# Low Impact Development Subdivision Ordinance

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# I. Purpose.

The purpose of this ordinance is to allow and encourage the development of subdivisions that incorporate low impact development principles as an alternative to conventional subdivisions. This is achieved by relaxing the infrastructure requirements in exchange for the provision of an alternative storm water management system and the protection of sensitive environmental areas. Subdivisions created under this section will:

- Protect vegetation and its habitat areas;
- Protect wildlife and its habitat areas;
- Reduce the amount of storm water runoff generated by development;
- Allow more storm water to infiltrate the ground on site;
- Improve the quality of storm water runoff;
- Improve the water quality of local water bodies;
- Reduce the amount of impervious surface;
- Reduce erosion in receiving streams;
- Reduce sedimentation of the Illinois River and local water bodies; and
- Protect property and human life by restricting residential development in areas near steep slopes and ravines.

# II. Definitions.

The following terms used in this ordinance shall have the following meanings:

*Best Management Practice (BMP)* means a structural or nonstructural practice which is designed to minimize the impacts of development on surface water or groundwater systems. *Bioretention* means the use of a natural, terrestrial-based community of plants to manage storm water by infiltrating runoff and filtering pollutants.

*Conservation Subdivision* means a residential subdivision designed to preserve environmental resource areas and provide open space. A conservation subdivision does not necessarily contain integrated management practices to improve the quality and reduce the quantity of storm water runoff.

*Environmental Resource Area* means any river, nonlinear water body, ravine, wooded area, wetland, steep slope, prairie, floodplain and any other natural area that must be documented prior to subdivision development.

*Floodplain* means the 100 year floodplain as determined by the Federal Emergency Management Agency (FEMA).

*Four Step Explanation* means a written statement explaining how the applicant's preliminary plat incorporates the following four steps: 1) Identification of all potential environmental resource areas; 2) Location of house sites; 3) Design of street alignments and trails; and 4) Drawing of lot lines.

*Impervious Surface* means any hard-surfaced, man-made area that does not readily absorb or retain water, including but not limited to building roofs, parking and driveway areas, gravel-covered areas, sidewalks and paved recreation areas.

*Integrated Management Practice (IMP)* means a microscale and distributed management technique used to maintain predevelopment site hydrology. Integrated management practices include bioretention facilities, dry wells, filter strips, buffer strips, grassed swales, rain barrels, cisterns, infiltration trenches, amended soils, and other similar practices.

*Low Impact Development (LID)* means a hydrologically functional site design with pollution prevention measures to reduce impacts and compensate for development impacts on hydrology and water quality.

*Nonlinear Water Body* means a natural or artificial body of water that retains water year round such as a depressional ponded area, lake, or slough.

*Open Drainage System* means a storm water conveyance system that uses swales or drainage paths to transport and infiltrate runoff over land instead of through a storm sewer system located beneath grade.

*Open space* means any area set aside subject to the provisions of this Ordinance to be used as an environmental resource area, restoration area, recreational area, greenway area, agricultural and horticultural area, or a storm water detention and retention area. This definition shall encompass the use provisions which form the entirety of Section VI of the Low Impact Development Residential Overlay Zoning Ordinance.

*Pervious surface* means a hard-surfaced, man-made area that contains spaces that allow storm water runoff to pass through to a permeable subbase layer.

*Planted island* means a landscaped area located in a cul-de-sac that consists of plantings and vegetation.

*Planting strip* means the area lying, existing or being between the sidewalk and curb or edge of roadway consisting of native vegetation designed to allow for the infiltration of storm water runoff.

*Prairie* means an area with a minimum size of one acre that contains primarily a mixture of native warm season grasses interspersed with native flowering plants that were prevalent prior to European settlement of the region.

*Pre-application Conference* means a meeting between the applicant and planning and zoning staff at which review of key ordinance provisions takes place and a mutual understanding of the preliminary development proposal is reached.

*Ravine* means a narrow valley or gorge in the earth's surface worn by running water.

*River* means a natural or artificial watercourse that periodically or continuously contains moving water, or that forms a connecting link between 2 or more bodies of water. A river includes any stream, creek, brook, branch, and drainage channel.

*Significant tree* means a tree having a diameter breast height of 24 (twenty four) inches or greater for deciduous trees and 12 (twelve) inches or greater for evergreen trees.

*Steep Slope* means land with a slope which equals or exceeds a vertical rise of one foot for a horizontal run of four feet for a vertical height of 35 feet or more.

