

DIVISION 2

STREAM BUFFER REGULATIONS

SEC. 28.2-1 FINDINGS. The President and Board of Trustees of the Town of Normal hereby find:

Vegetated buffers adjacent to stream systems provide environmental protection and resource management benefits that include the following:

- A. Restoring and maintaining the chemical, physical and biological integrity of water resources.
- B. Removing pollutants delivered from urban stormwater.
- C. Reducing erosion and sediment entering streams.
- D. Stabilizing stream banks.
- E. Providing infiltration of stormwater runoff.
- F. Maintaining base flow of streams.
- G. Contributing to the organic matter that is a source of food and energy for the aquatic ecosystem.
- H. Providing tree canopy to shade streams and promote desirable aquatic organisms.
- I. Providing riparian wildlife habitat.
- J. Furnishing scenic value and recreational opportunity.

SEC. 28.2-2 PURPOSE: The President and Board of Trustees, therefore, declare that the purpose of this division is to protect, establish and maintain vegetation in buffer and wetland areas by implementing specifications for the establishment, protection and maintenance of vegetation along all stream systems within our jurisdictional authority. Furthermore, it is the intent of the President and Board of Trustees to establish minimal, acceptable requirements for the design of buffers to protect the streams, wetlands, and floodplains of the Town; to protect the water quality of watercourses, reservoirs, lakes, and other significant water resources within the Town; to protect the Town's riparian and aquatic ecosystems; and to provide for the environmentally sound use of the Town's land resources.

SEC. 28.2-3 DEFINITIONS: When used in this division the following terms shall have the following meaning:

- A. Active Channel: The area of the stream channel that is subject to frequent flows (approximately once per one and a half years) and that includes the portion of the channel below the floodplain and the floodway.

- B. Base Flood: The flood having a one per cent probability of being equaled or exceeded in any given year. The Base Flood is also known as the 100-year flood.
- C. Best Management Practices: Conservation practices or management measures that control soil loss and reduce water quality degradation caused by nutrients, animal wastes, toxins, sediment, and runoff. (Also identified as BMP'S)
- D. Buffer: A vegetated area, including trees, shrubs, and herbaceous vegetation, that exists or is established to protect a stream system, lake or reservoir. Alteration of this area is strictly limited.
- E. Development:
1. Any manmade alteration of property for any purpose including but not limited to clearing, stripping, grading, filling and construction activities.
 2. Subdivision or the division of a tract or parcel of land into two or more parcels.
 3. The combination of any two or more lots, tracts, or parcels of property for any purpose.
 4. The preparation of land for any of the above purposes.
- F. Flood Plain: Those areas that are subject to inundation by the base flood and identified as such on the most recent Flood Insurance Rate Map of McLean County, Illinois, and Incorporated Areas prepared by the Federal Emergency Management Agency, a copy of which is on file in the Office of the Town Clerk.
- G. Floodway: That portion of the flood plain identified as such on the most recent Flood Insurance Rate Map for McLean County, Illinois, and Incorporated Areas prepared by the Federal Emergency Management Agency, a copy of which is on file in the Office of the Town Clerk
- H. Nontidal Wetlands: Property not influenced by tidal fluctuations 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.
- I. Nonpoint Source Pollution: Pollution that is generated by land use activities (rather than pollution from an identifiable or discrete source) and is conveyed to waterways through natural processes, such as rainfall, stormwater runoff, or groundwater seepage rather than direct discharges.

- J. One Hundred Year Floodplain: Those lands subject to inundation by the 100-year flood or the flood having a one-percent probability of being equaled or exceeded in any given year.
- K. Person: Any individual, firm or corporation, public or private, the State of Illinois and its agencies or political subdivisions, and the United States of America, its agencies and instrumentalities, and any agent, servant, officer, or employee of any of the foregoing.
- L. Protected Property: Any property within the corporate limits of the Town of Normal or within the one and one-half mile planning jurisdiction outside the Town corporate limits, (1) designated as a stream system on the stream buffer map attached hereto as Appendix A together with the buffer areas defined in this division based on stream order; and (2) any stream system located and identified by the Public Works Director based on field observation or on information supplied to the Director, together with the buffer areas defined in this division based on stream order.
- M. Pollution: Any contamination or alteration of the physical, chemical or biological properties of any waters that will render the waters harmful or detrimental to:
1. Public health, safety or welfare.
 2. Domestic, commercial, industrial, agricultural, recreational, or other legitimate beneficial uses.
 3. Livestock, wild animals or birds.
 4. Fish or other aquatic life.
- N. Stream Channel: Part of a watercourse either naturally or artificially created that contains an intermittent or perennial base flow of groundwater origin. Base flows of groundwater origin can be distinguished by any of the following physical indicators:
1. Hydrophytic vegetation, hydric soil, or other hydrologic indicators in the area(s) where groundwater enters the stream channel in the vicinity of the headwaters, channel bed, or channel banks.
 2. Flowing water not directly related to a storm event.
 3. Historical records of a local high groundwater table, such as well and stream gauge records.
- O. Stream Order: A classification system for streams based on a stream hierarchy. The smaller the stream, the lower its numerical classification. For example, a first-order stream does not have tributaries and normally originates from springs and/or seeps.
- P. Stream System: A stream channel together with one or both of the following:

1. 100-year floodplain.
 2. Hydrologically related nontidal wetland.
- Q. Streams: Perennial and intermittent watercourses identified through site inspection and the McLean County Stream Order Map.
- R. Water Pollution Hazard: A land use or activity that causes a relatively high risk of potential water pollution.

