CHAPTER 2

EROSION CONTROL AND STORMWATER MANAGEMENT

(rev. in it's entirety 6-12-07, Ordinance 2007-03)

SEC. 15-2-1 AUTHORITY.

This chapter is adopted by the Village of Marshall under the authority of sec. 61.354 of the Wisconsin Statutes.

SEC. 15-2-2 DEFINITIONS.

As used in this chapter:

(1) "Affected" means that a regulated activity has significantly:
  (a) Caused negative impacts on water or the use or maintenance of land or business; or
  (b) Endangered health, safety, or general welfare.

(2) "Agricultural" means related to or used for the production of food and fiber, including but not limited to, general farming, livestock and poultry enterprises, grazing, nurseries, horticulture, viticulture, truck farming, forestry, sod production, cranberry productions and wild crop harvesting and includes lands used for on-site buildings and other structures necessary to carry out such activities.

(3) "Average annual rainfall" means measured precipitation in Madison, Wisconsin between March 12 and December 2, 1981.

(4) "Bank erosion" means the removal of soil or rock fragments along the bank or bed of a stream channel resulting from high flow after rain events.

(5) "Best management practice" means a practice, technique, or measure that is an effective, practical means of preventing or reducing soil erosion or water

pollution, or both, from runoff both during and after land development activities. These can include structural, vegetative or operational practices.

(6) "Cold water community" means surface waters capable of supporting a community of cold water fish and other aquatic life, or serving as a spawning area for cold water fish species (NR 102.04(3)(a) Wisconsin Administrative Code).

(7) "Connected imperviousness" means an imperious surface that is directly connected to a separate storm sewer or water of the state via an impervious flow path.

(8) "Construction site erosion control" means preventing or reducing soil erosion and sedimentation from land disturbing activity.

(9) "Effective infiltration area" means the area of the infiltration system that is used to infiltrate runoff and does not include the area used for site access, berms, or pretreatment.

(10) "Erosion" (soil erosion) means the detachment and movement of soil or rock fragments by water, wind, ice or gravity.

(11) "Excavation" means any act by which organic matter, earth, sand, gravel, rock or any other similar material is cut into, dug, quarried, uncovered, removed, displaced, relocated or bulldozed and shall include the resulting conditions.

(12) "Existing development" means buildings and other structures and impervious area existing prior to August 22, 2001.

(13) "Fill" means any act by which earth, sand, gravel, rock or any other material is deposited, placed, replaced, pushed, dumped, pulled, transported, or moved to a new location and shall include the resulting conditions.

(14) "Financial security instrument" means an irrevocable letter of credit submitted to the Village of Marshall to assure that requirements of this chapter are carried out in compliance with the stormwater management plan.

(15) "Gully erosion," means a severe loss of soil caused by or resulting in concentrated flow of sufficient velocity to create a defined flow channel.

(16) "Heavily disturbed site," means a site where an area of land is subjected to significant compaction due to the removal of vegetative cover or earthmoving activities, including filling.

(17) "Hydrologic soil group (HSG)" has the meaning used in the runoff calculation methodology promulgated by the United States Natural Resources Conservation Service Engineering Field Manual for Conservation Practices.

(18) "Impervious surface" means any land cover that prevents rain or melting snow from soaking into the ground, such as roofs (including overhangs), roads, sidewalks, patios, driveways and parking lots. For purposes of this chapter, all road, driveway or parking surfaces including gravel surfaces shall be considered impervious, unless specifically designed to encourage infiltration and approved by the local approval authority.

(19) "Infiltration" for the purpose of this chapter, refers to any precipitation that does not leave the site as surface runoff.

(20) "Infiltration system" means a device or practice such as a basin, trench, rain garden or swale designed specifically to encourage infiltration, but does not include natural infiltration in pervious surfaces such as lawns, redirecting of rooftop downspouts onto lawns or minimal infiltration from practices such as swales or road side channels designed for conveyance and pollutant removal only.

(21) "Karst Feature" means an area or surficial geologic feature subject to bedrock dissolution so that it is likely to provide a conduit to groundwater, and may include caves, enlarged fractures, mine features, exposed bedrock surfaces, sinkholes, springs, seeps or swallets.

(22) Intentionally left blank.

(23) "Land disturbing activities" means any land alterations or disturbances that may result in soil erosion, sedimentation, or change in runoff including but not limited to removal of ground cover, grading, excavating, and filling of land.

(24) "Lightly disturbed site," means a site where an area of land is subjected to minor compaction due to the limited removal of vegetative cover or earthmoving activities.

(25) "Local approval authority" means the municipal staff or contracted entity who is charged by the Village Board with responsibility for enforcing stormwater and erosion control ordinances.

(26) "Local Land Division Ordinance" means Title 15 of the Village of Marshall Code of Ordinances.

(27) "Maximum extent practicable" or "(MEP)" means a level of implementing best management practices in order to achieve a performance standard specified in this chapter which takes into account the best available technology, cost effectiveness and other competing issues such as human safety and welfare, endangered and threatened resources, historic properties, and geographic features. MEP allows flexibility in the way to meet performance and may vary based on the performance standard and site conditions.

(28) "New development" means any of the following activities:
- (a) Structural development, including construction of a new building or other structures;
- (b) Expansion or alteration of an existing structure that results in an increase in the surface dimensions of the building or structure;
- (c) Land-disturbing activities; or
- (d) Creation or expansion of impervious surface

(29) "Non-erosive velocity" means a rate of flow of stormwater runoff, usually measured in feet per second, which does not erode soils. Non-erosive velocities vary for individual sites, taking into account topography, soil type, and runoff rates.

(30) "Peak flow" means the maximum rate of flow of water at a given point in a channel, watercourse, or conduit resulting from the predetermined storm or flood.

(31) "Pervious surface" means any land cover that permits rain or melting snow to soak into the ground.

(32) "Plan" means an erosion control plan required by sec. 15-2-5 or a storm water management plan required by sec. 15-2-6.

(33) "Plan review agency" means the Village Staff or Contracted Entity or Entities charged with responsibility for reviewing and approving stormwater plans and erosion control plans under this chapter.