*Steep Slope Zone* means all land which lies between the bottom of a steep slope and a line twenty (20) feet beyond the top of a steep slope into the adjoining tableland.

*Swale* means a linear depression in the ground surface which conveys drainage water with side slopes at or less steep than a 3H to 1V slope (3 feet of horizontal run for each foot of rise or fall). *Tableland* means an elevated region with a low relief structure and with at least one border defined by one or more steep slopes.

*Stream*. See the definition of "river" above.

*Wetland* means land that is inundated or saturated by surface or ground water at a frequency and duration sufficient to support, under normal conditions, vegetation adapted for life in saturated soil conditions.

*Wooded Area* means an area or stand of trees whose total combined canopy covers an area of 20,000 square feet or more.

## **III. Relationship with Existing Ordinances**

A low impact development subdivision shall be subject to all of the applicable standards of this chapter, and all other requirements of the Local Government, unless specifically modified or excepted by the provisions of this chapter.

## **IV. Application Process**

A. Pre-application Conference.

A pre-application conference between the applicant and planning and zoning department staff shall occur at the outset of the application process prior to submitting a preliminary plat to the planning and zoning department. The purpose of the pre-application conference is to allow staff to inform the applicant of the subdivision review and approval process required by this ordinance and the necessary information that must be submitted by the applicant according to this ordinance. The applicant is not required to bring any formal plans to the pre-application conference but should be prepared to discuss the location of the proposed subdivision, the proposed number of lots, the proposed number of dwellings, the presence of natural resource areas at the proposed subdivision location, and the properties adjacent to and near the proposed subdivision location.

## B. Preliminary Plat

The following items shall be submitted with the preliminary plat in addition to the items required for a conventional subdivision development.

1. "Four Step" Explanation.

A "four step" explanation shall be submitted with the preliminary plat. This document shall be a written statement explaining how the applicant completed the following four steps in order when creating the preliminary plat:

- a. Identification of all potential environmental resource areas;
- b. Location of house sites;
- c. Design of street alignments and trails; and
- d. Drawing of lot lines.

If creation of the preliminary plat did not follow the four step process outlined above, the applicant shall state in the written explanation why the process was not followed.

2. Environmental Resource Area Inventory

The applicant shall submit an environmental resource area inventory with the preliminary plat in conjunction with the first step of the "four step" explanation. The environmental resource area inventory shall consist of a map of the proposed subdivision location that identifies the location, quantity, and size of environmental resource areas at the proposed subdivision location. The environmental resource area inventory also shall include a written statement that describes the physical attributes of environmental resource areas at the proposed subdivision location. Environmental resource areas that must be identified in the environmental resource area inventory include:

- a. Rivers;
- b. Nonlinear water bodies;
- c. Ravines;
- d. Wooded areas;
- e. Wetlands;
- f. Floodplains;

- g. Steep slopes; and
- h. Prairies.

The planning and zoning department may require the identification of other environmental resources not explicitly listed in this ordinance to be included in the environmental resource area inventory.

C. Final Plat Components

The following items shall be submitted with the Final Plat in addition to the items required for a conventional subdivision development.

1. Environmental Resource Area Protection Plan

A plan labeled "Environmental Resource Area Protection Plan" shall be submitted and shall be prepared as an overlay of the final plat. The Environmental Resource Area Protection Plan shall include:

- a. The location and extent of all environmental resource areas;
- b. The location, type and nature of all temporary and permanent measures and practices to be utilized to protect environmental resource areas from development activities as required by Section VI. of this Ordinance;
- c. The location of environmental resource area buffers;
- d. A statement which names the party legally responsible for maintenance of environmental resource area protection measures during construction and through the maintenance period. The statement shall include the responsible party's name, address and telephone number; and
- e. A narrative description of the sequencing of grading and soil disturbance and construction activities and the temporary and permanent natural resource protection measures to be implemented to mitigate any negative effects of grading and other construction activities, including: supporting calculations, estimated schedule for installing, maintaining and removing both temporary and permanent structures, and the final stabilization and revegetation measures.
- 2. Planting Plan

A plan labeled "Planting Plan" shall be submitted that meets the requirements of Section VII.F.3 below.

3. Open Space Plan

A plan labeled "Open Space Plan" shall be submitted that shows the locations, sizes, uses, and cumulative land area of all open space areas including environmental resource areas.

4. Storm Water Management

All requirements of the Low Impact Development Storm Water Ordinance must be met. All items required by the Low Impact Development Storm Water Ordinance must be submitted at the times stated in the Ordinance.

