

# **Review of Delaware Floodplain and Drainage Standards Progress Report**

Draft August 2013

Prepared for:  
Delaware Department of Natural Resources and Environmental Control  
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**Senate Bill 64**

In response to growing concerns regarding flooding and drainage problems in the First State from rising sea levels and extreme storms, Governor Jack A. Markell signed Senate Bill 64 on August 17, 2011 that established a Floodplain and Drainage Advisory Committee who recommended that the 57 municipalities and 3 counties in Delaware adopt the following minimum floodplain and drainage standards by code or ordinance:

Floodplain Standards

1. For all new development activities which exceed 50 lots or 5 acres in locations contiguous to streams without a FEMA-delineated floodplain, a floodplain study shall be conducted.
2. For all new development that exceed 50 lots or 5 acres in Zone A FEMA floodplains, a flood study shall be submitted to FEMA for approval prior to record plan approval.
3. Only FEMA approved floodplain and BFE data shall be shown on record plans and development documents.
4. Only base flood elevation data approved by the appropriate county or municipal agency or FEMA may be used in building permit application documents.
5. Floodplain information must be included on permitting documentation.
6. Require use of FEMA elevation certificate and flood-proofing certificate.
7. Require 18 inches of freeboard for all new construction and substantial improvements or require 12 inches of freeboard for all new construction and substantial improvements.
8. Require 18 inches of freeboard for manufactured homes.
9. Fill placed in the floodplain which results in land having an elevation less than 18 inches above base flood elevation will not result in a relaxation of floodplain standards.
10. Hydrostatic vents shall be required within 1 foot of grade.
11. The elevation of the lowest floor beneath an elevated building must be above the lowest adjacent grade on at least one side.
12. Prohibit subdividing of land in the floodplain. Newly subdivided floodplain shall remain deed restricted open space.

13. Prohibit new non-water dependent structures in floodplains in newly subdivided lands.
14. Prohibit encroachments that would cause more than 0.1 foot of rise without compensation.
15. Incorporate FEMA technical bulletins in local floodplain regulations.

#### Drainage Standards

1. Easements of an adequate width shall be required over drainage conveyance systems within any proposed subdivision.
2. The willful or negligent obstruction of any drainage conveyance shall be
3. Drainage conveyance systems within proposed subdivisions shall meet the minimum 10-year storm event.
4. Lot grading shall ensure adequate drainage away from buildings and accessory structures without creating an adverse impact to adjacent structures or lands.
5. A topographic plan submittal shall be required for all construction activity greater than 5,000 square feet.
6. An as-built submittal shall be required for any construction with an approved topographic plan.

#### **Floodplain and Drainage Ordinance Review**

Using a list compiled by the Delaware League of Local Governments, the University of Delaware Water Resources Agency contacted the 60 local governments in Delaware and researched municipal and county ordinances for consistency with the SB64 floodplain and drainage standards.

