREA CODE + PHONE NUMBER:													
STREET:		CITY:		ST:	ZIP:												
CONSTRUCTION SITE NAME:																	
COUNTY:		SECTION:		TOWNSHIP:	RANGE:												
NPDES PERMIT NUMBER:	I	L	R	1	0					LATITUDE:	DEG.	MIN.	SEC.	LONGITUDE:	DEG.	MIN.	SEC.

CAUSE OF NON-COMPLIANCE:

ACTIONS TAKEN TO PREVENT ANY FURTHER NON-COMPLIANCE:

ENVIRONMENTAL IMPACT RESULTING FROM THE NON-COMPLIANCE:

ACTIONS TAKEN TO REDUCE THE ENVIRONMENTAL IMPACT RESULTING FROM THE NON-COMPLIANCE:

SIGNATURE: _____ TITLE: _____ DATE: _____

MAIL COMPLETED FORM TO:
(DO NOT SUBMIT ADDITIONAL DOCUMENTATION UNLESS REQUESTED)

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF WATER POLLUTION CONTROL
COMPLIANCE ASSURANCE SECTION #19
POST OFFICE BOX 19276
SPRINGFIELD, ILLINOIS 62794-9276

FOR OFFICE USE ONLY	
LOG:	
PERMIT NO. ILR10	____ _
DATE:	

Information required by this form must be provided to comply with 415 ILCS 5/39(1996). Failure to do so may prevent this form from being processed and could result in your application being denied. This form has been approved by the Forms Management Center.

IL 532 2105
WPC 624 Rev. 6/98)

Standard Attachment 22.06a

**GUIDELINES FOR COMPLETION OF INCIDENCE OF NON-COMPLIANCE (ION)
FORM**

Complete and submit this form for any violation of the Storm Water Pollution Prevention Plan observed during any inspection conducted, including those not required by the Plan. Please adhere to the following guidelines.

- Submit original, photocopy or facsimile copies. Facsimile and/or photo copies should be followed-up with an original signature copy as soon as possible. Please write "copy" under the "For Office Use Only" box in the lower right hand corner.
- Submit completed forms to:

Illinois Environmental Protection Agency
Division of Water Pollution Control
Permit Section
Post Office Box 19276
Springfield, Illinois 62794-9276

- Reports must be typed or printed legibly and signed.
- Use the formats given in the following examples for correct form completion.

<u>Example</u>		<u>Format</u>
SECTION	12	1 or 2 numerical digits
TOWNSHIP	12N	1 or 2 numerical digits followed by "N" or "S"
RANGE	12W	1 or 2 numerical digits followed by "E" or "W"

**ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
NOTICE OF TERMINATION (NOT)
OF COVERAGE UNDER THE GENERAL PERMIT
FOR STORM WATER DISCHARGES
ASSOCIATED WITH CONSTRUCTION SITE ACTIVITY**

OWNER INFORMATION

NAME:	LAST	FIRST	MIDDLE INITIAL	OWNER TYPE: (SELECT ONE)		
MAILING ADDRESS:				<input type="checkbox"/> PRIVATE	<input type="checkbox"/> COUNTY	
				<input type="checkbox"/> CITY	<input type="checkbox"/> SPECIAL DISTRICT	
				<input type="checkbox"/> FEDERAL	<input type="checkbox"/> STATE	
CITY:			STATE:		ZIP:	
CONTACT PERSON:			TELEPHONE NUMBER:	AREA CODE	NUMBER	

CONTRACTOR INFORMATION

NAME:			TELEPHONE NUMBER:	AREA CODE	NUMBER	
MAILING ADDRESS:		CITY:		STATE:		ZIP:

CONSTRUCTION SITE INFORMATION

FACILITY NAME:				NPDES STORM WATER GENERAL PERMIT NUMBER:	I	L	R	1	0				
FACILITY LOCATION:	(Not necessarily the mailing address)												
CITY:		STATE:	IL	ZIP:		LATITUDE	DEG.	MIN.	SEC.	LONGITUDE:	DEG.	MIN.	SEC.
COUNTY:			SECTION:		TOWNSHIP:			RANGE:					

I certify under penalty of law that disturbed soils at the identified facility have been finally stabilized or that all storm water discharges associated with industrial activity from the identified facility that are authorized by an NPDES general permit have otherwise been eliminated. I understand that by submitting this notice of termination, that I am no longer authorized to discharge storm water associated with industrial activity by the general permit, and that discharging pollutants in storm water associated with industrial activity to Waters of the State is unlawful under the Environmental Protection Act and the Clean Water Act where the discharge is not authorized by an NPDES permit.

OWNER SIGNATURE: _____ DATE: _____

MAIL COMPLETED FORM TO:
(DO NOT SUBMIT ADDITIONAL DOCUMENTATION UNLESS REQUESTED)

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF WATER POLLUTION CONTROL
ATTN: PERMIT SECTION
POST OFFICE BOX 19276
SPRINGFIELD, ILLINOIS 62794-9276

FOR OFFICE USE ONLY

LOG:
PERMIT NO. ILR10 _____
DATE:

Information required by this form must be provided to comply with 415 ILCS 5/39 (1996). Failure to do so may prevent this form from being processed and could result in your application being denied. This form has been approved by the Forms Management Center.

IL 532 2102
WPC 621 Rev. 6/98

GUIDELINES FOR COMPLETION OF NOTICE OF TERMINATION (NOT) FORM

Please adhere to the following guidelines:

Submit original, photocopy or facsimile copies. Facsimile and/or photo copies should be followed-up with an original signature copy as soon as possible. Please write "copy" under the "For Office Use Only" box in the lower right hand corner.

- Submit completed forms to:

Illinois Environmental Protection Agency
Division of Water Pollution Control
Permit Section
Post Office Box 19276
Springfield, Illinois 62794-9276
217/782-0610

- Reports must be typed or printed legibly and signed.
- NOTE: FACILITY LOCATION IS NOT NECESSARILY THE FACILITY MAILING ADDRESS, BUT SHOULD DESCRIBE WHERE THE FACILITY IS LOCATED.
- Use the formats given in the following examples for correct form completion.

	<u>Example</u>	<u>Format</u>
SECTION	12	1 or 2 numerical digits
TOWNSHIP	12N	1 or 2 numerical digits followed by "N" or "S"
RANGE	12W	1 or 2 numerical digits followed by "E" or "W"

CLASS I & CLASS III

EROSION CONTROL
PERMIT

&

STANDARD DETAILS



CLASS 1 & 3 EROSION CONTROL PERMIT STANDARDS

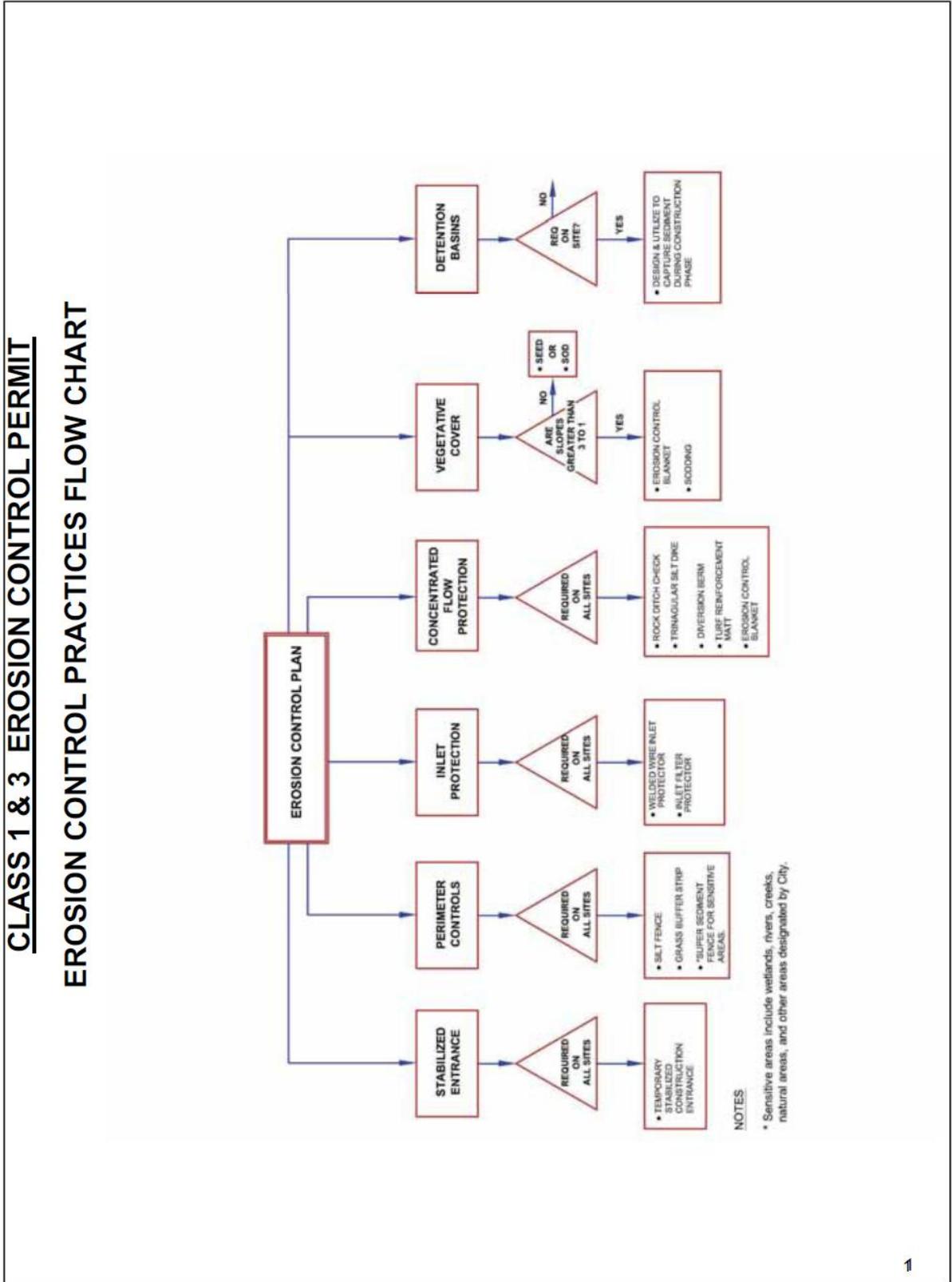
TABLE OF CONTENTS

EROSION CONTROL PRACTICES FLOW CHART	1
CLASS 1 EROSION CONTROL PERMIT FORM	2
CLASS 3 EROSION CONTROL PERMIT FORM	7
CLASS 1 SAMPLE PERMIT PLAN	8
CLASS 3 SAMPLE EROSION CONTROL PLAN # 1	9
CLASS 3 SAMPLE EROSION CONTROL PLAN # 2	10
CLASS 3 SAMPLE EROSION CONTROL PLAN # 3	11
CLASS 3 SAMPLE EROSION CONTROL PLAN # 3	11
ILR-10 NOTICE OF INTENT FORM	12
ILR-10 CONTRACTOR CERTIFICATION FORM	14
ILR-10 INCIDENCE OF TERMINATION FORM	17
EROSION CONTROL INSPECTION FORM	19
STORM WATER POLLUTION PREVENTATION PLAN	21
STABILIZED CONSTRUCTION ENTRANCE	25
PERIMETER CONTROLS	
SILT FENCE	27
GRASS BUFFER STRIP	29
SUPER SILT FENCE	31
INLET PROTECTION	
WELDED WIRE INLET PROTECTOR	33

CLASS 1 & 3 EROSION CONTROL PERMIT STANDARDS

TABLE OF CONTENTS

INLET FILTER PROTECTOR	35
CONCENTRATED FLOW CONTROLS	
CHECK DAMS - ROCK CHECK DAM	38
TRIANGULAR SILT DIKE	40
DIVERSION BERMS	42
TURF REINFORCEMENT MATT	43
EROSION CONTROL BLANKET	46
VEGETATIVE COVER	
SODDING	50
PUMP FILTER DISCHARGE BAG	51
CONCRETE WASHOUT FACILITIES	52



Chapter 22: Erosion Control and NPDES Requirements

City of Champaign
 Engineering Division
 702 Edgebrook Drive
 Champaign, IL 61820
 Phone 217-403-4710
 Fax 217-403-4755

Date Received _____	Permit Number _____
Site Visit Date _____	
Permit Fee _____	Check No. _____
<i>Permit Fees- \$500 for first 5 acres and \$20 per additional acre Make check payable to City of Champaign</i>	

CLASS 1 LAND DISTURBANCE PERMIT FORM

(Land Disturbances that require an IEPA ILR-10 permit for one (1) acre or more land disturbance)

1. APPLICANT (Please check if applicant is the landowner or designated agent*)

Name	Landowner	Designated Agent*
Address _____		
City	State	Zip Code
Area Code/Telephone Number _____		

2. ENGINEER

Name _____			
Address _____			
City	State	Zip Code	Area Code/Telephone Number
License #	State	License Expiration Date	

3. LOCATION

Subdivision Name _____	
Subdivision Lot No. Tax ID Number _____	
Street Address _____	

4. PROPOSED EARTH CHANGE

Project Type: Residential Commercial Industrial **ILR-10 Permit No.** _____
 (Copy must be attached)

5. Name and Telephone Number of on-site responsible person

Name _____	Area Code/Telephone Number _____
------------	----------------------------------

I (we) affirm that the above information is accurate and that I (we) will conduct the above described earth change in accordance with Part 91 Soil Erosion and Sedimentation Control, of the Natural Resource and Environmental Protection Act, 1994 PA. No. 451 as amended, applicable local ordinances, and the documents accompanying this application.

I (we) request the City's Erosion Control Inspector to inspect and approve work completed in accordance with the approved Erosion and Sediment Control Plan.

Landowner's Signature	Print Name	Date
Designated Agent's Signature	Print Name	Date

6. Soil Erosion and Sedimentation Control Plan

Complete the following checklist and include the drawings, specifications, supporting documentation, and application.

EROSION AND SEDIMENT CONTROL PLAN CHECKLIST

Project: _____

Sheet/Page No.

- I. Project Narrative Description
 - A. Description of proposed development _____
 - B. Past, present and proposed land uses including adjacent properties _____
 - C. Surface area involved, use of excess spoil material, use of borrow material _____

- II. Vicinity Map – 500 ft around site
 - A. 8½" x 11" copy of a USGS map with the outline of the project area. _____
 - B. Scale indicated on map _____
 - C. Streets and significant structures properly labeled on map. _____
 - D. Watercourses, water bodies, wetlands, and other significant geographic features in the vicinity of the project area properly identified and labeled on the maps _____

- III. Site Drawing(s)
 - A. Sealed by licensed professional engineer _____
 - B. Existing and proposed contours shown and labeled -100 ft around site. _____
 - C. Property lines shown and labeled _____

Chapter 22: Erosion Control and NPDES Requirements

		<u>Sheet/Page No.</u>
D.	Scale, legend, and north arrow shown and labeled.	□ _____
E.	100 year flood elevation and floodplain delineation shown and labeled	□ _____
F.	Delineation of any wetlands, natural or artificial water storage detention areas, and drainage ditches on the site.	□ _____
G.	Delineation of any storm drainage systems including quantities of flow and site conditions around all points of surface water discharge from the site. . . .	□ _____
H.	Delineation of any areas of vegetation or trees to be preserved	□ _____
I.	Delineation of any grading or land disturbance activity including specific limits of disturbance and stockpile locations	□ _____
J.	Stabilized construction entrance provisions shown and labeled	□ _____
K.	Perimeter erosion control provisions shown and labeled <ul style="list-style-type: none">• Silt Fence• Grass Buffer Strip• Super Sediment Fence for Sensitive Areas	□ _____
L.	Inlet protection provisions shown and labeled <ul style="list-style-type: none">• Stone Bags• Welded Wire Inlet Protectors• Approved Manufacturers Product	□ _____
M.	Concentrated flow provisions shown and labeled <ul style="list-style-type: none">• Diversion Berms• Erosion Control Blanket• Turf Reinforcement Matt• Stone Ditch Check	□ _____

Chapter 22: Erosion Control and NPDES Requirements

Sheet/Page No.

- N. Vegetative restoration provisions shown and labeled _____
 - Seed
 - Erosion Control Blanket
 - Sod

- O. Sediment traps or basins shown and labeled _____

- P. Plan note stating “Following initial soil disturbance or redisturbance, permanent or temporary stabilization shall be completed within seven (7) calendar days on all perimeter dikes, swales, ditches, perimeter slopes, and all slopes greater than 3 horizontal to 1 vertical (3:1); embankments of ponds, basins, and traps; and within fourteen (14) days on all other disturbed or graded areas. The requirements of this section do not apply to those areas which are shown on the plan and are currently being used for material storage or for those areas on which actual construction activities are currently being performed.” _____

- Q. Erosion control provision details in accordance with standards presented in the Manual of Practice. _____

IV. Chronological Construction Schedule and Time Frame including the following:

- A. Clearing and grubbing those areas necessary for installation of perimeter erosion control devices _____

- B. Construction of perimeter erosion control devices _____

- C. Remaining interior site clearing and grubbing. _____

- D. Installation of permanent and temporary stabilization measures. _____

- E. Road grading _____

- F. Grading for remainder of the site _____

- G. Building, parking lot, and site construction _____ 5

- H. Final grading, landscaping, or stabilization _____

- I. Implementation and maintenance of final erosion control structures _____

- J. Removal of temporary erosion control devices _____

- V. Specifications
 - A. Sediment retention structure specifications _____

 - B. Surface runoff and erosion control devices specifications _____

- VI. Vegetative Measures
 - A. Description of vegetative measures _____

 - B. Proposed vegetative conditions of the site on the 15th of each month between and including the months of April through October _____

- VII. Concrete Washout Facilities
 - A. Location of Concrete Washout Facility shown on Site Plan _____

 - B. Details of Concrete Washout Facility _____

Chapter 22: Erosion Control and NPDES Requirements

City of Champaign
Engineering Division
702 Edgebrook Drive
Champaign, IL 61820
Phone 217-403-4710
Fax 217-403-4755

General Permit Number: _____

No Permit Fees Required For Class III Permits

CLASS III LAND DISTURBANCE PERMIT FORM
(Utility Company Land Disturbances Between 2,000 square feet and one (1) acre)

1. UTILITY COMPANY

Name			
Address			
City	State	Zip Code	Area Code/Telephone Number

2. APPLICANT

Name	Title of Applicant		
Address			
City	State	Zip Code	Area Code/Telephone Number
Signature of Applicant			Date

3. LOCAL PERSON RESPONSIBLE FOR CONSTRUCTION SITE EROSION CONTROL

Name	Title		
Address			
City	State	Zip Code	Area Code/Telephone Number
Fax Number	Cell Phone Number		
Email Address			

A GENERAL EROSION CONTROL PLAN OR PLANS THAT INCLUDES THE BEST MANAGEMENT PRACTICES (BMP) TYPICALLY USED ON THE LAND DISTURBING CONSTRUCTION ANTICIPATED DURING THE YEAR IS PROVIDED AS AN ATTACHMENT TO THIS GENERAL PERMIT APPLICATION (27.08(3)).

1. A General Permit may be issued for land disturbing construction activities that are subject to the City of Champaign Construction Site Erosion Control Regulations and Manual of Practice.

2. General Permits may be issued to a utility company for a one-year period.

Application Review by: _____ Date: _____

Permit Issued by: _____ Date: _____

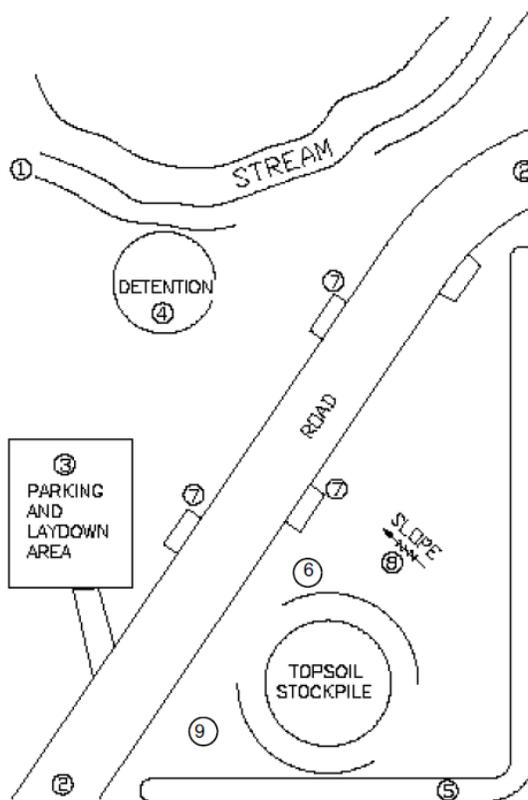
CLASS 1 SAMPLE PERMIT PLAN

CLASS 1 PERMIT
TYPICAL EROSION CONTROL
PLAN ELEMENTS

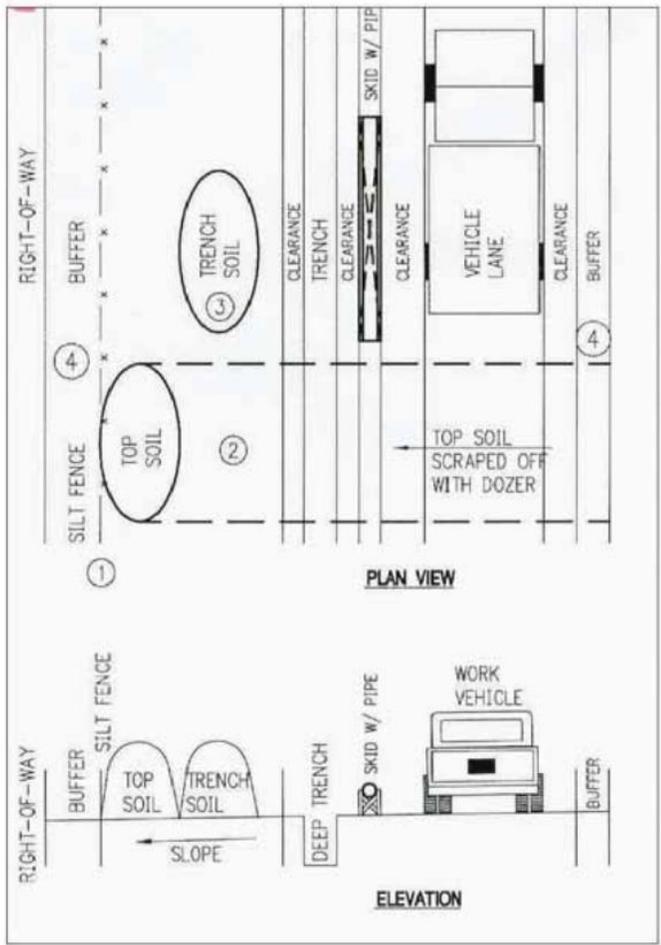
- ① SUPER SEDIMENT FENCE TO PROTECT SENSITIVE AREAS.
- ② STABILIZED CONSTRUCTION ENTRANCES.
- ③ STABILIZE PARKING AND LAY DOWN AREA WITH GRAVEL PAD AND SILT FENCE AROUND DOWNHILL SIDES.
- ④ BUILD DETENTION PONDS AND SEDIMENT TRAPS
- ⑤ DIVERT UPSTREAM SITE WATER AROUND SITE WITH DIVERSION BERMS
- ⑥ PROTECT STOCKPILE WITH TEMPORARY VEGETATION AND SILT FENCE.
- ⑦ INLET PROTECTION ONCE STORM SEWERS ARE IN PLACE.
- ⑧ STABILIZE SOIL WITHIN 14 DAYS OF ROUGH GRADING WITH SOD, SEED BLANKETS, HYDRO MULCH, ETC.
- ⑨ SLOPES GREATER THAN 3:1 MUST RECEIVE EROSION CONTROL PROTECTION OF BLANKET OR SOD WITHIN 7 DAYS OF BEING PLACED OR STRIPPED.