5. Covenants and Restrictions

A Declaration of Covenants and Restrictions shall be required for all subdivisions, except for those that do not contain any storm water management or other open space areas that must be commonly maintained by a property owners' association. The Declaration shall:

- a. State that the covenants and restrictions shall run with the land and are for the benefit of all lot or unit owners in the subdivision, the property owners' association and the local government;
- b. Provide for the formation of a mandatory property owners' association;
- c. Assign ownership of all storm water management facilities and other common open space areas to the property owners' association;
- d. State that all storm water management facilities and other open space areas shall be used only for the purposes intended by this Ordinance and shall not be used or developed for or with any other use which would limit or cause to limit their use and function as intended by this Ordinance;
- e. State that all storm water management facilities, landscaping and other common open space areas in the subdivision shall be maintained in perpetuity by the property owners' association;
- f. State that all deed restricted open space shall be maintained by the owner of the lot on which the deed restricted open space is platted;

- g. Make provisions for the assessment and collection of all funds necessary for the repair and maintenance of all storm water management facilities, landscaping and other common open space areas within the subdivision;
- h. Make provisions for the transfer of ownership of the stormwater management facilities and other common open space areas from the Declarant to the property owners' association;
- Include a provision that the failure of the property owners; association to i. enforce the provisions of this Declaration with respect to the proper use and maintenance of any storm water management facility or any other open space area in the subdivision, shall operate to empower the Local Government to act for and on behalf of the property owners' association, subject to reasonable inspection notice and demand requirements, and perform all maintenance or other operations necessary to ensure that all storm water management facilities and other open space areas function and may be used as intended by this Ordinance. In the event that the Local Government finds that the failure to enforce the provisions of this Declaration has created an immediate threat to public health, safety and welfare, the Local Government shall not be required to give notice before causing the correction of the problems arising from the failure of the property owners; association to enforce the provisions of this Declaration. Furthermore, the Local Government shall be entitled to reimbursement by the property owners' association for all reasonable costs incurred by the Local Government in acting for, and on behalf of, the property owners' association;
- j. Contain provisions permitting the addition, amendment or termination of any covenant or restriction; and
- k. Contain provisions that the addition, amendment or termination of any covenant or restriction shall not be permitted if the result would in any manner diminish the function of the Declaration with respect to the use and maintenance of storm water management facilities and other open space areas in the subdivision unless otherwise approved by the Local Government.

### D. Additional Information

The local government may require additional plans and/or documentation not explicitly stated in this ordinance in order to acquire a sufficient understanding of the proposed subdivision development and its attributes.

### V. Design Standards

#### A. Streets

- 1. Design.
  - a. Streets shall be located to avoid the destruction of environmental resource areas. If the destruction of environmental resources cannot be avoided, the applicant must submit a written statement explaining why the proposed street layout is necessary and cannot be avoided.
  - b. Existing streets shall be extended to adjacent developed or undeveloped property, unless the natural conditions on the adjacent property preclude extension of the street, in order to improve connectivity between areas and facilitate emergency vehicle access.
  - c. Proposed streets shall be laid out so that they can be extended to adjacent undeveloped areas when those areas are developed in order to improve connectivity between areas and facilitate emergency vehicle access, unless the natural conditions on the adjacent property preclude extension of the street.
  - d. A temporary cul-de-sac shall be provided at the terminus of all dead-end streets. The right-of-way lines and constructed pavement shall be extended to the boundary line of the proposed subdivision if the adjacent property is undeveloped. The following notation shall be placed on the subdivision plat: "Future access connection for adjacent development, to be removed upon the extension of the street."
- 2. Construction.

Streets may be constructed of porous asphalt or permeable pavers subject to the approval of the Local Government Engineer.

3. Dimensions.

The minimum widths of the right-of-way and pavement shall not be less than the following dimensions:

	Right-of-way	Pavement
Local Streets (no	50 feet	18 feet
parking allowed)		
Local Streets (parking	50 feet	21 feet
on one side of street)		
Local Streets (parking	60 feet	28 feet

on both sides of	
street)	

#### B. Cul-de-sacs

A planted island with a pervious or bioretention landscaped area where runoff from the street can be directed shall be required in the center of any permanent cul-de-sac to increase the amount of storm water runoff infiltrated on site. The planted island shall be a minimum forty (40) feet in diameter. Ownership and maintenance of the planted island shall be designated on the approved final plan of the subdivision or land development.

#### C. Sidewalks

1. Location.

Subject to the discretion of the local government, a sidewalk is required to be located on only one side of the street in order to reduce the amount of impervious surfaces. The local government may require sidewalks to be located on both sides of the street to provide for safety and convenience.