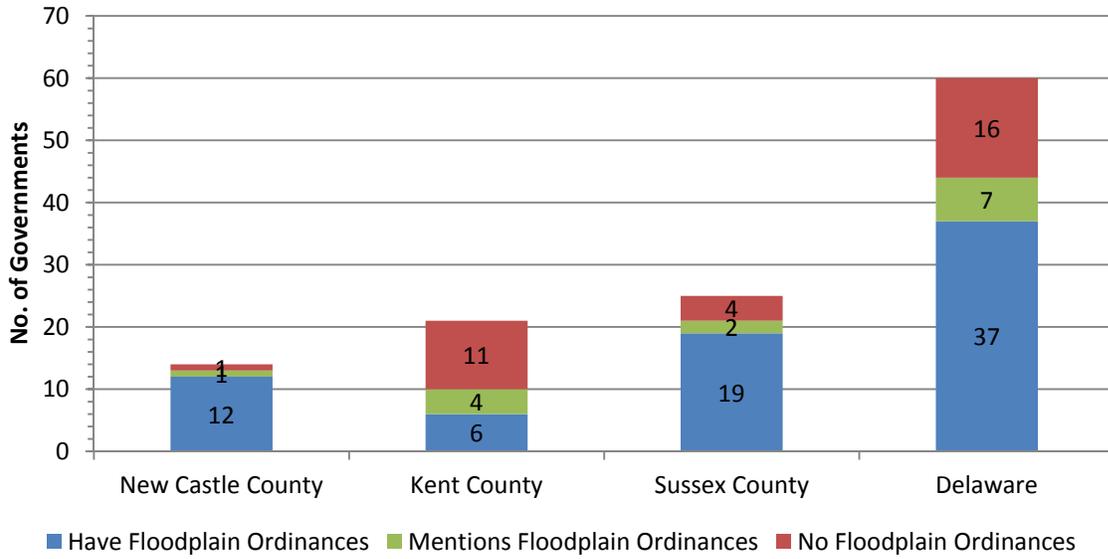
Of the 60 local governments within the State of Delaware, 37 governments (62%) have extensive floodplain ordinances, 7 (12%) have partial floodplain codes, and the remaining 16 (27%) did not have floodplain regulations or their codes were not available for review (Figure 2). Approximately 86%, 29%, and 76% of the local governments in New Castle, Kent, and Sussex counties, respectively, have extensive or partial floodplain ordinances.

In Delaware, 16 governments (27%) have extensive drainage ordinances, 21 (35%) have partial drainage codes, and the remaining 23 (38%) did not have drainage regulations or their codes were not available for review (Figure 3). And 65%, 14%, and 16% of the local governments in New Castle, Kent, and Sussex counties, respectively, have extensive or partial stormwater drainage ordinances.



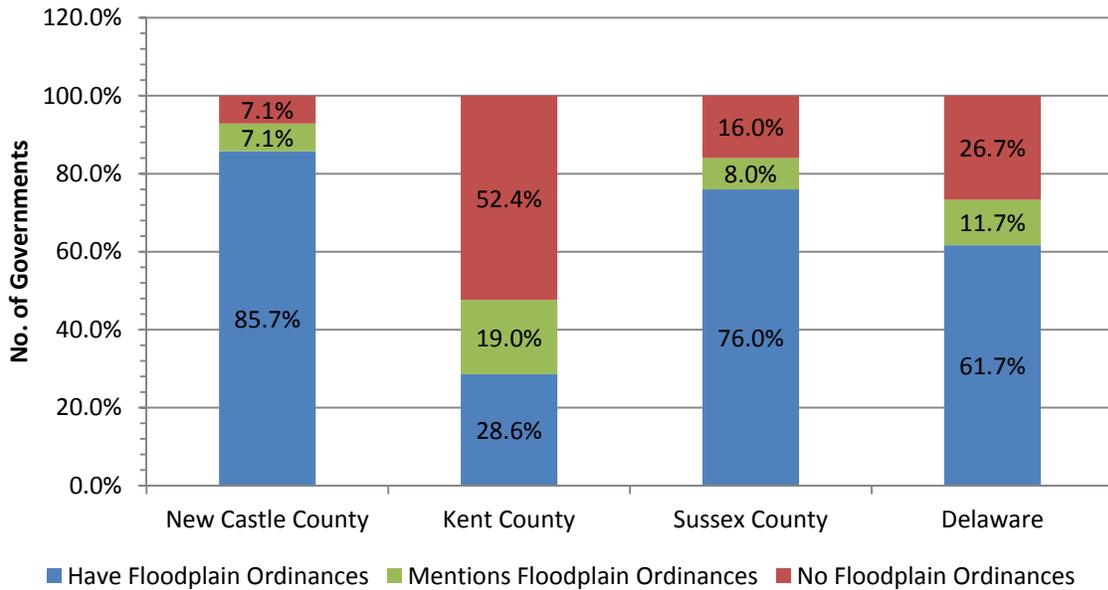
## Local Governments with Floodplain Ordinances

