

Version 5.3 - May 25, 2010 - JMA

ARTICLE 2. DEFINITIONS.

Sec. 15-16. Interpretation of Terms and Words.

The terms and words used in this Ordinance or in a waiver community ordinance shall be interpreted as follows:

1. Words used in the present tense include the future tense; and
2. Words used in the singular number include the plural number and words used in the plural number include the singular number; and
3. The words "shall", "will", and "must" are mandatory, not permissive; and
4. All distances, unless otherwise stated, shall be measured horizontally.
5. The phrases "Director or the Administrator", "Director, or the Administrator in a waiver community", or "Director, or Administrator in a complete waiver community", refer to the individual responsible for the enforcement in the specific area.

Sec. 15-17. Definitions.

Within the context of this Ordinance or a waiver community ordinance, the following words and terms shall have the meanings set forth except where otherwise specifically indicated. Words and terms not defined shall have the meanings indicated by common dictionary definition.

Administrator. The person administering the implementation and enforcement of this Ordinance; or, the person administering the implementation and enforcement of a community ordinance in a waiver community.

Alternatives Analysis: The process of comparing two or more courses of action for the various technical aspects of a project with the intent of selecting the action that best meets the stated purpose, while minimizing environmental effects and costs. A study of practicable alternatives, the study should consider possible alternative sites, a reduction in the scale of the project and rearrangement of the proposed facilities. This study assesses actions such as fill site locations, partial and full avoidance of habitats, and restoration and enhancement of habitats and project economics.

Applicable Engineering Practice. Procedures, methods, or materials recommended in standard engineering textbooks or references as suitable for the intended purpose.

Applicant. A person applying for a Stormwater Management Permit, which person must be either

the owner or the developer of the land specified in the application.

Appropriate Use. The only uses of the regulatory floodway that may be considered for a stormwater permit. See Section 15-133 of this Ordinance.

Base Flood. The flood having a one percent probability of being equaled or exceeded in a given year.

Base Flood Elevation. The height of the base flood in relation to the National Geodetic Vertical Datum of 1929.

Basic Project Purpose. The fundamental, essential function of the proposed activity.

Best Management Practices (BMPs). Design, construction, and maintenance practices and criteria for stormwater facilities that minimize the impact of stormwater runoff rates and volume, prevent erosion, and capture pollutants.

Buffer. Shall be applied to areas that meet the definition of waters of DuPage and shall consist of the following: Existing vegetated areas within 50 feet of any regulatory wetland boundary or 100 feet of any critical wetland boundary. Buffer shall also be applied to those portions of linear waters of DuPage that do not have wetland fringe. Buffer shall also be applied to the non-wetland portion of a linear waters within area containing mapped 100 year flood plain. The buffer width will be no more than 50' wide from the Ordinary High Water Mark (OHWM) and will not extend past the limit of the mapped flood plain,

Building. A structure that is constructed or erected partially or wholly above ground and is enclosed by walls and a roof. The term "building" includes manufactured homes and includes both the above-ground and the below-ground portions of the structure.

Certify/Certification. A statement that a proposed development meets the requirements of this Ordinance.

Committee. The Stormwater Management Committee of the DuPage County Board, authorized by Public Act 85-905.

Community. Any municipality, or the unincorporated County, within DuPage County acting as a unit of local government.

Compensatory Storage. An excavated hydrologically and hydraulically equivalent volume of storage created to offset the loss of existing flood storage.

CLOMA. A Conditional Letter of Map Amendment. A FEMA comment letter on a development proposed to be located in, and affecting only that portion of, the area of flood plain outside the regulatory floodway and having no impact on the existing regulatory floodway or base flood elevations.

CLOMR. A Conditional Letter of Map Revision. A letter that indicates that FEMA will revise base flood elevations, flood insurance rate zones, flood boundaries, or floodways as shown on an effective

FIRM or FBFM, after the record drawings are submitted and approved.

COE. The United States Army Corps of Engineers.

Complete Waiver. The authority granted to a community pursuant to Articles 3, 4, and 5 of this Ordinance whereby a community acquires complete jurisdiction over reviewing applications for and granting Stormwater Management Permits.

County. The County of DuPage, Illinois.

Critical Wetlands. Wetlands of the highest value by virtue of one or more high ranking characteristics that result in a uniquely valuable environment. See Sections 15-134 and 15-135 of this Ordinance.

Dam. Any obstruction, wall embankment, or barrier, together with any abutments and appurtenant works, constructed to store or direct water or to create a pool (not including underground water storage tanks).

Department. The DuPage County Department of [Economic Development and Planning](#).

Developer. Any person who undertakes development or permits development on such person's behalf.

Development. Any activity, excavation or fill, alteration, subdivision, change in land use, or practice, undertaken by private or public entities that affects the discharge of stormwater; or any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment or materials in a Special Management Areas. The term "development" does not include maintenance of stormwater facilities.

Director. The DuPage County Director of Stormwater Management or his or her designee. The Director Stormwater Management shall be a professional engineer.

Elevation Certificates. A form published by FEMA, or its equivalent, that is used to certify the base flood elevation and the lowest elevation of usable space to which a building has been constructed.

Environmental Scientist. A person with a four-year degree in an [earth or](#) life science curriculum in which the emphasis was on ecologic systems or equivalent education, and four years of [professional](#) experience [with an emphasis on wetland delineation, ecology, and restoration](#).

Existing Manufactured Home Park. A manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including, at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring on concrete pads) is completed before the effective date of the flood plain management regulations adopted by a community.

Expansion to an Existing Manufactured Home Park. The preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured homes are to be affixed

(including the installation of utilities, the construction of street, and either final site grading or the pouring of concrete pads).

FBFM. A Flood Boundary and Floodway Map. A flood plain management map issued by FEMA that depicts, based on detailed analysis, the boundaries of the base flood, the two tenth percent (0.2%) probability flood, and the floodway.

FEMA. The Federal Emergency Management Agency.

FHBM. A Flood Hazard Boundary Map. An official map of a community, issued by FEMA, on which the boundaries of the flood, mudslide or mudflow, or related erosion areas having special hazards have been designated as Zones A, M, and/or E.

Filter Barrier. A temporary barrier installed below small disturbed areas to intercept and detain sediment.

FIRM. A Flood Insurance Rate Map. A map issued by FEMA that is an official community map, on which map FEMA has delineated both the special hazard areas and the risk premium zones applicable to the community. This map may or may not depict floodways. The current effective FIRMs for the incorporated and unincorporated DuPage County are listed in Exhibit 2.

FIS. Flood Insurance Study. An examination, evaluation and determination of flood hazards and, if appropriate, corresponding water surface elevations. The current effective FIS's for the incorporated and unincorporated DuPage County are listed in Exhibit 2.

Flood or Flooding. A general and temporary condition of partial or complete inundation of normally dry land areas from the unusual and rapid accumulation or runoff of surface waters from any source.

Flood Plain. The area typically adjacent to and including a body of water where ground surface elevations are at or below a specified flood elevation.

Floodproof. Additions, changes, or adjustments to structures or property that prevent the entry of flood water in order to protect property from flood damage.

Floodproofing Certificate. A form published by FEMA that is used to certify that a structure is floodproofed to one foot above the base flood elevation.

Floodway. The channel and that portion of the flood plain adjacent to a stream or watercourse that is needed to convey the base flood without cumulatively increasing the water surface elevation more than 0.1 feet. The maps that identify the current effective floodways for the incorporated and unincorporated DuPage County are listed in Exhibit 2.

Floodway Conveyance. The measure of the flow carrying capacity of the floodway section and is defined using Manning's equation as, $K = \frac{1.49 AR^{2/3}}{n}$ where "n" is Manning's roughness factor, "A" is the effective area of the cross-section, and "R" is ratio of the wetted area to the wetted perimeter.

Floristic Quality Index (FQI). As determined by the methodology contained in Swink, F. and G. Wilhelm's *Plants of the Chicago Region* (1994. 4th Edition, The Morton Arboretum, Lisle, Illinois).

Hydrology. The science of the behavior of water, including its dynamics, composition, and distribution in the atmosphere, on the surface of the earth, and underground.

Interim Watershed Plan. A watershed plan adopted by the County Board that does not contain all of the elements in Chapter 3 of the Plan.

Lake. A natural or artificial body of water encompassing an area of two or more acres that retains water throughout the year.

Land Surveyor. A person licensed under the laws of the State of Illinois to practice land surveying.

LOMA. A Letter of Map Amendment. The official determination by FEMA that a specific structure is not in a regulatory flood plain. A LOMA amends the effective FHBM, FBFM, or FIRM.

LOMR. A Letter of Map Revision. A letter from FEMA that revises base flood elevations, flood insurance rate zones, flood boundaries, or floodway as shown on an effective FHBM, FBFM, or FIRM.

Lowest Floor. The lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, usage solely for parking of vehicles, building access or storage in an area other than a basement area is not considered a building's lowest floor; provided, that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirement of the *Code of Federal Regulations 44, Part 60.3*.

Maintenance. The selective removal of woody material and accumulated debris from, or repairs to, a stormwater facility so that such facility will perform its natural functions or the functions for which it was designed and constructed.

Major Stormwater System. That portion of a stormwater facility needed to store and convey flows beyond the capacity of the minor stormwater system.

Manufactured Home. A building, transportable in one or more sections, that is built on a permanent chassis and is designated for use with or without a permanent foundation when connected to the required utilities. The term "manufactured home" also includes park trailers, travel trailers, and other similar vehicles placed on a site for more than 180 consecutive days.

Manufactured Home Park. A parcel or contiguous parcels of land divided into two or more manufactured home lots for rent or sale.

Minor Stormwater System. That portion of a stormwater facility consisting of street gutters, storm sewers, small open channels, swales, and similar facilities designed to convey runoff from the 10-year flood event or less.

Mitigation. Measures taken to offset negative impacts by development within or wetland, wetland

buffer or floodplain areas. When a project unavoidably requires impact or loss of natural resources, that impact must be offset (compensated or mitigated) by replacing or providing substitute resources or environments. Mitigation shall take into consideration the following functions the impacted area may provide:

- Bank stability
- Sediment filtration from adjoining uplands.
- Shading of the waterway to moderate daily and seasonal stream temperature fluctuations.
- Habitat for both aquatic and terrestrial fauna and flora.
- Recreation and aesthetics for humans.

Formatted: Bulleted + Level: 1 +
Aligned at: 0.25" + Indent at: 0.5"

Natural Areas Restoration Project. A development for which the purpose of the project is the restoration or creation of natural areas including streambank or shoreline restoration.

Deleted: ¶

New Construction. For the purposes of determining insurance rates, structures for which the “start of construction” commenced on or after the effective date of an initial FIRM or after December 31, 1974, whichever is later, and included any subsequent improvements to such structures. For flood plain management purposes, new construction means structures for which the start of construction commenced on or after the effective date of the flood plain management regulation adopted by a community and includes any subsequent improvements to such structures.

New Manufactured Home Park. A manufactured home park for which the construction of facilities for servicing homes are to be affixed (including at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed on or after the effective date of flood plain management regulation adopted by a community.

NFIP. The National Flood Insurance Program. The requirements of the NFIP are codified in Title 44 of the Code of Federal Regulations.

NRCS. The United States Department of Agriculture, Natural Resources Conservation Service.

Oversight Committee. A committee appointed by a waiver community to oversee the implementation and enforcement of the waiver community's ordinance.

Ordinary High Water Mark (OHWM). The line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas

OWR. The Illinois Department of Natural Resources, Office of Water Resources.

Parcel. Contiguous land under single ownership or control.

Partial Waiver. Authority granted to a community pursuant to Articles 3, 4, and 5 of this Ordinance whereby the waiver community acquires limited jurisdiction over reviewing applications for, and issuing, Stormwater Management **Permits.**

Comment [JMA1]: Should this say certification.

Performance Standard. A set of criteria for a specified area which the vegetation, soils, and/or

hydrology must meet in order to obtain approval as outlined in a stormwater management certification..

Person. Any individual, partnership, firm, school district, company, corporation, association, joint stock company, trust, estate, unit of local government, special taxing district, public utility, political subdivision, state agency, or any other legal entity, or owner, or any legal representative, agent, or assign thereof.

Plan. The DuPage County Stormwater Management Plan, adopted by the DuPage County Board in September 1989, as amended from time to time.

Pollutant. Any substance harmful to the environment that is not authorized for discharge from a storm sewer by an Illinois Environmental Protection Agency General National Pollutant Discharge Elimination System (NPDES) Permit.

Practicable Alternative. Available and capable of being completed after taking into consideration cost, existing technology, and logistics in light of the overall project purpose.

Professional Engineer. A person licensed under the laws of the State of Illinois to practice professional engineering.

Professional Engineering. The application of science to the design of engineering systems and facilities, using the knowledge, skills, ability, and professional judgment developed through professional engineering education, training, and experience.

Professional Engineering Practice. The consultation on, conception, investigation, evaluation, planning, and design of, and selection of materials and methods to be used in, administration of construction contracts for or site observation of an engineering system or facility, when such consultation, conception, investigation, evaluation, planning, design, selection, administration, or observation requires extensive knowledge of engineering laws, formulae, materials, practice, and construction methods.