(34) "Plat review officer" means the Village Staff or Contracted Entity is charged by the Village with responsibility for reviewing land divisions, certified survey maps or subdivision plats, or any combination thereof, under Chapter 236 of the Wisconsin Statutes.

(35) "Post-development" refers to the extent and distribution of land cover types anticipated to occur under conditions of full development of the submitted plan. This term is used to match pre- and post-development stormwater peak flows as required in this chapter.

(36) "Pre-development" refers to the extent and distribution of land cover types present before the initiation of the proposed land development activity, assuming that all land uses prior to land disturbing activity are in "good" condition as described in the Natural Resources Conservation Service Technical Release 55, "Urban Hydrology for Small Watersheds" (commonly known as TR-55). This term is used to match pre- and post-development stormwater peak flows as required by this chapter. In a situation where cumulative impervious surface created after August 21, 2001 exceeds the 20,000 sq. ft threshold, the pre-development conditions shall be those prior to the proposed land disturbance.

(37) "Recharge" means the portion of the average annual rainfall that infiltrates the soil and becomes groundwater. Recharge does not include evaporation, transpiration, or runoff from the site.

(38) "Redevelopment" means any construction, alteration or improvement exceeding four thousand square feet of land disturbance performed on sites where the existing site is predominantly developed ~~to~~ as commercial, industrial, institutional or multifamily residential uses. Projects may include a mix of redevelopment and new impervious surfaces. New impervious surfaces added as a result of redevelopment are subject to Section 15-2-6(1).

(39) "Runoff curve number (RCN)" has the meaning used in the runoff calculation methodology promulgated by the United States Natural Resources Conservation Service Engineering Field Manual for Conservation Practices.

(40) "Sediment" means solid earth material, both mineral and organic, that is in suspension, is being transported, or has been moved from its site of origin by air, water, gravity or ice, and has come to rest on the earth's surface at a different site.

(41) "Sedimentation" means the deposition of eroded soils at a site different from the one where the erosion occurred.

(42) "Sheet and rill erosion" means a loss of soil caused by sheet flow or shallow concentrated flow, and characterized by an absence of channeling or a relatively uniform loss across the exposed upper layer of the soil or shallow irregular scouring of the soil surface.

(43) "Site" means the bounded area described in an erosion control plan or stormwater management plan.

(44) "Slope" means the net vertical rise over horizontal run, expressed as a percentage, which represents a relatively homogeneous surface incline or decline over the area disturbed.

(45) "Soil loss rate" means the rate, usually measured in tons per acre per year, at which soil is transported beyond the perimeter of a given control site and which occurs as a result of sheet and rill erosion. This term does not apply to soil movement resulting from concentrated flow such as gully or bank erosion.

(46) "Storm events," mean the precipitation amounts that occur over a 24-hour period that have a specified recurrence interval for Dane County, Wisconsin. For example, one-year, two-year, 10-year and 100-year storm events mean the precipitation amounts that occur over a 24-hour period that have a recurrence interval of one, two, 10 and 100 years, respectively.

(47) "Stormwater" means the flow of water, which results from, and which occurs during and immediately following, a rainfall, snow- or ice- melt event.

(48) "Stormwater management" means any measures taken to permanently reduce or minimize the negative impacts of stormwater runoff quantity and quality after land development activities.

(49) "Stormwater runoff" means the waters derived from rains falling or snowmelt or ice melts occurring within a drainage area, flowing over the surface of the ground and collected in channels, watercourses or conduits.

(50) "Street reconstruction" means removal and replacement of the road subgrade, where existing stormwater conveyance systems are modified.

(51) "Structure" means any human-made object with form, shape and utility, either permanently or temporarily attached to, placed upon, or set into the ground, stream bed or lake bed.

(52) "Unnecessary hardship" means that circumstance where special conditions, which were not self-created, affect a particular property and make strict conformity with regulations unnecessarily burdensome or unreasonable in light of the purposes of this chapter.

SEC. 15-2-3 LEGISLATIVE FINDINGS.

(1) The Village Board of the Village of Marshall finds that construction site erosion and uncontrolled stormwater runoff from land disturbing and land development activities have significant adverse impacts upon regional water resources and the health, safety, property and general welfare of the community, and diminish the public enjoyment and use of natural resources. Specifically, soil erosion and stormwater runoff can:
   (a) Carry sediment, nutrients, pathogens, organic matter, heavy metals, toxins and other pollutants to regional lakes, streams and wetlands;
   (b) Diminish the capacity of water resources to support recreational and water supply uses and a natural diversity of plant and animal life;
   (c) Clog existing drainage systems, increasing maintenance problems and costs;
   (d) Cause bank and channel erosion;
   (e) Increase downstream flooding;
   (f) Reduce groundwater recharge, which may diminish stream base flows and lower water levels in regional lakes, ponds and wetlands;
   (g) Contaminate drinking water supplies;
   (h) Increase risk of property damage and personal injury, and;
   (i) Cause damage to agricultural fields and crops.

(2) The Village Board of the Village of Marshall also finds that effective sediment and stormwater management depends on proper planning, design, and timely installation of conservation and management practices and their continuing maintenance.

SEC. 15-2-4 PURPOSE AND INTENT.

(1) The purpose of this chapter is to set forth the minimum requirements for construction site erosion control and stormwater management that will diminish threats to public health, safety, public and private property and natural resources of Marshall.

(2) This chapter is intended to regulate construction site erosion and stormwater runoff, to accomplish the following objectives:
   (a) Promote regional storm water management by watershed,
   (b) Minimize sedimentation, water pollution from nutrients, heavy metals, chemical and petroleum products and other contaminants, flooding and thermal impacts to the water resources of Marshall,
   (c) Promote infiltration and groundwater recharge;
   (d) Protect functional values of natural watercourses and wetlands,
   (e) Provide a set of performance standards that are consistent with the standards set forth by Dane County,
   (f) Achieve an 80% reduction in sediment load rates to Dane County waters compared to no controls for all new development, a 40% reduction in sediment load rates compared to no controls for all redevelopment and street reconstruction, and a 20% reduction in sediment load rates compared to no controls for existing developments.
   (g) Ensure no increase in temperature of storm water post-construction in order to protect coldwater communities,
   (h) Ensure no increase in the rate of surface water drainage from sites during or after construction; and

(i) Protect public and private property from damage resulting from runoff or erosion.

