

ORDINANCE NO. 2489

AN ORDINANCE TO AMEND CHAPTER 90, §§90-4 AND 90-5; CHAPTER 99, ARTICLES I, III, V, VI AND VIII, §§99-5, 99-6, 99-18, 99-26, 99-30, 99-31, 99-32, 99-36 AND 99-40; CHAPTER 110, ARTICLE XI AND XXI, §§110-84 AND 110-136; AND CHAPTER 115, ARTICLES I, XVI, XXIV AND XXVII, §§115-4, 115-128, 115-129, 115-172, 115-174, 115-218, 115-221 AND 115-224 OF THE CODE OF SUSSEX COUNTY REGARDING DRAINAGE AND GRADING REQUIREMENTS, ROAD, DRIVE AND PARKING CONSTRUCTION AND RELATED REQUIREMENTS, BONDING REQUIREMENTS, PROJECT CONSTRUCTION INCLUDING NOTICES TO PROCEED, INSPECTIONS AND CLOSEOUT, AND CLARIFICATION OF THE MANNER IN WHICH CERTAIN FEES ARE ESTABLISHED

WHEREAS, Chapter 90 of the Code of Sussex County governs sediment control and stormwater management in Sussex County; and

WHEREAS, the stated purpose of Chapter 90 of the Code of Sussex County is “to protect, maintain, and enhance the public health, safety and general welfare by establishing minimum requirements and procedures to control the adverse impacts associated with sediment and modified stormwater characteristics. Proper implementation and maintenance of sediment control and stormwater management will minimize adverse impacts to public and private property, reduce the impacts that the developmental process has on land stream channel erosion, assist in the maintenance of water quality standards, reduce the potential for localized flooding and maintain after development, to the extent that it can be maintained, the predevelopment runoff characteristics”; and

WHEREAS, Chapter 90 of the Code of Sussex County currently requires plans for stormwater management and sediment control for certain single family and commercial construction; and

WHEREAS, Chapter 99 of the Code of Sussex County contains requirements including the consideration of stormwater, erosion and sedimentation control, and runoff from subdivided properties as part of the approval process; and

WHEREAS, Chapter 99 of the Code of Sussex County contains certain technical requirements for the submission and subsequent approval of Final Site Plans for subdivisions, including the provision for the approval of the Sussex Conservation District; and

WHEREAS, Chapter 115 of the Code of Sussex County contains certain technical requirements for the submission and subsequent approval of Final Site Plans for commercial development, multifamily residential development and townhouse residential development; and

WHEREAS, As development continues in Sussex County, technical drainage and grading requirements are necessary to utilize sound engineering principles to preserve and construct adequate drainage for new and existing properties, to: (1) assure that during project design, adequate drainage is provided for the conveyance of surface water runoff; (2) control soil erosion and sedimentation along waterways and ensure conformity with topography so as to create the least erosion potential for developments; (3) minimize impact to properties adjacent or down

gradient from development lands from runoff; (4) decrease drainage-related damage to public and private property; (5) provide adequate drainage away from buildings; and (6) require the submission of Detailed Lot Grading Plans and Individual Lot Grading Certifications to ensure proper drainage, and (7) provide adequate easements for the permanent protection and maintenance of drainage conveyance systems in Sussex County; and

WHEREAS, it is the desire of Sussex County to amend Chapter 90, §§90-4 and 90-5; Chapter 99, Articles I, III, V, VI and VIII, §§99-5, 99-6, 99-18, 99-26, 99-30, 99-31, 99-32 and 99-36; and Chapter 115, Articles I and XXVIII, §§115-4, 115-129, 115-221 and 115-224 of the Code of Sussex County to require all subdivision Final Site Plans, Residential Planned Community Site Plans, Residential Multifamily or Townhouse Final Site Plans, or Commercial Development Site Plans to include Bulk Grading data within the Plans; and

WHEREAS, it is the desire of Sussex County to amend Chapter 90, §§ 90-4 and 90-5 and Chapter 115, Article XXVII §115-224 of the Code of Sussex County to require Lot Grading Certification for any development approved with Bulk Grading Data after the date of adoption of this Ordinance; and

WHEREAS, Sussex County Council has determined that the Street Design Standards currently set forth in Section 99-18 of the Sussex County Code are outdated and need to be updated; and

WHEREAS, Sussex County Council has determined that the street design standards contained within the Sussex County Code should contain flexibility to enable creativity in design (taking into account existing topographical and environmental features) while providing safe communities for the residents of Sussex County; and

WHEREAS, as part of the overall revisions to the roads and drainage requirements in the Code, which comprise a significant portion of the site work within a development project, it is the direction of Sussex County Council to amend the bonding and performance guarantee requirements set forth in Section 99-32 of the Sussex County Code; and

WHEREAS, it is appropriate to amend Chapters 99, 110 and 115 of the Code of Sussex County to reflect that fees for certain permits, approvals, applications and inspections associated with property development shall be set annually as part of the Sussex County Annual Budget; and

WHEREAS, as part of the revisions set forth herein, Sussex County Council has determined that it is necessary and appropriate to clarify certain existing Code requirements regarding commercial and residential site plans and the expiration of them; and

WHEREAS, Sussex County Council has determined that the provisions of this Ordinance promote the health, safety and welfare of Sussex County and its residents, property owners and visitors.

NOW, THEREFORE, THE COUNTY OF SUSSEX HEREBY ORDAINS:

Section 1. The Code of Sussex County, Chapter 90, §90-4 “Basis for Implementation” is hereby amended by inserting the italicized and underlined language as follows:

§90-4 Basis for Implementation.

The provisions and requirements contained in the [Sussex Conservation District Sediment Control and Stormwater Management Program and Handbook] Delaware Sediment and Stormwater Regulations and the requirements of Chapter 99, Articles I, III, V and VI, as shall be amended from time to time, shall be the basis for the implementation of this chapter.

Section 2. The Code of Sussex County, Chapter 90, §90-5 “Plan Required For Building Permit; Exemptions” is hereby amended by deleting the language in brackets and inserting the italicized and underlined language as follows:

§90-5 Plan Required For Building Permit; Exemptions.

No building permit shall be issued by Sussex County unless a sediment control and stormwater management plan has been approved by the Sussex Conservation District meeting all of the applicable requirements of the [Sussex Conservation District Sediment Control and Stormwater Management Program and Handbook] Delaware Sediment and Stormwater Regulations and Chapter 99, Articles I, III, V and VI, including an inspection and maintenance agreement, and an Individual Grading Plan meeting all requirements of the Sussex County Drainage and Grading Requirements. No Certificate of Occupancy shall be issued without the submission of a Lot Grading Certificate meeting all requirements of the Sussex County Drainage and Grading Requirements. [:

- A. Standard plans. On private single-family residential construction, a standard plan for sediment control and stormwater management signed by the builder shall be required on land-disturbed areas one (1) acre in size or less. Standard plans shall also apply to forest harvest operation and utility projects disturbing five thousand (5,000) square feet or more.
- B. Detailed plans. A detailed sediment control and stormwater management plan, approved by the District, shall be required for all residential construction with disturbed land areas in excess of one (1) acre in size and for all other commercial, recreational, industrial or institutional construction, without regard to size.
- C. Exemptions. The provisions of this chapter shall not apply to the following:
 - (1) Agricultural land management practices unless the Conservation District determines that the land requires a new or updated soil and water conservation plan and the owner or operator of the land has refused either to apply to a Conservation District for the development of such a plan or to implement a plan developed by a Conservation District.
 - (2) Utility projects disturbing less than five thousand (5,000) square feet of land.]

Section 3. The Code of Sussex County, Chapter 99, Article I, §99-5 “Definitions” is hereby amended by inserting the italicized and underlined language in alphabetical order within the Section as follows:

§99-5 Definitions.