Public Flood Easement. An easement acceptable to the appropriate jurisdictional body that meets the regulation of the OWR, the Department, and the community, that provides legal assurances that all areas subject to flooding in the created backwater of the development will remain open to allow flooding.

Record Drawings. Drawings prepared, signed, and sealed by a professional engineer or land surveyor representing the final "as-built" record of the actual in-place elevations, location of structures, and topography.

Recreational Vehicle. A vehicle which is: (a) Built on a single chassis; (b) 400 square feet or less when measured at the largest horizontal projections; (3) Designed to be self-propelled or permanently towable by a light duty truck; and (4) Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

Regulatory Flood Map. The flood plain map panels maintained and published by DuPage County

which reflect the current effective flood zone boundaries as shown on the FIRM and all effective Letters of Map Change issued by FEMA.

Regulatory Flood Plain. The flood plain as determined by the base flood elevation used as the basis for regulation in this Ordinance.

Regulatory Floodway. The floodway that is used as the basis for regulation in this Ordinance.

Regulatory Wetlands. All wetlands other than critical wetlands.

Runoff. The waters derived from melting snow or rain falling within a tributary drainage basin that exceeds the infiltration capacity of the soils of that basin.

Sediment Basin. Settling ponds with pipe outlet, which have both a permanent pool (dead storage) and additional volume (live and sediment storage) component, to detain sediment-laden runoff from disturbed areas to allow sediment and debris to settle out.

Sediment Trap. A small, temporary ponding basin formed by the construction of an embankment or excavated basin to detain sediment-laden runoff from disturbed areas to allow sediment and debris to settle out.

Silt Fence. A temporary filter barrier of entrenched geotextile fabric (filter fabric) stretched across and attached to supporting posts.

Soil Scientist. A person with a four-year degree in which the core curriculum included course work in a minimum of two of the following fields: soil science, pedology, edophology, and geomorphology, and which person has a minimum of two years of field experience in classifying soils.

Special Flood Hazard Area. An area having special flood, mudslide or mudflow, or flood-related erosion hazards, and which area is shown on an FHBM or FIRM as Zone A, AO, A1-30, AE, A99, AH, VO, V1-30, VE, V, M, or E.

Special Management Areas. Regulatory flood plains, riparian environment, wetlands, or wetland buffers. See Article 10 of this Ordinance.

Start of Construction. The date the permit was issued provided the actual start of construction, repair, reconstruction, rehabilitation, addition placement or other improvement was within 180 days of the permit date. The actual start date includes the first day of any land preparation, including clearing, grading, filling, or excavation. For substantial improvements, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building whether or not that alteration affects the external dimensions of the building.

Stormwater Facility. All ditches, channels, conduits, bridges, culverts, levees, ponds, natural and man-made impoundments, **manmade** wetlands, wetland buffers, riparian environment, tile, swales, sewers, BMPS or other natural or artificial structures or measures which serve as a means of draining surface and subsurface water from land.

Stormwater Management Certification. A permit established by this Ordinance or by a waiver community's Stormwater Ordinance; and issued by the Department or a waiver community signifying acceptance of measures identified for proposed development to comply with this Ordinance and the Plan.

Structure. Anything that is erected or constructed. The term "structure" includes, without limitation: buildings, manufactured homes, tanks, dams, sewers, constructed channels, outfalls, parking lots, driveways, roads, sidewalks, and concrete patios.

Structural Engineer. A person licensed under the laws of the State of Illinois as a structural engineer.

Substantial Damage. Damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.

Substantial Improvement. Any repair, reconstruction, rehabilitation, addition, or other improvement of a building, the cost of which improvement equals or exceeds, individually or in the aggregate, 50 percent of the fair market value of the building, determined from the equalized assessed value of the building, before the start of construction of the improvement or, if the building has been damaged, before the damage occurred. The term "cost of improvement" includes the value of volunteer labor and donated materials. The term "cost of improvement" does not, however, include either (1) any project for improvement of a building to correct existing violations of state or local health, sanitary, or safety code specifications that have been identified by the local code enforcement official and that are the minimum necessary to assure safe living conditions or (2) any alteration of a historic building that will not preclude the building's continued designation as a historic building.

Temporary Wetland Impact. Short-term loss of wetland function and/or value. Temporary impacts do not include relocation of wetland, or conversion of a vegetated community to open water, unless the conversion is part of an overall wetland restoration/creation program that is submitted for review and approval. Additionally, for the impact to be considered temporary, wetland soil profiles shall be able to be restored to a similar pre-disturbance condition, vegetative communities shall have the capability of being restored to same or higher quality floristic values, and restoration must occur within one year of occurring.

Usable Space. Space used for dwelling, storage, utilities, or other beneficial purposes, including without limitation basements.

Variance. An authorization recommended by the Committee or an Oversight Committee, and granted by the DuPage County Board or the corporate authorities of a waiver community, that varies certain requirements of this Ordinance or a waiver community ordinance in a manner in harmony with the application of such ordinance's general purpose and intent, which variance shall be granted only in a case where there are practical difficulties or particular hardships.

Violation. Failure of a structure or other development to be fully compliant with the regulations identified by Ordinance.

Waiver Community. A community that has been granted either a partial waiver or a complete waiver from County enforcement of this Ordinance. See Article 4 of this Ordinance.

Waiver Community Ordinance. An approved, valid, and effective stormwater management ordinance of a waiver community. See Articles 3 and 4 of this Ordinance.

Watershed. All land area drained by, or contributing water to, the same stream, lake, or stormwater facility.

Watershed Basin Committee. A technical committee established within a watershed planning area.

Watershed Benefit. A decrease in flood elevations or flood damages or an improvement in water quality, upstream or downstream of the development site.

Watershed Plan. A plan adopted by the County for stormwater management within a watershed consistent with the requirements in Chapter 3 of the Plan.

Watershed Planning Area. That area considered in a specific watershed plan, adopted as part of the Plan, and depicted on the attached Exhibit 1.

Watershed Plan Model. The hydrologic and hydraulic model meeting the standards of the Plan and used in developing a watershed plan.

Waters of DuPage.

1. All waters such as lakes, rivers, streams (including intermittent streams), mudflats, wetlands, sloughs, wet meadows, or natural ponds.
2. All impoundments of waters not otherwise defined as waters of DuPage under the definition.
3. Tributaries of waters identified above.

For clarification, waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the CWA (other than cooling ponds as defined in 40 CFR 123.11(m) which also meet the criteria of this definition) are not waters of DuPage. It should also be noted that the following waters are generally not considered to be Waters of DuPage. However, the Director, or the Administrator in a complete waiver community, reserves the right on a case-by-case basis to determine that a particular waterbody within these categories of waters is a water of DuPage.

1. Drainage and irrigation ditches excavated on dry land.
2. Artificially irrigated areas that would revert to upland if the irrigation ceased.
3. Artificial lakes created by excavating and/or diking dry land to collect and retain water and which are used exclusively for such purposes as stormwater storage, stock watering, irrigation, or settling basins.
4. Artificial bodies of water created by excavating and/or diking dry land to retain water for primarily aesthetic reasons.

4. Waterfilled depressions created in dry land incidental to construction activity and pits or quarries excavated in dry land for the purpose of obtaining fill, stone, aggregate, sand, or gravel unless and until the construction or excavation operation is abandoned for a period of 5 years or more and the resulting body of water meets the definition of waters of DuPage.

Wetlands. Areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

Wetland Impact. Development affecting the long term functions and/or values of any wetland.

Comment [JMA2]: added "long term" because temporary impact says "short term"

Sec. 15-18. through 15-30. Reserved.

ARTICLE 3. WAIVER COMMUNITY ENFORCEMENT.

ARTICLE 9. REQUIREMENTS FOR STORMWATER AND FLOOD PLAIN MANAGEMENT.

Sec. 15-111. General Information.

1. All developments shall meet the requirements specified for general stormwater and flood plain development (Section 15-112), site runoff (Section 15-113), sediment and erosion control (Section 15-117), and performance security (Article 13).
2. All developments, with consideration given to those developments as noted in Section 15-111.3 of this ordinance, shall comply with the site runoff storage requirements provided in Section 15-114 of this Ordinance in which:
 - a. The parcels being developed total three acres or greater for single or two family residential subdivision land uses; or
 - b. The parcels being developed total one acre or greater for multiple family or non-residential subdivision land uses; or
 - c. The parcels being developed total one acre or greater for multiple family or non-residential developments and the new development totals either individually or in the aggregate after February 15, 1992 to more than 25,000 square feet; or
 - d. The area being developed totals one acre or greater for road developments in rights-of-way under the ownership or control of a unit of government.
3. The Director or Administrator in a waiver community shall consider granting an exception to Section 15-111.2 of this Ordinance for those developments listed below, if specific requirements are met for

such development as listed or required by the Administrator:

- a. The development is strictly limited to the grading of pervious area, in which the following specific requirements are met:
 - (1) The Applicant must demonstrate to the administrator's satisfaction that for all storm events, up to and including the critical duration 100-year event, the grading activity does not:
 - a) Result in an increase in runoff volume; and,
 - b) Result in an increase in peak release rate; and,
 - c) Result in a time decrease associated with the time of concentration; and,
 - d) Contribute to adjacent flood problems; and,
 - e) Alter the direction of runoff.
- b. The development is strictly limited to the reconstruction of an existing parking lot, in which the following specific requirements are met:
 - (1) The Applicant must demonstrate that the reconstruction will remain in the same foot print as the existing parking lot; and,
 - (2) The Applicant must demonstrate to the administrator's satisfaction that for all storm events, up to and including the critical duration 100-year event, the development activity does not:
 - (a) Result in an increase in runoff volume; and,
 - (b) Result in an increase in peak release rate; and,
 - (c) Result in a time decrease associated with the time of concentration; and,
 - (d) Contribute to adjacent flood problems; and,
 - (e) Alter the direction of runoff.
- c. The development is strictly a Regional Stormwater Management Project or a Flood Control project in substantial compliance with either a watershed plan or other said study as reviewed and approved by the DuPage County Stormwater Management Committee.
- d. The development is strictly a Stream Bank Stabilization project.
- e. The development is strictly limited to the construction, or re-construction, of a pedestrian walkway/bike path, in which the following specific requirements are met:
 - (1) The pedestrian walkway/bike path shall not exceed twelve (12) feet in width; and,

- (2) The pedestrian walkway/bike path must be constructed by a government agency (e.g., DuPage County regional trail system, municipal sidewalk program, etc.)
- (3) The pedestrian walkway/bike path shall not be constructed in such a manner as to violate Section 15-112 of this Ordinance.
- f. The development is strictly limited to the creation of a DuPage County recognized wetland bank and/or wetland mitigation site.
- g. The development is strictly limited to the modification of an existing stormwater management facility to incorporate Best Management Practices.
- h. The development is strictly limited to the construction of a single-family residential structure on a parcel of land greater than three (3) acres.
- i. The development is greater than one acre and the existing parcel(s) is greater than eighty percent (80%) impervious on March 8, 2005, in which the following specific requirements are met:
 - (1) Where there are no known off-site flooding problems that the development is contributory to, sufficient site runoff storage shall be provided in pervious (vegetative) areas such that the probability of the post development release rate exceeding 0.04 cfs/acre of development shall be less than fifty percent (50%) per year (2-yr event), unless the applicant demonstrates to the Administrator why this criteria can't be met and the following specific requirements are met:
 - (a) Where detention storage is provided in impervious areas (i.e. underground tanks, parking lots, etc.) best management practices as described in Section 15-113.11 of this Ordinance shall be required and the applicant shall demonstrate that these practices are appropriate and effective for the site conditions
 - (b) Where the required site runoff storage cannot be provided on-site, the shorted storage shall be provided off-site or by payment into an approved detention variance fee program as determined in Section 15-115 of this Ordinance.
 - (2) The required storage in Section 15-111.3.i.(1) is required for the total project, regardless of phasing.
 - (3) Site runoff storage facilities shall meet the requirements of Section 15-114 of this Ordinance.
 - (4) Where there are known off-site flooding problems, the Administrator may require additional site runoff storage, best management practices or other measures to reduce the flood potential.
 - (5) The post development site runoff storage shall not be less than the existing site runoff storage.
 - (6) There shall be no increase in peak release rates up to and including the one percent probability of occurrence (100-yr) per year.
 - (7) Additions to an existing site that increase the imperviousness above the eighty (80%) threshold are subject to providing the full storage such that the probability of the release rate

exceeding 0.1 cfs/acre of new development is less than one percent (1.0%) per year, providing the new development is greater than 25,000 square feet.

(8) Approved Stormwater plans or permits that contain more stringent criteria than Section 15-111.3.i will apply.

4. Developments shall also meet the more specific requirements of applicable adopted Watershed Plans or adopted Interim Watershed Plans, set forth in Sections 15-118 through 15-123.
5. All development within special management areas, shall also satisfy the requirements specified in Article 10 of this Ordinance.
6. All developers shall submit the documents specified in Article 11 of this Ordinance to verify compliance with these requirements.
7. Facilities constructed under the provisions of this Ordinance or the waiver community ordinance shall be maintained according to the criteria and guidelines established in the Plan. Maintenance is the responsibility of the owner of the land on which the stormwater facilities are constructed unless the responsibility is assigned, pursuant to Section 15-180 of this Ordinance, to an entity acceptable to the governmental unit that has jurisdiction over such land.