2. Construction.

The construction of all sidewalks shall be in accordance with the requirements of the local government. Sidewalks may be constructed of pervious materials, provided the runoff through the material will not be directed towards the subgrade of the roadway, subject to the approval of the Local Government Engineer. A raised sidewalk with plantings or soil mixture underneath to allow for storm water infiltration or a sidewalk system that utilizes an underdrain to allow for storm water infiltration may be constructed.

3. Dimensions.

The minimum width of all sidewalks shall be three (3) feet.

- 4. Design
  - a. For sidewalks located in a street right-of-way there shall be a minimum five (5) feet wide planting strip between the curb or edge of roadway and sidewalk to be used for the location of the underground utilities, vegetated open channels or bioretention areas.
  - b. The width of the planting strip shall be reduced when significant trees are located in the path of the sidewalk in order to preserve significant trees.

The local government may allow the width of the planting strip to be reduced for other reasons when it determines the reduction promotes public safety, health, or general welfare.

5. Trail System Alternative.

The sidewalk requirement may be waived in order to allow for a trail system as a means of providing pedestrian access. A trail must be a minimum of 5 feet in width and shall be constructed as a sidewalk when located within the right-of-way. The trail system shall provide sufficient pedestrian access throughout the subdivision and connect with nearby trails or sidewalks.

#### C. Curb and Gutters

1. Location

Curbs and gutters shall be required along streets only when storm sewers are required. Curbs and gutters are not required along streets when an open drainage system that consists of integrated management practices is utilized to convey storm water runoff and allow storm water runoff to infiltrate the ground. Open drainage systems consisting of integrated management practices shall be designed so that the quantity, quality, and rates of runoff comply with the standards of the Low Impact Development Storm Water Management Ordinance.

2. Curb Cut Provision

When curbs are required by the local government for traffic control, pedestrian safety, or roadway stability, curb cuts may be used to direct storm water runoff from paved surfaces to a vegetated swale, bioretention area, or other integrated management practice designed to allow for storm water infiltration.

3. Maintenance and Management

Curbs and gutters shall be maintained by the local government. Integrated management practices, best management practices, and other components of a stormwater management system shall be maintained and managed by the appropriate homeowners' association. If no homeowners' association exists, the components shall be maintained and managed by the property owner.

D. Lot Design

Side lot lines shall be as near as possible at right angles to straight street lines or radial to curved street lines unless the design will harm environmental resource

areas. Side lot lines may follow an alternative design in order to protect environmental resource areas.

## VI. Protection of Environmental Resource Areas

- A. Rivers
  - 1. General

A buffer of 50 feet from each side of a river shall be established in order to protect water quality, reduce sedimentation of the river, and reduce soil erosion that contributes to sedimentation. The buffer shall be measured from the top of the river bank and shall consist of the existing vegetation on site or be replanted with native vegetation. Grading or any other activity that will disturb soil and vegetation, excluding the removal of invasive species and the replanting of native vegetation, is prohibited from occurring within the river buffer. No permanent or temporary structures, septic systems, or impervious surface is permitted to be established within a river buffer unless the structure is for the purpose of controlling or reducing soil erosion.

2. Extension of River Buffer

If the 100 year flood zone of a river extends beyond the required width of the buffer, the buffer shall be extended to encompass the entire 100 year flood zone.

3. Restricted Activities

The following activities are prohibited from occurring within a river buffer:

- a. Removal of native vegetation unless part of a comprehensive effort to remove existing vegetation and replant native vegetation in order to enhance the natural environment and allow for greater storm water infiltration;
- b. Soil disturbance by grading, stripping, or other practices;
- c. Filling of the area with soil from another site;
- d. Dumping of trash, debris, excess soil or sediment, yard waste, and any other substance;
- e. Draining the area by ditches, underdrains, or other systems;
- f. Conveying private drainage from sump pumps to the buffer;

- g. Application of pesticides except for what is necessary to maintain the growth of native vegetation; and
- h. Storage or operation of motorized vehicles.
- 4. Maintenance

The landowner shall be responsible for maintenance, which shall consist of the removal of litter, junk, debris, dead or diseased vegetation, and invasive species that may be detrimental to the health of the area.

5. Inspection

The local government shall annually inspect the river buffer and, when evidence of improper maintenance is found, cause the landowner to perform required maintenance.