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BULK GRADING PLAN – An overall lot grading plan prepared by a licensed professional who is permitted to prepare Detailed Sediment and Stormwater Plans, specifying the elevation, surface gradients, lot types, swale locations, driveway pipe sizes and other drainage information required for lot grading, as further set forth in the Sussex Conservation District Technical Drainage and Grading Requirements. A Bulk Grading Plan shall confirm that all conveyance features must be located in deeded open space or the subject of a permanent easement, and they satisfy the following requirements:

Conveyance Swale Design Criteria:

- a. A minimum longitudinal swale slope of 1.0% if contiguous to a residential lot excluding roadside swales. If the slope is greater than .5% but less than 1%, then no more than 300 feet of conveyance swale can be routed through an adjacent lot, not to exceed three (3) side-by-side lots, prior to entering a closed drainage system. All other conveyance swale design criteria shall apply.
- b. Maximum side slopes of 3:1 or flatter.
- c. Must contain the 10 year design storm within the banks.
- d. Conveyance must be non-erosive.
- e. Must show spot elevations at grade breaks in the proposed conveyances swales as applicable.
- f. Must include flow direction arrows.
- g. Pipe/Inlet size, Type, Inverts, Slope, Rim Elevations must be labeled on the plan view.
- h. Must include a Summary Table listing conveyance swale drainage area, discharge (Q10), velocity and depth of flow.

Closed Drainage System Design Criteria:

- a. Must include yard basins where required within the drainage easement or open space to capture and convey lot surface runoff via a closed system to a positive outfall location.
- b. Must show spot elevations at grade breaks in the proposed conveyance swales as applicable.
- c. Must include flow direction arrows.
- d. Pipe/Inlet Size, Type, Inverts, Slope, Rim Elevations must be labeled on the plan view.
- e. Profiles for closed drainage systems receiving residential lot drainage shall only be required within a system with more than two pipes and/or structures that are not located within a roadway.

f. Must include a Summary Table listing conveyance swale drainage area, discharge (Q10), velocity and depth of flow.

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DETAILED GRADING PLAN – A plan depicting final grades for land development prepared by a licensed professional who is permitted to prepare Detailed Sediment and Stormwater Management Plans, including house and lot perimeter spot elevations and conveyance features to ensure positive drainage under the minimum slope requirements. A Detailed Grading Plan shall satisfy the following requirements:

- a. It must demonstrate that lots can be graded with a minimum 5% slope the first ten (10) feet from the dwelling or as required by building/residential codes and 1% beyond ten (10) feet to the side and rear swales or a closed pipe.
- b. It must show spot elevations delineating grade breaks at all property and right of way lines including finished grades at all lot and house corners.
- c. It must show first floor and slab elevations.
- d. Relief from the foregoing standards may be granted by the Sussex County Engineer for environmental, topographic, archeological or site constraints or low impact development (i.e. rain gardens, bio swales, etc.).

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INDIVIDUAL LOT GRADING PLAN – A lot grading plan prepared by a licensed professional who is permitted to prepare Detailed Sediment and Stormwater Management Plans conforming to the approved Detailed Grading Plan submitted simultaneously with a building permit for construction on a lot. An Individual Lot Grading Plan shall satisfy the following requirements:

- a. It must show compliance with a minimum 5% slope the first ten (10) feet from the dwelling or as required by building/residential codes and 1% beyond ten (10) feet to the side and rear swales or a closed pipe.
- b. It must show spot elevations delineating grade breaks at all property and right of way lines including finished grades at all lot and house corners.
- c. It must show first floor and slab elevations.
- d. Relief from the foregoing standards may be granted by the Sussex County Engineer for environmental, topographic, archeological or site constraints or low impact development (i.e. rain gardens, bio swales, etc.).

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LOT GRADING CERTIFICATE – A certification by prepared by a licensed professional who is permitted to prepare Detailed Sediment and Stormwater Management Plans that a lot, as graded, is in general conformity with the Individual Lot Grading Plan. A Lot Grading Certificate shall include the following information:

- a. North Arrow.

- b. Tax Map and Parcel Number(s)
- c. Subdivision Name and lot number.
- d. Property lines, lot dimensions, drainage easements and adjacent rights of way.
- e. The location of the following items:
 - (i) Elevations at four (4) corners of the structure and at the location of the spot elevations indicated on the Detailed Grading Plan as applicable.
 - (ii) Inverts of drainage structures receiving runoff from the lot.
 - (iii) Top and bottom of curb and gutter (if applicable).
 - (iv) Driveway culvert pipe material, size and inverts, where applicable.
 - (v) Immediately adjacent upstream and downstream driveway culverts, including inverts and pipe sizes (if applicable).
 - (vi) Swale inverts along property frontage.
- f. Finished floor and slab elevations.
- g. A description of any discrepancies or variations from the approved plans (including site plans, Detailed Grading Plan, construction plans or calculations and specifications) and any approved revisions as a result thereof.

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Section 4. The Code of Sussex County, Chapter 99, Article I, §99-6 “General Requirements and Restrictions” is hereby amended by inserting the italicized and underlined language in §99-6.E. as follows:

§99-6 General Requirements and Restrictions.

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E. No grading, excavating, construction or erection under the jurisdiction of Sussex County may begin within any subdivision or development except in accordance with this chapter and after the issuance of a Notice to Proceed by the County Engineer or his or her designee.

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Section 5. The Code of Sussex County, Chapter 99, Article III, §99-18 “Street Design Standards” is hereby amended by deleting the language in brackets and inserting the italicized and underlined language as follows:

§ 99-18. Street design standards.

A. Construction plans shall be prepared by a [licensed] registered Delaware professional engineer or a licensed Delaware land surveyor.

B. Streets dedicated to public use shall be designed and constructed in accordance with standards established by the Delaware Department of Transportation, Division of Highways.

C. All entrances to the subdivision from a public street shall be designed and constructed in accordance with standards established by the Delaware Department of Transportation. A letter of no objection or other appropriate entrance approval from the Delaware Department of Transportation shall be required prior to final approval of the plan.

[C]D. Private streets to be *initially* maintained by the developer [or] *and ultimately* the owners of lots within the development may be designed and constructed in accordance with Subsection B or must comply with the following standards: [these minimum standards:

- (1) See typical cross-section illustrations at the end of this chapter for right-of-way grades and roadway location.
- (2) The roadway shall be a minimum of 20 feet wide.
- (3) For developments of four lots or fewer, the surface may be two inches crusher run stone compacted by rolling in place over an approved subgrade.
- (4) For developments with an average lot area of fewer than two acres, the surface treatment shall be minimum of three courses of bituminous surface treatment or two inches of hot-laid bituminous concrete.
- (5) Adequate drainage shall be provided, and all drainage plans shall include a design for the internal collection system extending to the point of outfall. The ability of the receiving stream or channel at the point of outfall shall be evaluated as to its ability to handle the increased flow. Where suitable soil conditions exists, approve retention ponds may be acceptable as points of outfall.
- (6) The road base shall be four inches of approved select borrow and two inches of crusher run stone; or four inches of crusher run stone over an approved subgrade.
- (7) All entrances to the subdivision from a public street shall be designed and constructed in accordance with standards established by the Delaware Department of Transportation, Division of Highways. An approved entrance permit from the Division of Highways shall be required prior to final approval of the plan.

D. Bituminous surface treatments.

(1) The surface material shall be applied in the following amounts:

(a) Prime coat: 0.50 gallon of asphalt per square yard covered with 50 pounds of three-fourths-inch crushed stone or 40 pounds of three-fourths-inch crushed slag.