LEGEND

— SILT FENCE OR OTHER LIKE CONTROL



CLASS 3 PERMIT
SAMPLE EROSION CONTROL PLAN DRAWING #1



CLASS III PERMIT
SAMPLE EROSION CONTROL
PLAN #1

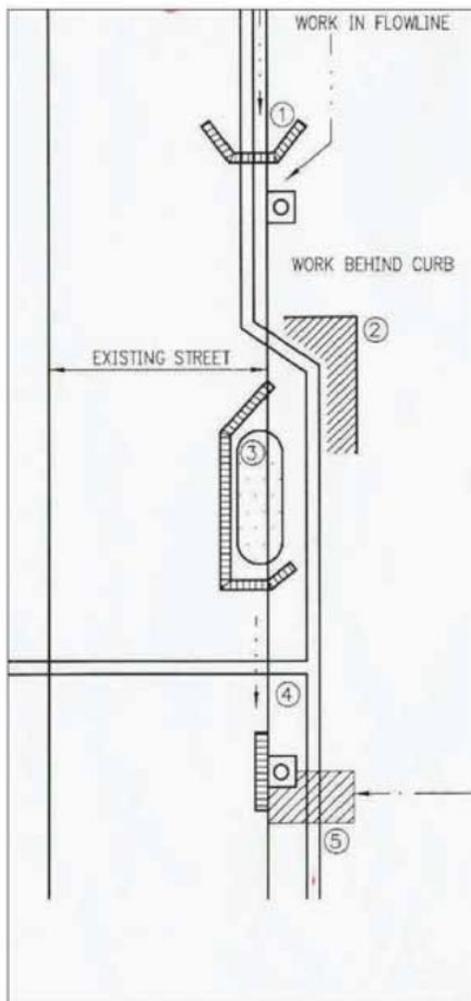
- ① INSTALL FENCE ON DOWNHILL SIDE OF STOCK PILE.
- ② BLADE TOPSOIL INTO A PILE.
- ③ STOCKPILE TRENCH SOIL.
- ④ MAINTAIN VEGETATIVE BUFFERS ON BOTH EDGES OF UTILITY R-O-W.

CLASS 3 PERMIT
SAMPLE EROSION CONTROL PLAN DRAWING #2

- CLASS 3 PERMIT**
SAMPLE EROSION CONTROL
PLAN #2
- ① INLET PROTECTION ALTERNATES
-DIVERT OFFSITE WATER
-SEDIMENT TRAP
 - ② RESTORE VEGETATION
-DEFINE PHASES
-DEFINE LAPSED TIME
-PLANT AS YOU GO
 - ③ STOCKPILE ON PAVEMENT
-AVOID IF POSSIBLE
-LIMIT ON DURATION
-CONSIDER CLIMATE CONDITIONS DURING CONSTRUCTION PERIOD
-CONSIDER TARPS OR TREATMENT
-CONSIDER DIVERSION
 - ④ WORK CROSSES FLOWLINE
-TIMING OF PAVEMENT PATCH
-RESTRICT TIMING TO PERIOD OF NO RAIN FORECAST
-CONTAIN FLOW IN FLOWLINES
 - ⑤ CONCENTRATED FLOW CROSSING
-IMMEDIATE STABILIZATION
-SELECT SOD OR BLANKETS
 - ⑥ PLAN SHOULD INDICATE REQUIRED MAINTENANCE & WHEN TO REMOVE ESC DEVICE

- LEGEND**
-  FLOW BARRIER
 -  STORM SEWER INLET
 -  STOCKPILED MATERIAL
 -  CONCENTRATED FLOW PATH
 -  STABILIZED SOIL

ESC IS EROSION AND SEDIMENT CONTROL DEVICE



CLASS 3 PERMIT

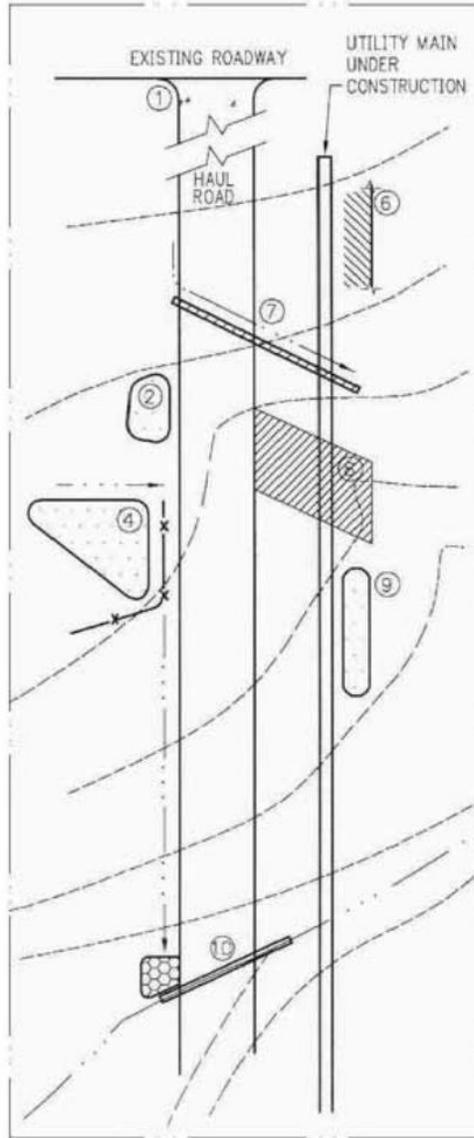
SAMPLE EROSION CONTROL PLAN DRAWING #3

CLASS III PERMIT
SAMPLE EROSION CONTROL
PLAN #3

- ① CONSTRUCTION ENTRY AT HAUL ROAD ACCESS TO STREET.
- ② BEDDING STOCKPILE. AVOID CONCENTRATED FLOW AREAS.
- ③ MINIMIZE DISTURBED AREA. CONSIDER FENCING TO CONTROL TRAFFIC. DEFINE SEQUENCE OF CLEARING.
- ④ TOPSOIL STOCKPILE FOR REUSE. DIVERT WATER, TRAP AND TREAT RUNOFF, TARP OR SEED IF STOCKPILE TO LAST FOR MORE THAN 21 DAYS.
- ⑤ PLAN SHOULD INDICATE REQUIRED MAINTENANCE & WHEN TO REMOVE ESC DEVICE.
- ⑥ ESTABLISH VEGETATIVE COVER. BREAK OVERALL PROJECT INTO PHASES FOR REVEGETATION. MINIMIZE LAPSED TIME FOR REVEGETATION. SEED AS YOU GO. SEPERATE TIME LINES FOR TRENCH AND HAUL ROAD.
- ⑦ SLOPE ALONG MAIN. DIVERT SHEET FLOW TO UNDISTURBED AREAS. REFER TO STD. DRAWING.
- ⑧ CONCENTRATED FLOW CROSSING. IMMEDIATE STABILIZATION. SELECT SOD OR BLANKETS. RESTRICT TIMING TO PERIOD OF NO RAIN FORECAST.
- ⑨ SLOPE ACROSS MAIN. DOWNHILL LOCATION OF TRENCH SPOIL STOCKPILE. CONSIDER DIVERSION OF CLEAN WATER PAST CONSTRUCTION AREA OUTLET PROTECTION. CONSIDER LIMITS OF DURATION & LINEAR EXTENT OF EXPOSED TRENCH & STOCKPILE.
- ⑩ TEMPORARY STREAM CROSSING. SELECT LOW WATER OR CULVERT CROSSING. BANK RESTORATION. REFER TO STREAM CROSSING STD. DRAWING.

LEGEND

-  CONSTRUCTION ENTRY
-  FLOW BARRIER
-  SILT FENCE
-  CONCENTRATED FLOW PATH
-  STOCKPILED MATERIAL
-  STABILIZED SOIL
-  EROSION PROTECTION



ESC IS EROSION AND SEDIMENT CONTROL DEVICE

**ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
NOTICE OF INTENT (NOI)
GENERAL PERMIT TO DISCHARGE STORM WATER
CONSTRUCTION SITE ACTIVITIES**

OWNER INFORMATION

NAME:	LAST	FIRST	M.I.	(SEE INSTRUCTIONS)	OWNER TYPE: (SELECT ONE AND TYPE "X")
Mailing ADDRESS:					<input type="checkbox"/> PRIVATE <input type="checkbox"/> COUNTY <input type="checkbox"/> STATE
CITY:	ST:	ZIP:			
CONTACT PERSON:					TELEPHONE NUMBER: AREA CODE NUMBER

CONTRACTOR INFORMATION

NAME:	LAST	FIRST	M.I.	(SEE INSTRUCTIONS)	TELEPHONE NUMBER:	AREA CODE	NUMBER
MAILING ADDRESS:					CITY:	ST:	ZIP:

CONSTRUCTION SITE INFORMATION

SELECT ONE:	<input type="checkbox"/> EXISTING SITE	<input type="checkbox"/> NEW SITE	<input type="checkbox"/> CHANGE OF INFORMATION	GENERAL NPDES PERMIT NO.	I	L	R	1	0				
FACILITY NAME:					OTHER NPDES PERMIT NUMBERS:								
FACILITY ADDRESS:					TELEPHONE NUMBER:	AREA CODE	NUMBER						
CITY:	ST:	IL	ZIP:			LATITUDE:	DEG. MIN. SEC.	LONGITUDE:	DEG. MIN. SEC.				
COUNTY:	SECTION:			TOWNSHIP:			RANGE:						
START OF CONSTRUCTION DATE:	MM/DD/YY			END OF CONSTRUCTION DATE:	MM/DD/YY			TOTAL SIZE OF CONSTRUCTION SITE IN ACRES:					

TYPE OF CONSTRUCTION (TYPE "X" FOR ALL THAT APPLY)

<input type="checkbox"/> RESIDENTIAL	<input type="checkbox"/> COMMERCIAL	<input type="checkbox"/> INDUSTRIAL	<input type="checkbox"/> RECONSTRUCTION	<input type="checkbox"/> TRANSPORTATION	<input type="checkbox"/> OTHER
--------------------------------------	-------------------------------------	-------------------------------------	---	---	--------------------------------

HISTORIC PRESERVATION AND ENDANGERED SPECIES COMPLIANCE (OPTIONAL)

HAS THIS PROJECT SATISFIED APPLICABLE REQUIREMENTS FOR COMPLIANCE WITH ILLINOIS LAW ON:
HISTORIC PRESERVATION <input type="checkbox"/> YES <input type="checkbox"/> NO, AND
ENDANGERED SPECIES <input type="checkbox"/> YES <input type="checkbox"/> NO?

I certify under penalty of law that this document and all attachments were prepared under my direction and supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage this system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. In addition, I certify that the provisions of the permit, including the development and implementation of a storm water pollution prevention plan and a monitoring program plan, will be complied with.

OWNER SIGNATURE: _____ DATE: _____

MAIL COMPLETED FORM TO:
(DO NOT SUBMIT ADDITIONAL DOCUMENTATION UNLESS REQUESTED)

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF WATER POLLUTION CONTROL
ATTN: PERMIT SECTION
POST OFFICE BOX 19276
SPRINGFIELD, Illinois 62794-9276

FOR OFFICE USE ONLY	
LOG:	
PERMIT:	ILR00
DATE:	

Information required by this form must be provided to comply with 415 ILCS 6/39(1998). Failure to do so may prevent this form from being processed and could result in your application being denied. This form has been approved by the Forms Management Center.

IL 532 2104
WPC 623 Rev. 5/98

Chapter 22: Erosion Control and NPDES Requirements

GUIDELINES FOR COMPLETION OF NOTICE OF INTENT (NOI) FORM

Please adhere to the following guidelines to allow automated forms processing using Optical Character Recognition (OCR) technology.

- Submit original forms. Do not submit photocopies. Original forms can be obtained from:

Illinois Environmental Protection Agency
Division of Water Pollution Control
Permits Section
2200 Churchill Road
P.O. Box 19276
Springfield, IL 62794-9276
or call (217)782-0610
- Reports must be typed and signed. Do not staple.
- Center your information by typing within the allocated areas avoiding all lines which border the areas.
- Provide only one line of type per allocated area.
- Replace typewriter ribbons and clean as necessary to avoid smeared, faint or illegible characters.
- Use the formats given in the following examples for correct form completion.

	<u>EXAMPLE</u>	<u>FORMAT</u>
NAME:	Smith John C Taylor T J Mfg Co LJ Trucking Co	Last First Middle Initial Surname First (or initials) and remainder Initials and remainder
DATE:	06/30/92	Month/day/year
SECTION:	12	1 or 2 numerical digits
TOWNSHIP:	12N	1 or 2 numerical digits followed by "N" or "S"
RANGE:	12W	1 or 2 numerical digits followed by "E" or "W"
AREA CODE:	217	3 numerical digits
TELEPHONE NUMBER:	782-0610	3 numerical digits followed by a hyphen and 4 more numerical digits
ZIP CODE:	62546	5 numerical digits only



Contractor Certification Statement

This certification statement is a part of the Storm Water Pollution Prevention Plan for the project described below, in accordance with NPDES Permit No. ILR10, issued by the Illinois Environmental Protection Agency on May 14, 1998.

Project Information:

Route _____ Marked _____
Section _____ Project No. _____
County _____

I certify under penalty of law that I understand the terms of the general National Pollutant Discharge Elimination System (NPDES) permit (ILR 10) that authorizes the storm water discharges associated with industrial activity from the construction site identified as part of this certification.

Signature _____ Date _____

Title _____

Name of Firm _____

Street Address _____

City _____ State _____

Zip Code _____

Telephone Number _____

Chapter 22: Erosion Control and NPDES Requirements

GUIDELINES FOR COMPLETION OF INCIDENCE OF NON-COMPLIANCE (ION) FORM

Complete and submit this form for any violation of the Storm Water Pollution Prevention Plan observed during any inspection conducted, including those not required by the Plan. Please adhere to the following guidelines to allow automated forms processing using Optical Character Recognition (OCR) technology.

- Submit original forms. Do not submit photocopies. Original forms can be obtained from:

Illinois Environmental Protection Agency
Division of Water Pollution Control
Permits Section
2200 Churchill Road
P.O. Box 19276
Springfield, IL 62794-9276
or call (217)782-0610
- Reports must be typed and signed. Do not staple.
- Center your information by typing within the allocated areas avoiding all lines which border the areas.
- Provide only one line of type per allocated area unless you are describing the cause of non-compliance, environmental impact, or actions taken.
- Replace typewriter ribbons and clean as necessary to avoid smeared, faint or illegible characters.
- Use the formats given in the following examples for correct form completion.

	<u>EXAMPLE</u>	<u>FORMAT</u>
NAME:	Smith John C Taylor T J Mfg Co LJ Trucking Co	Last First Middle Initial Surname First (or initials) and remainder Initials and remainder
DATE:	06/30/92	Month/day/year
SECTION:	12	1 or 2 numerical digits
TOWNSHIP:	12N	1 or 2 numerical digits followed by "N" or "S"
RANGE:	12W	1 or 2 numerical digits followed by "E" or "W"
AREA CODE:	217	3 numerical digits
TELEPHONE NUMBER:	782-0610	3 numerical digits followed by a hyphen and 4 more numerical digits
ZIP CODE:	62546	5 numerical digits only



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

**NOTICE OF TERMINATION (NOT)
OF COVERAGE UNDER THE NPDES GENERAL PERMIT
FOR STORM WATER DISCHARGES**

OWNER INFORMATION

NAME: LAST FIRST MI. (SEE INSTRUCTIONS)		OWNER TYPE: (SELECT ONE AND TYPE "X")	
MAILING ADDRESS:		<input type="checkbox"/> PRIVATE	<input type="checkbox"/> COUNTY <input type="checkbox"/> STATE
CITY:	ST:	ZIP:	<input type="checkbox"/> CITY <input type="checkbox"/> SPECIAL DISTRICT
CONTACT PERSON:	TELEPHONE NUMBER:	AREA CODE	NUMBER

CONTRACTOR INFORMATION

NAME: LAST FIRST MI. (SEE INSTRUCTIONS)		TELEPHONE NUMBER:	AREA CODE:	NUMBER
MAILING ADDRESS:		CITY:	ST:	ZIP:

CONSTRUCTION SITE INFORMATION

FACILITY NAME:	NPDES STORM WATER GENERAL PERMIT NUMBER: ILR10			
MAILING ADDRESS:				
CITY:	ST:	IL	DP:	
LATITUDE: (N/S/E/W) (DEGREES MIN. SEC.)		LONGITUDE: (E/W/N/S) (DEGREES MIN. SEC.)		
COUNTY:	SECTION:	TOWNSHIP:	RANGE:	

"I certify under penalty of law that disturbed soils at the identified facility have been finally stabilized or that all storm water discharges associated with industrial activity from the identified facility that are authorized by an NPDES general permit have otherwise been eliminated. I understand that by submitting this notice of termination, that I am no longer authorized to discharge storm water associated with industrial activity by the general permit, and that discharging pollutants in storm water associated with industrial activity to Waters of the State is unlawful under the Environmental Protection Act and the Clean Water Act where the discharge is not authorized by an NPDES permit."

OWNER SIGNATURE: _____ DATE: _____

MAIL COMPLETED FORM TO: ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF WATER POLLUTION CONTROL
ATTN: PERMIT SECTION
2200 CHURCHILL ROAD
POST OFFICE BOX 19276
SPRINGFIELD, IL 62794-9276

(DO NOT SUBMIT ADDITIONAL DOCUMENTATION UNLESS REQUESTED)

FOR OFFICE USE ONLY

LOG	
PERMIT	ILR10
DATE	

This Agency is authorized to require this information under Illinois Revised Statutes, 1991, Chapter 111 1/2, Section 1038. Disclosure of this information is required under that Section. Failure to do so may prevent this form from being processed and could result in your application being denied. This form has been approved by the Forms Management Center.

GUIDELINES FOR COMPLETION OF NOTICE OF TERMINATION (NOT) FORM

Please adhere to the following guidelines to allow automated forms processing using Optical Character Recognition (OCR) technology.

- Submit original forms. Do not submit photocopies. Original forms can be obtained from:

Illinois Environmental Protection Agency
Division of Water Pollution Control
Permits Section
2200 Churchill Road
P.O. Box 19276
Springfield, IL 62794-9276
or call (217)782-0610

- Reports must be typed and signed. Do not staple.
- Center your information by typing within the allocated areas avoiding all lines which border the areas.
- Provide only one line of type per allocated area.
- Replace typewriter ribbons and clean as necessary to avoid smeared, faint or illegible characters.
- Use the formats given in the following examples for correct form completion.