SEC. 28.2-4 OBLIGATION TO COMPLY.

- A. It shall be unlawful for any person to undertake, initiate or cause to occur on any Protected Property in the Town of Normal or within the one and one-half mile planning jurisdiction of the corporate limits any of the following activities without first complying with the requirements of this division and obtaining a site development permit from the Town for such activity:
1. Development of land.
 2. Timber harvesting activities.
 3. Surface mining operations except that the design standards shall not apply to active surface mining operations that are operating in compliance with an approved Illinois Department of Natural Resources – Land Reclamation Division surface mining permit.
- B. The obligation to comply with this division shall not apply in the following instances:
1. That part of any development for which a waiver or variance is granted pursuant to the terms of this division.
 2. Agricultural operations as defined in Town Zoning Code.
 3. Any development for which a valid building or site development permit or subdivision plan was issued or approved prior to the effective date of this division, and such permit or plan has not expired.
 4. All property zoned R-1A, R-1B, Single Family Residence District prior to the effective date of this division.

SEC. 28.2-5 APPLICATION FOR PERMIT.

- A. Application for a site development permit shall be made by the owner of the property or his authorized agent to the Public Works Department on a form furnished for that purpose. Each application shall bear the name(s) and address(es) of the owner and developer of the site and of any consulting firm retained by the applicant together

with the name of the applicant's principal contact at such firm and shall be accompanied by a filing fee of \$125.00 (A separate filing fee shall not be required for applications processed as part of the subdivision process). Each application shall include certification that any site development shall be in accordance with the plans approved upon issuance of the permit.

A licensed professional engineer shall sign each application for more than five acres.

- B. The application shall set forth an informative, conceptual and schematic representation of the proposed activity by means of maps, graphs, charts, or other written or drawn documents so as to enable the Public Works Director an opportunity to make a reasonably informed decision regarding the proposed activity and whether it complies with this division.
- C. The application shall contain the following information for the proposed activity:
 - 1. Location or vicinity map.
 - 2. Field delineated and surveyed streams, springs, seeps, bodies of water, and wetlands (include a minimum of 200 feet into adjacent properties)
 - 3. Field delineated and surveyed forest buffers.
 - 4. Limits of the ultimate 100-year floodplain.
 - 5. Hydric soils mapped in accordance with the NCRS soil survey of the site area.
 - 6. Steep slopes greater than fifteen (15) percent for areas adjacent to and within two-hundred (200) feet of streams, wetlands and other water bodies.
 - 7. A narrative of the species and distribution of existing vegetation within the buffer zone required by this division.
- D. A buffer plan shall be submitted in conjunction with the required application meeting the design, management and maintenance requirements of this division (28.2-6 and 28.2-7).
- E. Review and Approval. Each application for a site development permit shall be reviewed and acted upon according to the following procedures:
 - 1. The Public Works Director will review each application for a site development permit to determine its conformance with the provisions of this division. The Director may also refer any application to the McLean County Soil and Water Conservation District and/or any other local government or public agency within whose jurisdiction the site is located for review and

comment. Within ninety (90) days after receiving an application, the Public Works Director shall in writing:

- a. Approve the permit application if it is found to be in conformance with the provisions of this division and issue the permit;
 - b. Approve the permit application subject to such reasonable conditions as may be necessary to secure substantially the objectives of this division, and issue the permit subject to these conditions;
 - c. Request changes and/or additional information, necessary to secure substantially the objectives of this division, and indicate the procedure for submitting a revised application; *or*
 - d. Disapprove the permit application, indicating the deficiencies and the procedure for submitting a revised application and/or submission.
2. No site development permit shall be issued for an intended development site unless:
- a. The development, including but not limited to subdivisions and planned unit development, has been approved by the Town where applicable, and
 - b. All relevant federal and state permits (i.e., for floodplains and wetlands) have been received for the portion of the site subject to soil disturbance.
- F. Expiration of Permit. Every site development permit shall expire and become null and void if the work authorized by such permit has not been commenced within one year or is not completed by a date which shall be specified in the permit; except that the Town may, if the permittee presents satisfactory evidence that unusual difficulties have prevented work being commenced or completed within the specified time limits, grant a reasonable extension of time if written application is made before the expiration date of the permit. The Town may require modification of the stream buffer plan to prevent any increase in water pollution or sediment runoff resulting from any extension.
- G. Appeals. The applicant may appeal the decision of the Public Works Director as provided in Section 28.2-5, to the Zoning Board of Appeals. Upon receipt of an appeal, the Zoning Board of Appeals shall schedule and hold a public hearing after giving notice thereof as required by law. The Zoning Board of Appeals shall render a decision within thirty (30) days after the hearing. Factors to be considered on review shall include, but need not be limited to, the effects of the proposed development activities on the surface water flow to tributary and downstream lands, any comprehensive watershed management plans, or the use of any retention facilities; possible saturation of fill and unsupported cuts by water, both natural and domestic; runoff surface waters that produce erosion and silting of drainageways; nature and