(b) Second coat: 0.35 gallon of asphalt per square yard covered with 20 pounds of one-half-inch crushed slag or one-half-inch crushed stone.

(c) Third coat: 0.35 gallon of asphalt per square yard covered with 20 pounds of one-half-inch crushed slag or one-half-inch crushed stone.

(3) Specifications for the materials and methods of application shall be in accordance with or equivalent to those contained in Delaware Department of Transportation Standard Specifications, Section 404.

E. Hot-laid bituminous concrete. Specifications for this material and methods of application shall be in accordance with or equivalent to those contained in Delaware Department of Transportation Standard Specification, Section 401.

F. Select borrow base course.

(1) This material shall be granular soil meeting the requirements of Delaware Department of Transportation Standard Specification, Borrow Type G. Section 209, and construction of the base shall be in accordance with the requirements contained in Delaware Department of Transportation Standard Specifications, Section 302.

(2) Equivalent base course shall be in accordance with the requirements of Section 303 (crusher-run base course) or Section 304 (quarry waste base course) of the Delaware Department of Transportation Standard Specifications.

G. Right-of-way clearing and subgrade.

(1) All right-of-way areas shall be cleared flush with the ground of all trees, brush, shrubs, down timber, rotten wood, rubbish and other debris, vegetation or obstructions.

- (2) The subgrade shall be in accordance with Delaware Department of Transportation Standard Specifications, Section 202, Subsection 202.13. [NOTE: Delaware Department of Transportation Standard Specifications dated January 1, 1974, and supplemental specifications (Document No. 55.04.79.09.11) dated January 1, 1980.

H. Certification, inspection and test boring.

- (1) The County Engineer shall designate those licensed Delaware professional engineers whom he deems qualified to certify, test, inspect and accurately verify compliance with these regulations as to materials and construction standards. A list of these designees will be maintained in the office of the Planning and Zoning Department, and they shall be known as “suburban street engineers for Sussex County (SSE).”
- (2) The Commission shall not approve any construction plans until the plans have been reviewed and certified for compliance with these regulations by a suburban street engineer.]

E. Road Geometry.

All roads regulated by Sussex County shall meet fire access requirements as required pursuant to the Delaware State Fire Prevention Regulations (DSFPR).

1. Road Width.

- a. The minimum clear/unobstructed road width when using curb and gutter shall be 24 feet measured from face of curb to face of curb. The curb and gutter shall meet the DelDOT Standard Construction Details, latest edition, or stone set in place.
- b. The minimum clear/unobstructed road width when using open drainage shall be 24 feet.
- c. The minimum clear/unobstructed road width for one-way traffic shall be 14 feet.
- d. See Sub-Section 7 in this Section E for additional information regarding on-street parking.

2. Centerline Radii.

- a. The minimum centerline radii for all roads posted at 17 MPH or less shall be 50 feet.

b. The centerline for roads posted higher than 17 MPH shall be increased using the AASHTO (American Association of State Highway and Transportation Officials) Green Book for normal crown roads.

3. Minimum and Maximum Longitudinal Slope.

a. The minimum slope for a curbed street is 0.50%.

b. The minimum slope for an open ditch street is 0.30%.

c. The minimum slope across a flowline is 0.50% unless a concrete valley gutter is used.

d. The maximum longitudinal slope for all roads shall be 10%.

4. Cul-de-Sacs.

a. No Island: The minimum radius for cul-de-sacs without an internal Island is 38 feet.

b. Island: The paved area of a cul-de-sac with an internal grass island shall be 14 feet wide for one-way traffic and 20 feet for two-way traffic. The outer and inner radii shall be able to accommodate a ladder truck and subject to approval by the State Fire Marshal's Office.

c. No cul de sac or additional turn-around area shall be required for a dead end street that is less than 300 feet in length measured from the nearest approved turn-around area.

5. Alternative Turn Arouds.

The following alternative turn arounds are permitted:

a. Those listed in the DSFPR.

b. A looped road that meets DSFPR.

c. Alternative accesses not listed above that meets DSFPR.

d. The maximum length of a dead end (as measured from the nearest approved turn-around area) shall be 300 feet without an additional alternative turnaround.

6. Cross Slope.

a. The road cross slope can be a normal crown, superelevated or reverse crown.

b. The maximum cross slope shall be 4%.

c. The minimum cross slope shall be 2%.

7. On-Street Parking

a. On street parking shall be prohibited within the following locations:

(1) 15 feet of both sides of a fire hydrant and marked in accordance with DSFPR.

(2) 20 feet of a traffic control device (i.e. stop sign / signal).

(3) 10 feet of the Point of Tangent / Point of Curvature of an intersection.

(4) 10 feet of a crosswalk.

(5) 10 feet of a driveway.

b. These on-street parking requirements shall not affect nor be calculated as part of the parking requirements of Chapter 115, Section 162.A and B.

8. Right-of-Way / Access Easements

The right-of-way or access easements for non State-Maintained Roads shall be:

a. Placed 1 foot behind the back of curb if a sidewalk is not required.

b. Placed 1 foot behind the back of sidewalk if a sidewalk is required.

- c. Placed 1 foot behind the 10-year storm water surface of roadside swales.

9. Sidewalks.

Sidewalks required to be installed by Code or by project approval shall satisfy the following requirements:

- a. They shall be placed within the right of way or deeded easement.
- b. A Sidewalk can be adjacent to the travel lane using additional pavement that can be added but must be differentiated from the travel lane using demarcation every 300 feet.
- c. If the sidewalk is to be located between the parking space(s) and the roadway, the parking space shall extend a minimum of 18 feet beyond the edge of the sidewalk.
- d. For projects with open drainage (with or without grass strips) the sidewalk must be placed along the edge of the travel lane.
- e. Sidewalks must have 5 feet of clear width.
- f. Sidewalks that are not constructed adjacent to the travel lane using additional pavement must be constructed using a 4,000 PSI mix with fibre mesh.
- g. All sidewalks must have a minimum slope of 1% in any direction and a 2% maximum cross slope.
- h. All sidewalk expansion joints shall consist of rubber or other non-biodegradable material approved by the Sussex County Engineer or his or her designee.
- i. All sidewalks adjacent to curbing shall have expansion joints that are sealed and caulked with materials approved by the Sussex County Engineer or his or her designee.

10. Utilities.

All utilities shall be placed within an easement and typically located within the following utility corridor wherever possible:

- a. Sewer: Centerline of road or travel lane.
- b. Water: Under sidewalk (where installed) or 5 feet behind edge of pavement or back of curb.
- c. CATV / Telephone: Back of sidewalk or behind top of ditch bank.
- d. Gas / Propane: 2 feet behind ROW.
- e. Electric: 5 feet behind ROW.

11. Roundabouts.

Roundabouts shall be designed to accommodate a ladder truck entering, exiting and travelling around the roundabout and subject to approval by the Fire Marshal's Office.

12. Eye Brows.

Eye brows are a non-circular cul-de-sac that has various shapes and sizes that may provide design flexibility. Eye brows shall be designed to accommodate a ladder truck entering and exiting the eye brow and subject to approval by the Fire Marshal's Office.

13. Internal Intersections.

The minimum radius at edge of pavement for an internal intersection shall be 25 feet.

14. Sight Distance.

No vegetation or ground/monument signs may be placed within 50 feet of the Point of Tangent / Point of Curvature of an intersection with a height greater than 3 feet, unless shown otherwise with a site triangle.

15. Curb Islands

All landscaped curbed islands shall have an underdrain or liner along back of curb to prevent oversaturation from undermining the curb.

16. Alleys.

- a. The maximum clear/unobstructed pavement width shall be 16 feet.
- b. The minimum clear/unobstructed pavement width shall be 12 feet.

c. The longitudinal cross slopes shall comply with Sections 3 and 6 of this subsection.