SEC. 15-2-5 APPLICABILITY OF REQUIREMENT FOR EROSION CONTROL PERMITS.

Unless expressly exempted by sec. 15-2-7 an erosion control permit under sec. 15-2-9 shall be required and all construction site erosion control provisions of this chapter shall apply, to any of the following activities in Marshall,

(1) Land disturbing activity in excess of 4,000 square feet;
(2) Land disturbing activity on a slope of greater than 12%;
(3) Land disturbing activity that involves the excavation or filling, or a combination of excavation and filling, in excess of 400 cubic yards of material;
(4) Land disturbing activity that disturbs more than 100 lineal feet of road ditch, grass waterway or other land area where surface drainage flows in a defined open channel; including the placement, repair or removal of any underground pipe, utility or other facility within the cross-section of the channel;
(5) Any new public or private roads or access drives longer than 125 feet,
(6) Development that requires a subdivision plat, as defined in the Village's land division ordinance(s);
(7) Land disturbing activity that disturbs less than 4,000 square feet of land, including the installation of access drives, that the local approval authority determines to have a high risk of soil erosion or water pollution, or that may significantly impact a lake, stream, or wetland area. Examples of activities with a high risk of soil erosion or water pollution may include, but are not limited to, land disturbance on erodible soil or disturbance adjacent to lakes, rivers, streams or wetlands. All such determinations made by the local approval authority shall be in writing, unless waived by applicant.

SEC. 15-2-6 APPLICABILITY OF REQUIREMENT FOR STORMWATER CONTROL PERMITS.

Unless otherwise exempted by sec. 15-2-7, a storm water control permit under sec. 15-2-9 shall be required and all storm water management provisions of this chapter shall apply, to any of the following activities within the Village of Marshall.

(1) Any development(s) after August 22, 2001 that result(s) in the cumulative addition of 20,000 square feet of impervious surface to the site;
(2) Agricultural development that creates new impervious surface area exceeding 20,000 square feet on the site.
(3) Any development that requires a subdivision plat, as defined in the Village's land division ordinance(s);
(4) Any development that requires a certified survey map, as defined in the Village's land division ordinances(s); for property intended for commercial or industrial use;
(5) Redevelopment, as defined in s. 15-2-2(29).
(6) Other land development activities, including but not limited to redevelopment or alteration of existing buildings and other structures, that the local approval authority determines may significantly increase downstream runoff volumes, flooding, soil erosion, water pollution or property damage, or significantly impact a lake, stream, or wetland area. All such determinations shall be made in writing unless waived by the applicant.

SEC. 15-2-7 EXEMPTIONS and CLARIFICATIONS.

(1) The following activities are exempt from all requirements of this chapter:
   (a) Any activity directly related to the planting, growing and harvesting of agricultural crops; except as set forth in Section 15-2-6(2).

(2) The following activities are exempt from the construction site erosion control provisions of sec. 15-2-5.
   (a) One- and two-family dwelling units regulated under the Wisconsin Uniform Dwelling Code; Land disturbing activities in excess of one (1) acre, or not associated with the construction of a dwelling, are not exempt from this chapter.
   (b) Projects specifically exempted from local erosion control ordinances under state or federal statute. It is the responsibility of the landowner to demonstrate such exemptions with documentation acceptable to the Village.
   (c) Projects subject to an approved shoreland erosion control permit.
   (d) Agricultural development not subject to section 15-2-6 (2).
   (e) Village of Marshall and Dane County highway projects not exempted under section 15-2-11 (2) (c) where all the following conditions are met:
      (1) The purpose of the project is only to meet current state or federal design safety guidelines.
      (2) All activity takes place within existing public right-of-way.
      (3) All other requirements of 15-2-11 are met; and
      (4) The project does not include the addition of new driving lanes.

(3) The following activities are exempt from the infiltration standards described in 15-2-11 (2) (e):
   (a) Redevelopment sites.
   (b) New development sites with less than 10% connected imperviousness of the post construction site, provided the cumulative area of all impervious surfaces is less than one acre.
   (c) Agricultural facilities and practices.
   (d) Areas where the infiltration rate of the soil is less than 0.6 inches/hour measured at the bottom of the proposed infiltration system where the soil layer is not easily removed or manipulated.
   (e) Parking areas & access roads less than 5,000 sq. ft. for commercial and industrial development.
   (f) Roads in commercial, industrial and institutional land uses, and arterial roads.

SEC. 15-2-8 PRELIMINARY REVIEW LETTER.

(1) Purpose and intent. A preliminary review letter provides a potential permit applicant with an initial simple evaluation of whether erosion and stormwater control standards can be met for a proposed site, lot layout or construction design. This review is intended to assist applicants in preparing general site plans and other submittals necessary to obtain an erosion control and stormwater permit. A preliminary review letter does not guarantee that an erosion or stormwater control plan will be approved or that a permit will be

issued. Erosion and stormwater control plans and permit applications must meet all applicable standards and criteria for approval.

(2) Applicability. A preliminary review letter shall be required for all activities requiring an erosion control or storm water management permit under sec. 10-8-8 and 10-8-9.

(3) Application Requirements.

(a) A preliminary review letter must be issued by the Village Engineer before a stormwater management plan application may be filed and by the Zoning Administrator (or Building Inspector) before an erosion control plan application may be filed.

(b) The following materials must be included in the application for a preliminary review letter:

1. a narrative describing the proposed project.
2. a map showing the following information:
   a. location of the proposed project
   b. limits of disturbed area;
   c. limits of impervious area;
   d. drainage area for each watershed area; and
   e. location and description of proposed storm water facilities;
3. preliminary runoff calculations which clearly demonstrate the adequacy of the proposed facilities and land that will be dedicated to storm water management for meeting the standards of this chapter.

(4) Approval process.

(a) The Village Engineer shall review the information submitted for an erosion control plan and the Zoning Administrator (or Building Inspector) shall review the information submitted for a stormwater plan and each shall determine whether erosion and storm water control standards can be met for a proposed site, lot layout, and/or construction design.