- B. Steep Slopes
  - 1. Construction

No structures shall be constructed in a steep slope zone. When construction occurs upon property abutting a steep slope zone, a silt fence shall be erected temporarily along the top edge of the steep slope zone and shall remain in place during any construction and demolition activity.

2. Vegetation

All areas within a steep slope zone shall be vegetated either in the natural state or using appropriate native vegetation. No lawn waste or artificial debris is permitted to be placed within a steep slope zone. Owners of property within a steep slope zone shall remove any lawn waste and artificial debris from the steep slope zone immediately. Signage shall be erected at the boundary of publicly-owned steep slope zones prohibiting the mowing of vegetation.

3. Maintenance

The applicant shall submit a maintenance plan for steep slope zones. The maintenance plan shall include:

a. The names and addresses of owners of property within the steep slope zones;

- b. A written description of the vegetation that will cover the steep slope zone;
- c. A written description of how the vegetation that covers the steep slope zone will be maintained to ensure its constant presence in the steep slope zone;
- d. A written and graphical description of how storm water runoff will be conveyed throughout the site and the measures to be put in place to ensure no storm water runoff discharges into the top of a steep slope zone or along the slope itself.

The decision-making body of the Local Government may require covenants to be placed upon the subdivision plat to ensure the long-term maintenance of steep slope zones.

4. Drainage

No storm water runoff shall be discharged onto a steep slope zone or along the steep slope itself. Storm water runoff shall be conveyed either to an integrated management practice, an area designed to infiltrate storm water runoff, a public storm sewer or to the ravine channel at the bottom of the steep slope. Private drainage lines which leak water onto the top of a steep slope zone or onto the steep slope itself must be repaired within thirty (30) days of notification by the Local Government.

- C. Wetlands
  - 1. General

All wetlands with a surface area of one quarter acre or more situated wholly or partially on-site shall be protected and maintained. Additionally, a buffer shall extend from the edge of the delineated wetland. The buffer shall be calculated in the following manner:

- a. 30 feet from a wetland with a total surface area of less than 1 acre;
- b. 40 feet from a wetland with a total surface area of 1 acre or greater but less than 2 ½ acres;
- c. 50 feet from a wetland with a total surface area of  $2\frac{1}{2}$  acres or greater.
- 2. Restricted Activities

The following activities are prohibited from occurring in a wetland or within a wetland buffer:

- a. Removal of native vegetation unless part of a comprehensive effort to remove existing vegetation and replant native vegetation in order to enhance the natural environment and allow for greater storm water infiltration;
- b. Soil disturbance by grading, stripping, or other practices;
- c. Filling of the area;
- d. Dumping of trash, debris, excess soil or sediment, liquids, yard waste, and any other substance;
- e. Draining the area by ditches, underdrains, or other systems;
- f. Storage or operation of motorized vehicles; and
- g. Construction or installation of any permanent or temporary structures, septic systems, or impervious surface.
- 3. Vegetation

All areas within a wetland and wetland buffer shall be vegetated either in the natural state or using appropriate native vegetation. No lawn waste or artificial debris is permitted to be placed within a wetland or wetland buffer. Owners of property within a wetland buffer shall remove any lawn waste and artificial debris from the wetland buffer immediately. Signage shall be erected at the boundary of publicly-owned wetland buffers prohibiting the mowing of vegetation.

4. Storm Water Runoff

Storm water runoff may be directed to a wetland buffer as unconcentrated flow or shall be treated to remove all silt and sediment prior to entering the adjacent wetland. Storm water runoff directed to a wetland buffer shall not be less than 80 percent of the existing runoff volume nor more than 150 percent of the existing runoff volume for the 1-year 24 hour storm event.

5. Maintenance

The landowner shall be responsible for maintenance, which shall consist of the removal of litter, junk, debris, dead or diseased vegetation, and invasive species that may be detrimental to the health of the area.

6. Inspection

The local government shall annually inspect the wetland and wetland buffer and, when evidence of improper maintenance is found, cause the landowner to perform required maintenance.

### D. Wooded Areas

- 1. Noxious Species
  - a. Undesirable or non-native tree species shall not require protection under this ordinance.
  - b. When a wooded area contains tree species that form a canopy that prevents the growth of native vegetation that allows for the infiltration of storm water runoff, the species may be removed and replaced by native vegetation subject to the approval of the Local Government. The applicant shall submit a narrative describing the species to be removed and their location and the native vegetation to be planted and its location.
- 2. General

All wooded areas shall be protected and maintained. All areas located within 100 (one hundred) feet from the edge of wooded areas with slopes exceeding 12 (twelve) percent grade shall be protected and maintained.