F. Storm Drainage.

1. Design Storm. Storm drainage systems within roadways regulated by Sussex County shall be designed using the Rational Method to convey the 10 year storm event. The Sussex County Rainfall Intensity Duration Frequency Curves and Rainfall Intensity Table as defined in the DelDOT Roadway Design Manual shall be used for design purposes.

2. Additional requirements. For drainage along roadways with greater than 3,000 ADT that serve communities with a single access point, the Sussex County Engineer or his or her designee may require additional analysis to demonstrate that the road remains passable during the 25 year storm event. For purposes of this requirement, "passable" shall mean that the roadway may have stationary water of up to 6 inches higher than the crown of the road.

3. Open Drainage. Open drainage systems are allowed for subdivisions with a minimum lot width of 100 feet, or a width less than 100 feet if utilizing shared driveways with an adjacent lot, and shall consist of concrete or grass open swales designed in accordance with the following design criteria:

a. Minimum Slope:

i. The minimum slope of a concrete swale shall be 0.30%.

ii. The minimum slope of a grass swale shall be 0.50%.

b. Bottom Width:

i. Concrete swale: 2 feet wide with 1 inch depth valley gutter in the middle. Porous concrete will be subject to the requirements of Sub-section G.

ii. Grass lined swale: 2 foot width minimum for trapezoidal channel or V-Ditch section.

c. Side Slopes:

i. Front Slope: 4 foot horizontal minimum : 1 foot vertical.

ii. Back Slope: 3 foot horizontal minimum : 1 foot vertical with appropriate matting per approved Erosion and Sedimentation Control (ESC) plans.

iii. Driveway Culvert embankments: 3 foot horizontal minimum: 1 foot vertical with appropriate matting per approved ESC plans.

d. Swale Depth:

i. 1 foot minimum except at furthest upstream end, where 6 inch depth is required.

ii. 2.5 foot maximum contiguous to single family lots, except where approved otherwise by the Sussex County Engineer or his or her designee.

e. Freeboard: The design stormwater surface elevation for open swales shall not exceed the edge of pavement or travel lane.

4. Closed Drainage. Closed drainage systems shall consist of pipe, inlet and manhole network systems.

a. Minimum Size: Minimum pipe size is 15 inch diameter or equivalent.

b. Pipe Velocity: The minimum full flow pipe velocity shall be 2 feet per second.

c. Freeboard: The hydraulic grade line cannot exceed the rim elevation during the Design Storm event. The design storm surface elevation for the downstream stormwater management facility or receiving water shall be used as the tailwater for the design of the closed drainage system, or the water surface elevation at time of peak inflow. Where there is no downstream tailwater impact, the starting downstream Hydraulic Grade Line elevation shall be the crown of the discharge pipe. For tidal discharges, the minimum tailwater shall be mean high water elevation. The tailwater elevation should be noted on the submitted computations.

d. Pipe Material: All pipe shall be Reinforced Concrete Pipe (RCP) or High Density Polyethylene Pipe (HDPE), (AASHTO M294 Type S or AASHTO M252 Type S). Flexible pipe (HDPE) shall have a minimum cover of 1 foot, as measured from top of pipe to bottom of bituminous concrete pavement, or to the wearing surface of concrete pavement. Rigid pipe (Class III / IV RCP) shall have 12 inches of cover to the wearing surface of asphalt pavement or 9 inches of cover to the top of stone in a concrete pavement section. Cover requests less than those specified above for RCP must be accompanied with load calculations based on methodology in the American Concrete Pipe Association's Concrete Pipe Design Manual. Alternate pipe materials for pipe diameters greater than 36 inches shall be allowed by the Sussex County Engineer or his or her designee on a case by case basis.

5. Cross Road Culverts

- a. Minimum Size: The minimum size is 15 inches diameter or equivalent.
- b. Pipe Slope: The minimum full pipe flow velocity shall be 2 feet per second.
- c. Personnel Safety Grates: All culverts shall have a personnel safety grate as required by the Department of Natural Resources and Environmental Control.

6. Driveway Culverts:

- a. Minimum Size: The minimum culvert size is 12 inches in diameter.
- b. Pipe Slope: The minimum full pipe flow velocity shall be 2 feet per second.
- c. Pipe Material: Pipe shall be RCP or HDPE, (AASHTO M294 Type S). HDPE shall be allowed with minimum 6 inches cover of stone over the pipe during homebuilding operations and Type B Graded Aggregate Base Course (GABC) backfill.
- d. Analysis: An analysis of driveway culverts is required on the downstream portion of a lot to ensure that they are sufficiently sized to convey water without impeding drainage in the roadside ditch. Culvert size for each individual lot shall be shown in the construction plans required by Section 99-30.

G. Stormwater Management in Street or Road Rights of Way.

Stormwater management design within all street or road rights of way shall be in accordance with the Delaware's Sediment and Stormwater Regulations and accompanying Technical Documents, or as otherwise approved by the Sussex Conservation District, or other applicable regulation. The stormwater management plan shall be approved by the Sussex Conservation District.

- 1. Several Best Management Practices are suitable for use within the Right-of-Way, as listed below, and shall be designed in accordance with the Department of Natural Resources and Environmental Control's Technical Document, Chapter 3.06.02 Post Construction Stormwater BMP Standards and Specifications, as that document may be amended or supplemented.

a. Sheet Flow to Filter Strip

b. Bio Retention

c. Vegetated Channel/Bio-Swale

- d. Infiltration Practices
 - i. Infiltration Trench
 - ii. Perforated pipe with infiltration

- e. Permeable Pavement Systems, as follows, may be used in the right of way at the discretion of the Sussex County Engineer or his or her designee.
 - i. Porous Asphalt
 - ii. Pervious Concrete
 - iii. Permeable Pavers

- f. Soil Amendments

- g. Detention Practices (Underground)
 - i. Detention systems under the pavement section may be approved on a case by case basis by the Sussex County Engineer or his or her designee.

- h. Proprietary Practices as may be approved by the Sussex County Engineer or his or her designee.

- i. Other practices that become approved by the Department of Natural Resources and Environmental Control or the Sussex Conservation District, as allowed by the Sussex County Engineer or his or her designee.

- 2. Stormwater management practices outside of the right of way that are designed to treat roadway drainage must be located in a deeded open space area and contained within an easement.

H. Road Pavement Design.

- 1. Average Daily Trips. For the purposes of this Chapter, the following Average Daily Trips (ADTs) per unit shall be used:
 - a. Single Family Dwelling– 10 ADTs per unit.
 - b. Townhouse – 7 ADTs per unit.
 - c. Multifamily Dwelling (not townhouse)– 6 ADTs per unit.
 - d. Manufactured Home – 5 ADTs per unit.
 - e. Retirement Community – 4 ADTs per unit.

2. Subbase Course for Standard Pavement must include one of the following:
 - a. Graded Aggregate Base Course: 8 inch maximum lift.
 - b. Crushed Concrete: 8 inch maximum lift.
 - c. Millings: 8 inch maximum lift.

3. Bituminous Concrete for Standard Pavement must include one of the following:
 - a. Type Bituminous Concrete Base Course : 4 inch maximum lift
 - b. Type B: 4 inch maximum lift
 - c. Type C: 2 inch maximum lift

4. Porous Bituminous Concrete.
 - a. May be permitted in consultation with the Sussex County Engineer or his or her designee.
 - b. Must include a maintenance management plan.

5. Porous Portland Cement Concrete.
 - a. May be permitted in consultation with the Sussex County Engineer or his or her designee.
 - b. Must include a maintenance management plan.

