8-128: DRAINAGE REGULATIONS:

8-128.1: General Requirements:

A. Development on a lot or parcel of land including but not limited to new principal buildings or structures, additions thereto or new or existing accessory buildings or structures including for same buildings and structures or lot or parcel grading changes shall meet all requirements of the Building Code and the CSFPO.

B. Sump pump, downspout and gutter discharges:

1. Sump pump, downspout and gutter discharge lines shall be directed to a vegetated swale of sufficient length to allow dissipation before discharge exits site and a minimum of ten feet (10') from any property line and shall not directly tie into a storm sewer except as allowed under Section 128.1.B.2.

2. Sump pump, downspout and gutter discharge lines may be tied to storm sewers if sewer drains to a stormwater detention facility serving the subdivision.

3. In all instances, sump pump, downspout and gutter discharge lines shall not be directed in a manner that negatively impacts drainage on a neighboring property.

C. All required erosion control measures specified on grading plans approved and certified are to be installed and maintained in accordance with procedures and standards for urban soil erosion and sedimentation control in the Illinois Urban Manual as amended by the CSFPO.

D. Stripped surface areas shall be protected from soil erosion within fifteen (15) days after final grade is reached. Stripped areas not at final grade that will remain undisturbed for more than fifteen (15) days after initial disturbance shall be protected from erosion. Temporary cover shall be maintained continuously until permanent cover is established.

8-128.2: Plan Requirements:

A. Minimum Plan Requirements:

1. Title block that includes the project name, sheet number, date of preparation, and, and latest revision date.

2. North arrow.

3. Graph or bar scale.

4. Legal description and tax parcel number (PPN or PIN).

5. Legend identifying all standard symbols used on the plan sheet.

6. Plan must be prepared by an Illinois Registered Professional Engineer. Include name, address, telephone number and seal of registered engineer.

7. Delineation of all existing and proposed easements for utilities, drainage, and conservation.

8. Bench mark tied to the County (NGVD) datum. For sites located in flood hazard areas, tie benchmark to the FIRM datum.

9. Existing and proposed contour lines at one foot (1') interval tied to bench mark.

10. Drainage arrows along lot lines and wherever else appropriate.

11. The topographic survey shall extend one hundred feet (100') beyond all property lines.

12. Finished grades at least 0.5 feet below top of foundation.

13. Side and rear lot line swales at a minimum 1% slope. Drainage swales require a one percent (1%) minimum slope along property lines. These swales shall be contained on the lot being developed, or where applicable, a defined mutual (shared) swale may be used (with the lowest point of the swale being contained on the lot being developed).

a. Four (4) cross-section drawings will need to be provided along with both main property lines that reference the following: All existing and proposed foundations, spot elevations at the top and bottom of the swales (lowest point being contained on the property being developed) and spot elevations at the property line and onto the neighboring property. In addition, these cross-sections need to include the existing grade through the area.

b. Any grading being proposed on a neighboring property will require a letter both signed and notarized by the legal owner(s) of the property allowing grading changes. Depending on the amount of grading changes being proposed on that property, a separate grading permit may be required.

14. Maximum earth slopes – three (3) horizontal to one (1) vertical.

15. Proposed top of foundation elevation (and lowest opening elevation), including the top of foundation elevations (and the lowest opening) of existing structures within one hundred feet (100') of the project site.

16. The location and direction of all proposed sump pump and downspout discharge lines. Sump pump and downspout discharge lines shall be directed to a vegetated swale and shall not directly tie into a storm sewer. This requirement may be waived by the Building Official where the storm sewer discharges directly into an on-site stormwater facility. In all instances, sump pump and downspout discharge lines shall not be directed in a manner that negatively impacts drainage on a neighboring property. The outlet for every sump pump and downspout shall be located at least ten feet (10') from any property line.

17. Top and bottom elevations of the proposed retaining wall, along with a cross-section detail for the proposed design. Walls twenty four inches (24") or more in height require the certification of a registered Illinois Architect or Structural Engineer. Manufacturer's specification sheets are required for walls that are pre-engineered (e.g. pre-cast inter-locking wall system, etc). Depending on type of wall system, height, etc. the above certification may also be required, along with as-built drawings of the installation.

18. The locations and elevations (as defined by the Federal Emergency Management Agency National Flood Insurance Map) of all Zone A floodplains within one hundred feet (100') of the proposed development.

19. The delineation line with wetland submittals for properties containing wetlands or properties within one hundred feet (100') of wetlands. Delineation of off-site properties will not be required. Wetland submittals must be prepared in accordance with the standards found in the CSFPO.

20. The location of all easements for the proposed development.

21. Driveway slope may not exceed eight percent (8%).

22. Location of soil stockpiles remaining on the site for more than three (3) days.

23. Sediment and erosion control plan designed using the procedures and standards for urban soil erosion and sedimentation control in the Illinois Urban Manual as amended by the CSFPO.