(b) Within 15 days of receiving the application for preliminary review letter, the Village Engineer and the Zoning Administrator (Building Inspector) shall both issue a preliminary review letter.

(c) The Village Engineer and the Zoning Administrator (Building Inspector) shall both notify the applicant in writing of any deficiency in the preliminary plan.

(d) Approval of a preliminary review letter does not guarantee that an erosion or storm water control plan will be approved or that a permit will be issued. Erosion and storm water plans and permit applications must meet all applicable standards and criteria for approval.

SEC. 15-2-9 EROSION AND STORMWATER CONTROL PERMITS AND ADMINISTRATION.

(1) No activity meeting the criteria described in sec. 15-2-5 or 15-2-6 shall occur and no zoning permit may be issued, until an erosion control and stormwater control permit is issued by the local approval authority.

(2) The applicant must provide the following when requesting a permit:

(a) Completed application form,

1. The application must be signed by the landowner or include a notarized statement signed by the landowner authorizing the applicant to act as the landowner's agent and bind the landowner to the terms of this chapter.

2. If a landowner appoints an agent to submit an application pursuant to (2)(a)(1), the landowner shall be bound by all of the requirements of this chapter and the terms of any permit issued to the agent.

(b) Fees as required by sec. 15-2-15;

(c) Copy of preliminary review letter, as described in sec. 15-2-8, if applicable;

(d) If required by sec. 15-2-5, an erosion control plan meeting all the standards of sec. 15-2-10, or a simplified checklist as described in sec. 15-2-10.

(e) If required by sec. 15-2-6, a storm water management plan meeting all of the standards of sec. 15-2-11 and a draft maintenance agreement as described in sec. 15-2-11(1)(i);

(f) Copies of permits or permit applications or approvals required by any other governmental entity,

(g) A proposed timetable and schedule for completion and installation of all elements of approved erosion control and stormwater management plans and a detailed schedule for completion of construction.

(h) An estimate of the cost of completion and installation of all elements of the approved erosion control and stormwater management plans.

(i) Evidence of financial responsibility to complete the work proposed in the plan. The Village of Marshall may require a financial security instrument sufficient to guarantee completion of the project.

1. Estimate. The applicant shall provide to the Village an estimate, in writing, of the costs of all required improvements to be designed, constructed and installed under this chapter. The written estimate shall include an amount for the administrative, engineering, inspection, consulting, and legal fees or expenses related to these improvements, and shall be subject to the approval and modification of the Village Board. Subject to the next provision below, the estimate is intended only to provide a basis for determining the appropriate security amount and is not intended to in any way limit the liability of the applicant to pay for all costs related to the improvements whether of not the cost exceed the estimate;

2. Financial Security Agreement. Within thirty (30) days of the Village Board approval of the estimate, or its determination of an appropriate revised estimate and prior to the commencement of any work, the applicant shall furnish a financial security instrument to the Village in a form and with terms acceptable to the Village Attorney and the Village Board. The financial security instrument shall secure an amount equal to one hundred ten (110) percent of total estimated costs for the required improvements and shall be for the purpose of ensuring that all required improvements proposed by the applicant are satisfactorily completed and all Village costs are paid by the applicant. The financial security instrument shall be payable to the Village and shall bear an expiration date no earlier than two years after its effective date, unless earlier released by written agreement of the Village Board.

3. Payment Under Financial Security Instrument. Upon the applicant's failure to timely complete construction of any stormwater or erosion control facilities, correct any defects in such facilities or to timely

perform any other obligation under this chapter or any plan approved hereunder the Village shall have the right to complete the construction, cure such defects or perform such obligations on behalf of the applicant. The Village shall be entitled to draw against the financial security instrument for payment or reimbursement of any costs incurred by the Village in exercising its rights under this paragraph. Such costs shall include all sums paid or to be paid to private contractors for materials, labor or services rendered the reasonable value of any materials, labor, or services provided by the Village and engineering, inspection, consulting, legal fees, and administrative costs incurred, or services performed by or on behalf of the Village in connection with such project.

4. Reduction of Financial Security Instrument. As work progresses on the installation of improvements, the Village Engineer, or his or her designee, upon written request from the applicant from time to time, may recommend a reduction in the amount of security as hereinafter provided. The Village Board may approve such reduction, provided that the reduced amount shall be adequate to cover all remaining costs plus ten (10) percent.

5. Accounting. In the event that the Village exercises its right to draw upon the financial security instrument, the Village shall provide to the applicant from time to time but no less often than once every thirty (30) days, a written report of the status of the payments made under the financial security instrument. The applicant may inspect the Village construction and payment records upon request. The Village retains the exclusive right to determine, among other things, questions of design, specifications, construction cost, contract compliance, and payment in connection with the work.

(3) Approval process.

(a) The Village Engineer shall verify that the stormwater permit application is complete under sec. 15-2-9(2) and the Building Inspector shall verify that the erosion control permit application is complete under sec. 15-2-9(2). The Village Engineer shall review all completed stormwater permit applications and the Building Inspector shall review all completed erosion control permit applications.

(b) Within thirty days, the Village Engineer and the Building Inspector shall either approve the submitted plans or notify the applicant of any deficiencies. Staff engaged in this review and approval process shall be certified where appropriate by the Wisconsin Department of Commerce for this purpose.

(c) The Village Engineer and the Building Inspector shall notify the applicant in writing of any deficiency in the proposed plans and the applicant shall be given an opportunity to correct any deficiency.

(d) Where installed stormwater practices will be privately-owned, an affidavit which describes the property by legal description, notifying future prospective purchasers of the existence of a stormwater permit issued under this chapter and applicable plan, timetables and potential liability imposed by sub. 8(c) for failure to bring the property into compliance with this chapter, shall be recorded with the Dane County Register of Deeds

prior to issuance of an erosion and stormwater control permit. The foregoing information shall also be noted or referenced on every plat and certified survey map including any lands subject to the foregoing obligations in a form approved by the Plan Commission.

(e) Upon approval by the Village Engineer of the stormwater plan, and upon determining that all other requirements of this chapter have been satisfied, the Director of Public Works shall issue the permit. Upon approval by the Building Inspector of the erosion control plan, the Building Inspector shall issue the permit if the applicant has met all other requirements of this chapter.