	<u>EXAMPLE</u>	<u>FORMAT</u>
NAME:	Smith John C	Last First Middle Initial
	Taylor T J Mfg Co	Surname First (or initials) and remainder
	LJ Trucking Co	Initials and remainder
SECTION:	12	1 or 2 numerical digits
TOWNSHIP:	12N	1 or 2 numerical digits followed by "N" or "S"
RANGE:	12W	1 or 2 numerical digits followed by "E" or "W"
AREA CODE:	217	3 numerical digits
TELEPHONE NUMBER:	782-0610	3 numerical digits followed by a hyphen and 4 more numerical digits
ZIP CODE:	62546	5 numerical digits only

**SWPPP INSPECTION REPORT
City of Champaign, Illinois**

PROJECT NAME: _____

EROSION CONTROL PERMIT NO. _____

INSPECTION TYPE (circle one): *Routine Weekly* *Post Rain*

DATE: _____ **FOR WEEK ENDING:** _____

WEATHER: _____

DATE AND TIME OF LAST STORM EVENT: _____

INSPECTOR INFORMATION: _____
(PRINT NAME) (TITLE)

(SIGNATURE)

NO.	DESCRIPTION	YES	NO	N/A
1.	Are all erosion control devices in-place and functioning in accordance with the SWPPP and erosion control site map?			
2.	Are all sediment traps, barriers, and basins clean and functioning properly?			
3.	Are sediment controls in place at the site perimeter and storm drain inlets?			
4.	Are all discharge points free of any noticeable pollutants?			
5.	Are construction accesses stabilized adequately?			
6.	Is sediment, debris, or mud being cleaned from public roads where they intersect with site access roads?			
7.	Are all exposed slopes protected from erosion?			
8.	Are all temporary stockpiles or construction materials located in approved areas (as shown on map) and protected from erosion?			
9.	Are dust control measures being appropriately implemented?			
10.	Are all materials and equipment properly covered?			
11.	Are all material (paint, fuel, oil, etc.) handling and storage areas clean and free of spills and leaks?			
12.	Are all equipment storage and maintenance areas clean and free of spills and leaks?			
13.	Is concrete washing conducted on-site? If so, are wash-out areas defined and maintained properly?			
14.	Are there areas where construction activities have temporarily or permanently ended?			
15.	Is construction debris or other litter being blown off-site?			
16.	Are off-site material storage areas being managed properly?			
17.	Is the Notice of Permit Coverage posted in a location where the public can view it without entering the site?			
18.	Other:			

If any answer is "No", describe needed corrections on reverse side. Indicate the location of needed corrections and date corrections are made on attached site map.



Storm Water Pollution Prevention Plan

Route _____ Marked _____
Section _____ Project No. _____
County _____

This plan has been prepared to comply with the provisions of the NPDES Permit Number ILR10, issued by the Illinois Environmental Protection Agency for storm water discharges from Construction Site Activities.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature _____ Date _____

Title _____

1. Site Description

- a. The following is a description of the construction activity which is the subject of this plan (use additional pages, as necessary):

- b. The following is a description of the intended sequence of major activities which will disturb soils for major portions of the construction site, such as grubbing, excavation and grading (use additional pages, as necessary):

- c. The total area of the construction site is estimated to be _____ acres.

Chapter 22: Erosion Control and NPDES Requirements

The total area of the site that it is estimated will be disturbed by excavation, grading or other activities is _____ acres.

- d. The estimated runoff coefficients of the various areas of the site after construction activities are completed are contained in the project drainage study which is hereby incorporated by reference in this plan. Information describing the soils at the site is contained either in the Soils Report for the project, which is hereby incorporated by reference, or in an attachment to this plan.
- e. The design/project report, hydraulic report, or plan documents, hereby incorporated by reference, contain site map(s) indicating drainage patterns and approximate slopes anticipated after major grading activities, areas of major soil disturbance, the location of major structural and nonstructural controls identified in the plan, the location of areas where stabilization practices are expected to occur, surface waters (including wetlands), and locations where storm water is discharged to a surface water.
- f. The names of receiving water(s) and area extent of wetland acreage at the site are in the design/project report or plan documents which are incorporated by reference as a part of this plan.

2. Controls

This section of the plan addresses the various controls that will be implemented for each of the major construction activities described in 1.b. above. For each measure discussed, the contractor that will be responsible for its implementation is indicated. Each such contractor has signed the required certification on forms which are attached to, and a part of, this plan:

a. Erosion and Sediment Controls

- (i) **Stabilization Practices.** Provided below is a description of interim and permanent stabilization practices, including site-specific scheduling of the implementation of the practices. Site plans will ensure that existing vegetation is preserved where attainable and disturbed portions of the site will be stabilized. Stabilization practices may include: temporary seeding, permanent seeding, mulching, geotextiles, sod stabilization, vegetative buffer strips, protection of trees, preservation of mature vegetation, and other appropriate measures. Except as provided in 2.a.(i).(A) and 2.b., stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased on all disturbed portions of the site where construction activity will not occur for a period of 21 or more calendar days.
 - (A) where the initiation of stabilization measures by the 14th day after construction activity temporarily or permanently ceases is precluded by snow cover, stabilization measures shall be initiated as soon as practicable thereafter.

Description of Stabilization Practices (use additional pages, as necessary):

- (ii) **Structural Practices.** Provided below is a description of structural practices that will be implemented, to the degree attainable, to divert flows from exposed soils, store flows or otherwise limit runoff and the discharge of pollutants from exposed areas of the site. Such practices may include silt fences, earth dikes, drainage swales, sediment traps, check dams, subsurface drains, pipe slope drains, level spreaders, storm drain inlet protection, rock outlet protection, reinforced soil retaining systems, gabions and temporary or permanent sediment basins. The installation of these devices may be subject to Section 404 of the Clean Water Act.

Description of Structural Practices (use additional pages, as necessary):

b. Storm Water Management

Provided below is a description of measures that will be installed during the construction process to control pollutants in storm water discharges that will occur after construction operations have been completed. The installation of these devices may be subject to Section 404 of the Clean Water Act.

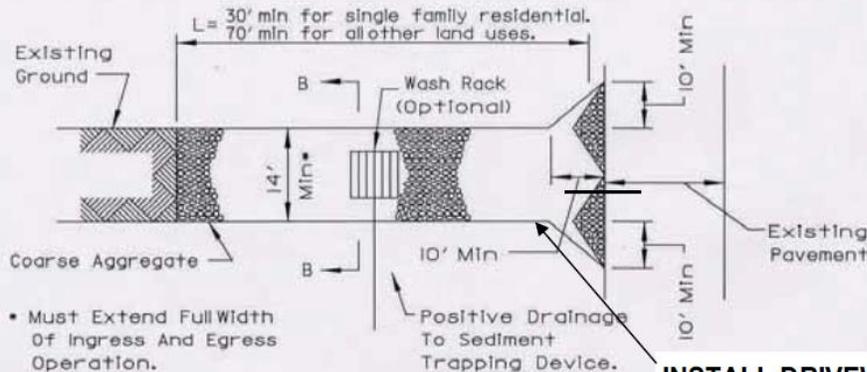
- (i) Such practices may include: storm water detention structures (including wet ponds); storm water retention structures; flow attenuation by use of open vegetated swales and natural depressions; infiltration of runoff on site; and sequential systems (which combine several practices). **The practices selected for implementation were determined on the basis of the technical guidance in Section 10-300 (Design Considerations) in Chapter 10 (Erosion and Sedimentation Control) of the Illinois Department of Transportation Drainage Manual. If practices other than those discussed in Section 10-300 are selected for implementation or if practices are applied to situations different from those covered in Section 10-300, the technical basis for such decisions will be explained below.**
- (ii) Velocity dissipation devices will be placed at discharge locations and along the length of any outfall channel as necessary to provide a non-erosive velocity flow from the structure to a water course so that the natural physical and biological characteristics and functions are maintained and protected (e.g., maintenance of hydrologic conditions, such as the hydroperiod and hydrodynamics present prior to the initiation of construction activities).

Description of Storm Water Management Controls (use additional pages, as necessary):

STABILIZED CONSTRUCTION ENTRANCE

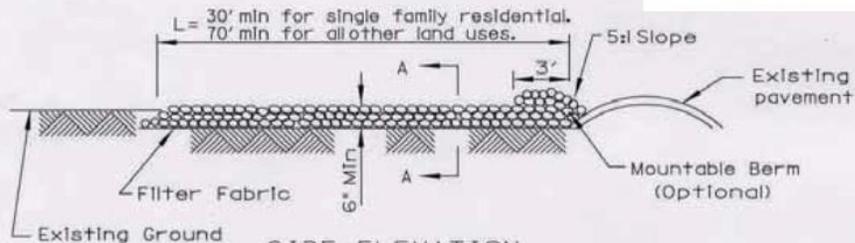
STABILIZED CONSTRUCTION ENTRANCE:

STABILIZED CONSTRUCTION ENTRANCE DETAIL



PLAN VIEW

**INSTALL DRIVEWAY
CULVERT IF ROADSIDE
DITCH IS PRESENT**



SIDE ELEVATION

NOTES:

1. Filter fabric shall meet the requirements of material specification 592 GEOTEXTILE, Table 1 or 2, Class I, II or IV and shall be placed over the cleared area prior to the placing of rock.
2. Rock or reclaimed concrete shall meet one of the following IDOT coarse aggregate gradation, CA-1, CA-2, CA-3 or CA-4 and be placed according to construction specification 25 ROCKFILL using placement Method 1 and Class I II compaction.
3. Any drainage facilities required because of washing shall be constructed according to manufacturer's specifications.
4. If wash racks are used they shall be installed according to the manufacturer's specifications.

STABILIZED LOT ENTRANCE

STABILIZED LOT ENTRANCE:

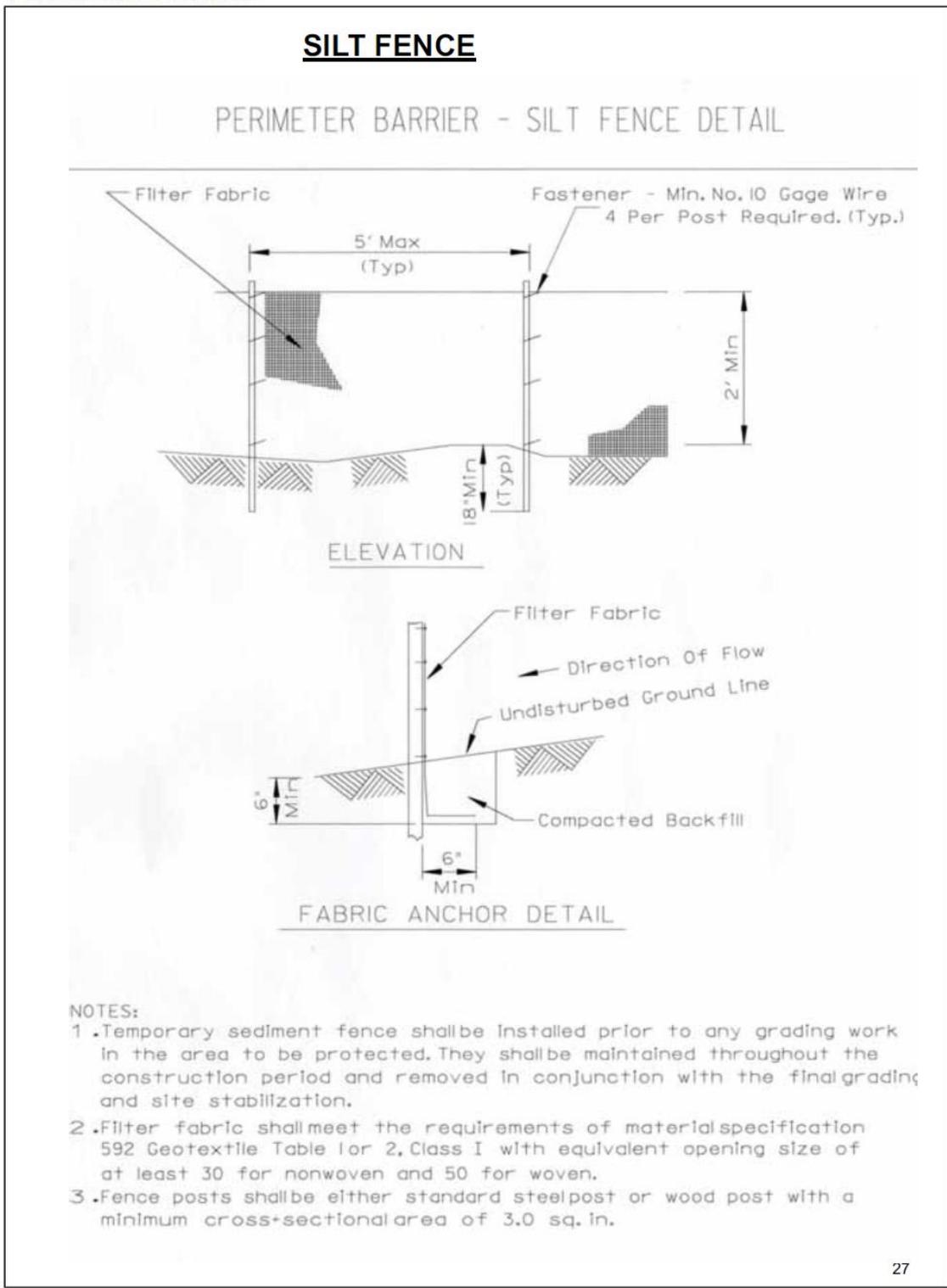
The diagram, titled "STABILIZED CONSTRUCTION ENTRANCE DETAIL", illustrates two cross-sections of a stabilized lot entrance.
SECTION A-A shows a top-down view of a stabilized area with a width of at least 14 feet. It features a layer of filter fabric on top of a base, with a minimum depth of 3 feet.
SECTION B-B shows a side view of a stabilized area with a width of 6 to 7 feet. It features a layer of reinforced concrete on top of a base, with a minimum depth of 3 feet. The diagram also indicates a "Drain Space" between the concrete and the base.

MAINTENANCE:

- 1.) Inspect on a daily basis or as necessary.
- 2.) Immediately remove mud or sediment tracked onto road.
- 3.) Add additional stabilized material as necessary.

26

PERIMETER CONTROL



PERIMETER CONTROL

SILT FENCE NOTES:

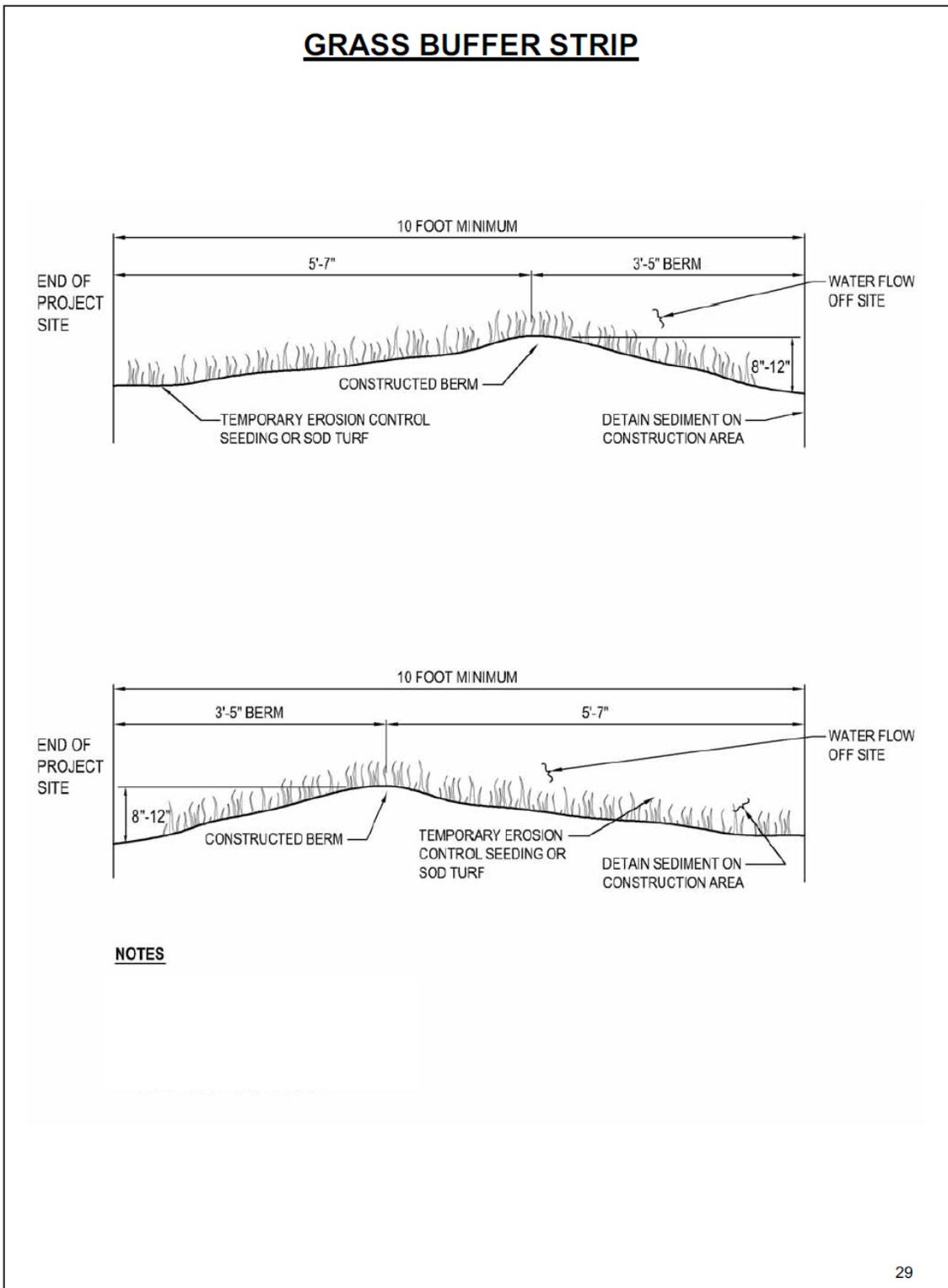
INSTALLATION:

1. Silt fence shall be a minimum of 24 inches above the original ground surface and shall not exceed 36 inches above ground surface.
2. Excavate a trench approximately 6 inches wide and 6 inches deep on the upslope side of the proposed location of the fence. A slicing machine may be used in lieu of trenching.
3. Posts shall be placed a maximum of 5 feet apart. Fabric shall be fastened securely to the upslope side of posts using min. One-inch long, heavy-duty wire staples or tie wires. Eight inches of the fabric shall be extended into the trench. The fabric shall not be stapled to existing trees.
4. The 6 inch by 6 inch trench shall be backfilled and the soil compacted over the textile unless a slicing machine is used.

MAINTENANCE:

1. Inspect on a daily basis or as necessary.
2. Any damage shall be repaired immediately.
3. Sediment must be removed when it reaches 6 inches high on the fence.
4. If geotextile has deteriorated due to ultraviolet breakdown, it shall be replaced.
5. Silt fence shall be removed when it has served its useful purpose, but not before the upslope area has been permanently stabilized.

PERIMETER CONTROL



PERIMETER CONTROL

GRASS BUFFER STRIP

DESCRIPTION:

These are wide strips of undisturbed vegetation consisting of grass or other erosion resistant plants surrounding the disturbed site. They provide infiltration, intercept sediment and other pollutants, and reduce stormwater flow and velocity. They can also act as a screen for visual pollution and reduce construction noise.

PLANNING CONSIDERATIONS:

Grass strips should be fenced off prior to construction. Avoid storing debris from clearing and grubbing, and other construction waste material in these strips during construction.

DESIGN CRITERIA:

The minimum length of strip must be at least as long as the contributing runoff area. The minimum width should conform to Table below.

MINIMUM WIDTHS OF FILTER STRIPS

SLOPE OF LAND %	WIDTH OF FILTER STRIP FOR GRASSED AREAS (FT)
0	10
2	12
4	14
6	16
8	18
10	20
15	25

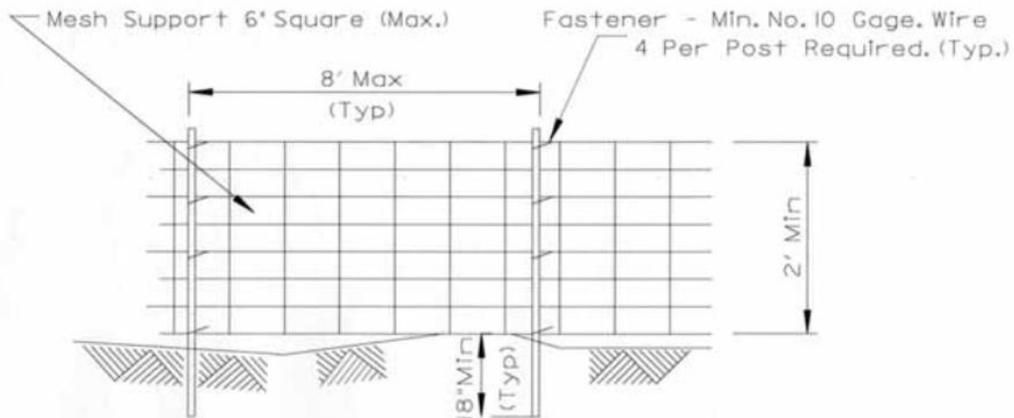
INSPECTION AND MAINTENANCE

1. Maintain moist soil conditions immediately after seeding and/or sod installation.
2. Maintain moist soil conditions throughout vegetation establishment period.
3. Sediment deposits should be removed after each storm event.

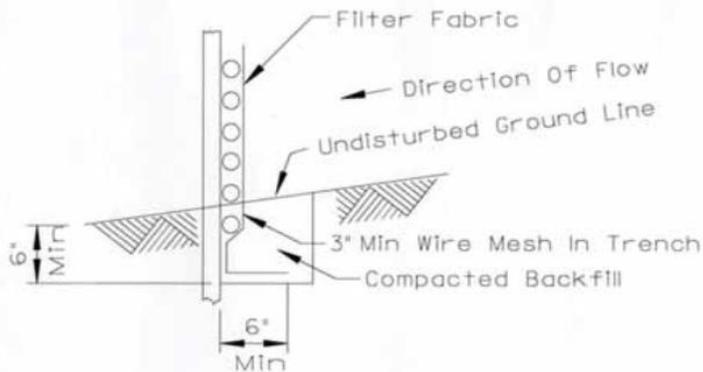
PERIMETER CONTROL

SUPER SILT FENCE

PERIMETER BARRIER - SILT FENCE WITH WIRE SUPPORT DETAIL



ELEVATION



FABRIC ANCHOR DETAIL

NOTES:

1. Wires of mesh support shall be min. gage no. 12.
2. Temporary sediment fence shall be installed prior to any grading work in the area to be protected. They shall be maintained throughout the construction period and removed in conjunction with the final grading and site stabilization.
3. Filter fabric shall meet the requirements of material specification 592 Geotextile Table 1 or 2, Class I with equivalent opening size of at least 30 for nonwoven and 50 for woven.
4. Fence posts shall be either standard steel post or wood post with a minimum cross-sectional area of 3.0 sq. in.