### State of Delaware



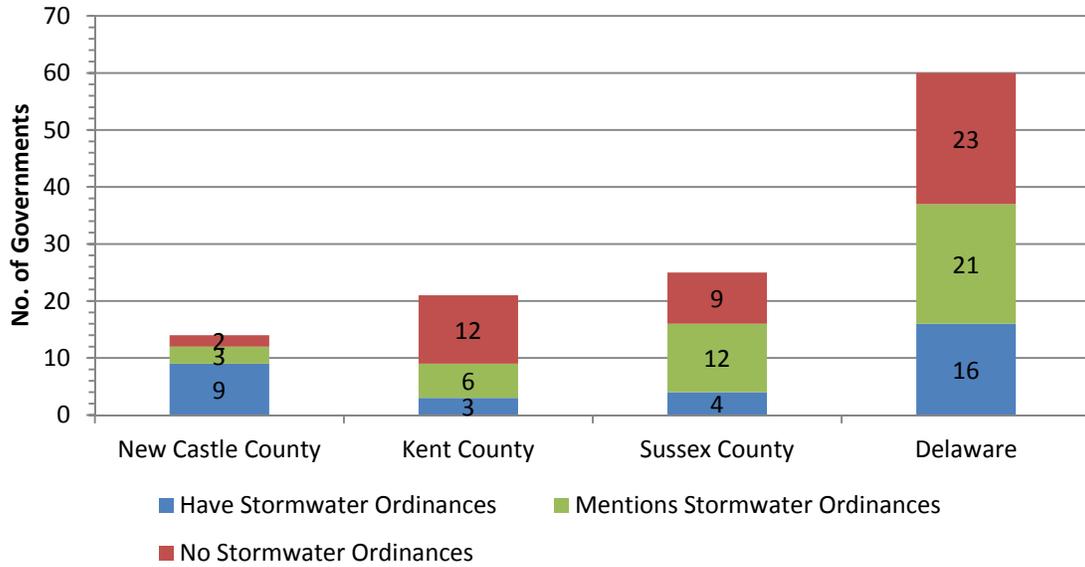
## Local Governments with Floodplain Ordinances