(4) Permit conditions.

(1) (a) The plan shall be implemented prior to the start of any land disturbing activity and shall be maintained over the duration of the project. Stormwater components of the plan shall be maintained in perpetuity unless otherwise indicated in the approved plan.

(b) The permittee is responsible for successful completion of the erosion control plan and the stormwater management plan. The permittee shall be liable for all costs incurred, including environmental restoration costs, resulting from noncompliance with an approved plan.

(2) Application for a permit shall constitute express permission by the applicant and landowner for the Village Engineer, Building Inspector, or the Director of Public Works to enter the property for purposes of inspection under sub. (5) or curative action under sub. (8)(c). The application form shall contain a prominent provision advising the applicant and landowner of this requirement.

(3) All incidental mud-tracking off-site onto adjacent public thoroughfares shall be cleaned up and removed by the end of each working day using proper disposal methods.

(4) A copy of the approved permit and erosion control plan shall be kept at the project site, in a place readily accessible to contractors, engineers, Village inspection staff and consultants and other authorized personnel.

(5) Inspections.

(a) The local approval authority may enter upon the property and inspect during the construction phase prior to the inspections pursuant to paragraphs (d) and (f), as such designee deems necessary to confirm compliance with the requirements of this chapter.

(b) As part of the plan approval process, the local approval authority shall determine the minimum number of inspections required to assure compliance. The site of any regulated land disturbing activity shall be inspected once every 30 days, or more frequently as determined by the local approval authority during the construction phase with assistance from the Village of Marshall staff.

(c) Within 10 days after installation of all practices in an approved erosion control plan and achievement of soil stabilization, the permittee shall notify the local approval authority.

(d) The local approval authority shall inspect the property to verify compliance with the erosion control plan within 10 days of notification of soil stabilization.

(e) Within 10 days after installation of all practices in an approved stormwater management plan, the permittee shall notify the local approval authority and submit as built drawings documenting completed construction in

accordance with all specifications included in the approved plans. At a minimum, as-built certification shall include a set of drawings comparing the approved stormwater management plan with what was constructed. Other information shall be submitted as required by the local approval authority.

(f) The local approval authority shall inspect the property to verify compliance within 10 days after receipt of the as built plans.

(g) Maintenance is the responsibility of the owner, and facilities are subject to inspection and orders for repairs.

(5) Permit transfers.

(a) When a permittee and landowner act to transfer an interest in property subject to an approved plan prior to completion of the proposed steps to attain soil stabilization, the permittee must secure approval from the local approval authority.

(b) When a permittee and landowner transfers ownership, possession or control of real estate subject to either or both an uncompleted erosion control stormwater management plan, the successor in interest to any portion of the real estate shall be responsible to control soil erosion and runoff and shall comply with the minimum standards provided in this chapter, including the provision of adequate security for performance as determined by the local approval authority.

(c) When ownership, possession or control of property subject to an uncompleted erosion control or stormwater management plan, or both, is transferred, the former owner (seller) shall notify the new owner (buyer) as to the current status of compliance with notice to the authority, and provide a copy of the erosion control plan or stormwater management plan, or both.

(d) Transfers of interest in real estate subject to an approved, uncompleted plan may be conducted consistent with this chapter under any of the following arrangements:

1. The transferee shall file a new, approved erosion control or storm water management plan, or both, with the Village,
2. The transferee shall obtain an approved assignment from the Village as sub-permittee to complete that portion of the approved plan regulating soil erosion and runoff on the transferee's property.
3. The permittee shall provide the Village of Marshall with a duly completed and executed financial security instrument in an amount sufficient to complete the work proposed in the approved plan; at the time of transfer the permittee may seek to reduce the financial security instrument to the appropriate amount to complete remaining work. If the transferor enters into escrow agreements with transferees to complete an approved plan, these funds shall be available to the authority to attain plan compliance. When an approved erosion control plan and, if required, a stormwater management plan is or are not completed as proposed, the authority may use the financial security instrument to complete remaining work to achieve plan compliance.

(6) Plan or permit amendments. Any proposed modifications to approved plans, construction schedules or alterations to accepted sequencing of land disturbing site activities shall be approved by the local approval authority in consultation with the Village of Marshall prior to implementation of said changes.

(7) Enforcement.

(a) Stop Work Order.

1. Whenever the local approval authority finds any noncompliance with the provisions of this chapter, the local approval authority shall attempt to communicate with the owner or person performing the work to obtain immediate and voluntary compliance if such person is readily available. If the owner or person performing the work is not readily available, that person refuses to voluntarily comply immediately or the noncompliance presents an imminent danger or will cause or threatens to cause bodily injury or damage to off-site property, including, but not limited to off-site run-off, the local approval authority shall post in a conspicuous place on the premises, a stop work order which shall cause all activity not necessary to correct the noncompliance to cease until noncompliance is corrected.
2. The stop work order shall provide the following information: date of issuance, reason for posting and the signature of the inspector posting the card.
3. The unauthorized removal of a stop work order from the premises shall be a violation of this chapter.

(b) In addition to posting a stop work order, the local approval authority shall provide notification to the owner or contractor by personal service, written notice by certified mail, or facsimile transmission.

1. The permittee, landowner and contractor shall have 24 hours from the time and date of notification by the local approval authority to correct any noncompliance with the plan when notification is by either personal communication of noncompliance to owner or contractor or their respective agents or written notice sent by certified mail to owner or contractor.
2. If notice is not provided under sec. 15-2-9(8)(b)(1), the permittee and landowner shall have 72 hours to correct any noncompliance with the plan when notification is by posting notice in a conspicuous place on the site or sending notice by facsimile transmission to owner or contractor.

(c) If any noncompliance is not corrected within the time periods specified in sec. 15-2-9(8)(b)(1) or (2), the permittee and landowner authorize the local approval authority to take any action, to perform any work, or commence any operations necessary to correct conditions upon the subject property where notice of noncompliance has been issued to bring the property into conformance with plan requirements. The permittee and landowner further consent to reimburse the authority for the total costs and expenses of the aforementioned actions, said reimbursement may be collected as a special charge upon the property for current services rendered as provided by law.