PERIMETER CONTROL

SUPER SILT FENCE NOTES:

INSTALLATION:

1. Silt fence shall be a minimum of 24 inches above the original ground surface and shall not exceed 36 inches above ground surface.
2. Excavate a trench approximately 6 inches wide and 6 inches deep on the upslope side of the proposed location of the fence. A slicing machine may be used in lieu of trenching.
3. Posts shall be placed a maximum of 5 feet apart. Fabric shall be fastened securely to the upslope side of posts using min. One-inch long, heavy-duty wire staples or tie wires. Eight inches of the fabric shall be extended into the trench. The fabric shall not be stapled to existing trees.
4. The 6 inch by 6 inch trench shall be backfilled and the soil compacted over the textile unless a slicing machine is used.

MAINTENANCE:

1. Inspect on a daily basis or as necessary.
2. Any damage shall be repaired immediately.
3. Sediment must be removed when it reaches 6 inches high on the fence.
4. If geotextile has deteriorated due to ultraviolet breakdown, it shall be replaced.
5. Silt fence shall be removed when it has served its useful purpose, but not before the upslope area has been permanently stabilized.

INLET PROTECTION

WELDED WIRE INLET PROTECTION

WELDED WIRE / MONOFILAMENT INLET PROTECTORS



SPECIFICATIONS

Description: Inlet protector shall consist of three (3) parts:

1. 36" wide geotextile fabric shall be Mirafi® FF101. Mirafi® FF101 is composed of high-tenacity monofilament polypropylene yarns, which are woven into a stable network such that the yarns retain their relative position. FF101 is inert to biological degradation and resistant to naturally encountered chemicals, alkalis, and acids.
2. 6" x 6" welded wire mesh geotextile composite, shall be 30" tall, formed and secured into a 42" minimum diameter circle.
3. Fastening rings shall be constructed of wire conforming to ASTM A-641, A-809, A-370, and A-938.

Assembly

Geotextile shall be wrapped three inches over the top member of the 6" x 6" welded wire mesh and secured with fastening rings at six inches on center. Geotextile shall be secured to the sides of the welded wire mesh with fastening rings at a spacing of one per square foot. The fastening rings shall penetrate both layers of geotextile and securely close around a steel member.

Geotextile

Mechanical/ Physical Properties	Description/Minimum Average Roll Values	Test Method
Structure	Woven Monofilament	
Polymer	Polypropylene	
U.V. Resistance (@ 500hrs)	80% Strength Retained	ASTM D4355
Permeivity	2.9 Sec-1	ASTM D4491
Flow Rate	100 gpm/ft ²	ASTM D4491
Grab Tensile Strength (md)	130 lbs	ASTM D4632
AOS (U.S. Sieve)	30	ASTM D4751
Mullen Burst Strength	175 psi	ASTM D3786
Color	Orange or Black	

Welded Wire Mesh

6" x 6" welded wire mesh shall be formed of 10 gauge steel conforming to ASTM A-185.

SILT FENCE FABRICATORS, LLC
PHONE: (317) 888-0599

P.O. BOX 36

GREENWOOD, IN 46142
Rev. 2/12/05

INLET CONTROL

WELDED WIRE INLET PROTECTION NOTES:

MAINTENANCE:

1. Excavate a trench approximately 6 inches wide and 6 inches deep the proposed location of the inlet protector.
2. The 6 inch by 6 inch trench shall be backfilled and the soil compacted over the textile

MAINTENANCE:

1. Inspect on a daily basis or as necessary.
2. Any damage shall be repaired immediately.
3. Sediment must be removed when it reaches 6 inches high on the basket.
4. If geotextile has deteriorated due to ultraviolet breakdown, it shall be replaced.
5. Inlet protector shall be removed when it has served its useful purpose, but not before the upslope area has been permanently stabilized.

INLET PROTECTION

INLET FILTER PROTECTOR

IPP INLET FILTERS

IDOT Type 1 Round Inlet Filter Depicted

NOTE: Round and Square/Rectangular Inlet Filters Available for most Neenah and East Jordan Beehive, Roll Curb and Curb Box Frame Types

LIFT HANDLES

OVERFLOW FEATURE

GALVANIZED STEEL FRAME

STAINLESS STEEL LOCKING BAND

GEOTEXTILE FILTER BAG WITH REINFORCED POLYESTER OUTER MESH

INLET FILTER SPECIFICATION

Note: Inlet Filters are slightly smaller than the inlet grate sizes. When identifying or specifying filters/castings please refer to the diameter "D" or width "W" and height "H" of filter frames or casting grates. You may also refer to our casting cross reference guide for IDOT standards.

All Products Manufactured by Inlet & Pipe Protection, Inc
www.inletfilters.com
 (847) 722-0690 ph
 (847) 364-5262 fx
sales@inletfilters.com

**** Certification: All IPP Inlet Filters conform to IDOT Specifications as outlined in Article 1081.15 of IDOT's Standard Specifications Guide**

INLET PROTECTION

INLET FILTER PROTECTOR

THE FOLLOWING PRODUCTS ARE
APPROVED FOR INLET PROTECTION

IPP INLET FILTERS

3535 Stackinghay
Naperville, IL 60564
847-722-0690 Telephone
847-364-5262 Fax

www.inletfilters.com

CATCH-ALL INLET PROTECTOR
MARATHON MATERIALS, INC.

25523 WEST SCHULTZ STREET
PLAINFIELD, ILLINOIS 60544
(630) 983-9494 Tel
(800) 983-9493 Toll Free
(630) 983-9580 Fax

www.marathonmaterials.com

OTHER PRODUCTS CAN BE SUBMITTED
FOR REVIEW AND APPROVAL

INLET PROTECTION

INLET FILTER PROTECTORS

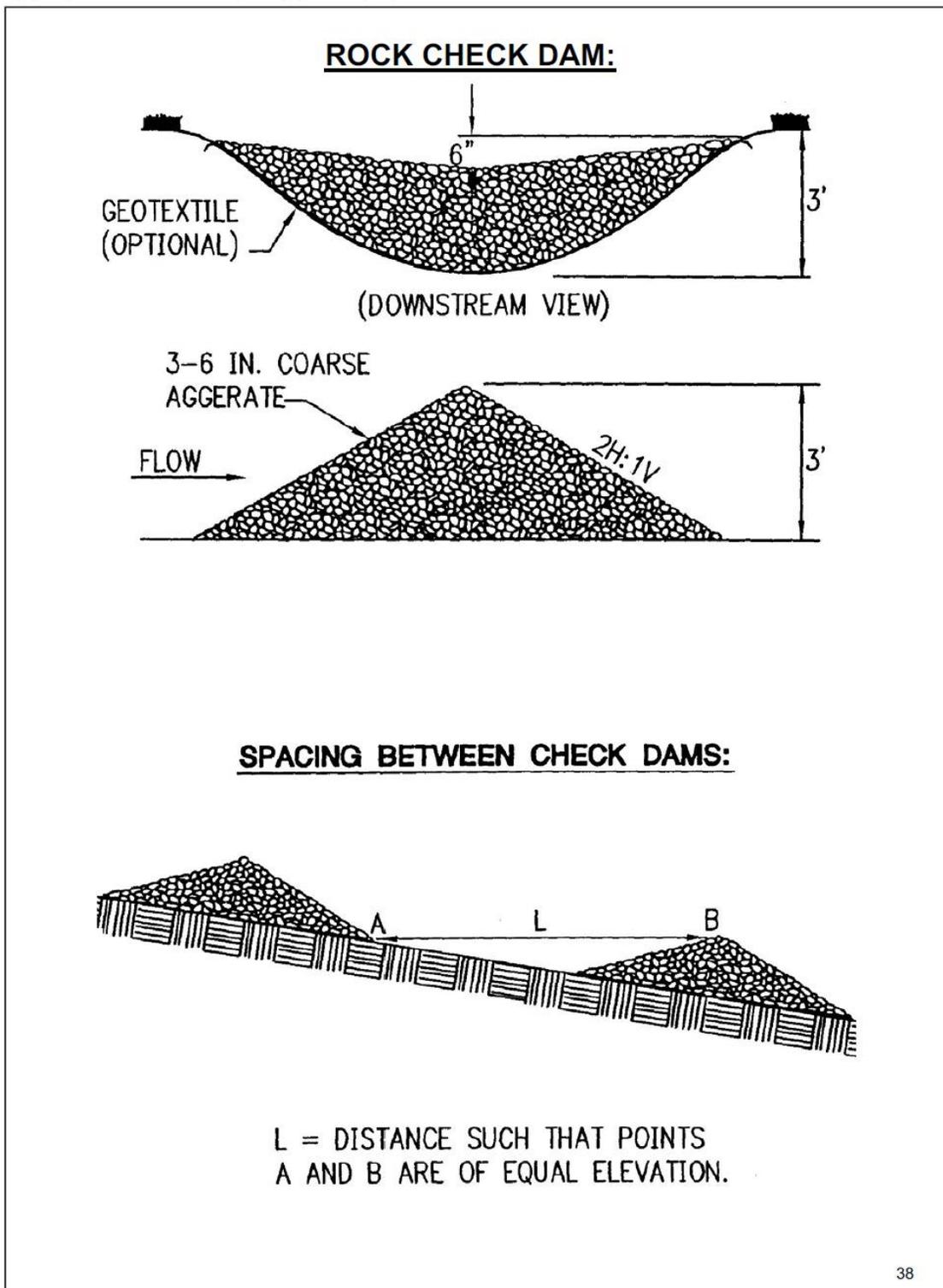
INSTALLATION:

All inlet filter protectors shall be installed in accordance with manufacturer's instructions.

MAINTENANCE

1. Inspect on a daily basis or as necessary.
2. Any damage to products shall be repaired immediately.
3. Sediment must be removed when it reaches 1/3 the height of the product.
4. Inlet protection shall be removed when it has served its useful purpose, but not before upslope area has been permanently stabilized.

CONCENTRATED FLOW CONTROLS



SOURCE: MODIFIED ILLINOIS URBANA MANUAL, 1995

CONCENTRATED FLOW CONTROLS

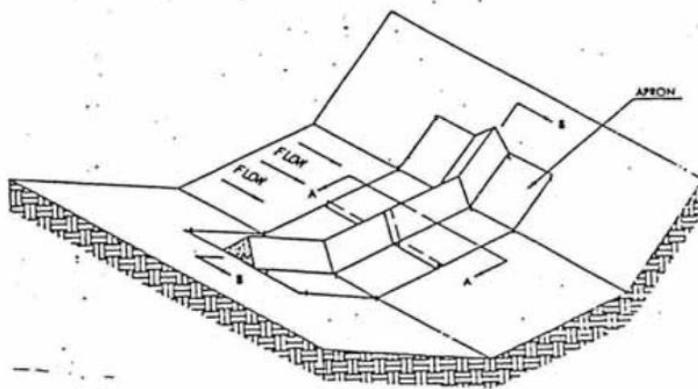
ROCK CHECK DAM:

NOTES:

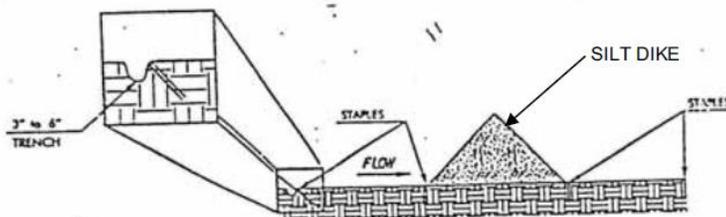
1. The maximum height of the dam shall be 3.0 feet.
2. The center of the check dam must be at least 6 inches lower than the outer edges.
3. For added stability, the base of the check dam can be keyed into the soil approximately 6 inches.
4. The dams should be spaced so the toe of the upstream dam is at the same elevation as the top of the downstream dam.
5. Stone should be placed according to the detail. Hand or Mechanical placement will be necessary to achieve complete coverage of the ditch or swale and to ensure that the center of the dam is lower than the edges.
6. Geotextile may be used under the stone to provide a stable foundation and to facilitate removal of the stone.
7. Check dams should be inspected for sediment accumulation after each runoff producing storm event. Sediment should be removed when it reaches half of the original height of the measure.
8. Regular inspection should be made to ensure that the center of the dam is lower than the edges. Erosion caused by high flows around the edges of the dam should be corrected immediately.

CONCENTRATED FLOW CONTROLS

TRIANGULAR SILT DIKE:
TRIANGULAR SILT DIKE INSTALLATION
FOR
ROADWAY DITCH OR DRAINAGE DITCH

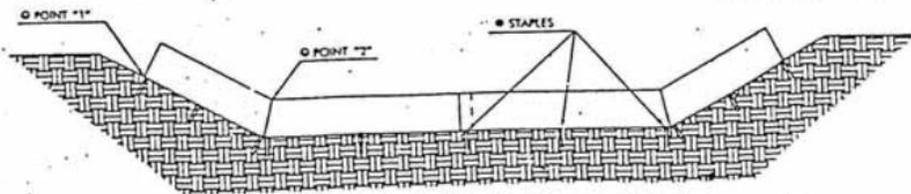


SILT DIKE UNIT
CUT SECTION



DETAIL A-A

• STAPLES SHALL BE PLACED WHERE THE UNITS OVERLAP AND IN THE CENTER OF THE 7" UNIT AS SHOWN ON THE DIAGRAM.



DIKE SECTION
DETAIL B-B

POINT #1 MUST BE HIGHER THAN POINT #2 TO ENSURE THAT WATER FLOWS OVER THE DIKE AND NOT AROUND THE ENDS.

CONCENTRATED FLOW CONTROLS

TRIANGULAR SILT DIKE NOTES:

INSTALLATION:

1. Excavate a trench approximately 3-6 inches wide and 3-6 inches deep on the upslope side of the proposed location of the dike.
2. The 3-6 inch by 3-6 inch trench shall be backfilled and the soil compacted over the textile .

MAINTENANCE:

1. Inspect on a daily basis or as necessary.
2. Any damage shall be repaired immediately.
3. Sediment must be removed when it reaches 6 inches high on the dike.
4. If geotextile has deteriorated due to ultraviolet breakdown, it shall be replaced.
5. Dike shall be removed when it has served its useful purpose, but not before the upslope area has been permanently stabilized.

CONCENTRATED FLOW CONTROLS

DIVERSION BERMS:

TEMPORARY RIGHT-OF-WAY DIVERSIONS

TEMPORARY FILL DIVERSION NOTES:

1. THE DIVERSION SHALL BE CONSTRUCTED AT THE TOP OF THE FILL AT THE END OF EACH WORK DAY AS NEEDED.
2. THE DIVERSION SHALL BE LOCATED AT LEAST 2 FEET INSIDE THE TOP EDGE OF THE FILL.
3. THE SUPPORTING RIDGE SHALL BE CONSTRUCTED WITH A UNIFORM HEIGHT ALONG ITS ENTIRE LENGTH. WITHOUT UNIFORM HEIGHT, THE FILL DIVERSION MAY BE SUSCEPTIBLE TO BREACHING.

RIGHT-OF-WAY DIVERSION DETAIL NOTES:

1. THE DIVERSION SHALL BE INSTALLED AS SOON AS THE RIGHT-OF-WAY HAS BEEN CLEARED AND/OR GRADED.
2. ALL EARTHEN DIVERSIONS SHALL BE MACHINE- OR HAND-COMPACTED IN 8-INCH LIFTS.
3. THE OUTLET OF THE DIVERSION SHALL BE LOCATED ON AN UNDISTURBED AND STABILIZED AREA WHEN AT ALL POSSIBLE. THE FIELD LOCATION SHOULD BE ADJUSTED AS NEEDED TO UTILIZE A STABILIZED OUTLET.
4. EARTHEN DIVERSIONS WHICH WILL NOT BE SUBJECT TO CONSTRUCTION TRAFFIC SHOULD BE STABILIZED IN ACCORDANCE WITH TEMPORARY SEEDING.

DIVERSION DETAIL NOTES:

1. ALL TREES, BRUSH, STUMPS, OBSTRUCTIONS, AND OTHER OBJECTIONABLE MATERIAL SHALL BE REMOVED AND DISPOSED OF SO AS NOT TO INTERFERE WITH THE PROPER FUNCTIONING OF THE DIVERSION.
2. THE DIVERSION SHALL BE EXCAVATED OR SHAPED TO LINE, GRADE, AND CROSS-SECTION AS REQUIRED TO MEET THE CRITERIA SPECIFIED HEREIN, FREE OF IRREGULARITIES WHICH WILL IMPEDE FLOW.
3. FILLS SHOULD BE COMPACTED AS NEEDED TO PREVENT UNEQUAL SETTLEMENT THAT WOULD CAUSE DAMAGE IN THE COMPLETED DIVERSION. FILL SHALL BE COMPOSED OF SOIL WHICH IS FREE FROM EXCESSIVE ORGANIC DEBRIS, ROCKS OR OTHER OBJECTIONABLE MATERIALS.
4. ALL EARTH REMOVED AND NOT NEEDED IN CONSTRUCTION SHALL BE SPREAD OR DISPOSED OF SO THAT IT WILL NOT INTERFERE WITH THE FUNCTIONING OF THE DIVERSION.
5. PERMANENT STABILIZATION OF DISTURBED AREAS SHALL BE DONE IN ACCORDANCE WITH SECTION 2151.

TEMPORARY FILL DIVERSION
NOT TO SCALE

TEMPORARY DIVERSION DIKE
NOT TO SCALE

SOURCE: APWA KANSAS CITY METRO CHAPTER

CONCENTRATED FLOW CONTROLS

TURF REINFORCEMENT MAT:

TURF REINFORCEMENT MAT SLOPE INSTALLATION NOTES:

A) TURF REINFORCEMENT MAT:

1. THE MAJORITY OF THESE PRODUCTS PROVIDE A THREE DIMENSIONAL GEOMATRIX OF NYLON, POLYETHYLENE, OR RANDOMLY ORIENTED MONOFILAMENTS, FORMING A MAT. THESE PRODUCTS CONTAIN ULTRA VIOLET (UV) INHIBITTING STABILIZERS, ADDED TO THE COMPOUNDS TO ENSURE ENDURANCE AND PROVIDE PERMANENT ROOT REINFORCEMENT. THE MATS MUST BE INSTALLED WITH THE MATS LAYING AN THE FACE REGION IS ALLOWED TO FILL WITH SOIL. THE ROOTS OF THE GRASS PLANTS BECOMES ESTABLISHED WITHIN THE MAT ITSELF, FORMING A STRENGTHENING ROOT AND MAT SYSTEM. AS THE GRASS BECOMES ESTABLISHED, THE TWO ACTUALLY REINFORCE EACH OTHER PREVENTING MOVEMENT OR DAMAGE TO THE SOIL. SOIL VELOCITIES ARE INCREASED CONSIDERABLES IN OTHER INSTALLED TURF STANDS. ADVANCE TO THE APPROPRIATE LAYING TECHNIQUES ARE INCREASED CONSIDERABLES IN OTHER INSTALLED TURF STANDS. IN THE SUCCESS OF THIS PRACTICE CONSULTATION WITH THE SUPPLIER OR THE MANUFACTURER AND THROUGH AN EVALUATION OF PERFORMANCE DATA TO ENSURE PROPER SELECTION OF SOIL STABILIZATION MATTING ARE ALSO ESSENTIAL. ALTHOUGH MANY MANUFACTURERS CLAIM THEIR PRODUCTS MAY INHIBIT EROSION ASSOCIATED WITH CHANNEL VELOCITIES OF UP TO 20 FT./SEC., IT IS RECOMMENDED THAT ANY VELOCITIES THAT EXCEED 10 FT./SEC. BE PROPERLY PREVENTED WITH SOME FORM OF STRUCTURAL LINING.

B) INSTALLATION REQUIREMENTS:

1. **SITE PREPARATION:**
AFTER SITE HAS BEEN SHAPED AND GRADED TO APPROVED DESIGN, PREPARE A FRIABLE SEEDBED RELATIVELY FREE FROM CLODS AND ROCKS MORE THAN 1-INCH IN DIAMETER, AND ANY FOREIGN MATERIAL THAT WILL PREVENT CONTACT OF THE SOIL STABILIZATION MAT WITH THE SOIL SURFACE. IF NECESSARY, REDIRECT ANY RUNOFF AWAY FROM THE DITCH OR SLOPE DURING INSTALLATION.
2. **PLANTING:**
LIME, FERTILIZE AND SEED IN ACCORDANCE WITH THE APPROVED PLAN, PAYING SPECIAL ATTENTION TO THE PLANT SELECTION THAT MAY HAVE BEEN CHOSEN FOR THE MATTED AREA. IF THE AREA HAS BEEN SEEDED PRIOR TO INSTALLING THE MAT, MAKE SURE AND RESEED ALL AREAS DISTURBED DURING INSTALLATION.
3. **LAYING AND SECURING:**
SIMILAR TO INSTALLING OTHER EROSION CONTROL BLANKETS, BUT PLAN APPROVING AUTHORITY'S REQUIREMENTS OR MANUFACTURER'S RECOMMENDATIONS MUST BE FOLLOWED AS DETAILED. THE KEY TO ACHIEVING DESIRED PERFORMANCE IS DEPENDENT UPON PROPER INSTALLATION.
4. **CHECK SLOTS:**
BLANKET MANUFACTURERS VARY SIGNIFICANTLY IN THEIR CHECK SLOT REQUIREMENTS. SIMILAR TO THE INSTALLATION OF OTHER BLANKETS, A CHECK SLOT MAY BE REQUIRED WHEN LAYING TURF REINFORCEMENT MAT TO "CORRECT" THE FLOW OF WATER IF IT HAS THE POTENTIAL, TO UNDERMINE THE BLANKET. MOST AUTHORITIES REQUIRE THAT THE SIDES OF THE BLANKET ALSO BE ENTRENCHED, CREATING A SLOPE SHELF FOR THE MATERIAL TO REST ON, PREVENTING WATER FROM ENTERING UNDER THE BLANKET ON THE SIDES.
5. **SECURING THE MATERIAL AND JOINING BLANKETS:**
AGAIN, PRODUCT SPECIFICATIONS VARY - UPSTREAM AND DOWNSTREAM TERMINAL SLOTS, NEW ROLL OVERLAPS AND MULTIPLE WIDTH INSTALLATIONS DIFFER BY VARIOUS PRODUCTS AND MANUFACTURERS.
6. **FINAL CHECK:**
THESE INSTALLATION TECHNIQUES MUST BE ADHERED TO:
 - a. SOIL STABILIZATION BLANKET IS IN UNIFORM CONTACT WITH THE SOIL
 - b. ALL REQUIRED SLOTS AND LAPPED JOINTS ARE IN PLACE.
 - c. THE MATERIAL IS PROPERLY ANCHORED.
 - d. ALL DISTURBED AREAS ARE SEED.