Sec. 15-112. General Stormwater and Flood Plain Requirements.

The following general stormwater and flood plain requirements shall apply to all development.

1. Development shall not:
 - a. Result in any new or additional expense to any person other than the developer for flood protection or for lost environmental stream uses and functions; nor
 - b. Increase flood elevations or decrease flood conveyance capacity upstream or downstream of the area under the ownership or control of the developer; nor
 - c. Pose any new or additional increase in flood velocity or impairment of the hydrologic and hydraulic functions of streams and flood plains unless a watershed benefit is realized; nor
 - d. Violate any provision of this Ordinance or any applicable waiver community ordinance either during or after construction; nor
 - e. Unreasonably or unnecessarily degrade surface or ground water quality.
2. Analysis and design of all stormwater and flood plain facilities required for development shall:
 - a. Meet the standards and criteria established in the Plan and, if available, in Watershed Plans or in Interim Watershed Plans; and
 - b. Consider the Technical Guidance for the DuPage Countywide Stormwater and Flood Plain Ordinance for the Plan; and

- c. Be consistent with techniques specified in the Watershed Plans or the Interim Watershed Plans; and
 - d. Consider existing and ultimate watershed and land use conditions, with and without the proposed development.
3. Stormwater facilities shall be functional before building permits are issued for residential and non-residential subdivision.
 4. Stormwater facilities shall be functional where practicable for single parcel developments before general construction begins.
 5. In areas outside the boundary of the regulatory flood plain all usable space in new buildings, or added to existing buildings shall either be elevated, floodproofed, or otherwise protected such that the lowest entry shall be at least one foot above the adjacent base flood elevation to prevent the entry of surface stormwater. Floodproofing devices shall be operational without human intervention. If electricity is required for protection against flood damage, there shall be a backup power source which will activate without human intervention. Floodproofing measures shall be certified by a professional engineer.
 6. All usable space in new buildings or added to existing buildings adjacent to a major stormwater system, site runoff storage facility overflow path or site runoff storage facility, shall be elevated, floodproofed, or otherwise protected to at least one foot above the design elevation to prevent the entry of surface stormwater. The design elevation is the elevation associated with the design rate as determined in Section 15-114.8.f

Sec. 15-113. Site Runoff Requirements.

1. Stormwater facilities shall be required and shall be designed so that runoff exits the site at a point where flows will not damage adjacent property.
2. Stormwater facilities shall be designed to conform with the requirements of Illinois law and the applicable Sections 15-118 through 15-123 of this Ordinance.
3. Minor stormwater systems shall be sized to convey runoff from the tributary watershed under fully developed conditions consistent with the design requirements of the local jurisdiction.
4. Major stormwater systems shall be sized to carry the base flood without causing additional property damage.
5. Design runoff rates shall be calculated by using continuous simulation models or by event hydrograph methods. If event hydrograph methods are used, they must be either HEC-1 SCS runoff method, TR-20, or TR-55 tabular method. Event methods must incorporate the following assumptions:
 - a. Antecedent moisture condition = 2; and

- b. Huff or SCS Type II rainfall distribution.
- 6. Any design runoff rate method shall use Illinois State Water Survey Bulletin 70 northeast sectional rainfall statistics or the National Oceanic and Atmospheric Administration continuous rainfall record from 1949 to present at the Wheaton gage, and shall calculate flow from all tributary area upstream of the point of design.
- 7. Major and minor stormwater systems shall be located within easements or rights-of-way explicitly providing for public access for maintenance of such facilities.
- 8. Maximum flow depths on any roadway shall not exceed six inches during the base flood condition.
- 9. Transfers of waters between watersheds shall be prohibited except when such transfers will not violate the provisions of Subsection 15-112.1 of this Ordinance.
- 10. Stormwater facilities for runoff upstream of flood protection facilities shall provide for conveyance or storage of flood waters without increased potential for damage to real or personal property during base flood conditions.

Deleted: <sp><sp>

- 11. Developments requiring a Stormwater Management Permit under Section 15-147 of this Ordinance shall treat the developed area for pollutants from the site in accordance with accepted practices and procedures, examples of which are in Appendix E of the DuPage County Countywide Stormwater and Flood Plain Ordinance, Part I-Technical Guidance, Water Quality Best Management Practices, with the following exceptions:
 - a. The parcels being developed total less than one acre for single or two family land uses.
 - b. The Director or Administrator in a waiver community shall consider granting an exception to section 15-113.11 for those developments listed in section 15-111.3.b. and e.
- 12. Developments requiring a Stormwater Management Permit under Section 15-147 of this Ordinance shall, to the extent practical, incorporate the following Best Management Practices into the site design to minimize increases in runoff rates, volumes, and pollutant loads:
 - a. All runoff from rooftops and parking lots, and discharge from sump pumps, that does not discharge into a site runoff storage facility shall be directed onto vegetated swales or filter strips, for a distance of at least 50 feet.
 - b. Vegetated swales shall be utilized, where appropriate, as an alternative to storm sewers to promote the infiltration of stormwater and the filtration of stormwater pollutants.
 - c. Effective impervious surface area should be limited by site designs which minimize the area of streets, parking lots, and rooftops and/or utilize permeable paving material such as concrete grids in low traffic areas.
 - d. Other Best Management Practices such as infiltration basins and trenches (where permeable soils are present) and filtration basins and sand filters (on highly impervious or industrial developments) shall be utilized where appropriate.

- e. The practices and procedures established in the Technical Guidance for the DuPage Countywide Stormwater and Flood Plain Ordinance for the Plan and as described in the United States Environmental Protection Agency's "Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters", dated January 1993.

13. Developments shall incorporate all Best Management Practices as may be required pursuant to the United States Clean Water Act, 33 U.S.C. §§ 1251 et seq., as amended.

Sec. 15-114. Site Runoff Storage Requirements (Detention).

1. Maximum site runoff storage requirements shall be consistent with the information, procedures, and requirements of the applicable Sections 15-118 through 15-123 of this Ordinance, except as limited by the provisions of Subsection 15-114.2 of this Ordinance.
2. If no release rate, or a greater release rate than identified below, is specified in the applicable Sections 15-118 through 15-123 of this Ordinance, then sufficient storage shall be provided such that the probability of the post development release rate exceeding 0.1 cfs/acre of development shall be less than one percent (1.0%) per year. Design runoff volumes shall be calculated using continuous simulation or event hydrograph methods.
3. If event hydrograph methods are used to calculate design runoff volumes, they must be either HEC-1 SCS runoff method with outlet routing option, TR-20 with outlet control routing option, or TR-55 tabular method with outlet control routing. Event methods shall incorporate the following assumptions:
 - a. Antecedent moisture condition = 2; and
 - b. Huff or SCS Type II rainfall distribution; and
 - c. Twenty-four (24) hour duration storm with a one percent (1.0%) probability of occurrence in any one year as specified by Illinois State Water Survey Bulletin 70 northeast sectional rainfall statistics.
4. If continuous simulation methods are used, design runoff volumes shall be calculated using the Wheaton National Oceanic and Atmospheric Administration rainfall record from 1949 to present.
5. For sites where the undeveloped release rate is less than the maximum release rate in Subsection 15-114.2 of this Ordinance, the developed release rate and corresponding site runoff storage volume shall be based on the existing undeveloped release rate for the development site.
6. All hydrologic and hydraulic computations must be verified under the full range of expected downstream water surface elevations, from low flow through the base flood elevation.
7. Responsibility for maintenance of all storage facilities shall be designated on the plat of subdivision or other recorded documents.
8. Storage facilities shall be designed and constructed with the following characteristics:
 - a. Water surface depths two feet above the base flood elevation will not damage the storage facility.

- b. The storage facilities shall be accessible and easily maintained.
- c. All outlet works shall function without human intervention or outside power and shall operate with minimum maintenance.
- d. Storage facilities shall facilitate sedimentation and catchment of floating material.
- e. Storage facilities shall minimize impacts of stormwater runoff on water quality by incorporating Best Management Practices.
- f. Storage facilities shall provide an overflow structure and overflow path that can safely pass excess flows through the development site. The minimum design rate shall be 1.0 cfs/acre of area tributary to the storage facility.

9. Storage facilities located within the regulatory flood plain shall:

- a. Conform to all applicable requirements specified in Article 10 of this Ordinance; and
- b. Store the required site runoff under all stream flow and backwater conditions up to the base flood elevation; and
- c. Not allow design release rates to be exceeded under any stream elevation less than the base flood elevation.

Deleted: <sp><sp>

10. Storage facilities located within the regulatory floodway shall:

- a. Meet the requirements for locating storage facilities in the regulatory flood plain; and
- b. Be evaluated by performing hydrologic and hydraulic analysis consistent with the standards and requirements for Watershed Plans; and
- c. Provide a watershed benefit.

11. Developments with storage facilities that have off-site flow tributary to the site either shall provide storage sufficient to accommodate runoff from the off-site tributary watershed and the site, or shall store the site runoff and convey off-site flows through the development while preserving the existing flow and storage of the site.

12. Storage facilities may be located off-site if the following conditions are met:

- a. The off-site storage facility meets all of the requirements of this Article 9; and
- b. Adequate storage capacity in the off-site facility is dedicated to the development; and
- c. The development includes provisions to convey stormwater to the off-site storage facility.

Sec. 15-115. Detention Variance Fee Program.

1. Where a variance to the site runoff storage requirements of Section 15-114 is granted, payment into a detention variance fee program shall be made prior to the issuance of a Stormwater Management Permit as a condition of the variance.
2. Development in a non-waiver community or in a waiver community that has not adopted a detention variance fee program shall participate in the County's program where:
 - a. Payment of a detention variance fee for the varied storage shall be made to the County and is determined by applying the first applicable criteria as follows:
 - (1) A fee calculated by multiplying the per acre-foot cost of the closest off-site storage facility times the varied storage where:
 - (a) A design concept plan for the facility has been approved by the Committee and the County Board containing an estimate of the per acre-foot cost of constructing the storage, including operation and maintenance costs; and
 - (b) A formula has been developed to determine that any investment in the facility shall be at least equal to the cost of planning, acquiring of lands, constructing, operating, and maintaining the facility; and
 - (c) The facility is located in the same watershed planning area as the variance.
 - (2) An adopted fee schedule, attached to this Ordinance as Schedule B and by this reference incorporated into this Ordinance, that identifies reasonable and rational cost to provide site runoff storage in the same watershed planning area as the variance. The fee shall include the cost of planning, acquiring land, construction, operation, and maintenance.
 - b. Funds collected shall be accounted for in separate project or watershed planning area accounts. Funds shall be used in the same community or watershed planning areas as collected to enhance existing site runoff storage facilities and related components, construct off-site facilities and related components, provide maintenance of stormwater facilities, or undertake other development that provides a watershed benefit.
 - c. The County Board shall provide accounting on an annual basis of all funds deposited in each project or watershed planning accounts and shall account for each fund on a first-in, first-out basis.
 - d. The Committee may prioritize and allocate funds on an annual basis within each watershed planning area account. Communities may make a request to the Committee by June 30th of each year for funds within the watershed planning accounts for uses identified in Section 15-115.2.b.
 - e. All detention variance fees are refunded to the person who paid the fee, or to that person's successor in interest, whenever the County fails to encumber the fees collected within 10 years of the date on which such fees are collected.

Deleted: <sp>

- f. Refunds are made provided that the person who paid the fee, or that person's successor in interest, files a petition with the County within one year from the date on which such fees are required to be encumbered.
- 3. Development in a waiver community shall participate in the waiver community's detention variance fee program where the corporate authority has adopted a program that is consistent with Section 15-115.2. The waiver community may adopt its own fee schedule and designate off-site facilities.

Funds may be used in the same community or watershed planning area as collected. All accounting records shall be made available to the Committee upon request.

Sec. 15-116. Water Quality BMP Fee-in-Lieu Program.

- 1. The applicant for single or two family residential land uses that are not specifically exempted by 15-113.11 may elect to pay a fee-in-lieu of providing water quality BMPS under the following conditions:
 - a. A Stormwater Management Permit is required under section 15-147 of this Ordinance, and
 - b. The development is not required to provide site runoff storage per Section 15-111.2, and
 - c. Payment into a BMP fee-in-lieu program shall be made prior to the issuance of a Stormwater Management Permit.
- 2. The applicant for multiple family or non-residential land uses and roadway developments may elect to pay a fee-in-lieu of providing water quality BMPS under the following conditions:
 - a. A Stormwater Management Permit is required under section 15-147 of this Ordinance, and
 - b. The development is not required to provide site runoff storage per Section 15-111.2, and
 - c. The Director or Administrator in a waiver community has determined that it is not practical to install water quality BMPS, and
 - d. Payment into a BMP fee-in-lieu program shall be made prior to the issuance of a Stormwater Management Permit.
- 3. Development in a non-waiver community or in a waiver community that has not adopted a BMP fee-in-lieu program shall participate in the County's program where:
 - a. BMP fee-in-lieu payment shall be made to the County and is determined by applying the criteria as follows:
 - (1) The adopted fee schedule, attached to this ordinance as Schedule B and by this reference incorporated into this ordinance, that identifies reasonable and rational cost to construct and maintain similar BMPS for those areas of the development that remain without effective water quality treatment.
 - b. Funds collected shall be accounted for in watershed planning area accounts. Funds shall be used

in the same watershed planning areas as collected solely to design, construct, and maintain water quality improvements. Funds may not be used to fulfill obligations required by the Ordinance.