(d) If the permittee has filed an appeal under sec 15-2-14(1)(a) prior to the expiration of the time for compliance under sec. 15-2-9(8)(b), the local approval authority may take action, perform work or correct conditions only to the extent necessary to protect against or correct an imminent hazard or a condition that will cause or threatens to cause personal injury or damage to off-site property.

(8) Penalties.

(a) Any person or persons, firm, company or corporation, owner, occupant or other user of the premises who violates, disobeys, omits, neglects or refuses to comply with or resists the enforcement of any of the provisions of this chapter shall be subject to a forfeiture as provided in Section 1-1-6. Each day that a violation exists shall constitute a separate offense.

(b) Any person who has the ability to pay any forfeiture entered against him or her under this chapter but refuses to do so may be confined in the county jail until such forfeiture is paid, but in no event to exceed thirty (30) days. In determining whether an individual has the ability to pay forfeiture, all items of income and all assets may be considered regardless of whether or not such income or assets are subject to garnishment, lien or attachment by creditors.

(c) As a substitute for or as an addition to forfeiture actions under sub (9)(a) or corrective action under sub.(8)(c), the Village Attorney is authorized to seek enforcement of any part of this chapter by court action seeking injunctive relief. It shall not be necessary for the Village to take corrective action or prosecute for forfeiture before resorting to injunctive relief.

(9) Fees. The permit fee shall be payable at the time an application for either an erosion control or a stormwater management permit, or both, is submitted.

SEC. 15-2-10 EROSION CONTROL PLAN REQUIREMENTS.

(1) Plan materials. Erosion control plans required under section 15-2-5 may include consideration of adjoining landowners' cooperative efforts to control transport of sediment and except as specifically exempted below, shall include at a minimum, the following information:

(a) property lines, lot dimensions, and limits of disturbed area;

(b) limits of impervious area; including buildings. Include all public and private roads, driveways, parking lots, and indicate type of paving surfacing material;

(c) all natural and artificial water features including, but not limited to, lakes, ponds, streams (including intermittent streams), and ditches; and areas of natural woodland or prairie. The plan must show ordinary high-water marks of all navigable waters, 100-year flood elevations and delineated wetland boundaries, A certified flood zone determination and/or wetland delineation may be required at the applicant's expense;

(d) cross sections of and profiles of channels, swales, and road ditches:

(e) culvert sizes;

(f) direction of flow of runoff;

(g) watershed size for each drainage area;

(h) design discharge for ditches and structural measures;

(i) runoff velocities;

(j) fertilizer and seeding rates and recommendations;

(k) time schedules for stabilization of ditches and slopes;

(l) description of methods by which sites are to be developed and a detailed land disturbance schedule including time schedules for stabilization of ditches and slopes;

(m) provision for sequential steps mitigating erosive effect of land disturbing activities to be followed in appropriate order and in a manner consistent with accepted erosion control methodology suitable to proposed sites and

amenable to prompt re-vegetation including runoff calculations as appropriate;

(n) provisions to prevent mud-tracking off-site onto public thoroughfares during the construction period;

(o) provisions to disconnect impervious surfaces, where feasible:

(p) provisions to prevent sediment delivery to, and accumulation in, any proposed or existing stormwater conveyance systems;

(q) copies of permits or permit applications required by any other unit of government or agency;

(r) existing and proposed elevations (referenced to the North American Vertical Datum of 1988) and existing and proposed contours in the area, where deemed necessary.

(s) any other information necessary to reasonably determine the location, nature and condition of any physical or environmental features of the site.

(2) Simplified Plan Checklist. Applicants may submit erosion control proposals using simplified checklists of standard erosion control practices, on a standard form approved by the local approval authority, wherever all of the following conditions exist:

(a) The site does not exceed 20,000 square feet in area; and

(b) The slope of the land does not exceed six percent (6%).

(c) Simplified plan check lists shall be reviewed by the local approval authority for completeness and accuracy.

(3) Erosion Control Performance Standards.

(a) Proposed design, suggested location and phased implementation of effective, practicable erosion control measures for plans shall be designed, engineered and implemented to achieve the following results:

1. Prevent gully and bank erosion; and
2. Limit total off-site permissible annual aggregate soil loss for exposed areas resulting from sheet and rill erosion to an annual, cumulative soil loss rate not to exceed 7.5 tons per acre annually; and
3. Discharges from new construction sites must have a stable outlet capacity of carrying designed flow as required section 15-2-11(2)(c), at a non-erosive velocity. Outlet design must consider flow capacity and flow direction. This requirement applies to both the site outlet and the ultimate outlet to the stormwater conveyance or water body.

(b) Plan compliance under par. (a) shall be determined using the U.S. Natural Resources Conservation Service Technical Guide or another commonly accepted soil erosion methodology approved by the Dane County Conservationist, that considers season of year, site characteristics, soil erodibility and slope.

(c) Erosion control measures for plan approval need not attempt to regulate soil transportation within the boundaries of the applicant's site.

SEC. 15-2-11 STORMWATER MANAGEMENT PLAN REQUIREMENTS.

(1) Plan materials. Stormwater management plans shall satisfy all of the requirements in sub.(2), and shall address at a minimum the following information:

(a) A narrative describing the proposed project, including implementation schedule for planned practices,