TURF REINFORCEMENT MAT INSTALLATION ON A SLOPE

NOTES:

1. SOIL STABILIZATION SHOULD BE INSTALLED VERTICALLY DOWNSLOPE FOR BEST RESULTS.
2. SLOPE SURFACE SHALL BE SMOOTH AND FREE OF ROCKS, LUMPS OF DIRT, GRASS AND STICKS. MAT SHALL BE PLACED FLAT ON SURFACE FOR PROPER SOIL CONTACT.

TOE
MAINTAIN SLOPE ANGLE

BERM
NOT TO SCALE
TRENCH INTO BERM AND PROGRESS DOWNSLOPE

FILL SLOPE SECTION
NOT TO SCALE

SLOPE LINING (WET SLOPE)
NOT TO SCALE

SLOPE LINING (DRY SLOPE)
NOT TO SCALE

SOIL
TURF REINFORCEMENT MAT
POLYPROPYLENE
NON-WOVEN
(NEEDLE PUNCHED)
GEOTEXTILE FILTER
CLOTH (BEHIND TURF
REINFORCEMENT MAT)

NETEEL TABLE

TOP OF CUT SLOPE
TURF REINFORCEMENT MAT
BOTTOM OF CUT SLOPE
BOTTOM OF FILL SLOPE
BOTTOM OF CUT SLOPE

BREAK POINT OR SHOULDER

4\"/>

SOURCE: APWA KANSAS CITY METRO CHAPTER

SOURCE: MODIFIED FROM VA, DEC. 1982

CONCENTRATED FLOW CONTROLS

TURF REINFORCEMENT MAT:

TURF REINFORCEMENT MAT CHANNEL INSTALLATION NOTES:

A) TURF REINFORCEMENT MAT:

1. THE MAJORITY OF THESE PRODUCTS PROVIDE A THREE DIMENSIONAL GEOMATRIX OF NYLON, POLYETHYLENE, OR RANDOMLY ORIENTED MONOFILAMENTS, FORMING A MAT. THESE PRODUCTS CONTAIN ULTRA VIOLET (UV) INHIBITING STABILIZERS, ADDED TO THE COMPOUNDS TO ENSURE ENDOURANCE AND PROVIDE "PERMANENT ROOT REINFORCEMENT." THE THREE DIMENSIONAL FEATURE CREATES AN OPEN SPACE WHICH IS ALLOWED TO FILL WITH SOIL. THE ROOTS OF THE GRASS PLANT BECOME ESTABLISHED WITHIN THE MAT ITSELF, FORMING A SYNERGISTIC ROOT AND MAT SYSTEM. AS THE GRASS BECOMES ESTABLISHED, THE TWO ACTUALLY "REINFORCE" EACH OTHER, PREVENTING MOVEMENT OR DAMAGE TO THE SOIL. ALLOWABLE VELOCITIES ARE INCREASED CONSIDERABLY OVER NATURAL TURF STANDS. SELECTION OF THE APPROPRIATE MATTING MATERIALS ALONG WITH PROPER INSTALLATION BECOME CRITICAL FACTORS IN THE SUCCESS OF THIS PRACTICE. CONSULTATION WITH THE SUPPLIER OR THE MANUFACTURER AND THOROUGH EVALUATION OF PERFORMANCE DATA TO ENSURE PROPER SELECTION OF A SOIL STABILIZATION MATTING ARE ALSO ESSENTIAL. ALTHOUGH MANY MANUFACTURERS CLAIM THEIR PRODUCTS MAY INHIBIT EROSION ASSOCIATED WITH CHANNEL VELOCITIES OF UP TO 20 FT./SEC. FOR SHORT PERIODS OF TIME, IT IS RECOMMENDED THAT ANY VELOCITIES THAT EXCEED 10 FT./SEC. BE PROPERLY ARMORED WITH SOME FORM OF STRUCTURAL LINING.

B) INSTALLATION REQUIREMENTS:

- SITE PREPARATION:**
AFTER SITE HAS BEEN SHAPED AND GRADED TO APPROVED DESIGN, PREPARE A FRAGILE SEEDBED RELATIVELY FREE FROM STONES AND FOREIGN MATERIAL. IN DIVERTED, AND ANY FOREIGN MATERIAL THAT WILL PREVENT CONTACT OF THE SOIL STABILIZATION MAT WITH THE SOIL SURFACE. IF NECESSARY, REDIRECT ANY RUNOFF AWAY FROM THE DITCH OR SLOPE DURING INSTALLATION.
- PLANTING:**
LIME, FERTILIZER AND SEED IN ACCORDANCE WITH THE APPROVED PLAN. PAYING SPECIAL ATTENTION TO THE PLANT SELECTION THAT MAY HAVE BEEN CHOSEN FOR THE MATTED AREA. IF THE AREA HAS BEEN SEEDED PRIOR TO INSTALLING THE MAT, MAKE SURE AND RESEED ALL AREAS DISTURBED DURING INSTALLATION.
- LAYING AND SECURING:**
SIMILAR TO INSTALLING OTHER EROSION CONTROL BLANKETS, BUT PLAN APPROVING AUTHORITY'S REQUIREMENTS OR MANUFACTURER'S RECOMMENDATIONS MUST BE FOLLOWED AS DETAILED. THE KEY TO ACHIEVING DESIRED PERFORMANCE IS DEPENDENT UPON PROPER INSTALLATION.
- CHECK SLOTS:**
BLANKET MANUFACTURERS VARY SIGNIFICANTLY IN THEIR CHECK SLOT REQUIREMENTS. SIMILAR TO THE INSTALLATION OF OTHER BLANKETS, A CHECK SLOT MAY BE REQUIRED WHEN LAYING TURF REINFORCEMENT MAT TO "CORRECT" THE FLOW OF WATER IF IT HAS THE POTENTIAL TO UNDERMINE THE BLANKET. MOST AUTHORITIES REQUIRE THAT THE SIDES OF THE BLANKET ALSO BE ENTRENCHED, CREATING A SLOPE SHELF FOR THE MATERIAL TO REST ON, PREVENTING WATER FROM ENTERING UNDER THE BLANKET ON THE SIDES.
- SECURING THE MATERIAL AND JOINING BLANKETS:**
AGAIN, PRODUCT SPECIFICATIONS VARY - UPSTREAM AND DOWNSTREAM TERMINAL SLOTS, NEW ROLL OVERLAPS AND MULTIPLE WIDTH INSTALLATIONS DIFFER BY VARIOUS PRODUCTS AND MANUFACTURERS.
- FINAL CHECK:**
THESE INSTALLATION TECHNIQUES MUST BE ADHERED TO:
 - SOIL STABILIZATION BLANKET IS IN UNIFORM CONTACT WITH THE SOIL
 - ALL REQUIRED SLOTS AND LAPPED JOINTS ARE IN PLACE
 - THE MATERIAL IS PROPERLY ANCHORED.
 - ALL DISTURBED AREAS ARE RESTORED.

TURF REINFORCEMENT MAT INSTALLATION IN A CHANNEL:

SOIL STABILIZATION BLANKET SHALL BE USED IN CONJUNCTION WITH RIPRAP AT OUTLET END OF PIPE

ENTRENCH EDGES OF MATERIAL 6"

NOTE: CHECK SLOTS TO BE CONSTRUCTED AS PER MANUFACTURER'S RECOMMENDATIONS.

UPSTREAM AND DOWNSTREAM TERMINAL NOT TO SCALE

TRANSVERSE CLOSED CHECK SLOT

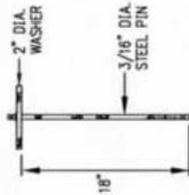
TRANSVERSE OPEN CHECK SLOT

SOURCE: APWA KANSAS CITY METRO CHAPTER

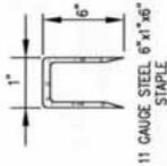
CONCENTRATED FLOW CONTROLS

TURF REINFORCEMENT MAT:

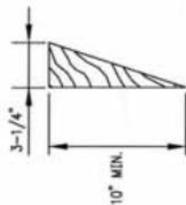
- STAKES, STAPLES, AND PINS NOTES:**
- A) GENERAL NOTES:**
1. 1/4 TRIANGULAR SURVEY STAKE - MINIMUM 10" IN LENGTH. PLACEMENT OF THE STAKE ACROSS THE FLOW OF THE WATER IS THOUGHT TO PROVIDE A "PINBALL EFFECT" TO HELP SLOW THE VELOCITY.
 2. 11 GAUGE STEEL - MINIMUM 1" WIDE BY 6" IN LENGTH STEEL STAPLE - 2"x6" STAPLE MAY BE REQUIRED IN CERTAIN SOIL CONDITIONS.
 3. STEEL PINS - 3/16 DIAMETER STEEL PIN BY 18" IN LENGTH WITH A 2" DIAMETER WASHER ON TOP. (SEE ILLUSTRATION)
 4. STAPLES OR ANCHORING METHODS AND RECOMMENDATIONS VARY BY MANUFACTURERS. THE EXPECTATIONS OF HIGH VELOCITIES SHOULD DICTATE THE USE OF MORE SUBSTANTIAL ANCHORING.



3. PIN
SEE NOTE 3



2. STAPLE
SEE NOTE 2



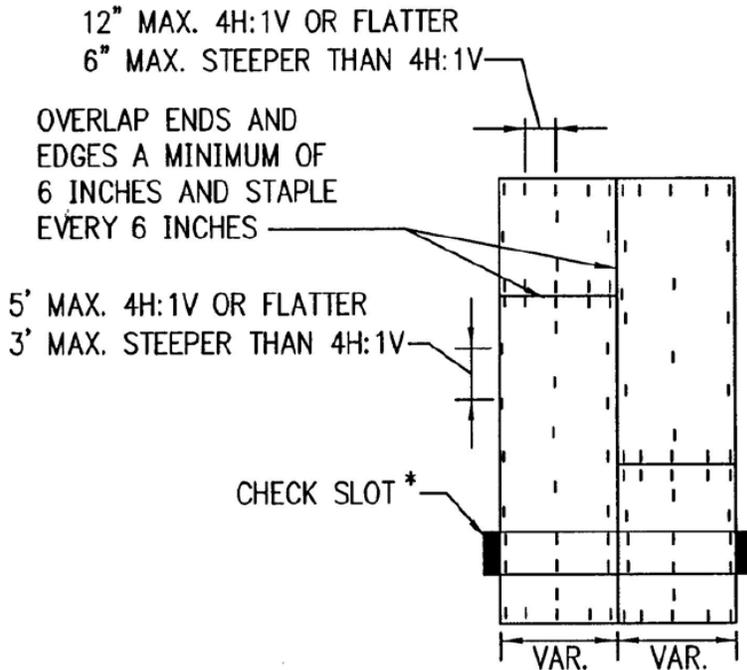
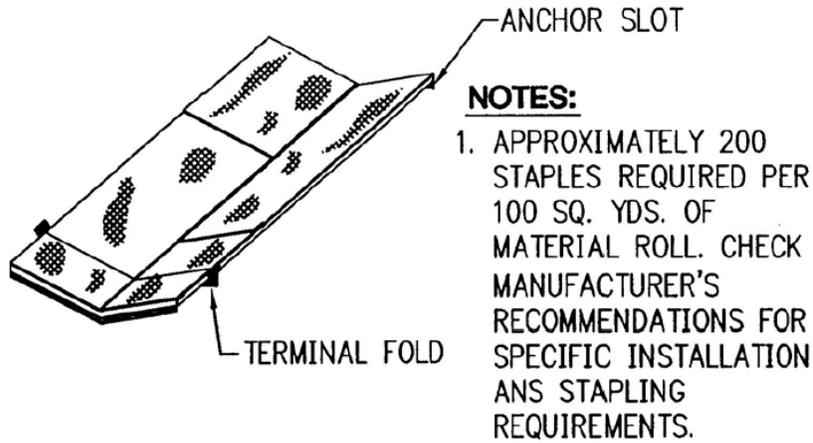
1. STAKE
SEE NOTE 1

**STAKES, STAPLES, AND PINS
FOR INSTALLATION OF
ROLLED EROSION CONTROL PRODUCTS**
NOT TO SCALE

SOURCE: APWA KANSAS CITY METRO CHAPTER

CONCENTRATED FLOW CONTROLS

EROSION CONTROL BLANKET



PLAN VIEW
STAPLING DIAGRAM:

* CHECK SLOTS AT MIN. 50' INTERVALS; NOT REQ'D WITH ALL "COMBINATION" BLANKETS.

SOURCE: MODIFIED ILLINOIS URBANA MANUAL, 1995

CONCENTRATED FLOW CONTROLS

**TYPICAL ORIENTATION OF
EROSION CONTROL BLANKET**

SHALLOW SLOPE:



ON SHALLOW SLOPES, STRIPS OF PROTECTIVE COVERINGS MAY BE APPLIED PARALLEL TO DIRECTION OF FLOW.

BERM:



WHERE THERE IS A BERM AT THE TOP OF THE SLOPE, BRING THE MATERIAL OVER THE BERM AND ANCHOR IT BEHIND THE BERM.

STEEP SLOPE:



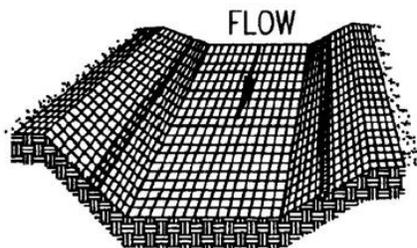
ON STEEP SLOPES, APPLY PROTECTIVE COVERING PERPENDICULAR TO THE DIRECTION OF FLOW AND ANCHOR SECURELY.

STEEP SLOPE:



BRING MATERIAL DOWN TO A LEVEL AREA BEFORE TERMINATING INSTALLATION. TURN THE END UNDER 4" AND STAPLE AT 12" INTERVALS.

DITCH:



IN DITCHES, APPLY PROTECTIVE COVERING PARALLEL TO THE DIRECTION OF FLOW. AVOID JOINING MATERIAL IN THE CENTER OF THE DITCH IF AT ALL POSSIBLE.

SOURCE: MODIFIED ILLINOIS URBANA MANUAL, 1995

CONCENTRATED FLOW CONTROLS

EROSION CONTROL BLANKET

LAYING AND STAPLING:

Place the erosion control blanket on a friable seedbed free of clods, rocks, and roots that might impede good contact.

1. Start placing the protective covering from the top of the channel or slope and unroll down-grade.
2. Allow to rest loosely on soil; do not stretch.
3. Upslope ends of the protective covering should be buried in an anchor slot no less than 6 inches deep. Tamp earth firmly over the material. Staple the material at a minimum of every 12 inches across the top end.
4. Edges of the material shall be stapled every 3 feet. The multiple widths are placed side by side, the adjacent edges shall be overlapped a minimum of 6 inches and stapled together. Staples shall be placed down the center, staggered with the edges at 3 foot intervals.

NOTE:

Study manufacturer's recommendations and site conditions for correct installation and stapling of product.

SOURCE: MODIFIED ILLINOIS URBANA MANUAL, 1995

CONCENTRATED FLOW CONTROLS

EROSION CONTROL BLANKET NOTES (CONTINUED):

JOINING PROTECTIVE COVERINGS:

Insert a new roll of material into an anchor slot as with upslope ends. Overlap the end of the previous roll a minimum of 12 inches, and staple across the end of the roll just below the anchor slot and across the material every 12 inches.

TERMINAL END:

Where the material is discontinued or where the ends under 4 inches, and staple across end every 12 inches.

AT BOTTOM OF SLOPES:

Roll onto a level surface before anchoring, turn ends under 4 inches, and staple across end every 12 inches.

FINAL CHECK:

These installation criteria must be met:

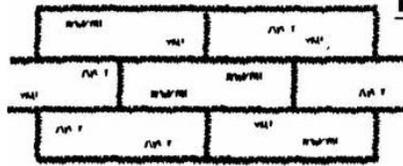
1. Protective blanket is in uniform contact with the soil.
2. All lap joints are secure.
3. All staples are driven flush with the ground.
4. All disturbed areas have been seeded.

MAINTENANCE:

All soil stabilization blankets and matting should be inspected periodically following installation, particularly after storms, to check for erosion and undermining. Any dislocation or failure should be repaired immediately. If washouts or breakage occurs, reinstall the material after repairing damage to the slope or ditch. Continue to monitor these areas until they become permanently stabilized; at that time an annual inspection should be adequate.

CONCENTRATED FLOW CONTROLS

SODDING:



NOTE:

LAY SOD IN A STAGGERED PATTERN. BUTT THE STRIPS TIGHTLY AGAINST EACH OTHER. DO NOT LEAVE SPACES AND DO NOT OVERLAP. A SHARPENED MASON'S TROWEL IS A HANDY TOOL FOR TUCKING DOWN THE ENDS AND TRIMMING PIECES.

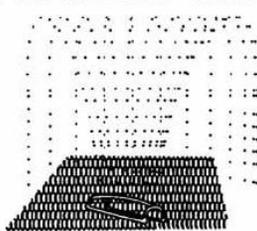
CORRECT

BUTTING:

ANGLED ENDS CAUSED BY THE AUTOMATIC SOD CUTTER MUST BE MATCHED CORRECTLY.



ROLL SOD IMMEDIATELY TO ACHIEVE FIRM CONTACT WITH THE SOIL.

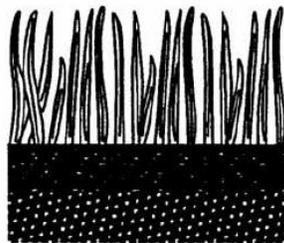


WATER SOD TO A DEPTH OF 4" AS NEEDED. WATER WELL AS SOON AS THE SOD IS INSTALLED.



MOW WHEN THE SOD IS ESTABLISHED - IN 2-3 WEEKS. SET THE MOWER HEIGHT AT 2"-3".

APPEARANCE OF GOOD SOD:



SHOOTS:

GRASS SHOULD BE GREEN AND HEALTHY, MOWED AT A 2"-3" CUTTING HEIGHT.

THATCH:

GRASS CLIPPINGS AND DEAD LEAVES UP TO 1/2" THICK.

ROOT ZONE:

SOIL AND ROOTS SHOULD BE 1/2" - 3/4" THICK WITH DENSE ROOT MAT FOR STRENGTH.