- c. The County Board shall provide accounting on an annual basis of all funds deposited in each watershed planning account and shall account for each fund on a first-in, first-out basis.
 - d. The Committee may prioritize and allocate funds on an annual basis within each watershed planning area account. Communities may make a request to the Committee by June 30th of each year for funds within the watershed planning accounts for uses as identified in Section 15-116.3.b.
 - e. All BMP fee-in-lieu payments are refunded to the person who paid the fee, or to that person's successor in interest, whenever the County fails to encumber the fees collected within ten (10) years of the date on which such fees are collected.
 - f. Refunds are made provided that the person who paid the fee, or that person's successor in interest, files a petition with the County within one year from the date on which such fees are required to be encumbered.
4. Development in a waiver community shall participate in the waiver community's BMP fee-in-lieu program where the corporate authority has adopted a program that is consistent with Section 15-116. The waiver community may adopt its own fee schedule and designate off-site facilities. Funds may be used in the same community or watershed planning area as collected. All accounting records shall be made available to the Committee upon request.

Sec. 15-117. Erosion and Sediment Control Requirements.

1. Erosion and sediment control features shall be considered as part of any development's initial site planning process. The developer's engineer should consider the following factors in the overall site design:
 - a. The susceptibility of the existing soils to erosion.
 - b. The natural contours of the land.
 - c. Existing native and mature vegetation.
 - d. Existing natural or established drainageways.
 - e. Emphasize erosion controls first then address sediment control.
2. All developments, whether a permit is required or not, shall incorporate stormwater management measures that control and manage runoff from such developments, as provided in this section. Temporary erosion and sediment control measures shall be functional and consistent with the information and requirements of this entire section before land is otherwise disturbed on the site. These measures shall be maintained during both the construction season and any construction shutdown periods until permanent erosion and sediment control measures are operational.

Deleted: <sp>

3. Soil erosion and sediment control measures shall be appropriate with regard to the amount of tributary drainage area as follows:
 - a. Disturbed areas draining less than 1 acre shall, at a minimum, be protected by a filter barrier or equivalent to control all runoff leaving the site. The use of straw bales for this purpose is prohibited.
 - b. Disturbed areas draining more than 1 but fewer than 5 acres shall, at a minimum, be protected by a sediment trap or equivalent control measure.
 - c. Disturbed areas draining more than 5 acres shall, at a minimum, be protected by a sediment basin or equivalent control measure.
4. Pumping sediment-laden water into any stormwater facility either directly or indirectly without filtration is prohibited. Water removed from traps, basins and other water holding depressions or excavations must first pass through a sediment control and/or filtration device. When dewatering devices are used, discharge locations shall be protected from erosion.
5. All discharges to an undisturbed area, stabilized area or watercourse shall be designed at a non-erosive velocity corresponding to the soil and vegetative cover of the undisturbed area.
6. All temporary and permanent stormwater conveyance channels, including ditches, swales, and diversions, and the outlets of all channels and pipes shall be designed and constructed to withstand the expected flow velocity from the 25-year frequency storm without erosion assuming the worst soil cover conditions to prevail in the contributing drainage area over the life of the structure. All materials specified shall be able to withstand these expected flow velocities without damage or soil erosion. Modifications to existing stormwater facilities shall be stabilized within 48 hours.
7. All storm drain inlets shall be protected by an appropriate sediment control measure when the area tributary to an inlet is disturbed.
8. Silt fences can be used to intercept sheet flow only. Unreinforced silt fences cannot be used as velocity checks in ditches or swales nor can they be used where they will intercept concentrated flows.
9. Reinforced silt fences (normal silt fence reinforced with woven wire fencing) can be used to intercept sediment-laden water from disturbed areas less than 1 acre. Its purpose is to reduce the runoff velocity thereby allowing the deposition of transported sediment to occur.
10. All Special Management Areas and waters of DuPage shall, at a minimum, have a dual fence barrier of protection **consisting of either a row silt fence, and a row of orange construction fence, or a dual silt fence barrier, with one of the fences being of high visibility material. Alternative practices to avoid further impact may be used where applicable. Fencing should be placed a minimum of one (1) foot outside the avoided Special Management Area or at the limits of soil disturbance where an approved impact to a Special Management Area is taking place.** Additional soil erosion and sediment control measures may be required to adequately protect these sites.
11. All trenches, holes or other excavations required for utility installation should be back-filled, and

stabilized at the end of each working day. No excavation should be opened more than what can be stabilized by the end of the same day. If an excavation must be left unstabilized or opened overnight, soil erosion and safety protection measures shall be installed.

12. The surface of stripped or disturbed areas shall be permanently or temporarily stabilized within 14 days after final grade is reached or when left idle for more than 14 days. Temporary erosion and sediment control measures shall be maintained continuously until permanent soil erosion control measures have been adequately established.
13. Stockpiles of soil or any other building materials shall not be located in Special Management Areas.
14. If a stockpile is to remain in place for more than three days, then erosion and sediment control shall be provided for such stockpile.
15. All waste generated as a result of site development (including discarded building materials, concrete truck washout, chemicals, litter, sanitary waste or any other waste shall be properly disposed of and be prevented from being carried off the site by either wind or water.
16. Graveled roads, access drives, parking areas of sufficient width and length, and vehicle wash down facilities if necessary, shall be provided to prevent soil from being tracked or deposited onto public or private roadways. Any soil reaching a public or private roadway shall be removed immediately or as warranted and transported to a controlled sediment disposal area.
17. All temporary erosion and sediment control measures shall be removed within 30-days after final stabilization is achieved with permanent soil stabilization measures. Trapped sediment and other disturbed soils resulting from temporary measures shall be properly disposed of and the area permanently stabilized.
18. Design criteria, standards and specifications for erosion and sediment control shall be taken from one of the following sources:
 - a. Technical Guidance for the DuPage Countywide Stormwater and Flood Plain Ordinance (Appendix E), as amended
 - b. IEPA/NRCS "Illinois Urban Manual", as amended
 - c. Other design criteria, standards and specifications, provided prior written approval is received from the Director or Administrator.
 - d. In the event of a conflict between the provisions of the above sources, this Ordinance and the Technical Guidance shall apply.
19. Erosion and sediment control measures utilized in complying with the requirements of Section 15-117 of this Ordinance that have a design frequency assigned, such as in the references noted in Section 15-117.18, shall have its design frequency increased to a design storm event equal to or greater than a 25-year 24-hour rainfall event.

Sec. 15-118. Reserved for Special Requirements in the Salt Creek Watershed.

Sec. 15-119. Reserved for Special Requirements in the East Branch DuPage River Watershed.

Sec. 15-120. Reserved for Special Requirements in the West Branch DuPage River Watershed.

Sec. 15-121. Reserved for Special Requirements in the Sawmill Creek Watershed.

Sec. 15-122. Reserved for Special Requirements in the Des Plaines River Tributaries Watershed.

Sec. 15-123. Reserved for Special Requirements in the Fox River Tributaries Watershed.

Sec. 15-124. through 15-130. Reserved.

ARTICLE 10. SPECIAL MANAGEMENT AREAS.

Sec. 15-131. Special Management Areas.

1. Special management areas include regulatory flood plains, wetlands and buffers. Requirements for determining regulatory flood plains are specified in Section 15-132 of this Ordinance. Requirements for delineating wetlands are specified in Section 15-134 of this Ordinance. Requirements for determining buffers are specified in Section 15-137.
2. Developments in the regulatory flood plain shall comply with the requirements of Section 15-133 of this Ordinance in addition to the requirements of Article 9 of this Ordinance.
3. Developments affecting wetland or wetland buffer shall comply with the requirements of Sections 15-134, 15-135 and 15-137 of this Ordinance in addition to the requirements of Article 9 of this Ordinance.
4. All developers shall submit the documents specified in Article 11 of this Ordinance to verify compliance with the requirements of this Ordinance or the applicable waiver community ordinance.
5. All developers shall grant the Director or the Administrator consent to record against the title of the property an informational note stating that a permit to build on a property which contains special management area has been issued. The informational note shall be printed on the face of the plat or other recorded document or shall be separately recorded if the project is a single lot development.

Sec. 15-132. Requirements for Regulatory Flood Plain and Regulatory Determination.

1. Any developer proposing development shall identify the boundaries and elevation of the regulatory flood plain and the boundaries of the regulatory floodway.

2. The regulatory flood plain shall be determined by the highest base flood elevation for a development site at the time of application as determined by:
 - a. Flood plain studies in the Watershed Plans.
 - b. Flood plain studies prepared as part of Interim Watershed Plans.
 - c. OWR studies adopted as State Regulatory Maps listed in Exhibit 2.
 - d. Flood Insurance Studies, Flood Insurance Rate Maps, and Flood Boundary and Floodway Maps published by FEMA listed in Exhibit 2.
 - e. Project specific flood plain studies that meet the standards established in the Plan and approved by the Director.
3. ~~The Director, or the Administrator in a complete waiver community, may require the applicant to perform a project specific flood plain study when no other regulatory flood plain has been established as provided in Subsection 15-132.2 of this Ordinance. If the drainage area is one square mile or greater, the study shall also require approval from OWR or their designee.~~ Deleted: <sp>
4. Any development located within the regulatory flood plain as listed in Exhibit 2 may require approval from OWR or its designee or FEMA or both. Exhibit 2 includes approved OWR and FEMA studies and maps used for insurance and flood plain management purposes.
5. The regulatory floodway shall be designated by OWR or its designee and is shown on maps listed in Exhibit 2. If a floodway is not designated on the maps in Exhibit 2, then the regulatory floodway shall be deemed to be the regulatory flood plain.
6. The regulatory floodway may be redesignated by a project specific flood plain study and shall require approval from the Department and OWR or its designee, and a CLOMR or LOMR from FEMA.

Sec. 15-133. Requirements for Development within the Regulatory Flood Plain.

1. Development shall preserve effective floodway conveyance such that there will be no increases in flood elevations, flows, or floodway velocity, unless any such increases are contained in a public flood easement and a watershed benefit is provided.
2. Structures that are floodproofed shall:
 - a. Be anchored (including manufactured homes) to prevent flotation, collapse, or lateral movement of the structure.
 - b. Use flood resistant materials below the base flood elevation.
 - c. Use construction methods and practices that do not increase the potential for increases in flood damage.
 - d. Locate electrical, heating, ventilation, plumbing, air conditioning equipment, and other service facilities at least one foot above the base flood elevation.

- e. Provide adequate drainage.
3. Temporary or permanent storage of the following are prohibited unless elevated or floodproofed to one foot above the base flood elevation:
 - a. Items susceptible to flood damage; or
 - b. Unsecured buoyant materials or materials that may cause off-site damage including bulky materials, flammable liquids, chemicals, explosives, pollutants, or other hazardous materials; or
 - c. Landscape wastes.
 4. All usable space in new buildings, added to existing buildings, or in existing buildings in the flood plain undergoing substantial improvement shall be elevated to at least one foot above the base flood elevation.
 5. In areas outside the regulatory floodway but within the flood plain, maximum flow depths on new parking lots shall not exceed one foot during the base flood condition and shall be designed for protection against physical flood damages. Flood hazard in parking areas below the base flood elevation shall be clearly posted.
 6. New structures other than buildings shall either be elevated to at least one foot above the base flood elevation or designed for protection against physical flood damages. Floodproofing devices shall be operational without human intervention. If electricity is required for protection against flood damage, then there must be a backup power source that will activate without human intervention. The floodproofing shall be certified by a professional engineer.
 7. New or expansion of existing manufactured home parks or subdivisions and placement of manufactured homes not in existing manufactured home parks or subdivisions shall require that:
 - a. All stands or pads shall be elevated to or above the base flood elevation; and
 - b. Adequate access and drainage shall be provided; and
 - c. If pilings are used for elevation, applicable design and construction standards for pilings shall be met; and
 - d. Anchoring shall be accomplished in accordance with the rules and regulations for the Illinois Mobile Home Tie-Down Act issued pursuant to 77 Ill. Adm. Code § 870 to resist flotation, collapse, and lateral movement.
 8. Parked recreational vehicles shall be required to meet the elevation and anchoring requirements of Section 15-133.7 unless:
 - a. They are on site for fewer than 180 consecutive days; and,
 - b. They are fully licensed and ready for highway use. A recreation vehicle is ready for highway use

Deleted: <sp><sp>

if it is on its wheels and/or jacking system, is attached to the site only by quick disconnect type utility and service devices, and has no permanently attached additions.