6. Pavers.
 - a. May be permitted in consultation with the Sussex County Engineer or his or her designee.
 - b. Must include a maintenance management plan.

7. Structural Numbers (SN).
 - a. 1 – 50 ADT shall require $SN \geq 2.42$ based on California Bearing Ratio 10. Base course sections shall be equivalent to 80% of the SN; provided however, that the topcoat shall not be less 1.25 inch Type C.
 - b. 51 – 3,000 ADT shall require $SN \geq 3.06$ based on California Bearing Ratio 10. Base course sections shall be equivalent to 80% of the SN; provided however, that the topcoat shall not be less 1.25 inch Type C.
 - c. Greater than 3,001 ADT: Pavement section shall be determined by a geo-technical engineer.

I. Unless otherwise provided herein, all materials used in work governed by this Section shall meet or exceed the DelDOT Standards and Specifications for Road and Bridge Construction, as amended.

J. The Sussex County Engineer shall have, in appropriate circumstances and upon a written finding of good cause, the ability to grant administrative waivers from the requirements of this Section.

Section 6. The Code of Sussex County, Chapter 99, Article VI, §99-29 “Minimum Installation Requirements” is hereby amended by deleting the language in brackets in subsection D.(2)(c) and E.(1)(d) as follows:

§99-29. Minimum Installation Requirements.

...

D. Water supply facilities.

(2) All subdivisions requiring a public water supply shall be provided with a water supply and distribution system and fire hydrants meeting nationally recognized standards which have been adopted by the County Engineer.

[(c) The county reserves the right to collect appropriate fees for engineering design review and for any field inspection deemed necessary by the County Engineer.]

...

E. Sanitary Sewer Facilities.

(1) Every subdivision with lots of such size as to require a public sewer system under the zoning regulations or the regulations of the State Department of Natural Resources and Environmental Control and/or the County Engineer shall be provided with a community sanitary sewer system connected to a county or municipal system or to an adequate community sewerage disposal plant meeting the requirements of the State Department of Natural Resources and Environmental Control and the County Engineer. If connected to the county or municipal system, sewers shall be constructed to meet the standards and requirements of such system and shall become a part thereof without cost to the county or municipality. If built as an independent system, sanitary sewer facilities shall meet nationally recognized standards which have been adopted by the County Engineer.

[(d) The County reserves the right to collect appropriate fees for the engineering design review and for any field inspections deemed necessary by the County Engineer.]

Section 7. The Code of Sussex County, Chapter 99, Article VI, §99-30 “Plans” is hereby amended by deleting the language in brackets and inserting the italicized and underlined language and adding a new subsection G, H, I and J as follows:

§99-30. Plans.

Plans, profiles and specifications for the required improvements shall be prepared by the subdivider and submitted for approval by the appropriate public authorities prior to construction. No construction shall commence prior to the issuance of a Notice to Proceed by the County Engineer or his or her designee for the required improvements. All plans, profiles and specifications approved by the County Engineer or his or her designee with the issuance of a Notice to Proceed shall remain valid or, if substantial construction is not actively and continuously underway, they shall expire upon the expiration of the Final Site Plan. Prior to the issuance of a Notice to Proceed the County Engineer may require the owner and/or his designee to execute an agreement addressing the required improvements.

The plans and profiles submitted for all new construction shall include the following:

...

G. A Bulk Grading Plan as may be required by Chapter 99.

H. All construction and specification plans shall include an owner's statement acknowledging ownership of the property and agreeing to the requirements and information shown on the plat signed by the owner or owners; an engineer's statement certifying the information shown on the plat; and a statement as required by §99-26A.(17). In addition, a 3 by 5 inch block shall be included at the bottom right corner of the plan Title Sheet containing the Agreement Number of the project, the Ordinance or Subdivision Number of the project and a signature line for the County Engineer.

I. DelDOT standard construction details may be provided by schedule or by inclusion of the details within the construction and specification plans.

Section 8. The Code of Sussex County, Chapter 99, Article VI, §99-31 "Inspections; Fees" is hereby amended by revising the title of the Section to "Inspections, Closeout Procedures and Fees" and by deleting the language in brackets and inserting the italicized language as follows:

§99-31 Inspections, Closeout Procedures and Fees.

A. Following the issuance of a Notice to Proceed as required by this Article, [A]all construction work on improvements required herein shall be subject to inspection and approval by the County Engineer and/or other authorized individuals during and upon completion of such construction work to confirm that all work has been performed in accordance the requirements of this Chapter. [Upon the completion of each improvement, the subdivider shall furnish the appropriate official with an accurate and detailed description of location and the completion date of the improvement as it was actually constructed].

B. Upon the issuance of a Notice to Proceed as required by this Article, the required improvements shall proceed in a timely fashion.

C. Pavement topcoats on all streets and roadways shall be completed in accordance with the following percentages for the project or approved phase:

<u>Certificate of Occupancy Percentage</u>	<u>Top Coat Must be Installed Within</u>
<u>40%</u>	<u>5 years</u>
<u>50%</u>	<u>3 years</u>
<u>70%</u>	<u>2 years</u>
<u>90%</u>	<u>1 year</u>

D. A two-year extension from the requirements of subsection C. above may be granted at the discretion of the County Engineer if the following factors can be demonstrated:

- (1) There is active construction occurring in the approved phase. For purposes of this Article, "Active Construction" is defined as a minimum of five percent (rounded up to the next whole number) of the total lots in the approved phase have had a Certificate of Occupancy issued during the two years prior to the date of the extension request.
- (2) A maximum of 2, two-year time extensions may be granted per approved phase.
- (3) Any two-year extension granted by the County Engineer shall supersede the deadlines set forth in subsection C. above, and the Top Coat must be installed by the expiration of the time extension.
- (4) Entrance areas that provide the only point of vehicular access for a development are eligible for an extension without satisfying the percentages outlined in subsection C of this section at the discretion of the County Engineer.

E. Project Close-Out Procedures.

- (1) Prior to top coat surface application, the road must pass a pre-pave inspection and all punch list items required by the County Engineer or his or her designee must be completed. All final top coat surfaces must pass top coat inspections and approval by the County Engineer or his or her designee and have completed all items listed on the punch list issued by the County Engineer or his or her designee.
- (2) If concrete curb damage is evident as determined by the County Engineer or his or her designee the following repairs are required:
 - a. If a vertical crack is less than 1/32 of an inch wide then the curb is acceptable.
 - b. If a vertical crack is more than 1/32 of an inch wide then the crack must be sawcut and filled with a backer rod and sealant.

- c. If the curb is chipped with a width and/or height 2 inches or less and less than 1/4 inches deep then the chip must be patched with a sealant.
- d. If there are more than 6 chips and/or 3 vertical cracks or a total of 6 chips and vertical cracks within a 4 foot section of curb then the curb must be replaced. The 4 foot section shall be measured from each chip.
- e. If replacement is required, the curb shall be saw cut and replaced in a minimum of 4 foot section and not within 4 feet of a joint.
- f. As new technology emerges it may be considered as a method to repair or replace curb. One such example includes milling a section of curb adjacent to the roadway.
- g. The County Engineer or his or her designee may require concrete core samples.

(3) If sidewalk or driveway apron damage is evident as determined by the County Engineer or his or her designee the following repairs are required:

- a. If a vertical crack is less than 1/32 of an inch wide then the curb is acceptable.
- b. If a vertical crack is more than 1/32 of an inch wide then the crack must be sawcut and filled with a backer rod and sealant.
- c. If the curb is chipped with a width and or height 2 inches or less and less than 1/4 inches deep then the chip must be patched with a sealant.
- d. If there are more than 6 chips and / or 3 vertical cracks or a total of 6 chips and vertical cracks within a 4 foot section of concrete then the concrete must be replaced from joint to joint.
- e. If there is a vertical difference greater than 1/4 inch at a joint, then the concrete must be preplaced from joint to joint
- f. If replacement is required, the concrete shall be saw cut and replaced in a minimum of 4 foot sections at the joints.
- g. As new technology emerges it may be considered as a method to repair or replace curb. One such example includes milling a section of curb adjacent to the roadway.
- h. The County Engineer or his or her designee may require concrete core samples.