(b) Identification of the entity responsible for long-term maintenance of the project;
(c) A map showing drainage areas for each watershed area;
(d) A summary of runoff peak flow rate calculations, by watershed area, including:
    1. Pre-existing peak flow rates;
    2. Post-construction peak flow rates with no detention;
    3. Post-construction peak flow rates with detention;
    4. Assumed runoff curve numbers (RCNs); and
    5. Time of concentration (Tc) used in calculations.
(e) A complete site plan and specifications, signed by the person who designed the plan. All plans shall be drawn to an easily legible scale, shall be clearly labeled, and shall include, at a minimum, all of the following information:
    1. Property lines and lot dimensions;
    2. All buildings and outdoor uses, existing and proposed, including all dimensions and setbacks;
    3. All public and private roads, interior roads, driveways and parking lots. Show traffic patterns and type of paving and surfacing material,
    4. All natural and artificial water features, including, but not limited to lakes, ponds, streams (including intermittent streams), and ditches. Show ordinary high water marks of all navigable waters, 100-year flood elevations and delineated wetland boundaries, if any. If not available, appropriate flood zone determination or wetland delineation, or both, may be required at the applicant's expense,
    5. Depth to bedrock;
    6. Depth to seasonal high water table;
    7. The extent and location of all soil types as described in the Dane County Soil Survey, slopes exceeding 12%, and areas of natural woodland or prairie,
    8. Existing and proposed elevations (referenced to the North American Vertical Datum of 1988, where available) and existing and proposed contours in the area requiring a grading and filling permit;
    9. Elevations, sections, profiles, and details as needed to describe all natural and artificial features of the project,
    10. Soil erosion control and overland runoff control measures, including runoff calculations as appropriate,
    11. Detailed construction schedule;
    12. Copies of permits or permit applications required by any other governmental entities or agencies,
    13. Any other information necessary to reasonably determine the location, nature and condition of any physical or environmental features;
    14. Location of all storm water management practices,
    15. All existing and proposed drainage features;
    16. The location and area of all proposed impervious surfaces; and
    17. The limits and area of the disturbed area.
(f) Engineered designs for all structural management practices;
(g) A description of methods to control oil and grease or written justification for not providing such control;

(h) A maintenance plan and schedule for all permanent storm water management practices as recorded on the affidavit required in sec. 15-2-9(3)(d)).

(2) Stormwater management performance standards. Proposed design, suggested location and phased implementation of effective, practicable stormwater management measures for plans shall be designed, engineered and implemented to achieve the following results:

(a) Sediment Control.

1. For new development, design practices to retain soil particles greater than 5 microns on the site (80% reduction) resulting from a one-year 24-hour storm event (2.5 inches over 24-hour duration), according to approved procedures, and assuming no sediment resuspension.
2. For redevelopment resulting in exposed surface parking lots and associated traffic areas, design practices to retain soil particles greater than 20 microns on the entire site (40% reduction) resulting from a one-year 24-hour storm event, according to approved procedures, and assuming no sediment resuspension. Under no circumstances shall the site's existing sediment control level or trapping efficiency be reduced as a result of the redevelopment.

(b) Oil and grease control. For all stormwater plans for commercial or industrial developments and all other uses where the potential for pollution by oil or grease, or both, exists, the first 0.5 inches of runoff will be treated using the best oil and grease removal technology available. This requirement may be waived by the plan reviewer, only when the applicant can demonstrate that installation of such practices is not necessary.

(c) Runoff rate control - hydrologic calculations. All runoff calculations shall be according to the methodology described in the Natural Resources Conservation Service's Technical Release 55, "Urban Hydrology for Small Watersheds" (commonly known as TR-55), or other methodology approved by the Dane County Conservationist. For agricultural land subject to this section, the maximum runoff curve number (RCN) used in such calculations shall be 51 for HSG A, 68 for hydrologic soil group B, 79 for HSG C, and 84 for HSG D. The TR-55-specified curve numbers for other land uses shall be used. Heavily disturbed sites will be lowered one permeability class for hydrologic calculations. Lightly disturbed areas require no modification. Where practices have been implemented to restore soil structure to pre-developed conditions, no permeability class modification is required.

(d) Runoff rate control – design standards. Except for redevelopment projects, all stormwater facilities shall be designed, installed and maintained to effectively accomplish the following:

(1) Maintain predevelopment peak runoff rates for the 2-year, 24-hour storm event. (2.9 inches over 24-hour duration).
(2) Maintain predevelopment peak runoff rates for the 10-year, 24-hour storm event (4.2 inches over 24-hour duration).
(3) Maintain predevelopment peak runoff rates for the 100-year, 24-hour storm event (6.0 inches over 24-hour duration).

(e) Outlets. Discharges from new construction sites must have a stable outlet capable of carrying designed flow as required in section 15-2-11(2)(d), at a non-erosive velocity. Outlet design must consider flow capacity and flow duration. This requirement applies to both the site outlet and the ultimate outlet to the stormwater conveyance or water body.

(f) Infiltration.

(1) Residential development. For residential development, design practices to infiltrate sufficient runoff so that post-development infiltration volume shall be at least 90% of the pre-development infiltration volume, based upon average annual rainfall. If when designing appropriate infiltration systems, more than one percent (1%) of the site is required to be used as effective infiltration area, the applicant may alternately design infiltration systems and pervious surfaces to meet or exceed an annual recharge rate of 7.6 inches per year. If this alternative design approach is taken, at least one percent (1%) of the site must be used for infiltration.

(2) Nonresidential development. For nonresidential development, including commercial, industrial, and institutional development, design practices to infiltrate sufficient runoff volume so that post-development infiltration volume shall be at least sixty percent (60%) of the pre-development infiltration volume, based on average annual rainfall. If when designing appropriate infiltration systems, more than two percent (2%) of the site is required to be used as effective infiltration area, the applicant may alternately design infiltration systems and pervious surfaces to meet or exceed an annual recharge rate of 7.6 inches per year. If this alternative design approach is taken, at least two percent (2%) of the site must be used for infiltration.

(3) Pre-Treatment. Before infiltrating runoff, pretreatment shall be required for parking lot runoff and runoff from new road construction in commercial, industrial, and institutional areas that will enter an infiltration system. The pretreatment shall be designed to protect the infiltration system from clogging prior to scheduled maintenance and to protect groundwater quality.

(4) Prohibitions. Notwithstanding subparagraphs 1 through 3, infiltration systems may not be installed in any of the following areas:

(a) Areas associated with tier one (1) industrial facilities identified in NR 216.21(2)(a), Wis. Admin. Code; including storage, loading, rooftop & parking.

(b) Storage and loading areas of tier two (2) industrial facilities identified in NR 216.21(2)(B), Wis. Admin. Code.

(c) Fueling and vehicle maintenance areas.

(d) Areas within 1,000 feet up gradient or within 1,000 feet down gradient of Karst features.

(e) Areas with less than three feet separation distance from bottom of the infiltration system to the elevation of seasonal high groundwater or the top of bedrock, except that this provision does not prohibit infiltration of roof runoff.