9. Existing structures shall not be enlarged, replaced, or structurally altered unless the changes meet the requirements for development. If the changes constitute substantial improvement to a building in the flood plain, then the entire building shall meet the requirements for development.

10. Existing structures may be floodproofed. Floodproofing shall meet the requirements listed in Section 15-133(2) for development in the flood plain and be operational without human intervention. If

electricity is required, then there must be a backup power source that will activate without human intervention. The floodproofing shall be certified by a professional engineer.

11. Any placement of fill, structures, or other materials above grade in the flood plain shall require compensatory storage equal to at least 1.5 times the volume of flood plain storage displaced and shall be provided at the same incremental flood frequency elevation as the flood storage displaced. Compensatory storage shall be operational prior to placement of fill, structures, or other materials in the regulatory flood plain. Grading in Special Management Areas shall be done in such a manner that the existing flood plain storage is maintained at all times. Compensatory storage is not required for flood protection of existing buildings for flood plain volume displaced by the building and within the area of 10 feet adjacent to the building.

12. A copy of an application for a CLOMR, CLOMA, LOMA, or LOMR including all the required information, calculations, and documents shall be submitted to the Department concurrent with the application to FEMA or OWR or its designee.

13. No filling, grading, dredging, or excavating which changes the base flood elevation, base flood flow rate or the floodway boundary shall take place until a CLOMR is issued by FEMA.

14. If a LOMR is required by FEMA, no building construction shall take place until the LOMR is received.

15. Any fill required to elevate a building must extend at least 10 feet beyond the foundation before the grade slopes below the highest base flood elevation.

16. When a structure is elevated by some means other than filling in the regulatory flood plain:

- a. The useable space of any building, the bottom of the lowest structural member of the first finished floor (lowest habitable floor), and all electrical, heating, ventilating, plumbing, and air conditioning equipment shall be located at least one foot above the highest base flood elevation; and
- b. Elevation can be accomplished using stilts, piles, walls, or other foundations. Areas below the lowest floor that are subject to flooding shall be designed so that hydrostatic forces on exterior walls are automatically equalized by allowing for the entry and exit of floodwaters and shall be anchored and aligned in relation to flood flows and adjoining structures so as to minimize exposure to known hydrodynamic forces such as currents, waves, ice, and floating debris. Designs for meeting this requirement shall be prepared, signed, and sealed by a structural engineer or architect and meet or exceed the following minimum criteria:

- (1) A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding; and
- (2) The bottom of all openings shall be no higher than one foot above grade; and
- (3) Openings may be equipped with screens, louvers, valves, or other coverings or devices, provided that such coverings and devices do not impede the automatic entry and exit of floodwaters; and
- (4) The grade interior to the foundation of the structure shall not be more than 2 feet below the lowest adjacent exterior grade; and
- (5) An adequate drainage system must be installed to remove floodwaters from the area interior to the structure foundation within a reasonable period of time after the floodwaters recede.

c. All materials and structures less than one foot above the base flood elevation shall be resistant to flood damage.

- 17. Existing flood storage that is lost due to channel modification shall require compensatory storage.
- 18. Any removal, replacement, or modification of stormwater facilities that has an existing hydraulic impact shall provide a watershed benefit and shall require compensatory storage to mitigate for any potential increases in flow or flood elevations. All structures and their associated low entry elevations within the created backwater of the existing stormwater facility shall be identified.
- 19. The release rate from new or modified storm sewer outfalls shall meet the requirements of Section 15-114.2 of this Ordinance or demonstrate compliance with Section 15-112.
- 20. On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.
- 21. Sanitary sewer systems and water distribution systems shall be designed to minimize or eliminate infiltration or inflow of flood waters and discharge of sewage.
- 22. Hydrologic and hydraulic impacts of developments located in the regulatory floodway shall be evaluated using the applicable regulatory model and confirmed using Watershed Plan models, if available, or models meeting the Plan standards for watershed planning. The hydrologic and hydraulic impacts of development shall be evaluated using events representing the frequency range from 50 percent (2-yr) to one percent (100-yr) probability of being equalled or exceeded in a given year. The results of any such evaluation shall be submitted to the Department.
- 23. Any proposed development in the regulatory floodway shall evaluate the hydrologic and hydraulic impacts for existing and any future planned watershed conditions.
- 24. In the regulatory floodway portion of the regulatory flood plain, all of the requirements of this Section 15-133 shall apply to any proposed development, and only the following appropriate uses shall be considered for permits:

Deleted: <sp><sp>

- a. Bridges, culverts, and associated roadways, sidewalks, and railways, necessary for crossing over the floodway or for providing access to other appropriate uses in the floodway and any modification thereto; and
 - b. At or below grade trail systems; and
 - c. Regulatory floodway regrading, without fill, to create a positive slope toward a watercourse; and
 - d. Floodproofing activities to protect existing structures; and
 - e. Stormwater facilities relating to the control of drainage or flooding; and
 - f. Above-ground and below-ground utilities and sanitary and storm sewer outfalls; and
 - g. The storage and conveyance of floodwaters; and
 - h. Erosion control structures and water quality and habitat structures; and
 - i. Recreational boating and commercial shipping facilities.
25. Transition sections within the regulatory floodway are required for the calculation of effective conveyance including the modification and the replacement of existing bridge and culvert structures, or to compensate for lost conveyance for other appropriate uses. The following ratios shall be used to calculate transition sections:
- a. Water will expand no faster than one foot horizontal for every four feet of flooded stream length.
 - b. Water will contract no faster than one foot horizontal for every one foot of flooded stream length.
 - c. Water will not expand or contract faster than one foot vertical for every 10 feet of flooded stream length.

Sec. 15-134. Requirements for Wetland Delineation.

1. The boundaries, extent, and quality of all wetland areas within the development site shall be determined by an environmental scientist in accordance with the current Federal wetland delineation methodology. All development site wetland boundaries must be delineated in the field and verified by an Environmental Scientist representing the County, or the complete waiver community where the wetland is located. Verified wetland boundaries are valid until the end of the second calendar year after the date of verification. A written wetland delineation report shall be prepared in accordance with all methodologies and definitions set forth in this Ordinance or the applicable waiver community ordinance.
2. A farmed wetland determination for sites that are in agricultural production must be completed using the current National Food Security Act Manual methodology. Agricultural areas that have been abandoned for five or more consecutive years shall be delineated in accordance with the current Federal wetland delineation methodology.

3. The approximate location, extent, and relative quality of off-site wetlands within 100' of the development shall be identified by using the first of the following documents or procedures pertaining at the time of development:

- a. Site specific delineation according to the procedures specified in the Plan and the Federal Manual for Identifying and Delineating Jurisdictional Wetlands.
- b. Wetland signatures identifiable from aerial photography as determined by an Environmental Scientist.
- c. Wetlands identified in Watershed Plans.
- d. Wetlands identified in the DuPage County Wetland Inventory Maps
- e. Wetlands identified in the US Fish and Wildlife National Wetlands Inventory Maps.
- f. Wetlands identified in Interim Watershed Plans.

4. Wetlands shall be classified as either critical or regulatory wetlands. Critical wetland status shall be assigned to those wetlands that have been determined to satisfy one or more of the following:

- a. The wetland is identified as a critical wetland in the County's wetland inventory; or
- b. The plant community within the wetland is determined to have a native floristic quality index of 20 or higher during a single growing season assessment and/or a native mean C-value of 3.5 or greater, as calculated by the Swink & Wilhelm methodology.
- c. The initial wildlife quality value using the Modified Michigan Department of Natural Resources (MDNR) Method is 5.0 or higher,
- d. The wetland is known to possess a Federal or State listed threatened or endangered species based on the consultation with the Illinois Department of Natural Resources
- e. An evaluation in accordance with current United States Fish and Wildlife Service of the wetland for the presence or use by Federal listed threatened or endangered species.

5. All other wetlands that are not classified as critical shall be assigned a regulatory wetland status. The final determination of wetland status shall be made by the Director, or the Administrator in a complete waiver community, based upon a review of submitted information and when necessary, upon consultation with outside wetland authorities.

Sec. 15-135. Requirements for Development Affecting Wetlands.

1. Development proposing to affect critical wetlands must demonstrate through an alternatives analysis that the presence of critical wetlands precludes use of the entire parcel, and that no practicable alternative to wetland modification exists, and that the proposed project represents the least damaging alternative while still achieving the basic project purpose.

2. Development proposing to affect regulatory wetland with a total surface area, including contiguous Waters of DuPage, 0.10 acre or less is allowable pursuant to Sections 15-135.5 and 15-136.

3. Development proposing to affect regulatory wetland greater than 0.10 acre must demonstrate through an alternatives analysis that the proposed project represents the least damaging alternative while still meeting the basic project purpose.

Development of a regulatory wetland that is greater than 0.10 acre, or a critical wetland, will be authorized only when the proposed direct and indirect environmental impacts to on-site wetlands, and indirect environmental impacts to off-site wetlands, can be sufficiently evaluated, minimized, and mitigated within DuPage County, as specified in this Section 15-135.

Sec. 15-136 Wetland Mitigation Requirements

1. Permanent wetland impacts shall be mitigated within DuPage County at a minimum proportional rate of:
 - a. three to one (3:1) for critical wetlands and,
 - b. One and one half to one (1.5:1) for regulatory wetlands,
 - c. Natural areas restoration projects shall provide wetland mitigation for permanent wetland impacts at a minimum proportional rate of one to one (1:1), except as noted in 15-135.6 below.
 - d. The Director, or the Administrator in a complete waiver community, may require a greater compensation ratio where a critical wetland is considered to be of exceptional value.
2. The director or Administrator in a complete waiver community, at his or her discretion, may allow for partial credit to be given for the following provided that wetland creation for permanent wetland impacts does not fall below a 1:1 ratio.
 - a. Enhancement of an existing contiguous wetland at a ratio up to 0.5:1.
 - b. Enhancement, restoration, or creation of an onsite wetland buffer and/or riparian environment at a ratio up to 0.25:1,
 - c. Enhancement, restoration, or creation of an offsite wetland. At a ratio up to 0.5:1.
 - d. Enhancement, restoration, or creation of an offsite wetland buffer and/or riparian environment at a ratio up to 0.25:1.
3. Temporary wetland impacts shall be restored in place. The disturbed area must be returned to its original contour and general soil profile, be restored to a similar wetland community type, and exhibit an FQI no lower than that of the original wetland. The applicant may request an alternative community type, if the project is part of a natural area restoration project, and documentation is provided describing the restoration plan and goals.
4. Mitigation for storage lost within wetlands shall be provided in accordance with Section 15-112 and Subsection 15-114.5 of this Ordinance.
5. Mitigation for wetland impacts shall take place in the same watershed planning area as the affected wetland. For the purpose of Section 15-135 and Section 15-136, the four watershed planning areas are defined by the Salt Creek and Des Plaines River Tributaries Watersheds, West Branch DuPage River and Fox River Watersheds, the East Branch DuPage River Watershed, and the Sawmill Creek Watershed, as shown on Exhibit 1.
6. Wetland creation may only take place within areas that are not currently wetland.
7. Mitigation Plans shall include design, construction, and continued maintenance and monitoring of the

mitigation measures. See Section 15-197 of this Ordinance.

8. Mitigation areas shall incorporate native, non-invasive plant community types that are similar to that of the impacted wetland unless documentation is provided to support establishment of alternative native communities.
9. Mitigation must meet permit requirements, including performance standards, and shall undergo a maintenance and monitoring period as required in the stormwater management certification.
 - a. Upon final inspection and if the mitigation meets permit requirements, the director, or Administrator in a complete waiver community will issue regulatory signoff of the mitigation at the end of the management and monitoring period.
 - b. If the permit requirements are met early, and it appears that the cessation of the maintenance and monitoring period will not jeopardize the areas continuing compliance, the Director or Administrator in a complete waiver community will grant early signoff, if requested by the applicant.
 - c. If the mitigation area is not considered a success within the approved monitoring period, additional measures and/or an extension of the monitoring period will be required to bring the site into compliance.
 - d. Mitigation is considered separate from the other project components, and therefore requires that a separate performance security be established in accordance with Section 15-177 for the completion of the mitigation project.
10. Wetland Mitigation planting areas shall consist of vegetation native to northeastern Illinois as defined by Swink, F. and G. Wilhelm's *Plants of the Chicago Region* (1994, 4th Edition, The Morton Arboretum, Lisle, Illinois)..
11. Development or the removal of native vegetation in the existing wetland or buffer shall be initiated only after a mitigation plan has been approved and adequate securities are provided as specified in Article 13 of this Ordinance.
12. The removal of non-native vegetation is allowed provided that the project follows a management plan and receives prior written approval from the Director or administrator in a complete waiver community. A formal Stormwater Certification Application would not be necessary if the applicant receives prior written approval, and no other aspect of the project requires authorization.
13. The Director, or the Administrator in a complete waiver community, shall require that the developer or owner provide the County or the waiver community with annual monitoring reports on the status of the constructed mitigation measures, and further may require the developer or owner to undertake remedial action to bring the area into compliance with the mitigation plan. The monitoring reports should reflect data and observations taken during the growing season and should be submitted no later than January 31st of the following year until performance standards are met and accepted by the Environmental Scientist representing the Director or Administrator in a complete waiver community.
14. If the property ownership is changed during the management and monitoring period, the applicant shall provide formal written notification. The notification shall contain complete contact information

including permit number(s), owner(s) names(s), street address(es), phone number(s) (office, fax, mobile), email address(es), etc. The permittee is obliged to notify the future owners(s) of their obligations regarding permit conditions and maintenance and monitoring requirements for the subject project as they relate to the Stormwater Management Certification and to submit written confirmation from the receiving party. *Include provision for the Transfer of Obligation.*

15. Mitigation for development within or affecting a wetland begun prior to issuance of a stormwater permit, or other unauthorized impact to a wetland, shall presume the wetland disturbed was a critical wetland requiring mitigation at a minimum rate of three to one (3:1).