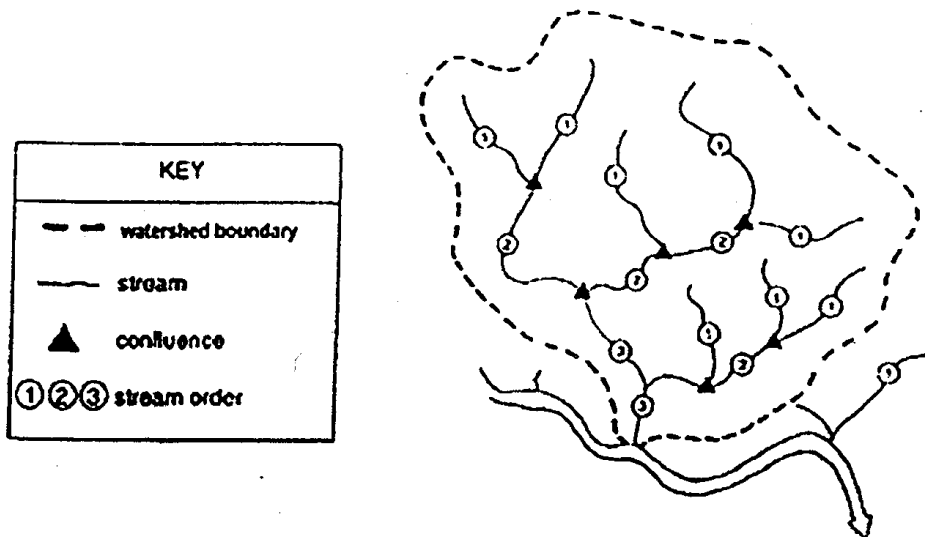
type of soil which when disturbed by the proposed development activities may create earth movement and produce slopes that cannot be landscaped; and excessive and unnecessary scarring of the natural landscape through grading or removal of vegetation. The decision of the Zoning Board of Appeals shall be final.

- H. Retention of Plans. Plans, specifications, and reports for all site developments shall be retained by the Town.

SEC. 28.2-6 DESIGN STANDARDS FOR BUFFERS: A buffer for a stream system shall extend along both sides of a stream and include a minimum distance adjacent to wetlands, floodplains and slopes. The buffer width shall be adjusted to include contiguous sensitive areas, such as steep slopes or erodible soils, where development or disturbance may adversely affect water quality, streams, wetlands, or other water bodies.

- A. The buffer shall begin on each side of the stream bank of the active channel and floodway in accordance with the following minimum criteria.

Figure 1: Stream Order (Source: Schueler, 1995)



- 1. The required width for all buffers (i.e., the base width) shall be in the areas described below:

Stream Order 1	10 feet from the centerline on each side.
Stream Order 2	25 feet from the centerline on each side.
Stream Order 3	50 feet on each side of the stream bank of the active channel and floodway.
Stream Order 4	100 feet on each side of the stream bank of the active channel and floodway.

Stream Order 5	100 feet on each side of the stream bank of the active channel and floodway.
Stream Order 6	100 feet on each side of the stream bank of the active channel and floodway.

- Steep slopes. The buffer width shall be modified if steep slopes are within close proximity to the stream and drain into the stream system. In those cases, the buffer width shall be adjusted by either Method A or Method B below.

METHOD A

Percent Slope	To total width of Buffer
15-17%	add 10 feet
18-20%	add 30 feet
21-23%	add 50 feet
24-25%	add 60 feet

METHOD B

Type of Stream Use

Percent Slope	Water Contact/ Recreational Use	Sensitive Stream Habitat
0 to 14%	no change	add 50 feet
15 to 25%	add 25 feet	add 75 feet
greater than 25%	add 50 feet	add 100 feet

- 100-Year Floodplain. Where the floodplain extends beyond the minimum buffer width as specified above, then buffers shall be extended to encompass the entire 100-year floodplain and a zone with a minimum width of twenty-five (25) feet beyond the edge of the floodplain.
- Wetlands Or Critical Areas. When wetland or critical areas extend beyond the edge of the required buffer width, the buffer shall be adjusted so that the buffer consists of the extent of the wetland plus a twenty-five (25) foot zone extending beyond the wetland edge.
- The buffer width may be reduced at some points as long as the average width of the buffer meets the minimum requirement. This averaging of the buffer may be used to allow for the presence of an existing structure or to recover a lost lot, as long as the streamside zone (Zone 1) is not disturbed by the reduction and no new structures are built within the 100-year floodplain. The Public Works Directors may require the submission of additional information to evaluate the proposed width reduction. Such reduction shall only be allowed where no feasible alternative exists.