(f) Areas with runoff from industrial, commercial and institutional parking lots and roads and residential arterial roads with less than five feet separation distance from the bottom of the infiltration system to the elevation of seasonal high groundwater or the top of bedrock.

(g) Areas within 400 feet of a community water system well as specified in NR 811.16(4), Wis. Admin. Code, for

runoff infiltrated from commercial, industrial, and institutional land used or regional devices for residential development.

(h) Areas where contaminants of concern, as defined in NR 720.03(2), Wis. Admin. Code, are present in the soil through which infiltration will occur.

(i) Any area where the soil does not exhibit one of the following characteristics between the bottom of the infiltration system and the seasonal high groundwater top of bedrock; at least a five foot (5') soil layer with 10 percent (10%) fines or greater. This provision does not apply where the soil medium within the infiltration system provides an equivalent level of protection and does not prohibit infiltration of roof runoff.

(5) Alternate use of runoff. Where alternate uses of runoff are employed, such as for toilet flushing, laundry or irrigation; such alternate use shall be given equal credit toward the infiltration volume required by this section.

(6) Minimizing groundwater pollution. According to Ch. NR 151, Wisc. Admin. Code, infiltration systems designed in accordance with this section shall, to the extent technically and economically feasible, minimize the level of pollutants infiltrating to groundwater and shall maintain compliance with the preventive action limit at a point of standard application in accordance with Ch. NR 140, Wisc. Admin. Code. However, if site-specific information indicates that compliance with preventive action limit is not achievable, the infiltration system may not be installed or shall be modified to prevent infiltration to the maximum extent practicable in the absolute discretion of the Village.

(g) Thermal control.

The storm water management plan shall include provisions and practices to reduce the temperature of runoff for sites located within the watershed of a river or stream identified by the Wisconsin Department of Natural Resources as:

(1) A Cold Water Community as identified through NR 102.04(3)(a), NR 104, Wisconsin Administrative Code, and Class I, Class II, and Class III Trout Streams identified in "Wisconsin Trout Streams," DNR publication PUB-FH-806-2002 or its successor.

(2) Rivers or streams proposed by the Wisconsin Department of Natural Resources as Cold Water Communities and Class I, II, and III Trout Streams.

The storm water management plan does not have to meet the requirement in this par. (7) if the applicant can justify by use of a model approved by the Dane County Conservationist that practices are not necessary because the temperature increase of runoff from the site post-development will be zero.

A current list and maps of affected watersheds shall be available for reference at the office of the Local Approval Authority.

(3) Storm water management goals. The following standards shall be met whenever possible, and proposed design, suggested location and implementation of practices to meet these goals shall be included in plans:
   (a) For existing development, design practices to retain soil particles greater than 40 microns on the site (20% reduction) resulting from a one-year 24-hour storm event, according to approved procedures, and assuming no sediment resuspension.
   (b) For street reconstruction, design practices to retain soil particles greater than 20 microns on the site (40% reduction) resulting from a one-year, 24 hour storm event, according to approved procedures, and assuming no sediment resuspension.

SEC. 15-2-12 OFF-SITE STORM WATER MANAGEMENT.

(1) Off-site storm water management is allowed, provided that all of the following conditions for the off-site facility are met:
   (a) The facility is in place.
   (b) The facility is designed and adequately sized to provide a level of storm water control that at least meets the standards contained in this chapter.
   (c) The facility has a legally obligated entity responsible for its long-term operation and maintenance.

SEC. 15-2-13 TECHNICAL STANDARDS AND SPECIFICATIONS.

The design of all best management practices designed to meet the requirements of this chapter shall comply with the following technical standards:
(1) Natural Resources Conservation Service's "Wisconsin Field Office Technical Guide, Chapter 4;" or its successor.
(2) Applicable construction or erosion control standards by the Wisconsin Department of Natural Resources.
(3) Any other technical methodology approved by the Dane County Conservationist.

SEC. 15-2-14 APPEALS AND VARIANCES.

(1) Appeals.
   (a) Any person aggrieved by any decision of the Village Engineer, Zoning Administrator, Building Inspector or other administrative officer made pursuant to this chapter may appeal to the Zoning Board of Appeals. Such appeal shall be taken within 15 days after the challenged decision. Notice of Appeal setting forth the specific grounds for the appeal shall be filed with the Village's Clerk. The Village Clerk shall forthwith transmit to the Zoning Board of Appeals the record upon which the action appealed from was taken.
   (b) The Zoning Board of Appeals shall fix a reasonable time for the hearing of the appeal and publish a class 2 notice thereof under ch. 985, Wis. Stats, as well as give due notice to the parties in interest, and decide the same

within a reasonable time. Upon the hearing any party may appear in person or by agent or attorney.

(c) The Zoning Board of Appeals may, in conformity with the provisions of this chapter, reverse or affirm, wholly or partly, or modify the order, requirement, decision or determination appealed from and may make such order, requirement decision or determination as ought to be made, and shall have all the powers of the officer from whom the appeal is taken.

(d) The concurring vote of a majority of the Zoning Board of Appeals shall be necessary to reverse the decision of the administrative officer and the grounds for such decision shall be stated in writing.

(2) Variances.

(a) An applicant may include in the application a request for a variance from the requirements of sec. 15-2-10 or 15-2-11. No variance shall be granted unless applicant demonstrates and the Village Engineer and the Building Inspector after consultation with the county conservationist, finds that all of the following conditions are present:

1. Enforcement of the standards set forth in this chapter will result in unnecessary hardship to the landowner,
2. The hardship is due to exceptional physical conditions unique to the property,
3. Granting the variance will not adversely affect the public health, safety or welfare, nor be contrary to the spirit, purpose and intent of this chapter,

(b) If all of the conditions set forth in par. (a) are met, a variance may only be granted to the minimum extent necessary to afford relief from the unnecessary hardship, with primary consideration to water quality and impact to downstream conditions.

(c) A person aggrieved by a decision of the Board of Appeals regarding a variance may appeal that decision to the Circuit Court as set forth in Section 62.23 (7) e, Wis. Stats.

SEC. 15-2-15. PERMIT FEES.

The Village Board of Trustees may by resolution separate from this chapter establish a fee schedule for erosion control and stormwater management permits.