Sec. 15-137. Wetland Banking.

1. Where development affecting wetland meets the requirements of Section 15-135 and the long term preservation of existing wetland functions or characteristics is unlikely as a result of existing or proposed land use practices in adjacent upland areas, then the Director or the Administrator may provide that mitigation for development within or affecting wetlands be accomplished wholly or in part through investment in an established wetland banking project in lieu of constructing new wetlands.
2. Such wetland banking shall be allowed only if no long term net loss of wetlands results within each watershed planning area as defined in Section 15-135.5 and if the adverse impacts of development in regulatory or critical wetlands are fully mitigated.
3. Wetland banking for development impacts within a critical or regulatory wetland shall take place within an established wetland banking project approved by the Committee, or the Oversight Committee in a complete waiver community, and shall:
 - a. Include a wetland enhancement, restoration, and construction plan approved by the Committee and the County Board, or by the Oversight Committee and the corporate authorities in a waiver community; and
 - b. Include a capital improvements plan containing an estimate of the total per acre cost of wetland mitigation, including operation and maintenance costs; and
 - c. Include a formula to determine that any investment in a wetland bank shall be at least equal to the cost of planning, acquiring of lands, constructing, operating, and maintaining mitigated wetlands of equivalent or greater functional value than those lost to development.
4. If development impacts to a wetland meets all the conditions for mitigation in a wetland banking project, a payment may be made into the wetland banking program and shall be determined by multiplying the acres of required mitigation times the first of the following applicable costs:
 - a. The investment cost of the closest wetland banking project to the development that is in the watershed planning area that has the greatest wetland deficit, as defined in Section 15-136.4.c; or
 - b. The investment cost of the closest wetland banking project within the same watershed planning area as the proposed wetland impact; or

- c. The investment cost of the closest wetland bank to the development that is outside the watershed planning area where the development is proposed. However, the area of mitigation available within a wetland banking project for mitigation from outside the watershed planning area shall not exceed 15% of the bank's total wetland area. This amount of wetland mitigation is considered a wetland deficit in the watershed planning area where the development occurs. The watershed planning area that receives the wetland mitigation shall pay back the wetland deficit in accordance with Section 15-136.4.a.
5. If development impacts to a wetland meet all the conditions for mitigation in the wetland banking program, wetland impacts are under the threshold requiring compensatory mitigation in accordance with current U.S. Army Corps of Engineers – Chicago District Regional Permit Program, and there is not a wetland banking project available per Section 15-136.4, a payment may be made to the County equal to \$175,000 per acre of required mitigation.
 6. All funds deposited in the wetland banking program shall be maintained in accounts designated solely for a particular wetland banking project or in a wetland bank suspense account if collected under Section 15-136.5. At the option of the Director, or the Administrator in a full waiver community, funds may be transferred to the account of another wetland banking project in the same watershed planning area, or if one is not available, in an off-site mitigation area meeting the requirements in Section 15-135, if that particular wetland banking project is not constructed within 10 years after the date on which such funds were deposited. Upon approval of a wetland banking project within a watershed planning area for which payments have been deposited in accordance with Section 15-136.5, such payments shall be immediately transferred into that wetland banking project. Any portion of the payment paid in excess of the actual fee established for said wetland banking project shall be refunded to the then current property owner or his/her/its designee.
 7. The County Board or the corporate authorities in a waiver community shall audit annually all funds deposited in wetland banking accounts and shall account for such funds on a first-in, first-out basis.

Sec 15-138. Requirements for Development Affecting Wetland and/or Buffer.

1. Buffers only apply to wetlands and waters meeting the definition for Waters of DuPage County.
2. The removal of non-native buffer vegetation is allowed provided that the project follows a management plan and receives prior written approval from the Director or administrator in a complete waiver community.
3. Development or the removal of native vegetation within a wetland buffer shall not occur without mitigation. Buffer mitigation is not solely based on area of impact; buffer mitigation area design shall incorporate native, non-invasive plant community types that are similar to that of the impacted buffer unless documentation is provided to support establishment of alternative communities.
 - a. Impacts to buffers of non-wetland linear waters shall consider the effectiveness of the following buffer functions and endeavor to provide mitigation to replace those functions proposed to be lost due development.
 - i. Preventing erosion and promoting bank stability.
 - ii. Filtering sediment and nutrients discharged from surrounding uplands.

- iii. Insulating and moderating daily and seasonal stream temperature fluctuations through shading with overhanging vegetation.
 - iv. Providing habitat and corridors for both aquatic and terrestrial fauna and flora.
 - v. Providing recreation and aesthetics for humans.
4. Replacement of turf grass or ornamental planting beds may be allowed where wetland buffer functions will not be permanently affected by development. When native plantings are required as part of a mitigation project, the plantings shall be native to Northeastern Illinois as defined by *Plants of the Chicago Region*.
5. Mitigation must meet permit requirements and performance standards, and shall undergo a maintenance and monitoring period as required in the stormwater management certification.
 - e. Upon final inspection and if the mitigation meets permit requirements, the director, or Administrator in a complete waiver community will issue regulatory signoff of the mitigation at the end of the management and monitoring period.
 - f. If the permit requirements are met early and it appears that the cessation of the maintenance and monitoring period will not jeopardize the areas continuing compliance, the Director or Administrator in a complete waiver community may consider granting early signoff, when requested.
 - g. If the mitigation area is not considered a success within the approved monitoring period, additional measures will be required to bring the site into compliance.
 - h. Mitigation is considered separate from the other project components, and therefore requires that a separate performance security be established in accordance with Section 15-177 for the completion of the mitigation project.
6. Development or the removal of native vegetation in or affecting a wetland buffer shall be initiated only after a mitigation plan has been approved and adequate securities are provided as specified in Article 13 of this Ordinance.
7. The designs and analyses of all mitigation measures shall meet the applicable standards of the Plan.
8. The Director, or the Administrator in a complete waiver community, shall require that the developer or owner provide the County or the waiver community with annual monitoring reports on the status of the constructed mitigation measures, and further may require the developer or owner to undertake remedial action to bring the area into compliance with the mitigation plan. The monitoring reports should reflect data and observations taken during the growing season and should be submitted no later than January 31st of the following year until performance standards are met and accepted by the Environmental Scientist representing the Director or Administrator in a complete waiver community.
9. If the property ownership is changed during the management and monitoring period, the applicant shall provide formal written notification. The notification shall contain complete contact information including permit number(s), owner(s) names(s), street address(es), phone number(s) (office, fax, mobile), email address(es), etc. The permittee is obliged to notify the future owners(s) of their obligations regarding permit conditions and maintenance and monitoring requirements for the subject project as they relate to the Stormwater Management Certification and to submit written confirmation

from the receiving party. *Include provision for the Transfer of Obligation.*

9. Features of a naturalized stormwater management system may be within the buffer area of a development.
10. Access through buffer areas shall be provided, when necessary, for maintenance purposes.
11. Stormwater discharges that enter a buffer shall have appropriate energy dissipation to prevent erosion and scour prior. Scour protection maybe located within or outside the buffer based on the most effective design.
12. Preservation of buffer areas shall be provided by recording of the permit requirements against the property.

Sec. 15-1140. through Sec. 15-145. Reserved.

ARTICLE 11. STORMWATER MANAGEMENT PERMITS.

Sec. 15-146. General Requirements.

1. Any person proposing a development shall obtain a Stormwater Management Permit prior to development, as provided in Section 15-147 of this Ordinance.
2. All Stormwater Management Permit review fees shall be paid at the time of application. See Section 15-153 of this Ordinance.
3. All submittals that include the design of stormwater facilities, calculations for the determination of the regulatory flood plain, or calculations of the impacts of development shall meet the standards of the Plan and shall be prepared, signed, and sealed by a professional engineer. Such professional engineer shall provide an opinion that the technical submittal meets the criteria required by the Plan and this Ordinance or the applicable waiver community ordinance.
4. Any structure subject to a differential water pressure head of greater than three feet shall be prepared, signed, and sealed by a structural engineer.
5. The site topographic map, record drawings, and other required drawings shall be prepared, signed, and sealed by a land surveyor or professional engineer and tied to the DuPage County Survey Control Network (National Geodetic Vertical Datum, 1929 adjustment).
6. Any proposed development shall secure all appropriate stormwater management related approvals, including without limitation a OWR Dam Safety permit if required, and other appropriate federal, state, and regional approvals prior to the issuance of a Stormwater Management Permit.
7. All development undertaken by a unit of local government in the regulatory flood plain where no regulatory floodway has been designated shall obtain a permit from OWR or its designee prior to issuance of a Stormwater Management Permit.

8. Within the regulatory floodway, the following calculations or analyses shall be submitted to and approved by OWR or its designee prior to the issuance of a Stormwater Management Permit:
 - a. Flood damage analyses for the replacement or modification of existing bridges or culverts; and
 - b. Hydraulic analyses of new, modified, or replacement bridges or culverts; and
 - c. Analyses of alternative transition sections as required in Subsection 15-133.23 of this Ordinance; and
 - d. Analyses of hydrologically and hydraulically equivalent compensatory storage.
9. Any and all proposed development not in a Special Management Area shall be reviewed under the supervision of a professional engineer and; where applicable, an environmental scientist, meeting the requirements in Section 15-47.3.b.
10. Any and all proposed development within the regulatory flood plain shall be reviewed under the supervision of a professional engineer meeting the requirements in Section 15-47.3.a. and, in the case of floodway development, certified by that professional engineer that the proposed development meets the minimum requirements of this Ordinance.
11. Any and all proposed development in or near a wetland shall be reviewed under the supervision of an environmental scientist meeting the requirements in Section 15-47.3.a (3). and certified by that environmental scientist that the proposed development meets the minimum requirements of this Ordinance.

Sec. 15-147. Applicability; Required Submittals.

1. A Stormwater Management Permit shall be required if:
 - a. The development involves one or more Special Management Areas; or
 - b. The development involves a substantial improvement in the regulatory flood plain; or
 - c. The development disturbs more than 5,000 square feet of ground cover, unless the development solely involves one or more of the following:
 - (1) Cultivation, conservation measures, or gardening; or
 - (2) Installation, renovation, or replacement of a septic system, potable water service line, or other utility to serve an existing structure; or
 - (3) Excavation or removal of vegetation in rights-of-way or public utility easements for the purpose of installing or maintaining utilities; or
 - (4) Maintenance, repair, or at grade replacement of existing lawn areas not otherwise requiring a stormwater permit under Ordinance.
2. In addition to the application requirements provided in Sections 15-146 and 15-148 of this

Ordinance, the following submittals shall be required:

- a. The Stormwater Submittal provided in Section 15-149 of this Ordinance shall be required for all development requiring a stormwater permit.
- b. The Flood Plain Submittal provided in Section 15-150 of this Ordinance shall be required for all development proposed within any regulatory flood plain designated in Section 15-132 of this Ordinance.
- c. The Wetland Submittal provided in Section 15-151 of this Ordinance shall be required for any development proposed within a wetland designated in Section 15-134 of this Ordinance.

Sec. 15-148. Stormwater Management Permit Application.

The Stormwater Management Permit application shall include all of the following:

1. The name and legal address of the applicant and of the owner of the land; and
2. The common address and legal description of the site where the development will take place; and
3. A general narrative description of the development, including submittals required pursuant to Subsection 15-147.2 of this Ordinance; and
4. Affidavits signed by the land owner and the developer attesting to their understanding of the requirements of this Ordinance or the applicable waiver community ordinance and their intent to comply therewith; and
5. A statement of opinion by a qualified person either denying or acknowledging the presence of Special Management Areas on the development site, and the appropriate submittals if the statement acknowledges the presence of Special Management Areas; and
6. Copies of other permits or permit applications as required; and
7. A stormwater submittal; and
8. A flood plain submittal, if development is proposed in a flood plain; and
9. A wetland submittal, if development is proposed in a wetland; and
10. A riparian environment submittal, if development is proposed in a riparian environment; and
11. An engineer's estimate of probable construction cost of the stormwater facilities.

Sec. 15-149. Stormwater Submittal.