- Water Pollution Hazards. The following land uses and/or activities are designated as

potential water pollution hazards and must be set back from any stream or waterbody by the distance indicated by the width of the buffer or the width indicated below, whichever is greater.

1. Storage of hazardous substances – (150 feet).
 2. Above ground or underground petroleum storage facilities – (150 feet).
 3. Drainfields for sewage disposal and treatment systems are not allowed in the stream buffer if the stream buffer is in a floodplain.
 4. Solid waste landfills or junkyards – (300 feet).
 5. Subsurface discharges from a wastewater treatment plant are not allowed in the stream buffer.
 6. Land application bio-solids – (200 feet).
- C. The stream buffer shall be composed of three distinct zones with each zone having its own set of allowable uses and vegetative targets as specified in this division.

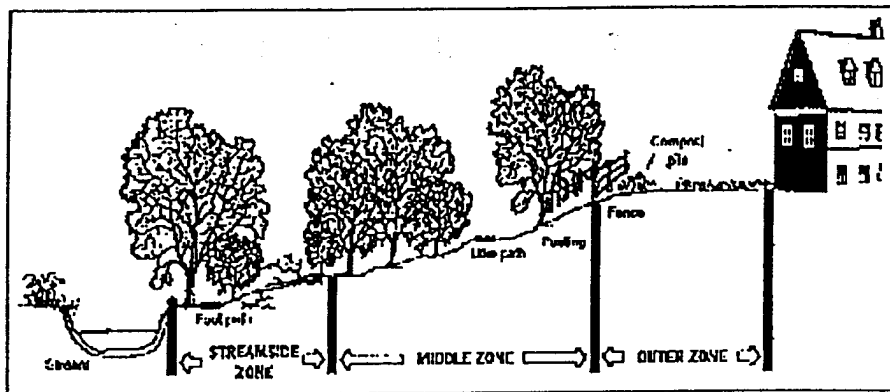


Figure 2: Three Zone Buffer System (Adapted from Welsch, 1991)

1. Zone 1, Streamside Zone
 - a. Protects the physical and ecological integrity of the stream ecosystem.
 - b. Begins at the edge of the stream bank of the active channel and extends twenty-five (25) feet or the width of the stream buffer from the top of the bank, whichever is less.
 - c. Allowable uses within this zone are highly restricted to:
 1. Flood control structures

2. Utility rights-of-way
 3. Hiking and biking paths
 4. Road crossings, where permitted
- d. Target for the streamside zone is undisturbed natural vegetation.
2. Zone 2, Middle Zone
- a. Protects key components of the stream and provides distance between upland development and the streamside zone.
 - b. Begins at the outer edge of the streamside zone and extends a minimum of fifty (50) feet or to the middle of the stream buffer whichever is less. Additional buffer width is specified in SEC. 28.2-6(A)(1).
 - c. Allowable uses within the middle zone are restricted to:
 1. Biking or hiking paths.
 2. Stormwater management facilities with the approval of the Town.
 3. Recreational uses as approved by the Town.
 4. Limited tree clearing with approval from the Town.
 - d. Targets mature native vegetation adapted to the region.
2. Zone 3, Outer Zone.

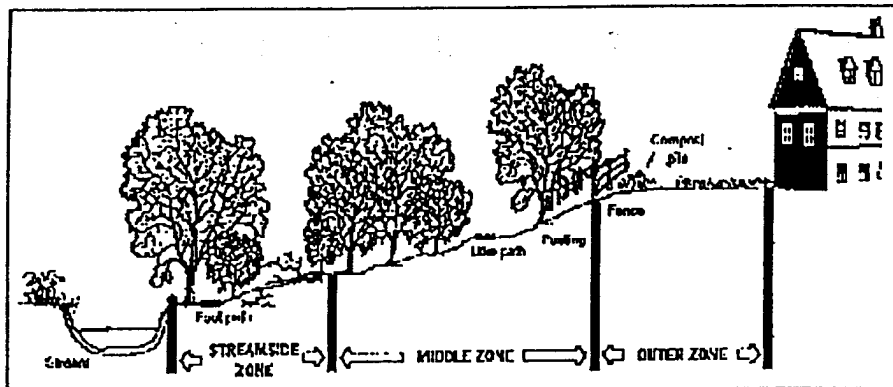


Figure 2: Three Zone Buffer System (Adapted from Welsch, 1991)

- a. Provides a traditional greenspace between development and sensitive Zone 1 and 2 areas, preventing encroachment of impervious cover into the buffer, and filters runoff from residential and commercial development.
- b. Begins at the outward edge of Zone 2 and provides a minimum width

of twenty-five (25) feet between Zone 2 and the nearest permanent structure, or the width of the stream buffer whichever is less.