### State of Delaware

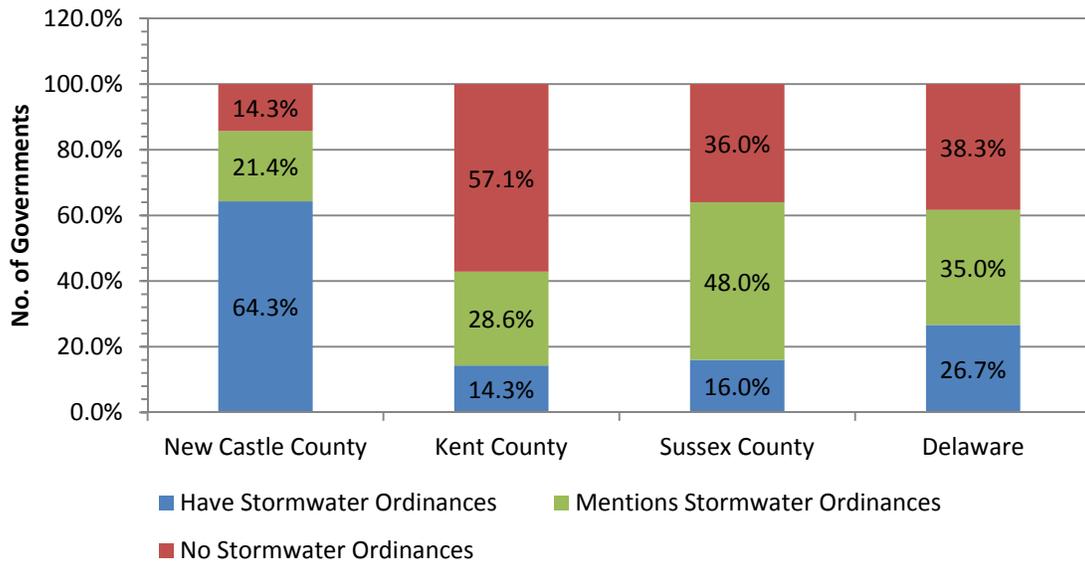


**Figure 2.** Local governments with floodplain ordinances in Delaware

### Local Governments with Stormwater Ordinances State of Delaware



### Local Governments with Stormwater Ordinances State of Delaware



**Figure 3.** Local governments with stormwater ordinances in Delaware

## **New Castle County**

Of the fourteen governments in New Castle County, including the county itself, we evaluated 11 ordinance codes to determine compliance with the proposed Senate Bill 64 floodplain and drainage standards. Three municipalities not evaluated were Bellefonte, Odessa, and Newark. We did not evaluate Bellefonte and Odessa because they did not have codes readily available online for public use. We did not evaluate Newark's municipal code because the city with assistance by Gerald Kauffman with the UD Water Resources Agency performed a separate evaluation for consistency with the standards. Arden, Ardencroft, or Ardentown utilize New Castle County's Uniform Development Code, therefore these towns meet the same floodplain and drainage standards as the county.

Each code was evaluated for compliance with the SB64 minimum floodplain and drainage standards. Of 11 governments evaluated in New Castle County, no municipality met floodplain standard 11 (crawl space elevation), 12 (subdivision of floodplain land), and 15 (incorporate FEMA technical bulletins into local regulations). New Castle County, Arden, Ardencroft, and Ardentown comprehensively met most of the SB64 standards. The rest of the municipalities met only 3 or 4 floodplain standards. All of the 11 local governments in New Castle County except for Elsmere met floodplain standard 9 (prohibits exempting areas with shallow fill above the Base Flood Elevation) from floodplain standards.

In the drainage standards evaluation, just 5 governments met at least one standard: New Castle County, Arden, Ardencroft, Ardentown, and Newport met with all but standard 2 (prohibits willful or negligent obstruction of drainage conveyances). Newport met drainage standard 5 (submission of a topographic plan for construction activities greater than 5,000 square feet).

**Table 1.** Review of floodplain and drainage standards in New Castle County

Government	Floodplain Standards															Drainage Standards						
	1	2	3	4	5	6	7	7a	8	9	10	11	12	13	14	15	1	2	3	4	5	6
New Castle Co.	Y	Y	Y	Y	Y	Y	Y		Y	Y	Y			Y			Y		Y	Y	Y	Y
Arden	Y	Y	Y	Y	Y	Y	Y		Y	Y	Y			Y			Y		Y	Y	Y	Y
Ardencroft	Y	Y	Y	Y	Y	Y	Y		Y	Y	Y			Y			Y		Y	Y	Y	Y
Ardentown	Y	Y	Y	Y	Y	Y	Y		Y	Y	Y			Y			Y		Y	Y	Y	Y
Bellefonte <sup>A</sup>																						
Delaware City					Y	Y				Y	Y											
Elsmere						Y					Y			Y								
Middletown										Y	Y				Y							
New Castle								Y	Y	Y					Y							
Newark <sup>B</sup>																						
Newport										Y	Y				Y						Y	
Odessa <sup>A</sup>																						
Townsend		Y								Y				Y								
Wilmington								Y		Y					Y							
Total	4	5	4	4	5	6	4	2	5	10	8	0	0	5	5	0	4	0	4	4	5	4