1. The stormwater submittal shall include:
 - a. A site stormwater plan; and

- b. Site runoff calculations; and
 - c. Site runoff storage calculations if site runoff storage is required in Section 15-111.2; and
 - d. Information describing off-site conditions; and
 - e. A sediment and erosion control plan; and
 - f. Description on how Best Management Practices are incorporated in the development.
2. The site stormwater plan shall include:
- a. A site topographic map depicting both existing and proposed contours of the entire site to be disturbed during development and all areas 100 feet beyond the site or as required by the Director or the Administrator at a scale of at least one inch equals 100 feet or less (e.g., one inch to 50 feet), with a minimum contour interval of one foot with accuracy equal to 0.5 foot of elevation; and
 - b. A plan view drawing of all existing and proposed stormwater facilities features, at the same scale as the site topographic map, including all of the following:
 - (1) Boundaries for watersheds tributary to all significant stormwater facilities (i.e., channels, bridges, inlets, and the like), along with the location of such facilities; and
 - (2) Major and minor stormwater systems (i.e., storm water pipes, culverts, inlets, and storage and infiltration facilities, and flooding limits under base flood conditions for the major stormwater system); and
 - (3) Roadways, structures, parking lots, driveways, sidewalks, and other impervious surfaces; and
 - (4) The nearest base flood elevations; and
 - (5) A planting plan for all vegetated areas which shall include:
 - (a) Planting locations, specifications, methodology; and
 - (b) A schedule for installation; and
 - (c) Management, monitoring, and maintenance provisions; and
 - (d) Performance standards; and
 - (e) An opinion of probable cost
 - c. Design details for all proposed stormwater facilities (i.e., major and minor stormwater systems, storage basins, and outlet works, and the like); and
 - d. A scheduled maintenance program for the stormwater facilities, including:
 - (1) Planned maintenance tasks; and

- (2) Identification of the person or persons responsible for performing the maintenance tasks as required by Section 15-180 of this Ordinance; and
 - (3) A description of the permanent public access maintenance easements granted or dedicated to, and accepted by, a governmental entity; and
- e. A schedule of implementation of the site stormwater plan; and
 - f. Upon completion of development, record drawings of the site stormwater plan shall be submitted to the Director or the Administrator. Such drawings shall be prepared, signed, and sealed by a land surveyor or professional engineer and shall include calculations showing the "as-built" volume of compensatory and site-runoff storage.
3. The site runoff calculations shall include:
 - a. Profile drawings of the major and minor stormwater systems, including cross section data for open channels, showing the hydraulic grade line and water surface elevation under the design and base flood condition; and
 - b. Documentation identifying the procedures, assumptions, and data used to calculate hydrologic and hydraulic conditions for sizing both major and minor stormwater systems.
 4. The site runoff storage calculations shall include:
 - a. Documentation identifying the procedures, assumptions, and data used to calculate hydrologic and hydraulic conditions and to determine the allowable release rate and related storage volume; and
 - b. Elevation-area-storage and elevation-discharge data for storage systems.
 5. Information describing the off-site conditions shall include sufficient information to allow evaluation of off-site impacts to and resulting from the proposed development. Such information shall include:
 - a. A vicinity topographic map covering the entire upstream watershed that drains to or through the site and the entire watershed downstream to the point of known or assumed discharge and water surface elevation; and
 - b. A plan view drawing of existing and proposed stormwater facilities, at the same scale as the vicinity topographic map, including:
 - (1) Watershed boundaries for areas draining through or from the development; and
 - (2) The location of the development within the watershed planning area; and
 - (3) Soil types, vegetation, and land cover conditions affecting runoff upstream of the development site for any area draining through or to the site.
 6. The erosion and sediment control plan shall conform to the requirements of Section 15-117 of this Ordinance. The erosion and sediment control plan shall include:

- a. A plan and schedule for construction, including site clearing and grading, construction waste disposal and stockpile locations, placement and maintenance of all soil stabilization controls, and sediment trapping facilities; and
 - b. A description of the development, including existing site land cover and hydrologic conditions, adjacent areas, soil types including a soils report and/or survey, permanent and temporary erosion and sediment control measures, and maintenance requirements; and
 - c. All data and calculations used to size, locate, design and maintain any soil erosion and sediment control measures.
 - d. Plan view drawings of existing and proposed site conditions, at the same scale as the site stormwater plan, including:
 - (1) Existing contours with drainage patterns and watershed boundaries; and
 - (2) Soil types, vegetation, and land cover conditions; and
 - (3) Limits of clearing and grading; and
 - (4) Final contours with locations of drainageways and erosion and sediment control measures with the drainage area tributary to each sediment control measure delineated on the drawings; and
 - (5) A sediment control quantity table including: total project area, total disturbed area, total existing and proposed impervious area, and total number of units for each sediment control measure.
 - e. Design details for proposed erosion and sediment control facilities; and
 - f. A copy of the written opinion, when applicable, of the Soil and Water Conservation District required under 70 ILCS 405/22.02 (1992); and
 - g. Evidence that the sediment and erosion control installation and maintenance requirements, including both a list of maintenance tasks and a performance schedule, are identified and required in the plans and specifications.
7. Information describing how Best Management Practices are incorporated into the site design. Such information shall include:
- a. A description of Best Management Practices that are incorporated into the site design and how they will function. Include applicable design criteria such as soil type, vegetation, and land cover conditions draining to the Best Management Practice along with appropriate calculations; and
 - b. A description of the maintenance requirements.

Sec. 15-150. Flood Plain Submittal.

The flood plain submittal shall include:

ARTICLE 11. STORMWATER MANAGEMENT PERMITS.

Sec. 15-146. through 15-154.

1. A delineation of the pre-development and post-development regulatory flood plain and regulatory floodway consistent with the requirements of Section 15-132 of this Ordinance; and
2. Calculations necessary for meeting the requirements of Sections 15-132 and 15-133 of this Ordinance; and
3. Topographic survey drawings of all structures located on or near the site, showing all structures including the lowest floor, point of entry, and floodproofing elevations. This survey shall be prepared, signed, and sealed by a land surveyor or professional engineer.

Sec. 15-151. Wetland and Wetland Buffer Submittal.

The wetland submittal shall include the following where applicable:

1. A wetland delineation report containing the following at a minimum.
 - a. Wetland delineation in accordance with Section 15-134
 - b. Wetland delineation plan view, including buffer area
 - c. Statement indicating the date of the wetland boundary verification
 - d. Completed **USACE** wetland delineation data forms.
 - e. Aerial photo or other exhibit clearly showing wetland boundary, location of wetland delineation **data points**, and offsite wetlands **within 100' of the property**
 - f. Narrative describing the physical characteristics and size of **each** wetland
 - g. Photos of the **each** wetland and **associated** buffer.
 - h. Copy of the NRCS DuPage County Soil Survey map identifying any mapped hydric soils.
 - i. Swink and Wilhelm Floristic Quality **Assessment** (*Plants of the Chicago Region*)
 - j. **A review of the wetlands to determine if they would be considered High Quality Aquatic Resources, based on the US Army Corps of Engineers guidelines**
 - k. IDNR Threatened and Endangered Species consultation
 - l. National Wetland Inventory Map
 - m. DuPage County Wetland Inventory Map

- n. Location map to scale with site identified
2. USACE jurisdictional determination and other correspondence, where applicable, such as a signed joint application form, Letter of No Objection, and/or General Permit delegation letter.
3. Characterization of critical or regulatory status of all wetlands
4. Documentation of avoidance and minimization of wetland impacts (i.e. no practicable alternative in accordance with 15-135
5. If a substantive change in hydrology is proposed to existing wetland(s), a hydroperiod analysis and engineering calculations documenting inundation and duration for existing and proposed wetlands shall be provided. A hydroperiod analysis shall be completed for all proposed wetland mitigation areas.
6. Description of the physical characteristics as well as the functions and values of the wetland and wetland buffer
7. Description of how the functions and values of the wetland and wetland buffer will be replaced in accordance with Section 15-137
8. Historical aerials, when necessary, to document the previous site conditions or the extent of farmed wetland.
9. Description of mitigation method, location, and ratios.
10. Mitigation management and monitoring plan, where applicable
 - a. Description of mitigation area and plan objectives
 - b. Description of management practices
 - c. Performance standards
 - d. Reporting requirements
 - e. Hydrology monitoring methodology and goals
 - f. Implementation schedule
 - g. Native species list with quantities, size of stock, seeding rate and/or plug spacing
 - h. Planting specifications and soil handling
 - i. Cost estimate to include installation, management, monitoring, and reporting as anticipated to meet performance standards
 - j. Burn/herbicide must be performed by trained/licensed personnel under the proper permits.
11. Plan view drawings and details, where applicable

- a. Existing and proposed topography
- b. Surveyed wetland boundary sealed by PE or PLS
- c. Wetland buffer boundary
- d. Limits of surveyed wetland boundary, wetland buffer, riparian environment, and OHWM (NOTES: verified? By whom? Surveyed? Should be in provisions)
- e. Location of impacts to Special Management Areas
- f. Table of proposed impacts, acreages, and mitigation acreage and ratios
- g. Sediment and erosion control plan.
- h. Soil stockpile and site or construction access location(s)

12. Planting and mitigation plan, where applicable

- a. Delineate and label planting and seeding zones
- b. Delineate and label mitigation and enhancement zones
- c. Existing and proposed topography
- d. Table of proposed impacts, acreages, and mitigation acreage and ratios
- e. Planting methodology and soil handling
- f. Proposed Special Management Area boundaries
- g. Native species list including size of stock, quantity, seed rate, and spacing of plugs
- h. Woody planting locations
- i. Signage and/or physical barrier
- j. Monitoring well locations
- k. Transect locations and photo-documentation points
- l. Performance standards.
- m. PLACEHOLDER for final monitoring report components; document reasons site is in compliance or eligible for early signoff.

Karen and Clayton to talk to tony H about proprietary nature of plans as municipal attys have differing opinion.

1. The wetland submittal for a regulatory wetland that includes contiguous waters of DuPage less than 0.10 acre shall include:

- a. A delineation of **all onsite** wetlands consistent with the requirements for wetland delineation provided in Sections 15-134.1, 15-134.2, and 15-134.3 (a), (b), and (c) of this Ordinance; and **(we thought about changing onsite to the parcel(s)).**
 - b. A completed joint application form (NCR Form 426, Protecting Illinois Waters) signed by the applicant or agent. If the agent signs, notification shall include a signed, written statement from the applicant designating the agent as its representative, or a Corps of Engineers jurisdictional determination letter; and
 - c. A wetland **mitigation** statement in accordance with Sections 15-135.5 and 15-136 of this Ordinance.
 - d. **A determination of offsite wetlands within 100 feet of the property proposed for development; and**
2. The wetland submittal for a critical wetland, or a regulatory wetland greater than 0.10 acre shall include:
- a. A delineation of the wetlands consistent with the requirements for wetland delineation provided in Section 15-134 of this Ordinance; and
 - b. A characterization of the wetlands as either critical or regulatory; and
 - c. A mitigation plan meeting the requirements of Section 15-135 of this Ordinance, if mitigation is required; and
 - d. A plan for the continued management, operation, and maintenance of the mitigation measures, including the designation of the person or persons responsible for long term operation and maintenance and dedicated funding sources, if mitigation is required.
 - e. A completed joint application form (NCR Form 426, Protecting Illinois Waters) signed by the applicant or agent. If the agent signs, notification shall include a signed, written statement from the applicant designating the agent as its representative, or a Corps of Engineers jurisdictional determination letter.

ARTICLE 12. PROHIBITED ACTS.
 Sec. 15-166. through 15-167.

ARTICLE 13. PERFORMANCE SECURITY.

Sec. 15-176. General Security Requirements.

- 1. As security to the County or the waiver community for the performance by the developer of the developer's obligations to complete the construction of any stormwater facilities required by the Stormwater Management Permit, to pay all costs, fees, and charges due from the developer pursuant to this Ordinance or the applicable waiver community ordinance, and to otherwise faithfully perform

the developer's undertakings pursuant to this Ordinance or the applicable waiver community ordinance, the developer shall, prior to issuance of a Stormwater Management Permit:

- a. Post a development security as provided in Section 15-177 of this Ordinance; and
 - b. Post an erosion and sediment control security as provided in Section 15-178 of this Ordinance, if a erosion and sediment control plan is required pursuant to Section 15-149 of this Ordinance.
2. The developer shall bear the full cost of securing and maintaining the securities required by this Section 15-176.

Sec. 15-177. Development Security.