- c. Restricts permanent structures or impervious cover with the exception of paths.
- d. Encourages the planting of native vegetation to increase the total width of the buffer.

D. Stream Restoration. In cases in which the Public Works Director determines that a waterway is significantly degraded, he may authorize or require stream restoration rather than protection of the waterway in its existing condition. Significant degradation shall be determined by the presence of any of the following:

- 1. Erosion present to the degree that waterway banks are unstable.
- 2. Sedimentation present to the degree that aquatic plant life is restricted.
- 3. History of flooding
- 4. Bank scour caused by high water velocity
- 5. Channelization
- 6. Presence of non-native, invasive plant species

Stream Restoration is the process of returning a waterway and its surrounding ecosystem to a close approximation of its condition prior to disturbance. Stream restoration may include activities such as re-meandering a channelized waterway, re-vegetating a waterway with appropriate native plantings, and re-grading a waterway to mitigate scouring and erosion problems.

E. Stream buffer areas may grow into their natural vegetative state, but methods to enhance the vegetation may be required when deemed necessary by the Public Works Director to ensure the preservation and propagation of the buffer area. Buffer areas may also be enhanced through reforestation or other growth techniques as a form of mitigation for achieving buffer preservation requirements. The Public Works Director may require planting of vegetation from the following list:

Stream buffer plant list.

The following plants are acceptable for replanting in the buffer area.

Flood Tolerant Native Northern Illinois Trees

River birch *Betula nigra*

Hophornbeam *Carpus caroliniana*

Green ash *Fraxinus pennsylvanica*

American larch *Larix laricina*

Red mulberry *Morus rubra*

Sycamore *Platanus occidentalis*

Eastern cottonwood *Populus deltoids*

Swamp white oak *Quercus bicolor*

Black willow *Salix nigra*

Bald cypress *Taxodium distichum*

White cedar *Thuja occidentalis*

American elm *Ulmus americana*

Flood Tolerant Native Northern Illinois Shrubs

False indigo *Amorpha fruticosa*
Red chokeberry *Aronia arbutifolia*
Buttonbush *Cephalanthus occidentalis*
Silky dogwood *Cornus amomum*
Gray dogwood *Cornus racemosa*
Red-osier dogwood *Cornus serica*
Cockspur hawthorn *Crataegus crus-galli*
Spicebush *Lindera benzoin*
Ninebark *Physocarpus opulifolius*
American black currant *Ribes americanum*
Wild gooseberry *Ribes missouriense*
Swamp rose *Rosa palustris*
Peachleaf willow *Salix amygdaloides*
Pussy willow *Salix discolor*
Sandbar willow *Salix interior*
Elderberry *Ambucus canadensis*
Meadowsweet *Spiraea alba*
Arrowwood viburnum *Viburnum dentatum*
Nannyberry *Viburnum lentago*
Highbush cranberry *Viburnum trilobum*
Flood Tolerant Native Northern Illinois Vines

Groundnut *Apios americana*
Virgin's bower *Clematis virginiana*
Riverbank grape *Vitis riparia*

Seed Mixes:

Detention Basin Seed Mix. (For saturated soils in a wetland or pond with highly fluctuating water levels and poor water quality associated with urban stormwater wetlands and ponds.)

Permanent Grasses/Sedges:

Brown fox sedge *Carex vulpinoidea*
Barnyard grass *Echinochloa crusgalli*
Blunt spike rush *Eleocharis obtusa*
Fowl manna grass *Glyceria striata*
Common rush *Juncus effuses*
Torrey's rush *Juncus torreyi*
Rice cut grass *Leersia oryzoides*
Switch grass *Panicum virgatum*
Great Bulrush (softstem) *Scirpus validus creber*

Temporary Cover:

Redtop *Agrostis alba*
Seed oats *Avena sativa*
Annual rye *Lolium multiflorum*

Forbs and Shrubs:

Wingstem *Actinomeris alternifolia*
Common water plantain *Alisma subcordatum*
Swamp milkweed *Asclepias incarnata*
Bidens, various *Bidens sp.*