SOURCE: MODIFIED ILLINOIS URBANA MANUAL, 1995

PUMP DISCHARGE FILTER BAG:

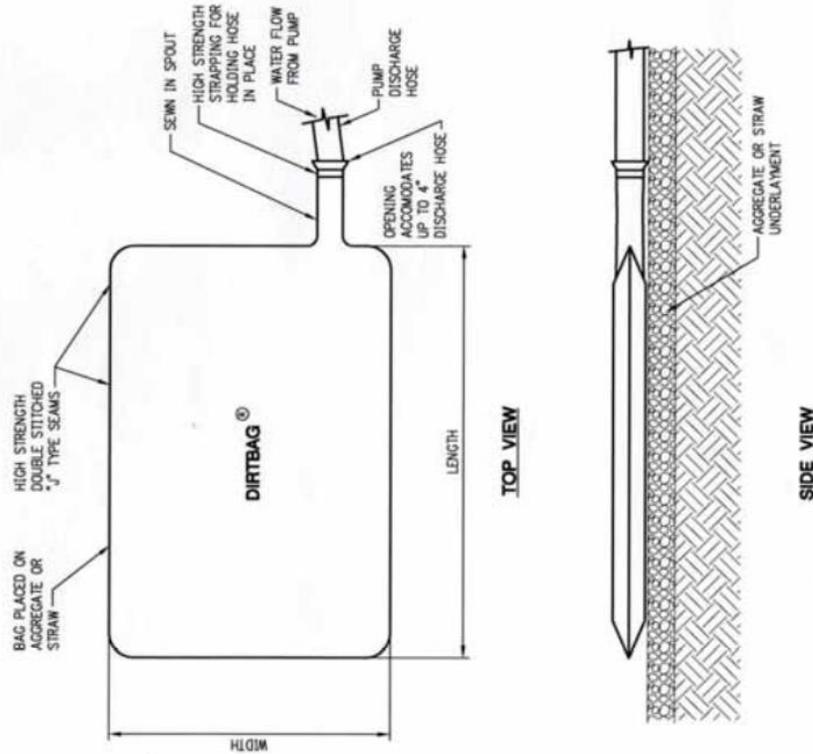
DIRTBAG® PUMP-SILT CONTROL SYSTEM NOTES:

A) GENERAL NOTES:

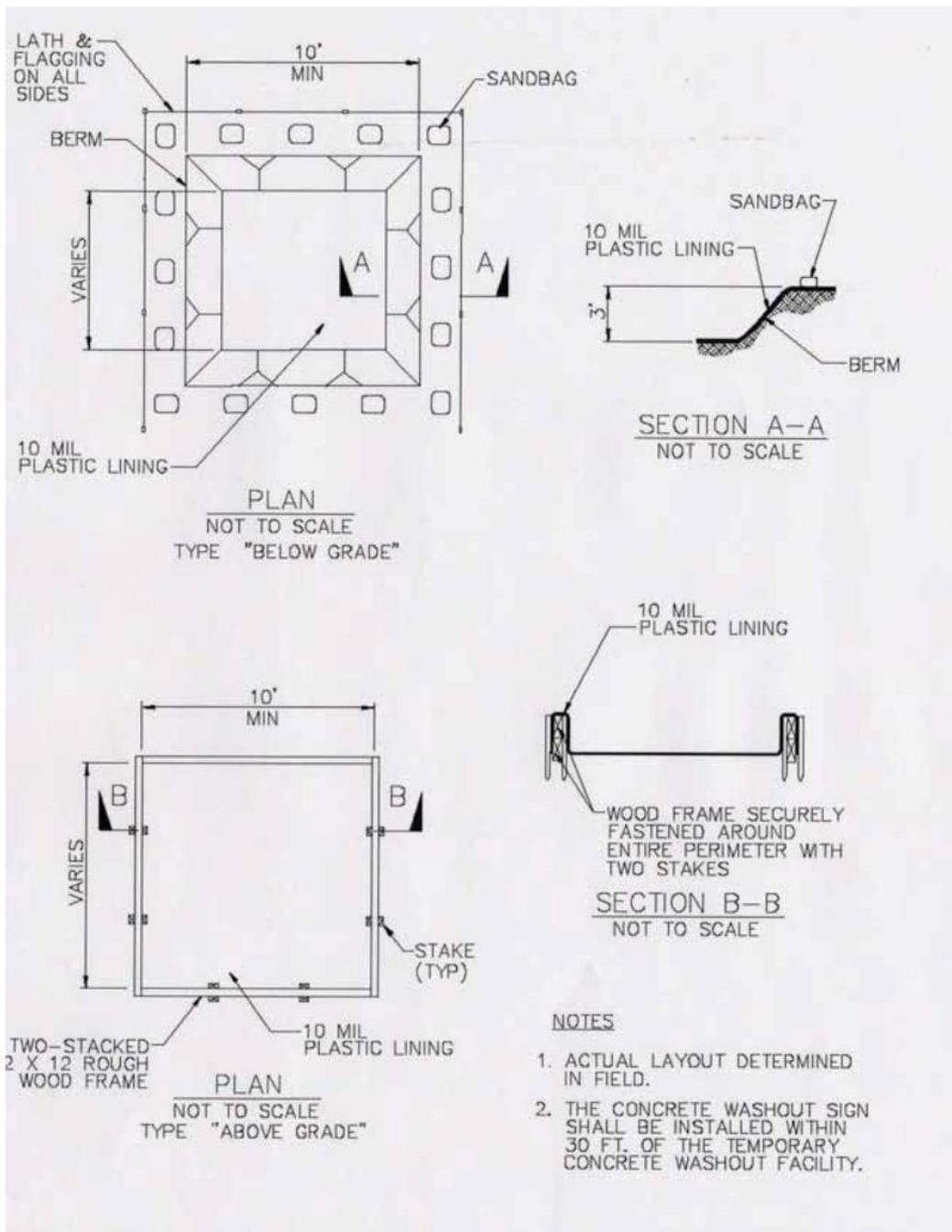
1. THE DIRTBAG® WILL HAVE AN OPENING LARGE ENOUGH TO ACCOMMODATE A 4" DISCHARGE HOSE WITH ATTACHED STRAP TO TIE OFF THE HOSE TO PREVENT THE PUMPED WATER FROM ESCAPING THE DIRTBAG® WITHOUT BEING FILTERED.
2. INSTALL THE DIRTBAG® ON A SLOPE. IT SHOULD BE PLACED SO THE INCOMING WATER FLOWS THROUGH THE DIRTBAG® SHOULD BE TIED OFF TIGHTLY TO STOP THE WATER FROM FLOWING OUT OF THE OPENING WITHOUT BEING FILTERED THROUGH THE FABRIC TO INCREASE THE EFFICIENCY OF THE FILTRATION, THE BAG SHOULD BE PLACED ON AN AGGREGATE BED TO ALLOW WATER TO FLOW THROUGH ALL SURFACES OF THE BAG.
3. DISPOSAL MAY BE ACCOMPLISHED AS DIRECTED BY THE ENGINEER. IF THE SITE ALLOWS, THE DIRTBAG® MAY BE CUT OPEN AND SEEDED, REMOVING THE VISIBLE FABRIC. THE DIRTBAG® IS STRONG ENOUGH TO BE LIFTED IF IT MUST BE HAILED AWAY. IF THE JOBSITE REQUIRES THE DIRTBAG® TO BE RELOCATED FOR DISPOSAL, IT MAY BE HELPFUL TO PLACE THE DIRTBAG® IN THE BACK OF A DUMP TRUCK OR FLATBED PRIOR TO USE, ALLOWING THE WATER TO DRAIN WITH BAG IN PLACE, THEREBY DISMISSING THE NEED TO LIFT THE DIRTBAG®.

B) INSPECTION AND MAINTENANCE:

1. THE DIRTBAG® SHOULD BE CONSIDERED FULL WHEN IT IS IMPRACTICAL FOR THE BAG TO FILTER OUT SEDIMENT AT A REASONABLE RATE, AND SHOULD BE REPLACED WITH A NEW DIRTBAG®.



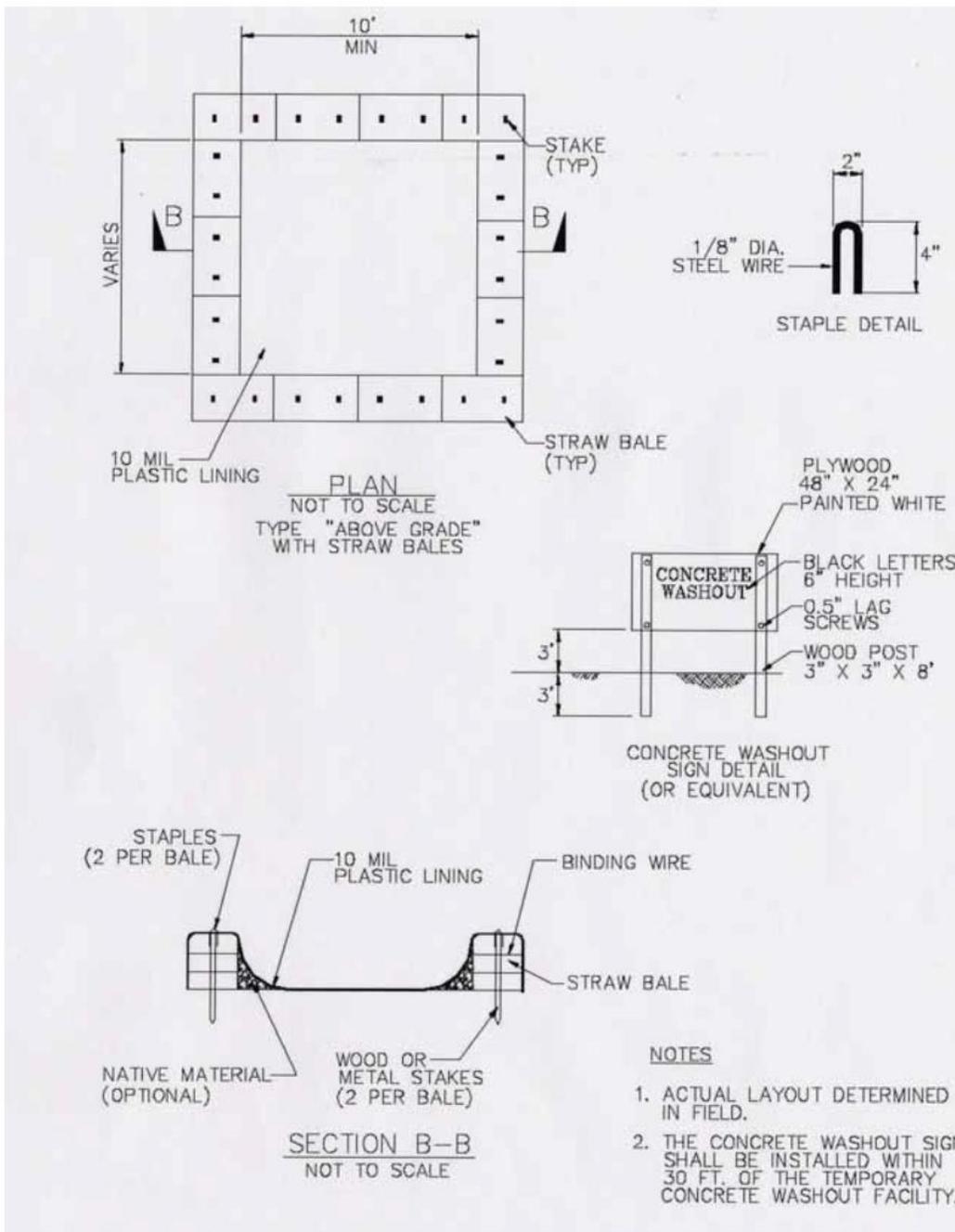
CONCRETE WASHOUT FACILITIES



52

SOURCE: CALIFORNIA STORM WATER BMP HANDBOOK

CONCRETE WASHOUT FACILITIES



SOURCE: CALIFORNIA STORM WATER BMP HANDBOOK

CONCRETE WASHOUT FACILITIES NOTES

GENERAL

- PCC and AC wastes shall be collected and disposed of or placed in a concrete washout facility. No PCC or AC wastes shall enter the storm sewer system or watercourses.
- Sign shall be installed adjacent to each facility to inform concrete equipment operators to utilize proper facilities.
- Below grade facilities are typical. Above grade facilities are utilized if excavation is not practical.
- Washout facilities shall have sufficient volume to contain all liquid and waste concrete materials generated by washout and construction activities.
- Once concrete wastes are discharged to facility and allowed to harden, the concrete waste should be broken up and disposed of in accordance with state and local law.
- Plastic lining shall be free of holes, tears, or other defects that comprise the impermeability of the material.
- A minimum freeboard 12-inches is required for below grade facilities and a minimum of 4-inches freeboard is required for above grade facilities.

REMOVAL

- When facilities are no longer required for construction work, the materials used to construct the facility shall be removed from the site and disposed of in accordance with state and local law.
- Holes, depressions or other ground disturbance caused by removal of the facility shall be backfilled and restored to its pre-existing condition or intended use.

CONCRETE WASHOUT FACILITIES NOTES

MAINTENANCE

- Facilities must be cleaned or new facilities constructed once the washout is 75% full.
- Remove and dispose of hardened concrete materials to return facilities to a functional condition.
- Inspect washout facility on a weekly basis.

CLASS II
EROSION CONTROL
PERMIT
&
STANDARD DETAILS

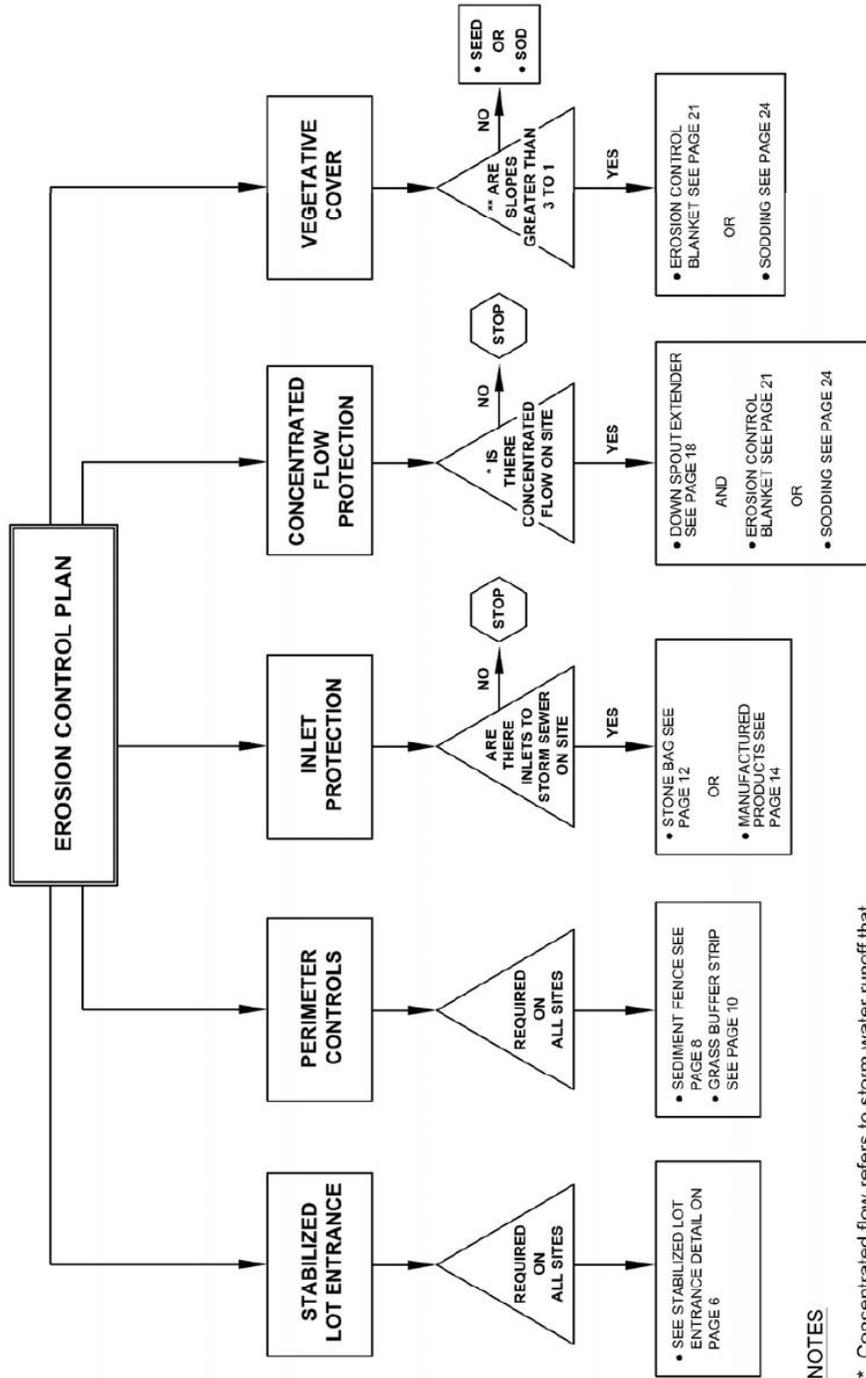


CLASS II EROSION CONTROL PERMIT

STANDARD

EROSION CONTROL PRACTICES FLOW CHART	1
SAMPLE EROSION CONTROL PLAN # 1	2
SAMPLE EROSION CONTROL PLAN # 2	3
SAMPLE EROSION CONTROL PLAN # 3	4
GENERAL NOTES	5
STABILIZED LOT ENTRANCE	6
PERIMETER CONTROLS	
SEDIMENT FENCE	8
GRASS BUFFER STRIP	10
INLET PROTECTION	
STONE BAG INLET PROTECTION	12
MANUFACTURED INLET PROTECTION PRODUCTS	14
CONCENTRATED FLOW CONTROLS	
CHECK DAMS - ROCK CHECK DAM	16
DOWNSPOUT EXTENDER	18
EROSION CONTROL BLANKET	20
SODDING	24

CLASS II EROSION CONTROL PERMIT
EROSION CONTROL PRACTICES FLOW CHART

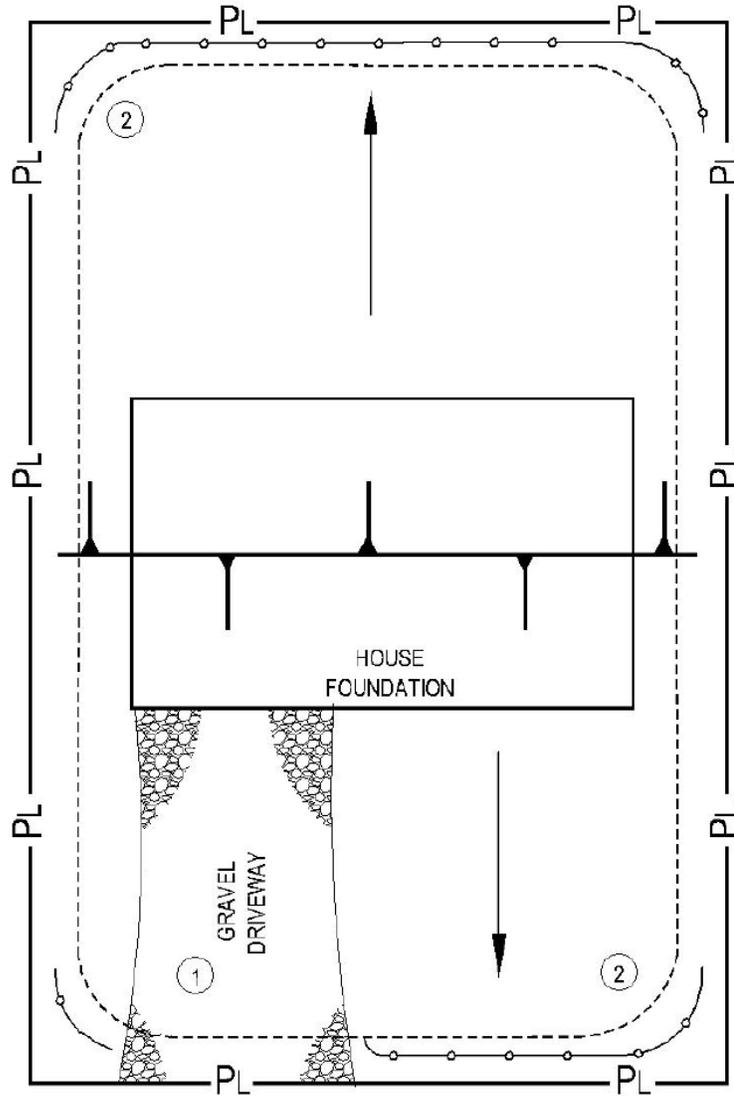


NOTES

* Concentrated flow refers to storm water runoff that has been concentrated and is flowing through small depressions, rills, gullies, ditches or swales.

** 3 to 1 refers to 3 feet horizontal to 1 foot vertical on slopes. $1 \frac{3}{1}$

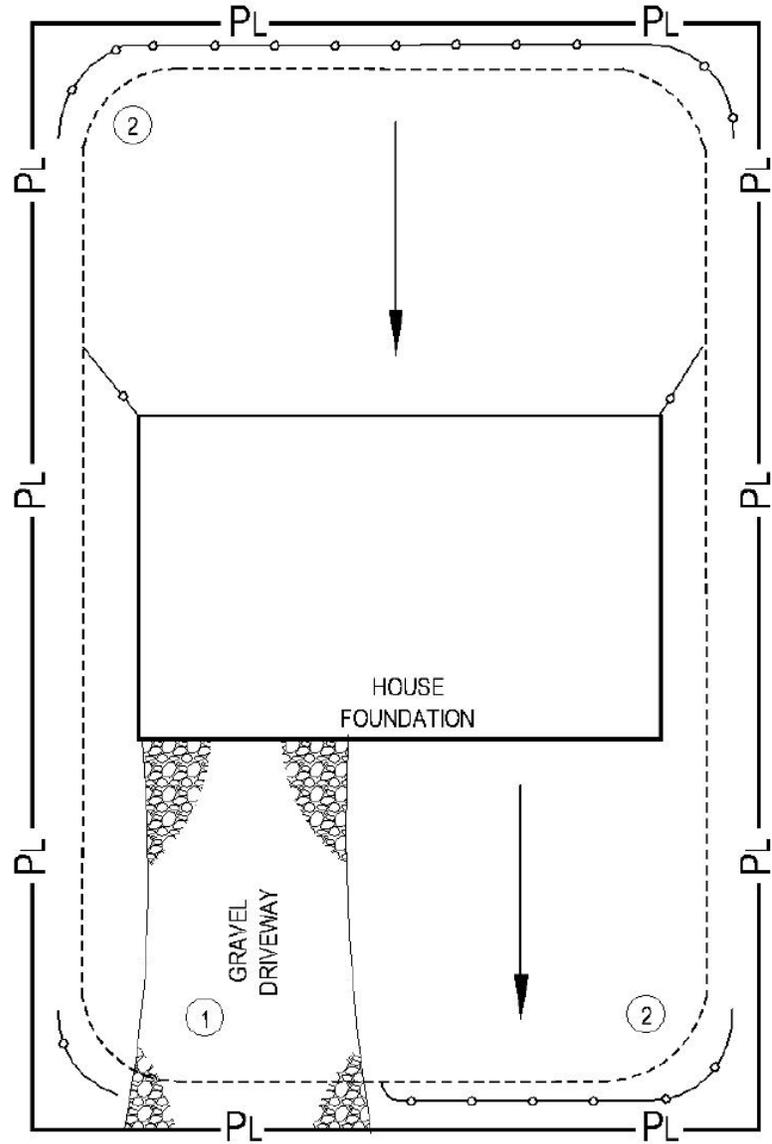
SAMPLE EROSION CONTROL PLAN DRAWING #1



LEGEND:

- SEDIMENT BARRIER
- LIMITS OF DISTURBANCE
- ▲— DIRECTION OF SURFACE WATER RUNOFF
- ▲— TOP OF SLOPE INDICATOR

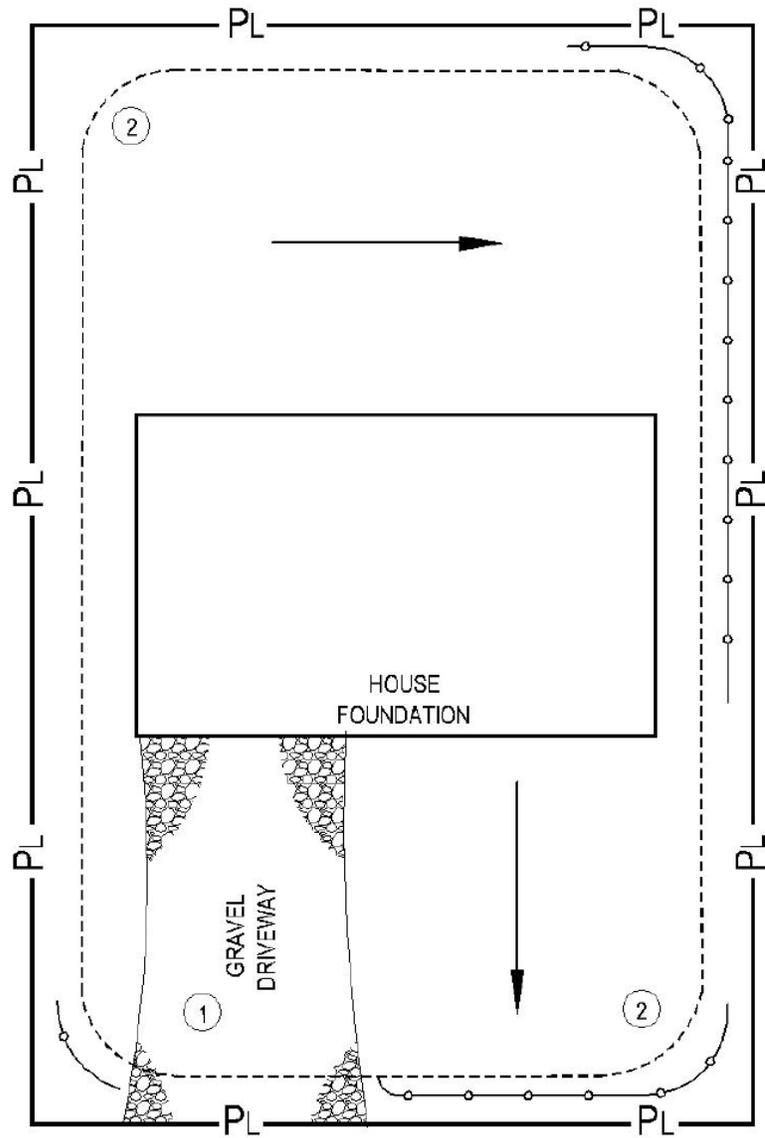
SAMPLE EROSION CONTROL PLAN DRAWING #2



LEGEND:

- SEDIMENT BARRIER
- - - - - LIMITS OF DISTURBANCE
- ← DIRECTION OF SURFACE WATER RUNOFF

SAMPLE EROSION CONTROL PLAN DRAWING #3



LEGEND:

- SEDIMENT BARRIER
- LIMITS OF DISTURBANCE
- ← DIRECTION OF SURFACE WATER RUNOFF

GENERAL NOTES

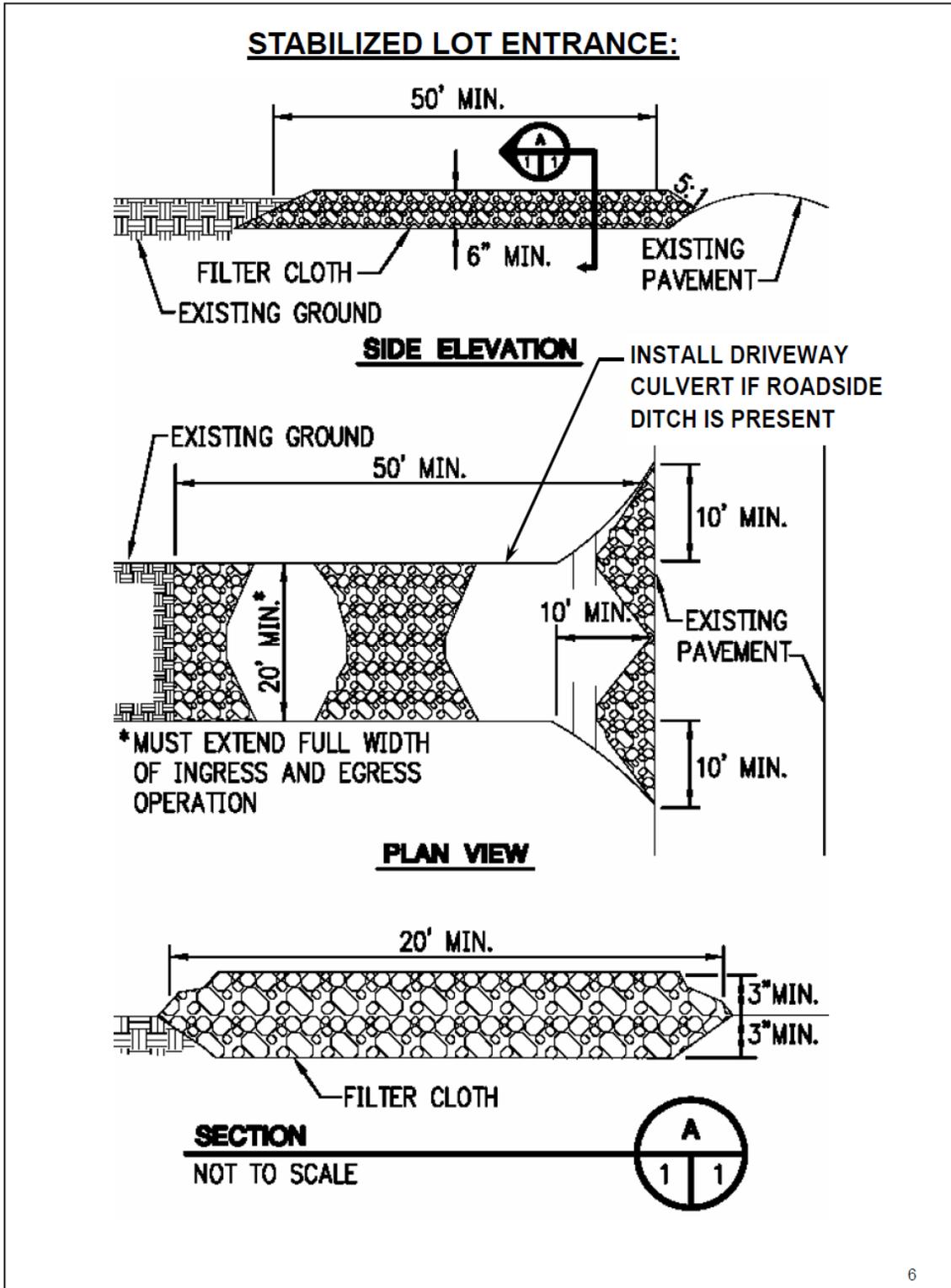
GENERAL INSTALLATION/CONSTRUCTION SEQUENCE:

- 1.) Stabilized lot entrance
- 2.) Perimeter controls
 - Place where stormwater runoff leaves the site.
 - Inspect and maintain controls.
- 3.) Excavate and backfill foundations
 - Spoil pile must remain a minimum of 5 FT. from back of curb and do not extend beyond property line.
- 4.) Construction activities
 - Maintain and repair all controls until final certificate of occupancy is issued.
- 5.) Final grading and sod or seed placement.
- 6.) Perimeter controls removed
 - Remove after permanent ground cover is obtained at a density sufficient to control erosion.

CONCENTRATED FLOW:

- 1.) Provide (rocks) checks of erosion protection (erosion blanket, sod, etc.) for concentrated flow areas.
- 2.) Provide soil protection and energy dissipation at gutter downspouts if they are in place prior to full vegetative cover over the area.
- 3.) Provide inlet protection at all storm sewer inlets, grates, drains, and manholes.

STABILIZED LOT ENTRANCE



SOURCE: MODIFIED ILLINOIS URBANA MANUAL, 1995

STABILIZED LOT ENTRANCE

STABILIZED LOT ENTRANCE:

NOTES:

Stabilized Entrance Material Can Be:

- 1.) 2-3 inches coarse aggregate.
- 2.) Wood chips or mulch.
- 3.) Turf reinforcement mat is sturdy enough for construction vehicle traffic.
- 4.) City approved material.

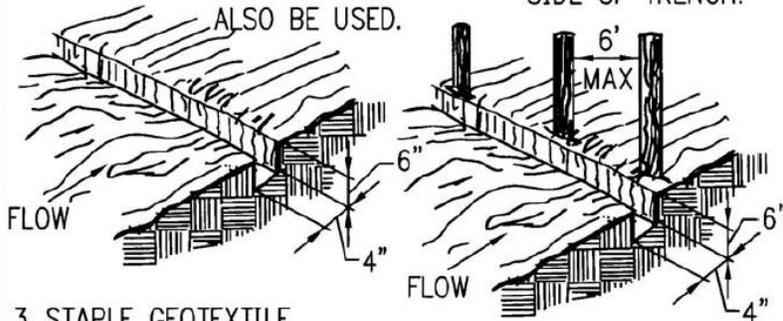
MAINTENANCE:

- 1.) Inspect on a daily basis or as necessary.
- 2.) Immediately remove mud or sediment tracked onto road.
- 3.) Add additional stabilized material as necessary.

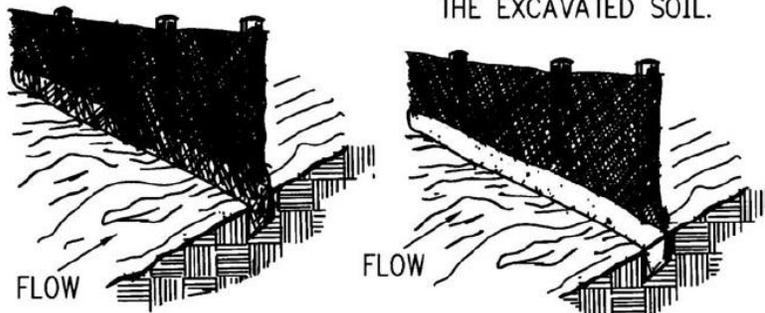
PERIMETER CONTROL

SEDIMENT FENCE

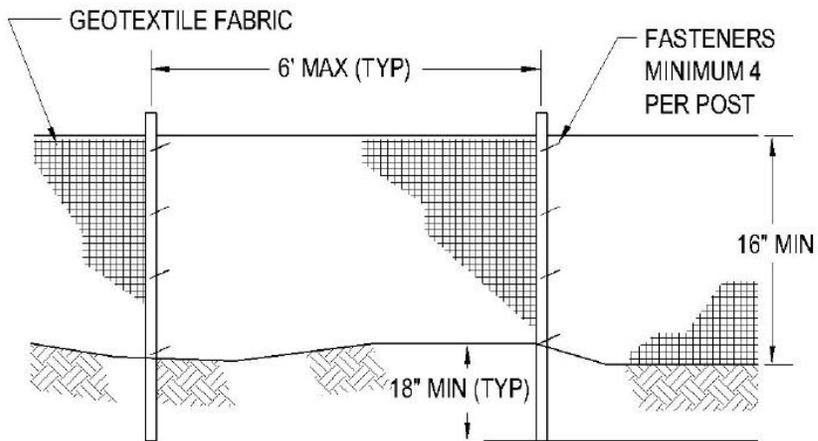
1. EXCAVATE A 6" X 4" TRENCH *
* SLICING MACHINE CAN ALSO BE USED.
2. SET THE STAKES ON THE DOWNSLOPE SIDE OF TRENCH.



3. STAPLE GEOTEXTILE TO STAKES AND EXTEND IT INTO THE TRENCH.
4. BACKFILL AND COMPACT THE EXCAVATED SOIL.



SHEET FLOW INSTALLATION



ELEVATION

SOURCE: MODIFIED ILLINOIS URBANA MANUAL, 1995

PERIMETER CONTROL

SEDIMENT FENCE NOTES:

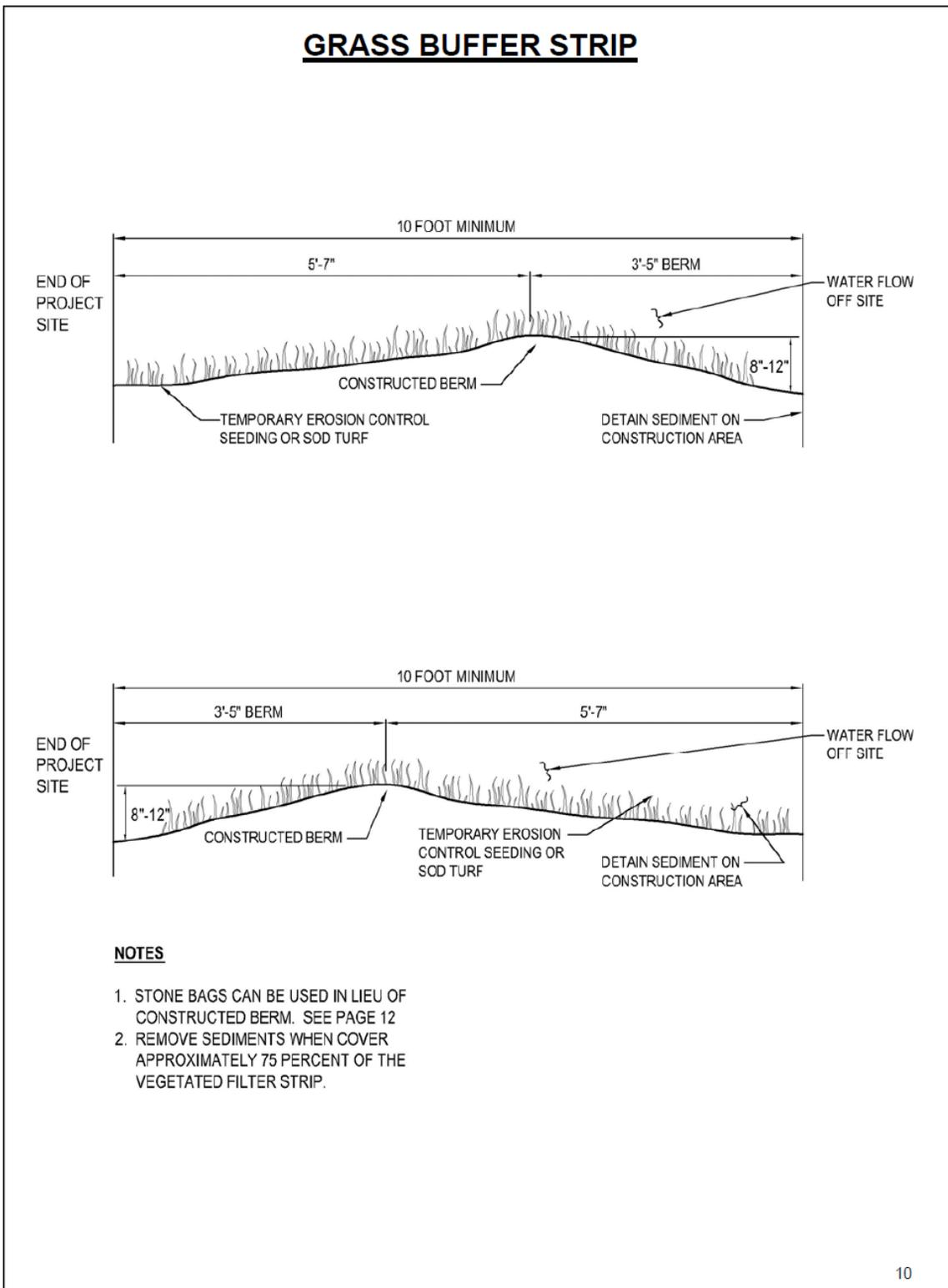
INSTALLATION:

1. Sediment fence shall be a minimum of 16 inches above the original ground surface and shall not exceed 34 inches above ground surface.
2. Excavate a trench approximately 4 inches wide and 6 inches deep on the upslope side of the proposed location of the fence. A slicing machine may be used in lieu of trenching.
3. Posts shall be placed a maximum of 6 feet apart. Fabric shall be fastened securely to the upslope side of posts using min. One-inch long, heavy-duty wire staples or tie wires. Eight inches of the fabric shall be extended into the trench. The fabric shall not be stapled to existing trees.
4. The 4 inch by 6 inch trench shall be backfilled and the soil compacted over the textile unless a slicing machine is used.

MAINTENANCE:

1. Inspect on a daily basis or as necessary.
2. Any damage shall be repaired immediately.
3. Sediment must be removed when it reaches 6 inches high on the fence.
4. If geotextile has deteriorated due to ultraviolet breakdown, it shall be replaced.
5. Sediment fence shall be removed when it has served its useful purpose, but not before the upslope area has been permanently stabilized.

PERIMETER CONTROL



SOURCE: STORM WATER MANAGEMENT HANDBOOK, 2000

PERIMETER CONTROL

GRASS BUFFER STRIP

DESCRIPTION:

These are wide strips of undisturbed vegetation consisting of grass or other erosion resistant plants surrounding the disturbed site. They provide infiltration, intercept sediment and other pollutants, and reduce stormwater flow and velocity. They can also act as a screen for visual pollution and reduce construction noise.

PLANNING CONSIDERATIONS:

Grass strips should be fenced off prior to construction. Avoid storing debris from clearing and grubbing, and other construction waste material in these strips during construction.

DESIGN CRITERIA:

The minimum length of strip must be at least as long as the contributing runoff area. The minimum width should conform to Table below.

MINIMUM WIDTHS OF FILTER STRIPS

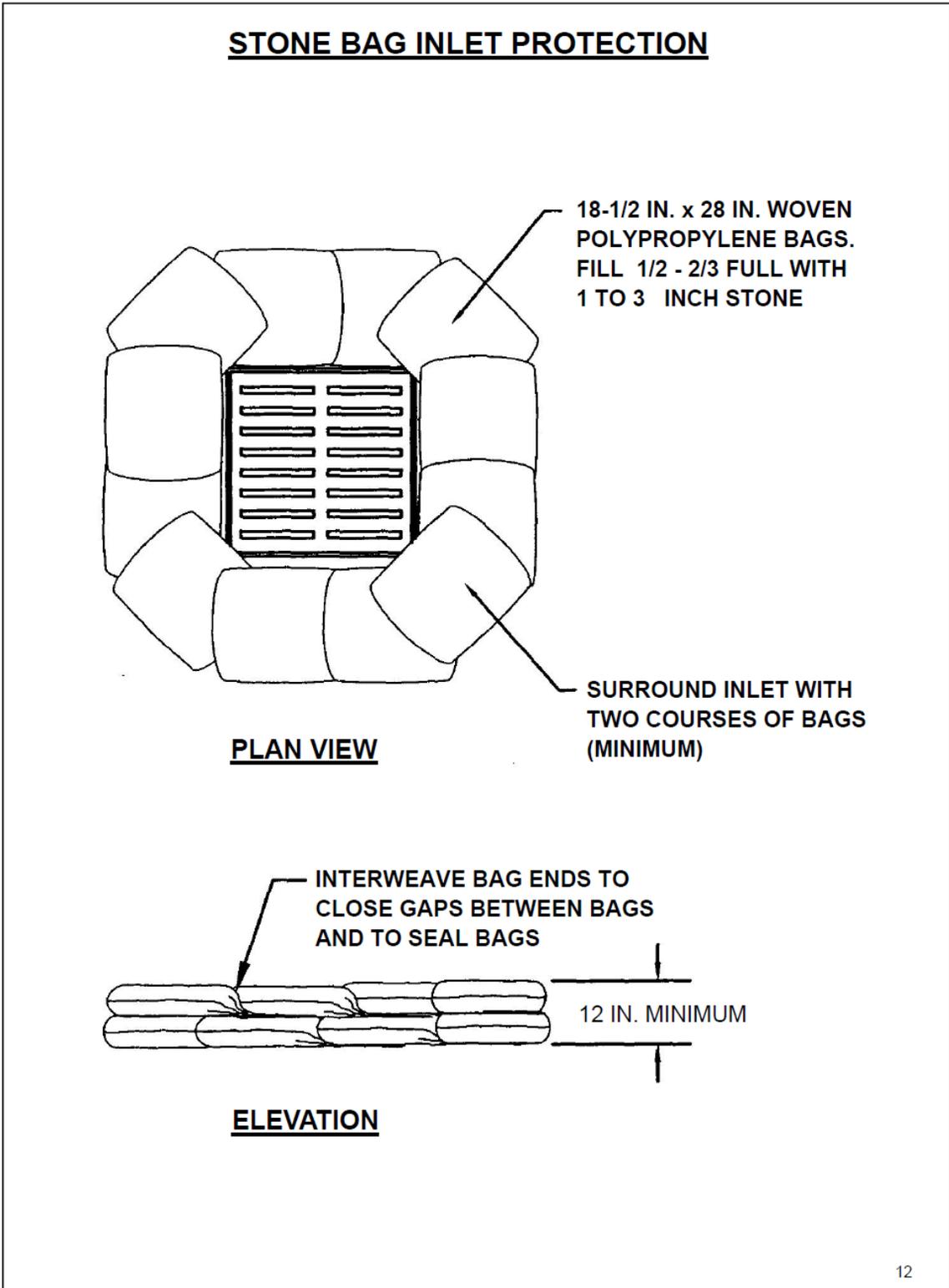
SLOPE OF LAND %	WIDTH OF FILTER STRIP FOR GRASSED AREAS (FT)
0	10
2	12
4	14
6	16
8	18
10	20
15	25

INSPECTION AND MAINTENANCE

1. Maintain moist soil conditions immediately after seeding and/or sod installation.
2. Maintain moist soil conditions throughout vegetation establishment period.
3. Sediment deposits should be removed after each storm event.