(4) If pavement damage is evident as determined by the Sussex County Engineer and/or other authorized individuals, the damaged area shall be repaired by traditional mill and overlay practices. New technologies may also be considered following consultation with a Registered Professional Engineer and approval of the Sussex County Engineer.

- (5) The following tolerances shall apply to the following items at the time of project closeout:
- a. Open Cross Road Pipes: an invert elevation of plus or minus 0.05 feet.
 - b. Swales within the ROW: and invert elevation of plus or minus 0.10 feet.
- (6) All driveway pipes for unfinished lots shown on the approved Detailed Grading Plan shall be installed prior to the top coat inspection.
- (7) For any closed drainage system project closeout inspection, the County Engineer or his or her designee may require the storm drain pipes to be flushed.
- (8) Pavement Cores:
- a. Curb and Gutter: The County Engineer or his or her designee may require pavement cores to be taken at the base course with a minimum of one core per road and / or one core per 500 linear feet.
 - b. Open Drainage: The County Engineer or his or her designee individual may require pavement cores to be taken at the base course and/or wearing course with a minimum of one core per road and/or one core per 500 linear feet.
 - c. Should the cores show the road section to be less than what is required, a geotechnical engineer shall determine if the Structural Numbers are sufficient or additional pavement is necessary.
 - d. The County Engineer or his or her designee may require sidewalk cores to be taken at one core per 500 linear feet.
- (9) Upon the satisfaction of all requirements, the owner or her his or her designee may apply for a determination of "Substantial Completion" by the County Engineer. "Substantial Completion" shall confirm that all work has been performed to the extent that it is in a condition to be utilized in the manner required, designed and intended, and any included conditions have been addressed.

[B.]F. Based on the recommendations of the County Engineer, the County Council shall establish a schedule of fees to be paid by the subdivider in order to reimburse the county for the cost of inspecting all construction work on improvements required herein. This schedule of fees

shall be adopted as part of the Annual Sussex County Budget. [Costs reimbursed shall be only those actually incurred by the county in inspecting work for which the county has the authority to establish design standards or has need to ensure that efficient maintenance can be accomplished adequately.]

Section 9. The Code of Sussex County, Chapter 99, Article VI, §99-32 “Bonds and Guaranties” is hereby amended by deleting the language in brackets and inserting the italicized and underlined language as follows:

§99-32 Bonds and Guaranties

A. As a condition of approval of improvement plans, the County Council shall require the subdivider to post a performance bond or other guaranty for any improvements required by the application of this chapter in an amount sufficient to construct the improvements and in a form acceptable to the County Attorney. The amount of such bond shall be [no less than] 125% of the cost of improvements or \$50,000.00, whichever is greater. Bonding and guaranties may be required for street and road improvements, water supply facilities, sanitary sewer facilities [forested] buffers [strips], amenities, recreational facilities [all areas approved as open space as defined in §99-5] and other improvements deemed necessary by the Commission or required by the Subdivision Ordinance. All amenities and/or recreational facilities required by the Commission or shown on the final plat shall be bonded as a separate phase or phase of the subdivision.

....

D. Notwithstanding the preceding subsections of this section, no performance bond or other guaranty shall be required for improvements required by the application of this chapter upon lands owned by the party seeking to construct the improvements, provided, however, that no lots shall be sold or transferred and no residential building permits or zoning permits shall be issued until: 1) all required improvements are constructed and receive substantial completion; or 2) a bond or guaranty is posted in accordance with section A, B and C of this section. [In the event no bond or performance guaranty is provided, a notice in the form acceptable to the County Attorney shall be recorded in the office of the Recorder of Deeds putting the public on notice that no transfer or sale of lots is permitted in the development until such bond or guaranty is provided as required by this section. This subsection D of 99-32 of Chapter 99 of the Code of Sussex County shall automatically sunset and expire on January 1, 2016.] Provided, however, that a party seeking to transfer a lot or obtain a residential building permit or zoning permit prior to substantial completion may notify the county in writing of the intention to do so and provide an estimate for the work that remains to construct the improvements using unit prices published by Sussex County. The performance bond or guaranty shall either be 125% of the value of the estimate or \$50,000.00, whichever is greater. The party seeking to transfer lots or obtain a residential building permit or zoning permit shall allow 20 days from the date of written notice to review the estimate, complete the necessary inspections and determine the amount of the performance bond or guaranty required for the remaining improvements.

E. After a performance bond or other guaranty is provided as required herein, a party may not alter the area of an approved phase of the development unless a new performance bond or other guaranty is provided for the new or altered phase. Any such alteration shall be subject to the approval of the Sussex County Engineer or his or her designee.

Section 10. The Code of Sussex County, Chapter 99, Article VIII, §99-36 “Restrictions on Issuance of Building Permit” is hereby amended to change the title of the section and by inserting the italicized and underlined language at the end thereof, as follows:

§99-36 Restrictions on Issuance of a Building Permit and Certificate of Occupancy.

No building permit shall be issued nor shall construction be authorized by the county on lands where a subdivision plat is required to be approved and recorded as provided herein unless such construction or use is in compliance with this chapter. No permit shall be issued until all required improvements have been installed, constructed or placed for the lot for which the permit is to be issued or [until bonds or performance guaranties] unless the requirements that have been established in accordance with the provisions of §99-32 of this chapter have been satisfied. No permit shall be issued nor shall construction be authorized by the county until an Individual Lot Grading Plan has been supplied to, and approved by the county; provided, however, that this shall not apply to a lot within a subdivision that was not required to include a Bulk Grading Plan as part of the approved Final Site Plan. No Certificate of Occupancy shall be issued until a Lot Grading Certificate is submitted to the Building Code Department demonstrating general conformity with the Individual Lot Grading Plan, provided, however, that this shall not apply to a lot within a subdivision that was not required to include a Bulk Grading Plan.

Section 11. The Code of Sussex County, Chapter 99, Article VI, §99-40 “Sunsetting of Major Subdivision Approval” is hereby amended by deleting the language in brackets and inserting the italicized and underlined language as follows:

§99-40 Sunsetting of Major Subdivision Approval.

A. Unless an extension is granted in accordance with §99-40[F]E below, any major subdivision approval granted by the Commission subsequent to the effective date of this section shall be rendered null and void if substantial construction is not [commenced] actively and continuously maintained and/or underway thereon within five years of the date of recordation of the final plat pursuant to §99-11.

[B. Any major subdivision approval granted by the Commission after March 23, 1982 and prior to the effective date of this section shall be rendered null and void if substantial construction is not commenced thereon within five years of the effective date of this section.

C. Any major subdivision approval granted by the Commission after March 23, 1982 and prior to the effective date of this section, but for which a final plat has not yet been recorded, shall be rendered null and void if substantial construction is not commenced thereon within five years of the date of recordation of the final plat pursuant to §99-11.

D. Any major subdivision lawfully existing on or before March 23, 1982, shall be rendered null and void if substantial construction is not commenced thereon within five years of the effective date of this section.]

[E.]B. For purposes of this section, the term “substantial construction” shall mean that the right of way has been cleared, the roadway has been rough-graded, the drainage system and/or stormwater management facilities have been rough graded and erosion and sedimentation control measures are in place and being actively maintained and proceeding to completion as required by this Article.