Buttonbush *Cephalanthus occidentalis*
Rosemallow, various *Hibiscus sp.*
Monkey flower *Mimulus ringens*
Ditch stonecrop *Penthorum sedoides*
Smartweed *Polygonum pensylvanicum*
Common arrowhead *Sagittaria latifolia*
Wetland Edge Seed Mix. (For sites with stable saturated soil conditions and good water quality.)
Permanent Grasses/Sedges:
Bottlebrush sedge *Carex lurida*
Sedge, various *Carex sp.*
Brown fox sedge *Carex vulpinoidea*
Great spike rush *Eleocharis palustris major*
Canada wild rye *Elymus canadensis*
Fowl manna grass *Glyceria striata*
Rice cut grass *Leersia oryzoides*
Dark green rush *Scirpus atrovirens*
Chairmaker's rush *Scirpus pungens*
Great bulrush (softstem) *Scirpus validus creber*
Temporary Cover:
Seed Oats *Avena sativa*
Annual rye *Lolium multiflorum*
Wingstem *Actinomeris alternifolia*
Slender false foxglove *Agalinis tenuifolia*
Common water plantain *Alisma subcordatum*
Swamp milkweed *Asclepias incarnate*
Panicked aster *Aster simplex*
Bidens, various *Bidens sp.*
Wild senna *Cassia hebecarpa*
Common boneset *Eupatorium perfoliatum*
Sneezeweed *Helenium autumnale*
Blue flag iris *Iris virginica shrevei*
Great blue lobelia *Lobelia siphilitica*
Seedbox *Ludwigia alternifolia*
Monkey flower *Mimulus ringens*
Wild golden glow *Rudbeckia laciniata*
Common arrowhead *Sagittaria latifolia*
Blue vervain *Verbena hastate*
Ironweed, various *Vernonia sp*
Forbs:
Wet-to-Mesic Prairie Seed Mix. (For sites with medium to wet soils.)
Permanent Grasses/Sedges:
Big bluestem grass *Andropogon gerardii*
Blue joint grass *Calamagrostis canadensis*
Canada wild rye *Elymus canadensis*
Switch grass *Panicum virgatum*
Indian grass *Sorghastrum nutans*
Prairie cord grass *Spartina pectinata*

Temporary Cover:

Redtop *Agrostis alba*

Seed oats *Avena sativa*

Annual rye *Lolium multiflorum*

Timothy *Phleum pratense*

Forbs:

Heath aster *Aster ericoides*

New England aster *Aster novae-angliae*

White wild indigo *Baptisia leucantha*

Partridge pea *Cassia fasciculata*

Tall coreopsis *Coreopsis tripteris*

Illinois tick trefoil *Desmodium illinoense*

Rattlesnake master *Eryngium yuccifolium*

Bottle gentian *Gentiana andrewsii*

Sneezeweed *Helenium autumnale*

Sawtooth sunflower *Helianthus grosseserratus*

Roundheaded bush clover *Lespedeza capitata*

Marsh blazing star *Liatris spicata*

Prairie bergamot *Monarda fistulosa*

Wild quinine *Parthenium integrifolium*

False dragonhead *Physostegia virginianum*

Common mountain mint *Pycnanthemum virginianum*

Yellow coneflower *Ratibida pinnata*

Black-eyed susan *Rudbeckia hirta*

Wild golden glow *Rudbeckia laciniata*

Sweet black-eyed susan *Rudbeckia subtomentosa*

Compass Plant *Silphium laciniatum*

Cup Plant *Silphium perfoliatum*

Prairie Dock *Silphium terebinthinaceum*

Early Goldenrod *Solidago juncea*

Stiff Goldenrod *Solidago rigida*

Wrinkled Goldenrod *Solidago rugosa*

Spider-Wort *Tradescantia ohioensis*

Hairy tall ironweed *Vernonia altissima taeniotriche*

Culver's Root *Veronicastrum virginianum*

Golden Alexanders *Zizia aurea*

Invasive Species:

The following plants are exceptionally invasive and will damage native ecosystems. Most of these plants are on the Illinois Banned Species list and are illegal to buy, sell, or plant, in the State of Illinois.

Tree of Heaven *Ailanthus altissima*

Autumn Olive *Eleagnus embellatus*

Tartarian Honeysuckle *Lonicera tartarica*

Glossy Buckthorn *Rhamnus frangula*

Common Buckthorn *Rhamnus cathartica*

Saw-toothed Buckthorn *Rhamnus arguta*

Dahurian Buckthorn *Rhamnus davurica*

Japanese Buckthorn *Rhamnus japonica*

Chinese Buckthorn *Rhamnus utilis*
Kudzu *Pueraria lobata*
Round-leaved Bittersweet *Celastrus orbiculatus*
Japanese Honeysuckle *Lonicera japonica*

SEC. 28-2.7 BUFFER MANAGEMENT & MAINTENANCE:

A. The buffer, including wetlands and floodplains, shall be managed to enhance and maximize the unique value of these resources. Buffers shall be vegetated either in their natural state or using appropriate, nursery stock vegetation as noted in SEC. 28.2-6(E). Soil disturbance in buffer areas shall be minimized. Every attempt should be made to reduce or eliminate cut and fill activities, topsoil respread, and soil compaction. Maintaining existing and/or development of buffer areas in naturally occurring soils is preferred. Where necessary, invasive species removal may be allowed prior to establishment of native vegetation. Management includes specific limitations on alteration of the natural conditions of these resources. The following practices and activities are prohibited within Zones 1 and 2 of the buffer unless prior approval is obtained from the Public Works Director.