24. The location and elevation of all existing and proposed stormwater/drainage facilities within one hundred feet (100') of the property (e.g. swales, ditches, catch basins, inlets, storm sewers, field tiles, culverts).

25. Indicate pipe, slope, length, elevations and type of material for all proposed storm lines.

B. In addition development on a lot or parcel of land including but not limited to new principal buildings or structures and additions thereto or new accessory buildings or structures and additions thereto or lot or parcel grading changes shall meet shall comply with the following sediment and erosion control plan requirements:

1. Site development that requires stormwater detention facilities or has potential impacts to a special management area (includes but not limited to the following: floodplain, riparian areas, wetlands or developments within one hundred feet (100') of a wetland) will require additional information as found in the CSFPO.

2. The plan shall indicate sedimentation controls for all existing and proposed storm water structures.

3. The plan shall indicate erosion control measures designed to protect adjacent properties and public rights of way. Such measure to be installed before any earth movement and/or ground breaking.

4. The plan shall indicate erosion control measures designed to protect ditches, swales, and other sloped areas where storm water velocity can cause erosion.

5. The plan shall indicate sediment and erosion control provisions for soil stockpiles.

C. The sediment/erosion control plan will need to include the following:

1. Proper sediment protection (e.g. silt fencing) to be properly installed along the downslopes of the site. Other acceptable and practical methods may be used.

2. The location of the construction entrance.

3. The location of the topsoil stockpile, including the backfill stockpile location. This is to be located as to not create a negative impact on the neighboring properties. Provide a notation if no stockpile is to remain.

4. Proper storm inlet and street inlet protection. Geotextile filter fabric required to be installed under all inlets.

5. Culvert sedimentation protection.

6. Temporary and permanent stabilization method(s) (e.g. erosion control matting/blanket installed on steep slopes, sod, hydro-seed, seed/mulch combination) where the mulch has been cultivated into the soil.

7. Rip-rap should be used on the outlet side of flared end sections in order to dissipate flows.

8. Ditchchecks of rock or straw/haybales should be considered within swales of excessive drop.

9. Sediment basin/traps should be considered as a settlement area before a storm structure/facility.

10. The location of cement wash-off areas shall be placed away from special management areas (floodplains/floodways, riparian, wetlands and wetland buffers), stormwater facilities and other related conveyance systems.

D. Requirements for Final Grading Approval and Security Bond Release:

1. Four (4) copies of a record drawing showing the as-built topography to be submitted to the Building & Zoning Department. The site will be inspected within three (3) to five (5) working days after the drawing is received.

2. The record drawing must be prepared, signed and sealed by a registered Illinois Land Surveyor (Professional Engineer when required) and should be prepared to the same standards as the approved topographic/grading plan.

3. The record drawing grading shall match the approved grading plan.

4. Submitted record drawing as-built topographic shall reflect the actual finished grading. This is to include the location of all downspouts and sump pump discharge lines and reference the benchmark used in the approved grading plan.

5. Swales/berms shall be properly installed as per the approved grading plan.

6. All storm lines (driveway culverts, storm inlets and outlets, catch basins and flared-end sections) shall be free of debris and sediment.

7. All vegetation shall be established (e.g. sod, hydro-seed or seed with an acceptable matting blanket material). Should a final grading inspection be scheduled without vegetation being established, a re-inspection will be required for the vegetation prior to any approvals being issued.

E. Development on Properties Within the Floodplain and Floodway Requirements:

1. The director or his designee shall be responsible for the general administration and enforcement of this section including but not limited to the following:

a. To make determinations on Floodplain and Floodway designation and check all new development sites to determine whether the sites are in a special flood hazard area (SFHA) per the standards and requirements of the Building Code and the CSFPO.

b. To make determinations as required by FEMA to determine if any structure has substantial damage and insure that any modification of those structures comply with the requirements of the Building Code and the CSFPO.

c. To make determinations relative to a substantial improvement and insure that those structures comply with the requirements of the Building Code and the CSFPO.

d. To make determinations relative to repetitive loss on a property and insure that the property complies with the requirements of the Building Code and the CSFPO.

2. Pursuant to the requirements of FEMA, any development in the floodplain must obtain an Elevation Certificate.

3. Where a development, structure or property has substantial damage, has or will have substantial improvement or is the subject of repetitive loss regulations, the director or his designee shall require that the development, structure or property comply with the requirements of the Building Code and the CSFPO, including but not limited to the following:

a. Elevate, relocate, demolish or floodproof. Floodproof only non-residential structures.

b. Obtain an Elevation Certificate.

4. The director or his designee shall be responsible to maintain for public inspection in the permit files any documentation including Elevation Certificates relative to all determinations made by the director or his designees relative to development in the floodplain and or floodway including substantial damage, substantial improvement and repetitive loss to said structures and property per the requirements of the Building Code and the CSFPO.