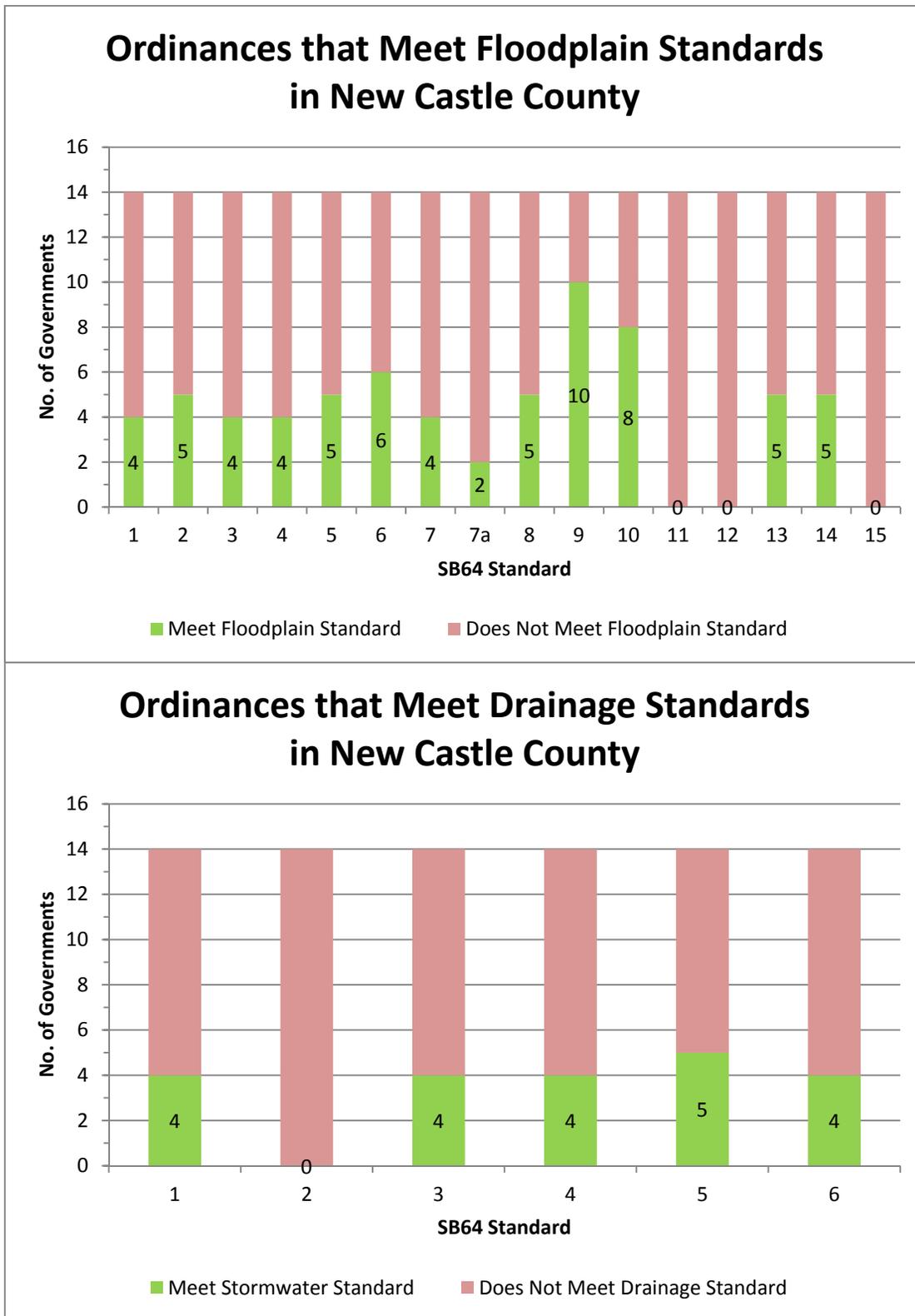
A. Bellefonte and Odessa not yet reviewed. B. Newark reviewed by the City with assistance by UDWRA.