1. Clearing of existing vegetation.
2. Soil disturbance by grading, stripping or other practices.
3. Filling or dumping.
4. Drainage by ditching, under-drains or other systems.
5. Use, storage, or application of pesticides, except for spot spraying of noxious weeds or non-native species consistent with recommendations of the Town.
6. Housing, grazing, or other maintenance of livestock.
7. Storage or operation of motorized vehicles, except for maintenance and emergency use approved by the Public Works Director.

The following structures, practices, and activities are permitted in the buffer with specific design or maintenance features, subject to review and approval of the Public Works Director.

1. Roads, bridges, paths, and utilities:
 - a. An analysis needs to be conducted to ensure that no economically feasible alternative to the proposed road, bridge, path, or utility is available.
 - b. The right-of-way shall be the minimum width needed to allow for maintenance access and installation.

- c. The angle of the crossing shall be perpendicular to the stream or buffer in order to minimize clearing requirements.
- d. The minimum number of road crossings shall be used with no more than one crossing for every 1,000 feet of buffer for stream classification three (3) or greater.

2. Stormwater Management, Structures and Facilities

- a. An analysis needs to be conducted to ensure that no economically feasible alternative to the proposed stormwater management facility is available and that a project is either necessary for flood control or significantly improves the water quality or habitat in the stream.
- b. In new developments, which include stream order three (3) or higher, on-site and non-structural alternatives will be preferred over larger facilities within the stream buffer.
- c. When constructing stormwater management facilities, the area cleared will be limited to the area required for construction and adequate maintenance access as outlined in the most recent edition of the Illinois Urban Stormwater Manual published by the United States Department of Agriculture – Natural Resources Conservation Service.
- d. Material dredged or otherwise removed for a stormwater management facility shall be stored outside the buffer.

3. Stream restoration projects.

4. Water quality monitoring and stream gauging.

5. Individual trees within the buffer that are in danger of falling, causing damage to dwellings or other structures, or causing blockage of the stream may be removed.

6. Other timber cutting techniques approved by the Town may be undertaken within the buffer under the advice and guidance of IDNR if necessary to preserve the buffer from extensive pest infestation, disease infestation, or threat from fire.

C. All preliminary plans and final plats shall clearly:

- 1. Show the extent of any buffer on the subject property.
- 2. Label the buffer.
- 3. Provide a note stating that disturbance and use of the buffer area is subject to restrictions pursuant to Town Code.

4. Provide an ingress/egress easement to the stream buffer area in favor of the Town of Normal for stream buffer inspection purposes.
- D. The Public Works Director shall inspect the buffer annually and immediately following severe storms for evidence of sedimentation deposition, erosion, or concentrated flow channels and recommend to the buffer owner corrective actions to ensure the integrity and function of the buffer.
 - E. Buffer areas may be allowed to grow into their vegetative target state naturally, but methods to enhance the successional process such as active restoration may be used when approved by the Public Works Director to ensure the preservation and propagation of the buffer area. Forest buffer areas may also be enhanced through re-forestation or other growth techniques as a form of mitigation for achieving buffer preservation requirements.
 - F. Permanent boundary markers, in the form of signage approved by the Town of Normal be installed prior to final approval of the required clearing and grading plan. Signs shall be placed at the edge of the middle zone.

SEC. 28.2-8 ENFORCEMENT PROCEDURES.

- A. The Public Works Director and the Director's designee are authorized and empowered to enforce the requirements of this division in accordance with the procedures of this section.
- B. The Public Works Director or designee shall make inspections as hereinafter required and shall either approve that portion of the work completed or shall notify the permittee wherein the work fails to comply with the site development permit as approved. Applicant shall maintain and make available upon demand the approved stream buffer plan bearing the stamp of approval of the Town. In order to obtain inspections and to ensure compliance with the approved plan and this division, the permittee shall notify the Town within two (2) working days of the completion of the construction stages specified below:
 1. Upon completion of installation of sediment and runoff control measures (including perimeter controls and diversions), prior to proceeding with any other earth disturbance or grading,
 2. After stripping and clearing (if over one acre),
 3. After rough grading (if over one acre),
 4. After final grading,
 5. After seeding and landscaping deadlines (if over one acre), and
 6. After final stabilization and landscaping, prior to removal of sediment

controls.

If site development is to be done in phases or areas, the permittee shall give notice and request inspection at the completion of each of the above work stages in each phase or area. If an inspection is not made and notification of the results given within five working days after notice is received by the Town from the permittee, the permittee may continue work at his/her own risk without presuming acceptance by the Town. Notification of the results of the inspection shall be given in writing.

C. Special Precautions.

1. If at any stage of the development the Town determines by inspection that the nature of the site is such that further work authorized by an existing permit is likely to imperil any property, public way, stream, lake, wetland, or drainage structure, the Town may require, as a condition of allowing the work to be done, that such reasonable special precautions to be taken as is considered advisable to avoid the likelihood of such peril. "Special precautions" may include, but shall not be limited to, a more level exposed slope, construction of additional drainage facilities, berms, terracing, compaction, or cribbing, installation of plant materials for erosion control, and recommendations of a registered soils engineer and/or engineering geologist which may be made requirements for further work.
2. Where it appears that storm damage may result because the grading on any development site is not complete, work may be stopped and the permittee required to install temporary structures or take such other measures as may be required to protect adjoining property or the public safety. On large developments or where unusual site conditions prevail, the Town may specify the time of starting grading and time of completion or may require that the operations be conducted in specific stages so as to insure completion of protective measures or devices prior to the advent of seasonal rains.