[F.]C. The applicant of any preliminary subdivision plat under §99-9B, and any recorded subdivision plat valid under §99-11 and §99-40; any Residential Planned Community District valid under Article XVI of Chapter 115 of the Sussex County Code; or any conditional use action approved and valid pursuant to the provision of Article XVI, Article XXIV and Article XXVIII of Chapter 115 of the Sussex County Code and relating to new residential, commercial or industrial developments may seek up to a six-month extension of said approval pursuant to this §99-40[F]C.

(1) Prior to the expiration of its current approval, any applicant holding a currently valid approval as set forth in this §99-40[F]C. may request an extension of up to six months for the validity of said approval. The six-month period shall commence upon the date of expiration of the current approval. Such a request must be in writing and delivered to the Director on or before the expiration date of its current approval. At a minimum, the written request must include the following information:

...

(2) The Director, after consultation with and input from other County departments or public agencies as the Director sees fit, shall consider any written request and the accompanying documentation submitted pursuant to this §99-40[F]C. Time extensions shall be recommended to Sussex County Council by the Director only upon a finding that all of the following criteria have been met: (i) that the approval constitutes one of the approvals defined in the first paragraph of §99-40[F]C.; (ii) that the request for said extension was timely filed; (iii) that all of the information required herein has been supplied; (iv) that there is good cause for the granting of the requested extension; (v) that necessity for the extension is due primarily to reasons beyond the reasonable control of the applicant, such as undue delays in receiving regulatory approvals, litigation affecting the progression of the project, third party economic restrictions of an extraordinary and unreasonable nature, or delays caused by significant medical or health issues impacting applicant’s key stakeholders; (vi) with respect to subdivisions with recorded final plats that are valid in accordance with §99-11 and §99-40, that there is a reasonable plan and schedule demonstrating that the improvements set forth on the subdivision plat in conformance with Chapter 99, Article VI of the Sussex County Code will reach “substantial construction” within six months; and (vi) with respect to a conditional use under Chapter 115, Article XXIV of the Sussex County Code, that there is a reasonable plan and schedule demonstrating that the construction or use shall be “substantially underway” within six months.

(3) After consideration of the relevant factors in accordance with this §99-40[F]C, the Director shall make a written recommendation whether to grant an extension to the applicant. This recommendation will be provided to Sussex County Council, who shall render the final decision whether to grant an extension to the applicant for up to six months from the expiration date of the current approval.

Section 12. The Code of Sussex County, Chapter 115, Article I, §115-4 “Definitions and Word Usage” is hereby amended by inserting the italicized and underlined language in alphabetical order within the Section as follows:

§115-4 Definitions and Word Usage.

BULK GRADING PLAN – An overall grading plan prepared by a licensed professional who is permitted to prepare Detailed Sediment and Stormwater Plans specifying the elevation, surface gradients, lot types, swale locations, driveway pipe sizes and other drainage information required for grading, as further set forth in the Sussex Conservation District Technical Drainage and Grading Requirements. A Bulk Grading Plan shall confirm that all conveyance features must be located in deeded open space or the subject of a permanent easement, and satisfy the following requirements:

Conveyance Swale Design Criteria:

- a. A minimum longitudinal swale slope of 1.0% if contiguous to a dwelling excluding roadside swales. If the slope is greater than .5% but less than 1%, then no more than 300 feet of conveyance swale can be routed through an adjacent lot, not to exceed three (3) side-by-side lots, prior to entering a closed drainage system. All other conveyance swale design criteria shall apply.*
- b. Maximum side slopes of 3:1 or flatter.*
- c. Must contain the 10 year design storm within the banks.*
- d. Conveyance must be non-erosive.*
- e. Must show spot elevations at grade breaks in the proposed conveyances swales as applicable.*
- f. Must include flow direction arrows.*
- g. Pipe/Inlet size, Type, Inverts, Slope, Rim Elevations must be labeled on the plan view.*
- h. Must include a Summary Table listing conveyance swale drainage area, discharge (Q10), velocity and depth of flow.*

Closed Drainage System Design Criteria:

- a. Must include yard basins where required within the drainage easement or open space to capture and convey lot surface runoff via a closed system to a positive outfall location.*

- b. Must show spot elevations at grade breaks in the proposed conveyance swales as applicable.
- c. Must include flow direction arrows.
- d. Pipe/Inlet Size, Type, Inverts, Slope, Rim Elevations must be labeled on the plan view.
- e. Profiles for closed drainage systems receiving residential lot drainage shall only be required on multi-runs.
- f. Must include a Summary Table listing conveyance swale drainage area, discharge (Q10), velocity and depth of flow.

...

DETAILED GRADING PLAN – A plan depicting final grades for land development prepared by a licensed professional who is permitted to prepare Detailed Sediment and Stormwater Plans, including dwelling perimeter spot elevations and conveyance features to ensure positive drainage under the minimum slope requirements. A Detailed Grading Plan shall satisfy the following requirements:

- a. It must demonstrate that sites adjacent to dwellings can be graded with a minimum 5% slope the first ten (10) feet from the dwelling or as required by building/residential codes and 1% beyond a point ten (10) from the side and rear swales or a closed pipe or swale positive outfall.
- b. It must show spot elevations delineating grade breaks at all property and right of way lines including finished grades at all dwelling corners.
- c. It must show first floor and slab elevations.
- d. Relief from the foregoing standards may be granted by the Sussex County Engineer for environmental, topographical, archeological or site constraints or low impact development (i.e. rain gardens, bio swales, etc.).

...

INDIVIDUAL SITE GRADING PLAN – A lot grading plan prepared by a licensed professional who is permitted to prepare Detailed Sediment and Stormwater Plans conforming to the approved Detailed Grading Plan submitted simultaneously with a building permit for construction. An Individual Site Grading Plan shall satisfy the following requirements:

- a. It must show compliance with a minimum 5% slope the first ten (10) feet from a dwelling or as required by building/residential codes and 1% beyond a point ten (10) from the side and rear swales or a closed pipe or swale positive outfall.
- b. It must show spot elevations delineating grade breaks at all property and right of way lines including finished grades at all dwelling corners.
- c. It must show first floor and slab elevations.

d. Relief from the foregoing standards may be granted by the Sussex County Engineer for environmental, topographic, archeological or site constraints or low impact development (i.e. rain gardens, bio swales, etc.).

...

GRADING CERTIFICATE – A certification prepared by a licensed professional who is permitted to prepare Detailed Sediment and Stormwater Plans that a site, as graded, is in general conformity with the Individual Site Grading Plan. A Lot Grading Certificate shall include the following information:

a. North Arrow.

b. Tax Map and Parcel Number(s)

c. Subdivision Name and lot number.

d. Property lines, lot dimensions, drainage easements and adjacent rights of way.

e. The location of the following items:

(i) Elevations at four (4) corners of the structure and at the location of the spot elevations indicated on the Detailed Grading Plan as applicable.

(ii) Inverts of drainage structures receiving runoff from the site.

(iii) Top and bottom of curb and gutter (if applicable).

(iv) Driveway culvert pipe material, size and inverts, where applicable.

(v) Immediately adjacent upstream and downstream driveway culverts, including inverts and pipe sizes (if applicable).

(vi) Swale inverts along property frontage.

f. Finished floor and slab elevations.

g. A description of any discrepancies or variations from the approved plans (including site plans, Detailed Grading Plan, construction plans or calculations and specifications) and any approved revisions as a result thereof.

PARKING LOT DRIVE - A paved drive or network of drives for the exclusive access to perpendicular and/or angled parking spaces and connected to a street via an intersection in accordance with Chapter 99.