*Floodplain:*

1. Flood study required in unmapped floodplains.
2. Flood study required in Zone A (no BFE) FEMA mapped floodplains.
3. Only FEMA approved and BFE data on record plans and development documents.
4. Use accepted base flood elevations in building permit application documents.
5. Floodplain information included on permitting documentation.
6. Require use of elevation and flood proofing certificates.
7. Require 18 inches of freeboard. 7a. Require one foot of freeboard.
8. Require 18 inches of freeboard for manufactured homes.
9. Shallow fill above BFE will not exempt a structure from floodplain regulations.
10. Hydrostatic vents required.
11. Prohibit below-grade crawl spaces or enclosures.
12. Newly subdivided floodplain shall remain deed restricted open space.
13. Prohibit new non-water dependent structure in floodplains on new lots.
14. Prohibit encroachments that would cause more than 0.1 foot of rise without compensation.
15. Incorporate FEMA technical bulletins in local floodplain regulations.

*Drainage:*

1. Adequate easements required.
2. Obstruction prohibited.
3. Conveyance systems meet 10-year storm event.
4. Lot grading away from buildings.
5. Topographic plan submittal.
6. As-built submittal.



**Figure 4.** Ordinances that meet floodplain and drainage standards in New Castle County.

## **Kent County**

Out of 21 governments in and including Kent County, 11 had codes not immediately available for review including Bowers Beach, Farmington, Frederica, Hartly, Kenton, Leipsic, Little Creek, Magnolia, Viola, Woodside, and Wyoming. Six municipalities - Farmington, Hartly, Kenton, Leipsic, Little Creek, and Woodside - did not have a website to obtain the code online.

Of the 10 codes evaluated in Kent County, none met standards 1 (Flood study required in unmapped floodplains), 7 (require 18 inches or 12 inches of freeboard), 8 (Require 18 inches of freeboard for manufactured homes), 9 (shallow fill above BFE will not exempt a structure from floodplain regulations), 11 (prohibit below-grade crawl spaces or enclosures), or 15 (Incorporate FEMA technical bulletins in local floodplain regulations). None of the municipalities met standard 7 (18 inches of freeboard), however, 3 governments (Kent County, Harrington, and Milford) met standard 7a (12 inches of freeboard). Only Kent County and Harrington met standard 2 (submission of a flood study for development activities in Zone A for FEMA approval). Seven of 10 governments evaluated met standard 4 (requires accepted base flood elevations in building permit application documents) and 3 did not, Clayton, Houston, and Smyrna. Four governments comply with floodplain standard 12 (conserves deed restricted open space). Kent County has the most comprehensive ordinance that met most of the floodplain standards while Houston does not yet meet any standard.

Every one of the ordinances evaluated in Kent County met at least 1 drainage standard. Only Smyrna met drainage standard 3 (requires conveyance systems to be designed for minimum 10-year storm events. As in New Castle County, drainage standard 5 (requiring submission of a topographic plan for construction activity greater than 5,000 square feet) was the most frequently met standard by Kent County governments. Cheswold and Felton have the most comprehensive drainage ordinances as both met every drainage standard but No. 3. Houston met just drainage standard 5.

**Table 2.** Review of floodplain and drainage standards in Kent County

Government	Floodplain Standards															Drainage Standards						
	1	2	3	4	5	6	7	7a	8	9	10	11	12	13	14	15	1	2	3	4	5	6
Kent County		Y	Y	Y	Y			Y			Y		Y		Y		Y			Y	Y	
Bowers Beach																						
Camden			Y	Y	Y	Y					Y		Y	Y	Y		Y			Y	Y	Y
Cheswold			Y	Y	Y						Y		Y	Y			Y	Y		Y	Y	Y
Clayton																	Y				Y	Y
Dover				Y		Y					Y				Y							
Farmington																						
Felton			Y	Y	Y									Y	Y		Y	Y		Y	Y	Y
Frederica																						
Harrington		Y	Y	Y		Y		Y			Y				Y			Y			Y	Y
Hartly																						
Houston																					Y	
Kenton																						
Leipsic																						
Little Creek																						
Magnolia																						
Milford			Y	Y	Y	Y		Y			Y		Y		Y		Y	Y				
Smyrna					Y												Y		Y		Y	Y
Viola																						
Woodside																						
Wyoming																						
<b>Total</b>	<b>0</b>	<b>2</b>	<b>6</b>	<b>7</b>	<b>6</b>	<b>4</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>0</b>	<b>4</b>	<b>3</b>	<b>6</b>	<b>0</b>	<b>7</b>	<b>4</b>	<b>1</b>	<b>4</b>	<b>8</b>	<b>6</b>