SOURCE: STORM WATER MANAGEMENT HANDBOOK, 2000

INLET PROTECTION



SOURCE: MODIFIED ILLINOIS URBANA MANUAL, 1995

INLET PROTECTION

STONE BAG INLET PROTECTION

INSTALLATION:

1. Stone fill bags shall be woven polypropylene bags with approximate dimensions of 18.5 inches by 28 inches.
2. Bags shall be filled 1/2 to 2/3 full with 1 to 3 inch stone. The ends of filled bags using either draw strings or wire ties.
3. Interweave the loose ends of the bags so that gaps between bags are filled and ends of bags are sealed.
4. Completely surround inlet with a minimum of two rows of bags to minimum of 12 inches in height.

MAINTENANCE

1. Inspect on a daily basis or as necessary.
2. Any damage to bags shall be repaired immediately.
3. Sediment must be remove when it reaches 3 inches high on bags.
4. If bags have deteriorated due to ultraviolet breakdown or wear and tear, they shall be replaced.
5. Inlet protection shall be remove when it has served its useful purpose, but not permanently stabilized.

INLET PROTECTION

**MANUFACTURED INLET PROTECTION
PRODUCTS**

THE FOLLOWING PRODUCTS ARE
APPROVED FOR INLET PROTECTION

DANDY PRODUCTS INC

2011 Harrisburg pike Suite R
Grove city, OH 43123
800-591-2284

www.dandyproducts.com

ECO-BLOK

1560-1 Newbury Rd Suite 102
Newbury Park , CA
91320-3448
(805) 499-8856 Tel
(805) 499-5797 Fax

www.eco-blok.com

CATCH-ALL INLET PROTECTOR
MARATHON MATERIALS, INC.

25523 WEST SCHULTZ STREET
PLAINFIELD, ILLINOIS 60544
(630) 983-9494 Tel
(800) 983-9493 Toll Free
(630) 983-9580 Fax

www.marathonmaterials.com

OTHER PRODUCTS CAN BE SUBMITTED
FOR REVIEW AND APPROVAL

14

INLET PROTECTION

**MANUFACTURED INLET PROTECTION
PRODUCTS**

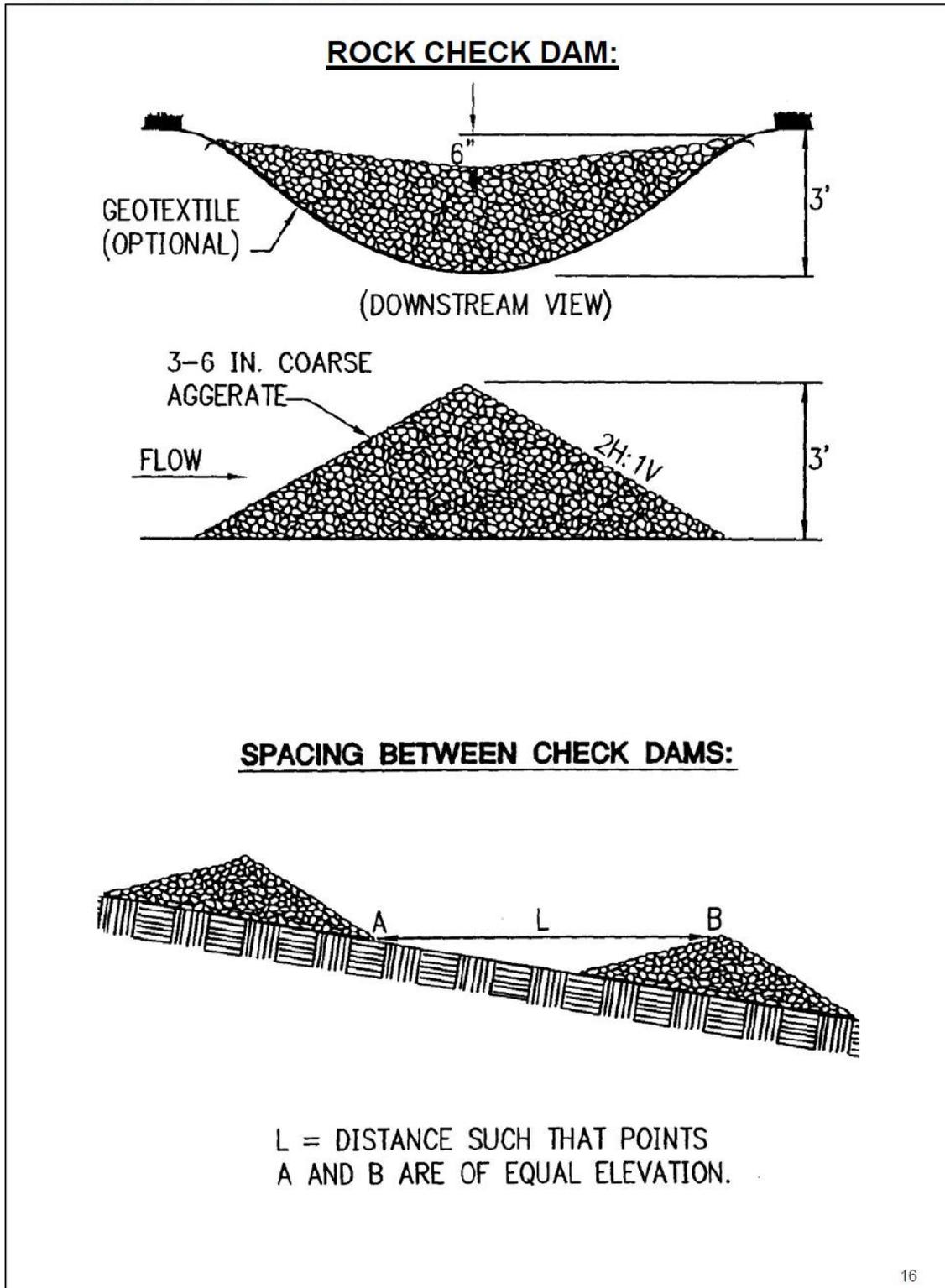
INSTALLATION:

All inlet protection products shall be installed in accordance with manufacturer's instructions.

MAINTENANCE

1. Inspect on a daily basis or as necessary.
2. Any damage to products shall be repaired immediately.
3. Sediment must be removed when it reaches 1/3 the height of the product.
4. Inlet protection shall be removed when it has served its useful purpose, but not before upslope area has been permanently stabilized.

CONCENTRATED FLOW CONTROLS



SOURCE: MODIFIED ILLINOIS URBANA MANNUAL, 1995

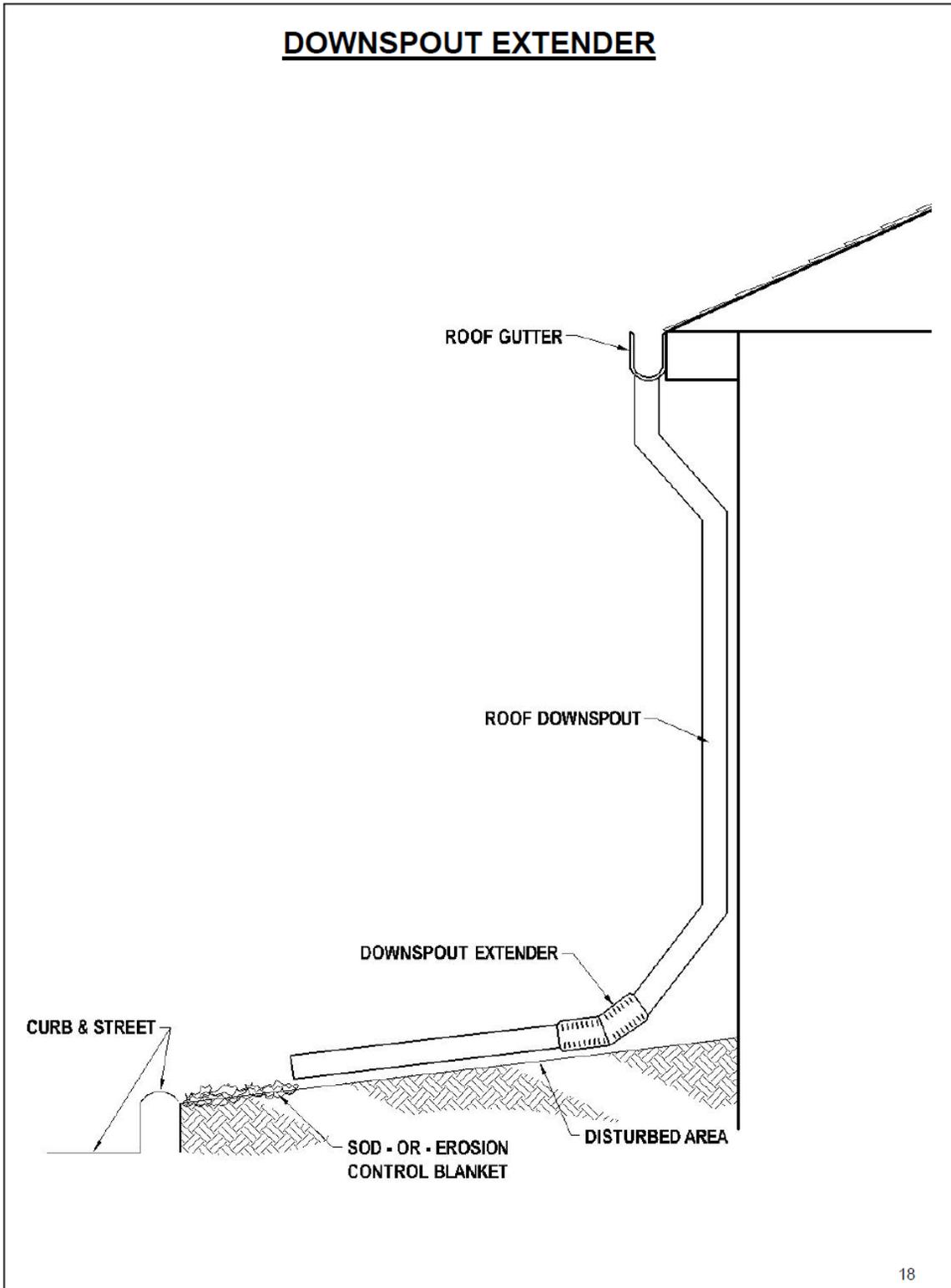
CONCENTRATED FLOW CONTROLS

ROCK CHECK DAM:

NOTES:

1. The maximum height of the dam shall be 3.0 feet.
2. The center of the check dam must be at least 6 inches lower than the outer edges.
3. For added stability, the base of the check dam can be keyed into the soil approximately 6 inches.
4. The dams should be spaced so the toe of the upstream dam is at the same elevation as the top of the downstream dam.
5. Stone should be placed according to the detail. Hand or Mechanical placement will be necessary to achieve complete coverage of the ditch or swale and to ensure that the center of the dam is lower than the edges.
6. Geotextile may be used under the stone to provide a stable foundation and to facilitate removal of the stone.
7. Check dams should be inspected for sediment accumulation after each runoff producing storm event. Sediment should be removed when it reaches half of the original height of the measure.
8. Regular inspection should be made to ensure that the center of the dam is lower than the edges. Erosion caused by high flows around the edges of the dam should be corrected immediately.

CONCENTRATED FLOW CONTROLS



SOURCE: STORM WATER MANAGEMENT HANDBOOK, 2000

Standard Attachment 22.08b

CONCENTRATED FLOW CONTROLS

DOWNSPOUT EXTENDER

DEFINITION:

A downspout extender is a temporary tube or pipe used to convey water from a building's rain downspouts to a stable area.

PURPOSE:

To prevent water discharged from a building's downspouts from eroding disturbed areas.

CONDITIONS WHERE PRACTICE APPLIES:

On downspouts discharging to disturbed areas.

DESIGN CRITERIA AND REQUIREMENTS:

Timing The downspout extender shall be installed as soon as downspouts are installed.

Removal Downspout extenders may be removed only after the disturbed area is stabilized by permanent best management practices.

Materials Non-slotted, non-perforated PVC or similar plastic pipe material should be used.

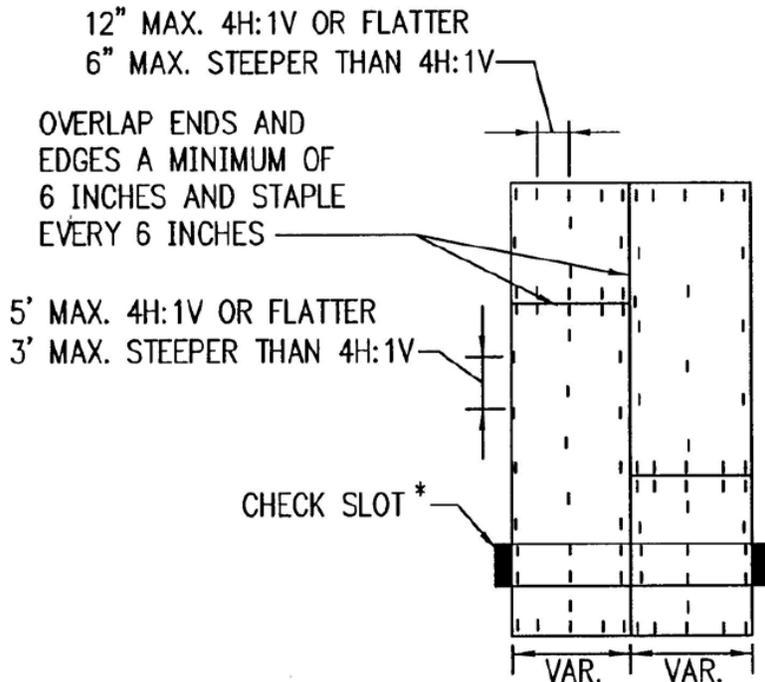
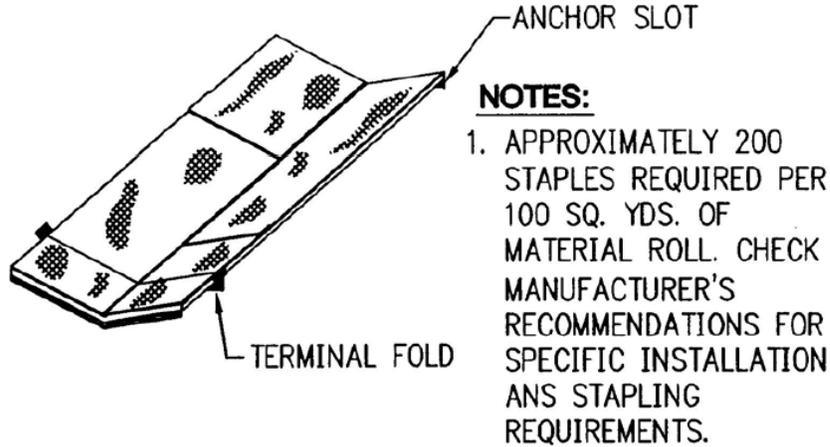
INSPECTION AND MAINTENANCE:

Downspout extenders shall be inspected daily within 24 hours of the end of a storm that is 0.5 inches or greater during periods of prolonged rainfall and, minimally, at least once a week. Repair or replacement should be made immediately.

SOURCE: STORM WATER MANAGEMENT HANDBOOK, 2000

CONCENTRATED FLOW CONTROLS

EROSION CONTROL BLANKET



PLAN VIEW
STAPLING DIAGRAM:

* CHECK SLOTS AT MIN. 50' INTERVALS; NOT REQ'D WITH ALL "COMBINATION" BLANKETS.

SOURCE: MODIFIED ILLINOIS URBANA MANUAL, 1995

CONCENTRATED FLOW CONTROLS

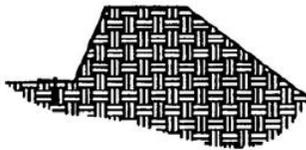
**TYPICAL ORIENTATION OF
EROSION CONTROL BLANKET**

SHALLOW SLOPE:



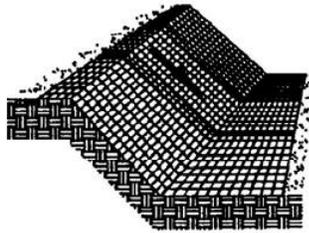
ON SHALLOW SLOPES, STRIPS OF PROTECTIVE COVERINGS MAY BE APPLIED PARALLEL TO DIRECTION OF FLOW.

BERM:



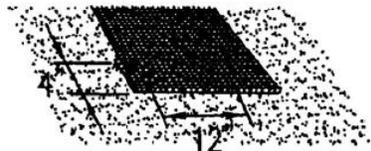
WHERE THERE IS A BERM AT THE TOP OF THE SLOPE, BRING THE MATERIAL OVER THE BERM AND ANCHOR IT BEHIND THE BERM.

STEEP SLOPE:



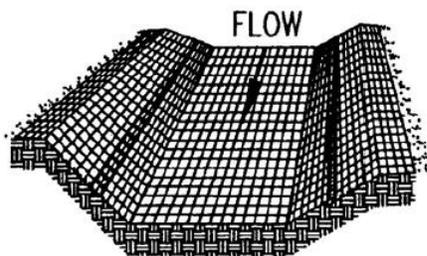
ON STEEP SLOPES, APPLY PROTECTIVE COVERING PERPENDICULAR TO THE DIRECTION OF FLOW AND ANCHOR SECURELY.

STEEP SLOPE:



BRING MATERIAL DOWN TO A LEVEL AREA BEFORE TERMINATING INSTALLATION. TURN THE END UNDER 4" AND STAPLE AT 12" INTERVALS.

DITCH:



IN DITCHES, APPLY PROTECTIVE COVERING PARALLEL TO THE DIRECTION OF FLOW. AVOID JOINING MATERIAL IN THE CENTER OF THE DITCH IF AT ALL POSSIBLE.

CONCENTRATED FLOW CONTROLS

EROSION CONTROL BLANKET

LAYING AND STAPLING:

Place the erosion control blanket on a friable seedbed free of clods, rocks, and roots that might impede good contact.

1. Start placing the protective covering from the top of the channel or slope and unroll down-grade.
2. Allow to rest loosely on soil; do not stretch.
3. Upslope ends of the protective covering should be buried in an anchor slot no less than 6 inches deep. Tamp earth firmly over the material. Staple the material at a minimum of every 12 inches across the top end.
4. Edges of the material shall be stapled every 3 feet. The multiple widths are placed side by side, the adjacent edges shall be overlapped a minimum of 6 inches and stapled together. Staples shall be placed down the center, staggered with the edges at 3 foot intervals.

NOTE:

Study manufacturer's recommendations and site conditions for correct installation and stapling of product.

SOURCE: MODIFIED ILLINOIS URBANA MANNUAL, 1995

CONCENTRATED FLOW CONTROLS

EROSION CONTROL BLANKET NOTES (CONTINUED):

JOINING PROTECTIVE COVERINGS:

Insert a new roll of material into an anchor slot as with upslope ends. Overlap the end of the previous roll a minimum of 12 inches, and staple across the end of the roll just below the anchor slot and across the material every 12 inches.

TERMINAL END:

Where the material is discontinued or where the ends under 4 inches, and staple across end every 12 inches.

AT BOTTOM OF SLOPES:

Roll onto a level surface before anchoring, turn ends under 4 inches, and staple across end every 12 inches.

FINAL CHECK:

These installation criteria must be met:

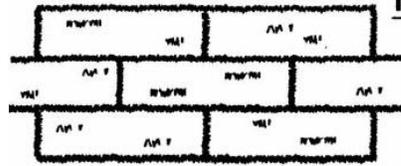
1. Protective blanket is in uniform contact with the soil.
2. All lap joints are secure.
3. All staples are driven flush with the ground.
4. All disturbed areas have been seeded.

MAINTENANCE:

All soil stabilization blankets and matting should be inspected periodically following installation, particularly after storms, to check for erosion and undermining. Any dislocation or failure should be repaired immediately. If washouts or breakage occurs, reinstall the material after repairing damage to the slope or ditch. Continue to monitor these areas until they become permanently stabilized; at that time an annual inspection should be adequate.

CONCENTRATED FLOW CONTROLS

SODDING:



INCORRECT

CORRECT

NOTE:

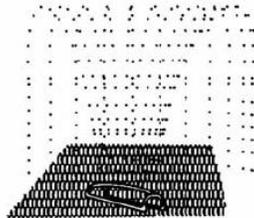
LAY SOD IN A STAGGERED PATTERN. BUTT THE STRIPS TIGHTLY AGAINST EACH OTHER. DO NOT LEAVE SPACES AND DO NOT OVERLAP. A SHARPENED MASON'S TROWEL IS A HANDY TOOL FOR TUCKING DOWN THE ENDS AND TRIMMING PIECES.

BUTTING:

ANGLED ENDS CAUSED BY THE AUTOMATIC SOD CUTTER MUST BE MATCHED CORRECTLY.



ROLL SOD IMMEDIATELY TO ACHIEVE FIRM CONTACT WITH THE SOIL.



WATER SOD TO A DEPTH OF 4" AS NEEDED. WATER WELL AS SOON AS THE SOD IS INSTALLED.



MOW WHEN THE SOD IS ESTABLISHED - IN 2-3 WEEKS. SET THE MOWER HEIGHT AT 2"-3".

APPEARANCE OF GOOD SOD:

SHOOTS:

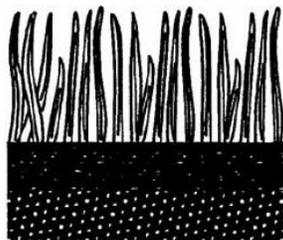
GRASS SHOULD BE GREEN AND HEALTHY, MOWED AT A 2"-3" CUTTING HEIGHT.

THATCH:

GRASS CLIPPINGS AND DEAD LEAVES UP TO 1/2" THICK.

ROOT ZONE:

SOIL AND ROOTS SHOULD BE 1/2" - 3/4" THICK WITH DENSE ROOT MAT FOR STRENGTH.



SOURCE: MODIFIED ILLINOIS URBANA MANUAL, 1995