3. Restricted Activities

The following activities are prohibited from occurring in a wooded area or a protected area within 100 (one hundred) feet of a wooded area:

- a. Removal of native vegetation unless part of a comprehensive effort to remove existing vegetation and replant native vegetation in order to enhance the natural environment and allow for greater storm water infiltration;
- b. Soil disturbance by grading, stripping, or other practices;
- c. Filling of the area;
- d. Dumping of trash, debris, excess soil or sediment, liquids, yard waste, and any other substance;
- e. Draining the area by ditches, underdrains, or other systems;
- f. Storage or operation of motorized vehicles.
- g. Construction or installation of any permanent or temporary structures, septic systems, or impervious surface.
- 4. Exemptions

Active commercial nurseries, Christmas tree operations, and operations that grow trees for commercial purposes are exempt from the wooded area protection standards of this ordinance.

- E. Nonlinear Water Bodies.
  - 1. General

All nonlinear water bodies shall be protected and maintained. Additionally, a buffer shall extend from the edge of the nonlinear water body. The buffer shall be calculated in the following manner:

- a. 30 feet from a nonlinear water body with a total surface area of less than 1 acre;
- b. 40 feet from a nonlinear water body with a total surface area of 1 acre or greater but less than 2 ½ acres;
- c. 50 feet from a nonlinear water body with a total surface area of  $2\frac{1}{2}$  acres or greater.
- 2. Restricted Activities

The following activities are prohibited from occurring in a nonlinear water body or within a nonlinear water body buffer:

- a. Removal of native vegetation unless part of a comprehensive effort to remove existing vegetation and replant native vegetation in order to enhance the natural environment and allow for greater storm water infiltration;
- b. Soil disturbance by grading, stripping, or other practices;
- c. Filling of the area;
- d. Dumping of trash, debris, excess soil or sediment, liquids, yard waste, and any other substance;
- e. Draining the area by ditches, underdrains, or other systems;
- f. Storage or operation of motorized vehicles unless the vehicle is a watercraft and is docked at an appropriate location; and
- g. Construction or installation of any permanent or temporary structures, septic systems, or impervious surface.
- 3. Vegetation

All areas within a nonlinear water body buffer shall be vegetated either in the natural state or using appropriate native vegetation. No lawn waste or artificial debris is permitted to be placed within a nonlinear water body buffer. Owners of property within a nonlinear water body buffer shall remove any lawn waste and artificial debris from the nonlinear water body buffer immediately. Signage shall be erected at the boundary of publiclyowned nonlinear water body buffers prohibiting the mowing of vegetation.

4. Storm Water Runoff

Storm water runoff may be directed to a nonlinear water body buffer as unconcentrated flow or shall be treated to remove all silt and sediment prior to entering the adjacent nonlinear water body.

5. Maintenance

The landowner shall be responsible for maintenance, which shall consist of the removal of litter, junk, debris, dead or diseased vegetation, and invasive species that may be detrimental to the health of the area.

6. Inspection

The local government shall annually inspect the nonlinear water body and nonlinear water body buffer and, when evidence of improper maintenance is found, cause the landowner to perform required maintenance.

#### F. Prairies

1. General

All prairies shall be protected, maintained, and vegetated either in the natural state or using appropriate native vegetation.

2. Restricted Activities

The following activities are prohibited from occurring in a prairie:

- a. Removal of native vegetation unless part of a comprehensive effort to remove existing vegetation and replant native vegetation in order to enhance the natural environment and allow for greater storm water infiltration;
- b. Soil disturbance by grading, stripping, or other practices;
- c. Filling of the area;
- d. Dumping of trash, debris, excess soil or sediment, liquids, yard waste, and any other substance;
- e. Draining the area by ditches, underdrains, or other systems;

- f. Storage or operation of motorized vehicles.
- g. Construction or installation of any permanent or temporary structures, septic systems, or impervious surface.
- G. Maintenance and Management of Environmental Resource Areas
  - 1. Responsibility

The owner of the property on which the environmental resource area is located shall be responsible for maintaining and managing the environmental resource area in perpetuity.