1. A development security shall be posted and shall include:
 - a. A schedule, agreed upon by the developer and the Director or the Administrator, for the completion of the construction of any stormwater facilities required by the permit; and
 - b. An irrevocable letter of credit, or such other adequate security as the Director or the Administrator may approve, in an amount equal to not less than one hundred ten percent (110%) of the estimated probable cost to complete the construction of any stormwater facilities required by the Stormwater Management Permit, which estimated probable cost shall be approved by the Director or the Administrator; and
 - c. A statement signed by the applicant granting the Director or the Administrator the right to draw on the security and the right to enter the development site to complete required work in the event that work is not completed according to the work schedule; and
 - d. A statement signed by the applicant that the applicant shall indemnify the community and the Department for any additional costs incurred attributable to concurrent activities of or conflicts between the applicant's contractor and the community's or Department's remedial contractor at the site.
2. The security required by this Section 15-177 shall be maintained and renewed by the applicant, and shall be held in escrow by the Director or the Administrator until the conditions set forth in this Section 15-177 or other applicable provision are satisfied.
3. At a minimum, the security required for this Section 15-177, in an amount equal to not less than one hundred ten percent (110%) of the estimated probable cost to plant, maintain and monitor all vegetated areas as required by the permit, may be held until all conditions or other applicable provisions are satisfied. The vegetated areas security may be reduced at the discretion of the Director or Administrator as conditions are met, but must not be less than one hundred ten (110%) of the estimated probable cost to continue to meet all conditions or other applicable provisions.
4. After approval of record drawings and final inspection by the Director or the Administrator, not more than ninety percent (90%) of the security provided for in this Section 15-177 or other applicable provision may be released. A minimum of ten percent (10%) of the security shall be retained for a period of time not less than one (1) year after completion of construction:

Sec. 15-178. Erosion and Sediment Control Security.

1. If an erosion and sediment control plan is required pursuant to Section 15-149 of this Ordinance, then an erosion and sediment control security shall be required. Such a security shall include:
 - a. An irrevocable letter of credit, or such other adequate security as the Director or the Administrator shall approve, in an amount equal to not less than one hundred ten percent (110%) of the estimated probable cost to install and maintain the erosion and sediment control measures, which estimated probable cost shall be approved by the Director or the Administrator; and
 - b. A statement signed by the applicant granting the Director or the Administrator, as applicable, the right to draw on the security and the right to enter the development site to complete erosion and sediment control measures in the event that such measures are not installed and maintained according to the established schedule.
2. The security required by this Section 15-178 shall be maintained and renewed by the applicant, and shall be held in escrow by the Director or the Administrator, as applicable, until the conditions set forth in this Section 15-178 are satisfied.
3. After establishment of vegetation, removal of all sediment from stormwater facilities, and final inspection and approval by the Director or the Administrator, as applicable, one hundred percent (100%) of the erosion and sediment control security shall be released.

Sec. 15-179. Letters of Credit.

1. Letters of credit posted pursuant to Sections 15-176, 15-177, and 15-178 of this Ordinance shall be in a form satisfactory to the Director or the Administrator, as applicable.
2. Each letter of credit shall be from a lending institution: (a) acceptable to the Director or the Administrator, as applicable, (b) having capital resources of at least ten million dollars (\$10,000,000), or such other amount acceptable to the Director or the Administrator; (c) with an office in the Chicago Metropolitan Area; and, (d) insured by the Federal Deposit Insurance Corporation.
3. Each letter of credit shall, at a minimum, provide that:
 - a. It shall not be canceled without the prior written consent of the Director or the Administrator; and
 - b. It shall not require the consent of the developer prior to any draw on it by the Director or the Administrator; and
 - c. If at any time it will expire within 45 or any lesser number of days, and if it has not been renewed, and if any applicable obligation of the developer for which its security remains uncompleted or is unsatisfactory, then the Director or the Administrator may, without notice and without being required to take any further action of any nature whatsoever, call and draw down the letter of credit and thereafter either hold all proceeds as security for the satisfactory completion of all such obligations or employ the proceeds to complete all such obligations and reimburse the County or the waiver community for any and all costs and expenses, including legal fees and administrative costs, incurred by the County or the waiver community, as the Director or the Administrator shall determine.

4. If at any time the Director or the Administrator determines that the funds remaining in the letter of credit are not, or may not be, sufficient to pay in full the remaining unpaid cost of all stormwater facility construction or erosion and sediment control measures, then, within ten (10) days following a demand by the Director or the Administrator, the developer shall increase the amount of the letter of credit to an amount determined by the Director or the Administrator to be sufficient to pay such unpaid costs. Failure to so increase the amount of the security shall be grounds for the Director or the Administrator to draw down the entire remaining balance of the letter of credit.

5. If at any time the Director or the Administrator determines that the bank issuing the letter of credit is without capital resources of at least ten million dollars (\$10,000,000), is unable to meet any federal or state requirement for reserves, is insolvent, is in danger of becoming any of the foregoing, or is otherwise in danger of being unable to honor such letter of credit at any time during its term, or if the Director or the Administrator otherwise reasonably deems the bank to be insecure, then the Director or the Administrator shall have the right to demand that the developer provide a replacement letter of credit from a bank satisfactory to the Director or the Administrator. Such replacement letter of credit shall be deposited with the Director or the Administrator not later than ten (10) days following such demand. Upon such deposit, the Director or the Administrator shall surrender the original letter of credit to the developer.

6. If the developer fails or refuses to meet fully any of its obligations under this Ordinance or the applicable waiver community ordinance, then the Director or the Administrator may, in his or her discretion, draw on and retain all or any of the funds remaining in the letter of credit. The Director or the Administrator thereafter shall have the right to take any action he or she deems reasonable and appropriate to mitigate the effects of such failure or refusal, and to reimburse the County or the waiver community from the proceeds of the letter of credit for all of its costs and expenses, including legal fees and administrative expenses, resulting from or incurred as a result of the developer's failure or refusal to fully meet its obligations under this Ordinance or the applicable waiver community ordinance. If the funds remaining in the letter of credit are insufficient to repay fully the County or

ARTICLE 13. PERFORMANCE SECURITY.

Sec. 15-176. through 15-180.

the waiver community for all such costs and expenses, and to maintain a cash reserve equal to the required letter of credit during the entire time such letter of credit should have been maintained by the developer, then the developer shall, upon demand of the Director or the Administrator therefor, immediately deposit with the Director or the Administrator such additional funds as the Director or the Administrator determines are necessary to fully repay such costs and expenses and to establish such cash reserve.

Sec. 15-180. Long-Term Maintenance.

Easements and wetlands/wetland buffers/ riparian. Considering removal of these from definition of stormwater facility. Record temporary and permanent easement to title only as a note referring to permit. Signature block for applicant and transfer language on temporary?

Subdivision site runoff storage areas, and stormwater facilities not located in dedicated rights-of-way, shall be granted or dedicated to and accepted by a public entity, or shall be conveyed by plat as undivided equal interests to each lot in the subdivision or to dedicated entities approved by the Director

or the Administrator. Included in the dedication shall be a plan for continued management, operation, and maintenance of the stormwater facility, including designation of the person or persons responsible for long-term operational management and dedicated funding sources.

1. If title to the land underlying site runoff storage areas and stormwater facilities is conveyed by agreement to each of the lots in the subdivision, then:
 - a. A covenant on the face of the plat shall be provided; and
 - b. Subdivision property owners shall establish a property owner's association to provide for the maintenance of site runoff storage areas and stormwater facilities. The association shall be duly incorporated and the property owners' association agreement shall be recorded for all the lots in that subdivision; and
 - c. The proposed property owners' association by-laws and declaration shall provide for a long term maintenance agreement establishing:
 - (1) Title to the site runoff storage areas and storm water facilities to assure that each lot owner is responsible for a share of the cost of maintenance; and
 - (2) Payment of real estate property taxes for such areas to assure that site runoff storage areas and stormwater facilities are not sold to satisfy delinquent taxes; and
 - (3) Methods of perpetual maintenance, to assure that the standards of the plan for the site runoff storage areas and stormwater facilities are met. Maintenance methods shall be approved by the Director or the Administrator.
2. If title to land underlying the site runoff storage areas and stormwater facilities is conveyed by the plat to a public entity, then:
 - a. The face of the plat shall provide, if necessary, that an easement for public access for construction and maintenance purposes is reserved to the public entity; and

ARTICLE 13. PERFORMANCE SECURITY.

Sec. 15-176. through 15-180.

- b. The public entity shall accept the dedication of the site runoff storage areas and stormwater facilities and provide for their perpetual maintenance, including capital expenses for repair and replacement.
3. If title to the land underlying the site runoff storage areas and stormwater facilities is conveyed by the plat to the owner of the land, then:
 - a. The face of the plat shall provide an easement for access and maintenance purposes is reserved to the governmental unit having local jurisdiction over the Stormwater Management Plan for the area in which the property is located; and
 - b. The face of the plat shall provide the maintenance responsibilities including the schedule of perpetual maintenance, repair and replacement; and

- c. The face of the plat shall stipulate an agreed right of the governmental unit having local jurisdiction over the Stormwater Management Plan for the area in which the property is located to come onto the property upon thirty (30) days written notice to correct any condition which causes the site runoff storage area not to function as hydraulically and hydrologically planned; and to demand payment for such costs or to place a lien against the property for the value of those costs.

Sec. 15-181. through 15-195. Reserved.

ARTICLE 13. PERFORMANCE SECURITY.

Sec. 15-176. through 15-180.

ARTICLE 14. ENFORCEMENT AND PENALTIES.

Sec. 15-196. Inspection and Maintenance Authority.

1. Pursuant to the authority granted by 55 ILCS 5/5-1104 & 5-1062 (1992), the County or a waiver community may, after thirty (30) days written notice to the owner or occupant, enter upon any lands or waters within the County for the purpose of inspecting or maintaining stormwater facilities or causing the removal of any obstruction to an affected watercourse.
2. The Director or the Administrator shall post the notice in a prominent place on the premises, and shall send by certified mail a copy of the notice to the property owner listed in the County property tax records. The notice shall:
 - a. State the method by which the stormwater facility will be cleaned or maintained; and
 - b. State the date upon which the proposed work will begin; and
 - c. Inform the property owner that the property owner may appeal the commencement date of the proposed maintenance work.

Sec. 15-197. Required Inspections.

1. Any development constructed pursuant to a Stormwater Management Permit shall be subject to periodic inspections by the Director or the Administrator to ensure conformity with permit provisions and conditions.
2. Unless otherwise provided by a valid and enforceable intergovernmental agreement, the Department shall inspect and monitor the construction and maintenance of mitigation measures prepared pursuant to Section 15-135 of this Ordinance for all mitigated wetlands authorized by a Stormwater Management Permit in a non-waiver or partial waiver community.

Sec. 15-198. Notice of Violations.

1. Whenever the Director or the Administrator determines that a violation of a permit exists, the Department or the Oversight Committee shall issue a notice of violation [in any of the following](#)

manner:

- a. By posting a copy on the subject property in a conspicuous place, or
- b. by personally delivering a copy to the person, firm, or corporation responsible for the unlawful act or omission or condition which forms the basis for the violation, or
- c. by personally delivering a copy to any adult who resides at, occupies, uses, leases, manages or maintains the property on which the violation is located, or
- d. personally delivering a Notice of Violation to any owner in title to the property on which the violation is located. If a notice, or order, is issued in accord with subsection 1 of this paragraph, or if the party the Notice of Violation was issued to in accord with subsections 2 and/or 3 of this paragraph is not the property owner, a copy of the notice shall also be mailed to the "owner of record" as indicated the latest Tax Assessor's records at the last address to which a tax bill was mailed by certified mail, receipt requested.

2. A Notice of Violation shall contain the following:

- a. The name of the party to whom it was issued to, if known; and
- b. The name of the property owner and, if applicable, the tenant and/or occupant, and/or party exercising control over the subject property; and
- c. A brief statement setting forth the type and nature of the violation; and
- d. The section, or sections, of the Ordinance violated and, if applicable, the identity of any order, permit, plan or statement of specifications violated; and
- e. The date the violation was observed; and
- f. The address and/ or PIN of the property on which the violation was observed; and
- g. A statement directing the discontinuance the illegal action or condition and abatement of the violation; and
- h. A statement informing the violator, and owner, that he/she/it may contest the Notice of Violation by requesting in writing and within fourteen (14) days of issuance of the notice, an administrative appeal before a Hearing Officer or an administrative appeal board; and
 - i. A statement directing the violator to undertake the following acts within fourteen (14) days, excepting instances when an administrative appeal has been requested;
 - i To pay a penalty to the Department of Economic Development and Planning in an amount of one hundred dollars (\$100.00); and
 - ii To apply to the Department of Economic Development and Planning for any necessary permit(s), or revise or amend any previously issued permit, or previously approved plan, drawing or specifications, as applicable; or
 - j. A warning that if the violator fails to comply with the Ordinance and perform as directed by the Notice of Violation, within the time therein specified, the County will institute appropriate legal proceedings against the violator including a statement

that the Ordinance authorizes the court to assess fines of up to one thousand dollars (\$1,000.00), plus additional court costs, per day, for each day a violation remains uncorrected, which fines and costs may be assessed in addition to other remedies at law including a court enjoining further violations and ordering the offender to cease, correct, repair, abate or otherwise remedy the offending condition.

3. If a party to which a Notice of Violation has been issued requests an extension of time to comply with the Ordinance, or perform any act set forth in the notice, the Director may allow an extension of time for such compliance or act, which extension shall not be less than fourteen (14) days, nor more than forty five (45) days. The Director may not extend the period of time in which a party may request an administrative hearing.

Deleted: For any variance to Section 15-114, a fee shall be required pursuant to Section 15-115 to compensate for any site runoff storage not being provided. **This Ordinance shall take effect** for all purposes, and its effective date shall be, February 15, 1992. ...