D. Amendment of Plans. Major amendments of the site development permit or stream buffer plan shall be submitted to the Public Works Director and shall be processed and approved or disapproved in the same manner as the original plan. Field modifications of a minor nature may be authorized by the Public Works Director by written authorization to the permittee. The Town Engineer shall be authorized to determine the level of modification.

E. Stop-Work Order; Revocation of Permit. In the event any person holding a site development permit pursuant to this division violates the terms of the permit, or carries on site development in such a manner as to materially adversely affect the health, welfare, or safety of the public or so as to be materially detrimental to the public welfare or injurious to property, the Town may suspend or revoke the site development permit.

1. Suspension of a permit shall be by a written stop-work order issued by the Town and delivered to the permittee or his agent or the person performing the

work. The stop-work order shall be effective immediately, shall state the specific violations cited, and shall state the conditions under which work may be resumed. A stop-work order shall remain in effect until the next regularly scheduled meeting of the Zoning Board of Appeals at which the conditions of sub-paragraph SEC. 28.2-8(E)(2) below can be met.

2. No site development permit shall be permanently suspended or revoked until a hearing is held by the Zoning Board of Appeals. Written notice of such hearing shall be served on the permittee, either personally or by registered mail, and shall state:
 - a. The grounds for complaint or reasons for suspension or revocation in clear and concise language; and
 - b. The time when and place where such hearing will be held.

Such notice shall be served on the permittee at least five (5) days prior to the date set for the hearing. At such hearing, the permittee shall be given an opportunity to be heard and may call witnesses and present evidence on his behalf. At the conclusion of the hearing the Zoning Board of Appeals shall determine whether the permit shall be suspended or revoked or the plan modified. In making its decision the Zoning Board of Appeals shall issue written findings of fact supporting its decision.

F. Penalties.

1. Any person convicted of violating any provision of this division or any approved stream buffer plan shall be punished by a fine not to exceed \$1,000.00 for each violation. Every day that such violation(s) continue will be considered a separate offense.
2. Any person who knowingly makes any false statements in any application, record, or plan required by this division shall upon conviction be punished by a fine of not more than \$1,000.00 for each violation.

- G. Injunctive Relief. If a property owner or permit holder fails after ten days notice to correct any violation of this division or violation of any approved permit and stream buffer plan, the Public Works Director may make application to the Circuit Court for an injunction requiring conformance with this division or other equitable relief necessary in order to secure compliance with this division. If the Public Works Director is authorized to enter onto private property to restore a stream buffer, the Owner shall be liable for damages in an amount equal to twice the cost of restoring the buffer.

SEC. 28.2-9 VARIANCES.

- A. The Zoning Board of Appeals may, in accordance with the following procedures, authorize exceptions to any of the requirements and regulations set forth in this

division.

1. A verified petition of the applicant for a site development permit stating fully the grounds of the petition shall make application for any exception and the facts relied upon by the applicant. Such petition shall be filed with the site development permit application. In order for the petition to be granted, it shall be necessary that the Zoning Board of Appeals find all of the following facts with respect to the land referred to in the petition:
 - a. That the land is of such shape or size or is affected by such physical conditions or is subject to such title limitations of record that it is impossible or impractical for the applicant to comply with all of the requirements of this division;
 - b. That the exception is necessary for reasonable use of the site and in order to avoid a substantial loss in value of the site; and
 - c. That the granting of the exception will not be detrimental to the public welfare or injurious to other property in the vicinity of the subject property.
2. Each application for an exception shall be referred to the Public Works Director for review. The Town shall transmit its recommendations to the Zoning Board of Appeals which shall review such recommendations prior to granting or denying the exception.
3. The Zoning Board of Appeals shall hold a public hearing on each application for exception within thirty (30) days after receiving application. After public hearing, the Zoning Board of Appeals may approve the site development permit application with the exceptions and conditions it deems necessary, or it may disapprove such site development permit application and exception application, or it may take such other action as appropriate in order to meet the purpose and intent of this division.

SEC. 28.2-10 CONFLICT WITH OTHER CODES AND REGULATIONS. Where the standards and management requirements of this buffer division are in conflict with other laws, regulations and policies regarding streams, steep slopes, erodible soils, wetlands, floodplains, timber harvesting, land disturbance activities, or other environmental protective measures, the more restrictive code or regulation shall apply.

SEC. 8.2-11 SEVERABILITY. The provisions of this division shall be deemed severable and the invalidity of any portion shall not affect the validity of the remaining provisions.