- 2. Types of Ownership
  - a. Dedication

An environmental resource area may be dedicated to the local government, an appropriate public agency, or a not-for-profit conservation organization that is willing to accept the dedication. Environmental resource areas may be dedicated via conservation easement.

b. Common Ownership

An environmental resource area may be held in common ownership by a property owners' association who shall assume full responsibility for its maintenance and who shall prevent development and subsequent subdivision of the environmental resource area for other than open space purposes. In the event that an environmental resource area is to be owned and maintained by a property owners' association, documents establishing the association, explaining ownership and membership requirements, establishing articles of incorporation and bylaws, providing the time at which the developer turns the association over to the property owners, listing items owned in common including such items as roads, recreation facilities, parking, common open space grounds, and utilities, detailing its obligation and otherwise providing for the maintenance and preservation of environmental resource areas shall be prepared and submitted with all required plans. Covenants shall provide for the mandatory inclusion of all property owners for the purpose of being responsible for continuing maintenance of the environmental resource areas.

3. Deed Restricted Ownership

All environmental resource areas must be held in deed restricted ownership to ensure that no development and subsequent subdivision of the environmental resource area for other than open space purposes shall be permitted. The maintenance responsibility of all environmental resource areas shall be specified and provision shall be made for guaranteeing this responsibility.

4. Management Plan

A management plan covering a minimum period of 5 years shall be prepared and submitted for all environmental resource areas by the party responsible for maintaining and managing the environmental resource area. The management plan shall consist of all necessary measures to be completed to ensure the protection, health, and continued existence of the environmental resource area. A new management plan covering a minimum period of 5 years shall be prepared and submitted prior to expiration of the management plan that is in effect.

## **VII. Open Space**

A. Minimum Open Space Requirement

For residential subdivisions developed under this Ordinance, the minimum acreage of open space required to be set aside is equal to 30 percent of the gross acreage of land in the proposed development or the amount of land required to be protected as environmental resource areas pursuant to this Ordinance, whichever is greater. When the amount of land protected as environmental resource areas pursuant to the gross acreage of land in the proposed development, the minimum acreage of open space shall consist of land protected as environmental resource areas and additional acreage, the sum of which equals 30 percent of the gross acreage of land in the proposed development.

- B. Design Standards for Open Space
  - 1. The following provisions (Section VII.B.2-5) shall apply to all open space areas that are not environmental resource areas unless the activities stated in the following provisions will not endanger the overall health of the environmental resource area.
  - 2. Any open space areas shall be physically delineated from private lots. The method of delineation shall include shrubbery, trees, markers or other methods acceptable to the Local Government. All plants used to delineate open space areas shall be native in origin.

Evergreens or shrubbery shall be a minimum height of two (2) feet at the time of planting. Deciduous trees shall have a minimum trunk diameter of two and one-half  $(2 \frac{1}{2})$  inches at a height of six (6) inches above the finished grade at the time of planting.

- 3. Open space areas shall be directly accessible to the largest practicable number of lots within the subdivision. Non-adjoining lots shall be provided with safe and convenient pedestrian access to open space. At a minimum, access to open space areas intended to be used by the general public shall be provided by one centrally located access point per 15 lots accessible from a public right of way.
- 4. Open space areas shall be linked with trails that are accessible to the residents of the subdivision. Public access to such trails shall be provided when the trails are linked to other publicly-accessible walkway systems within the Local Government. Provisions should be made for access to the open space, as required for land management and emergency purposes.
- 5. Continuity

Open space areas shall be designed so that an interconnected network of open space is provided throughout the site. Open space areas shall be connected to any adjacent open space areas that exist on other sites in order to provide an interconnected network of open space throughout the community.

- C. Maintenance and Management
  - 1. The following provisions (Section VII.C.2-5) shall apply to all open space areas that are not environmental resource areas. The maintenance and management requirements for environmental resource areas are provided in Section VI of this Ordinance.
  - 2. Responsibility

The owner of the open space shall be responsible for maintaining and managing the open space area in perpetuity.

- 3. Types of Ownership
  - a. Dedication

Open space may be dedicated to the local government, an appropriate public agency, or a not-for-profit conservation organization that is willing to accept the dedication. Open space may be dedicated via conservation easement.

b. Common Ownership

Open space may be held in common ownership by a property owners' association who shall assume full responsibility for its maintenance and who shall prevent development and subsequent subdivision of the open space for other than open space purposes. In the event that open space is to be owned and maintained by a property owners' association, documents establishing the association, explaining ownership and membership requirements, establishing articles of incorporation and bylaws, providing the time at which the developer turns the association over to the property owners, listing items owned in common including such items as roads, recreation facilities, parking, and utilities, detailing its obligation and otherwise providing for the maintenance and preservation of open space areas shall be prepared and submitted with all required plans. Covenants shall provide for the mandatory inclusion of all property owners for the purpose of being responsible for continuing maintenance of the open space areas.