PARKING SPACE, OFF-STREET – [An all weather surfaced] A paved area not part of a street or alley [and having an area of not less than 10 feet by 20 feet for vertical, nine feet by 18 feet for diagonal parking and 10 feet by 22 feet for parallel parking] exclusive of driveways and parking lot drives permanently reserved for the temporary storage of one vehicle and connected with the street or alley by a paved [driveway] surface which affords ingress and egress for an automobile without requiring another automobile to be moved. [An all-weather surfaced area will be a minimum of two courses of bituminous surface treatment. The dimensions for vertical or diagonal off-street parking spaces may be reduced to permit spaces for compact cars in accordance with §115-166A.]

...

STREET – A public or private thoroughfare which affords the principal means of access to abutting lots [properties] and whether designated as a “freeway”, “expressway”, “highway”, “road”, “avenue”, “boulevard”, “lane”, “place”, “circle”, or however otherwise designated. [The minimum width of a street right of way shall be 50 feet].

Section 13. The Code of Sussex County, Chapter 115, Article XVI, §115-128 “Requirements Regarding Parking and Streets and Driveways” is hereby amended by deleting the language in brackets and inserting the italicized and underlined language as follows:

§115-128 Requirements Regarding Parking and Streets and Driveways.

Off Street parking shall be provided meeting the minimum requirements of these regulations. Design and improvements of parking lots and garages shall also conform to these regulations and other applicable regulations and ordinances. Design, arrangement and improvement of streets *with lot frontage* [and driveways] shall conform to Chapter 99 [the ordinance or ordinances and regulations governing the subdivision of land].

Section 14. The Code of Sussex County, Chapter 115, Article XVI, §115-129 “Guaranty of Completion” is hereby amended by deleting the language in brackets and inserting the italicized and underlined language as follows:

§115-129 Guaranty of Completion.

[Before approval of a development plan, the Planning and Zoning Commission may recommend and the County Council may require a contract with safeguards approved by the County Attorney guaranteeing completion of the development plan in a period to be specified by the Commission in approving the site plan.] All RPC Districts shall be subject to the bonding and guaranty requirements of §99-32.

Section 15. The Code of Sussex County, Chapter 115, Article XXIV, §115-172G and H “Special Requirements” is hereby amended by deleting the language in brackets and inserting the italicized and underlined language as follows:

§115-172 Special Requirements.

The following special requirements shall be conditions of approval and development of the indicated conditional uses:

...

G. Manufactured Home Park, provided that:

- (1) Exterior [A]access to the manufactured home park shall be from a public highway having an easement width of at least 50 feet, that the number and location of access drives shall be controlled for traffic safety and protection of surrounding properties, that no

manufactured home space shall be designed for direct access to a street outside the boundaries of the manufactured home park and that the interior access drive *easements* shall be properly lighted and at least 50 feet in width, [hard surfaced and maintained in accord with applicable County specifications and ordinances for subdivision streets *with at least 24 feet in pavement width for two-way traffic and least 14 feet in pavement width for one-way traffic.*

...

- H. (1) *Exterior* [A]access shall be from a public highway having an *easement* width of at least 50 feet, that the number and location of access drives shall be controlled for traffic safety and protection of surrounding properties, that no camping or trailer space shall be designed for direct access to a street outside the boundaries of the park and that the [principal] interior access drive *easements* shall be properly lighted and at least 30 feet in width, [maintained] *with at least 24 feet in pavement width for two-way traffic and least 14 feet in pavement width for one-way traffic.*

Section 16. The Code of Sussex County, Chapter 115, Article XXIV, §115-174 “Period of Validity of Approval” is hereby amended by adjusting a code section reference so that the last sentence thereof now states as follows:

§115-174 Period of Validity of Approval.

... An extension of this time period may be sought in accordance with §99-40[F]C.

Section 17. The Code of Sussex County, Chapter 115, Article XXVII, §115-218F “Procedure for RPC District and Conditional Use Site Plan Approval” is hereby amended by adjusting a code section reference so that the last sentence thereof now states as follows:

§115-218 Procedure for RPC District and Conditional Use Site Plan Approval.

...An extension of these time periods may be sought in accordance with §99-40[F]C.

Section 18. The Code of Sussex County, Chapter 115, Article XXVII, §115-221 “Final Site Plan Requirements” is hereby amended by inserting the italicized and underlined language immediately following §115-221.B.(16) and by inserting a new subsection D. as follows:

§115-221 Final Site Plan Requirements.

(17) A Bulk Grading Plan.

...

D. A final site plan required for any of the major uses governed by §115-219 shall be valid for a period of 5 years from the date of approval by the County. Any such final site plan shall be rendered null and void if substantial construction is not actively and continuously underway on the use within 5 years of the date of approval by the County. For purposes of this section, the term

“substantial construction” shall mean that the roadways or parking areas have been cleared and rough-graded, the drainage system and/or stormwater management facilities have been rough graded and erosion and sedimentation control measures are in place and being actively maintained and construction of the use is actively proceeding to completion.

Section 19. The Code of Sussex County, Chapter 115, Article XXVII, §115-224 “Permits” is hereby amended by inserting the italicized and underlined language immediately following §115-224.I. as follows:

§115-224 Permits.

J. No permit shall be issued nor shall construction be authorized by the county until an Individual Lot Grading Plan has been supplied to, and approved by the county. No Certificate of Occupancy shall be issued until a Grading Certificate is submitted to the Building Code Department demonstrating general conformity with the Individual Site Grading Plan. Provided, however, that these requirements shall not apply to a development that was not required to include a Bulk Grading Plan as part of the approved Final Site Plan.

Section 20. The Code of Sussex County, Chapter 110, Article XI, §110-84 “Project Construction Permit” is hereby amended by deleting the language in brackets and inserting the italicized and underlined language as follows:

§110-84 Project Construction Permit.

Prior to the commencement of any construction of water or sanitary sewer facilities under this Part 2, the developer shall obtain a project construction permit from the county. Said permit shall not be issued until the following requirements have been met by the developer:

...

D. Payment of *a* construction, *administration and* inspection fee *is required.* [sufficient to reimburse the county for construction of said water or sanitary sewer facilities.] *This fee shall be included in the schedule of fees adopted as part of the Annual Sussex County Budget.*

E. Payment of the engineering fees for engineering design review *is required.* [as provided by a regulation which may be adopted by the Sussex County Council by resolution, which shall set forward the fees required by this subsection]. *This fee shall be included in the schedule of fees adopted as part of the Annual Sussex County Budget.*

[F. Payment of administrative costs.]

Section 21. The Code of Sussex County, Chapter 110, Article XXI, §110-136 “Application; Fee” is hereby amended by deleting the language in brackets and inserting the italicized and underlined language as follows:

§110-136 Application; Fee.

Any person, firm or corporation applying to the County Engineer for the revision of a sanitary or water district boundary without election pursuant to 9 Del. C. §6502 shall be required to pay such amount as may be required by the Sussex County Council to defray the administrative cost of the process of that request. *This fee shall be included in the schedule of fees adopted as part of the Annual Sussex County Budget.*

Section 22. Effective Date.

Sections 1, 4, 6, 7, 8, 9, 11, 12, 13, 14, 15, 16, 17, 20 and 21 shall be effective upon adoption. The remaining Sections, 2, 3, 5, 10, 18 and 19 shall take effect 30 days from the date of adoption by County Council; provided however, that these Sections shall not apply to any application accepted by the Planning and Zoning Department unless agreed upon by the developer/property owner.

I DO HEREBY CERTIFY THAT THE FOREGOING IS A TRUE AND CORRECT COPY OF ORDINANCE NO. 2489 ADOPTED BY THE SUSSEX COUNTY COUNCIL ON THE 28TH DAY OF MARCH 2017.

ROBIN A. GRIFFITH
CLERK OF THE COUNCIL