4. Deed Restricted Ownership

All open space areas must be held in deed restricted ownership to ensure that no development and subsequent subdivision of open space areas for other than open space purposes shall be permitted. The maintenance responsibility of all open space areas shall be specified and provision shall be made for guaranteeing this responsibility.

5. Management Plan

A management plan covering a minimum period of 5 years shall be prepared and submitted for all open space areas by the party responsible for maintaining and managing the open space areas. The management plan shall consist of all necessary measures to be completed to ensure the protection, health, continued existence, and continued uses of the open space areas. A new management plan covering a minimum period of 5 years shall be prepared and submitted prior to expiration of the management plan that is in effect.

#### D. Use

Open space shall be used only for the purposes defined in Section VI. of the Low Impact Development Residential Overlay Zoning Ordinance. For reference, these uses are:

- 1. Environmental resource areas;
- 2. Restoration areas;
- 3. Recreational areas;
- 4. Greenway areas;
- 5. Agricultural and horticultural areas; and
- 6. Storm water detention or retention areas.

#### E. Maintenance Activities

1. Environmental Resource Areas

The maintenance of environmental resource areas shall consist of the requirements stated in Section VI. of this Ordinance.

2. Restoration Areas

The maintenance of restoration areas shall consist of:

- a. The removal of litter, junk, and debris;
- b. The removal of dead or diseased vegetation and invasive species;
- c. The removal of any objects that restrict the natural or designed flow of water bodies; and
- d. The assurance that any restoration areas incorporated into the site's storm water management system function properly and adequately convey, filter, and infiltrate storm water runoff.
- 3. Recreational Areas

The maintenance of recreational areas shall consist of:

- a. Necessary activities to ensure the recreational areas are able to be used for their intended purposes; and
- b. Removal of any objects or prohibition of any activities that cause hazards, nuisances, or unhealthy conditions.

4. Greenway Areas

The maintenance of greenway areas shall consist of:

- a. The removal of litter, junk, and debris;
- b. The removal of dead or diseased vegetation and invasive species;
- c. The assurance that any greenway areas incorporated into the site's storm water management system function properly and adequately convey, filter, and infiltrate storm water runoff;
- d. Necessary activities to ensure the greenway areas are able to be used for their intended purposes; and
- e. Removal of any objects or prohibition of any activities that cause hazards, nuisances, or unhealthy conditions.
- 5. Agricultural and Horticultural Areas

The maintenance of agricultural and horticultural areas shall consist of:

- a. Necessary activities to ensure the productivity of the land for the intended agricultural and horticultural uses;
- b. Prevention of excessive odors, dust, noise, and other impacts that adversely affect adjacent residential uses; and
- c. The management of storm water runoff that complies with the Low Impact Development Storm Water Management Ordinance.
- 6. Storm Water Detention or Retention Areas

The maintenance of storm water detention or retention areas shall consist of:

- a. The removal of litter, junk, and debris;
- b. The removal of dead or diseased vegetation and invasive species;
- c. The removal of any objects that restrict the natural or designed flow of water; and
- d. The assurance that storm water detention and retention areas function properly and adequately filter and infiltrate storm water runoff.

- F. Landscaping of Open Space Areas
  - 1. Use of Native Vegetation

Native vegetation shall be left in place or planted in all open space areas that are not used for active recreation, agriculture, horticulture, or other activities where the growth of native vegetation is infeasible or will prohibit the intended activities from occurring.

2. Storm Water Management

Native vegetation that is planted or left in place shall be incorporated into the site's storm water management system to the maximum extent practicable in order to filter pollutants from storm water runoff and allow storm water runoff to infiltrate the ground on site.

3. Planting Plan

A planting plan for all open space areas shall be submitted with the final plat. The planting plan shall indicate:

- a. The location and use of all open space areas, such as environmental resource areas, restoration areas, recreational areas, greenway areas, agricultural and horticultural areas, and storm water detention and retention areas;
- b. The species of native vegetation to be planted and the areas where the species will be planted;
- c. A diagram and written explanation that shows where storm water runoff flows through the open space areas that consist of native vegetation and explains the effect the native vegetation will have on filtration and infiltration; and
- d. A written explanation of why native vegetation cannot be planted or is infeasible for areas where native vegetation is not proposed to be planted or left in place.

### **VIII.** Severability

If any section, paragraph, clause or provision of this Ordinance shall for any reason be held to be invalid or unenforceable, the invalidity or unenforceability of such section, paragraph, clause or provision shall not affect any of the remaining provisions of this Ordinance.