Ordinances for Bowers Beach, Farmington, Frederica, Hartly, Kenton, Leipsic, Little Creek, Magnolia, Viola, Woodside, and Wyoming not available for review yet.

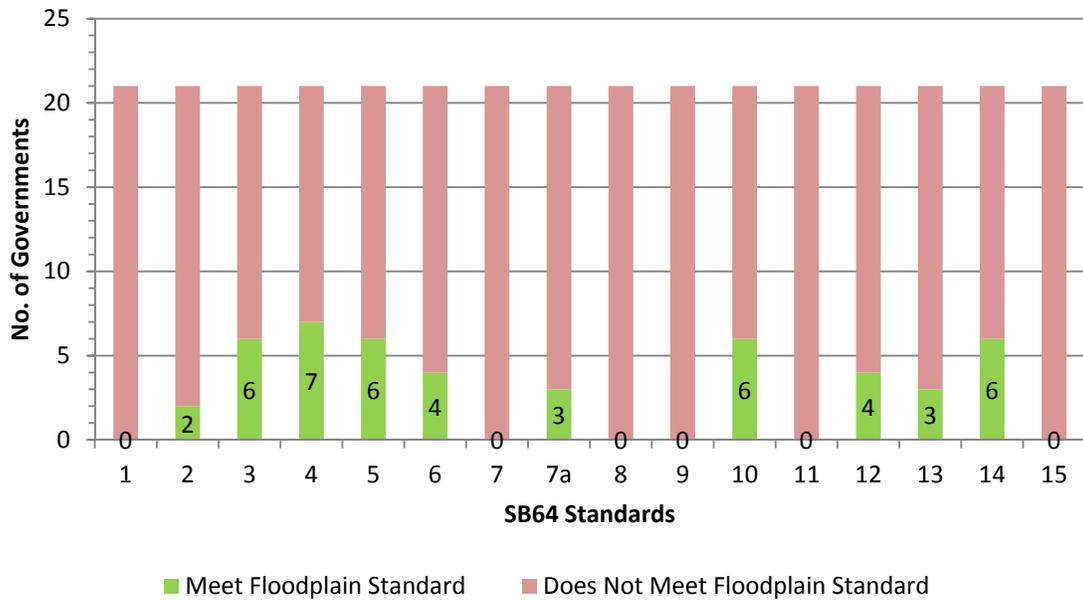
*Floodplain:*

1. Flood study required in unmapped floodplains.
2. Flood study required in Zone A (no BFE) FEMA mapped floodplains.
3. Only FEMA approved and BFE data on record plans and development documents.
4. Use accepted base flood elevations in building permit application documents.
5. Floodplain information included on permitting documentation.
6. Require use of elevation and flood proofing certificates.
7. Require 18 inches of freeboard. 7a. Require one foot of freeboard.
8. Require 18 inches of freeboard for manufactured homes.
9. Shallow fill above BFE will not exempt a structure from floodplain regulations.
10. Hydrostatic vents required.
11. Prohibit below-grade crawl spaces or enclosures.
12. Newly subdivided floodplain shall remain deed restricted open space.
13. Prohibit new non-water dependent structure in floodplains on new lots.
14. Prohibit encroachments that would cause more than 0.1 foot of rise without compensation.
15. Incorporate FEMA technical bulletins in local floodplain regulations.

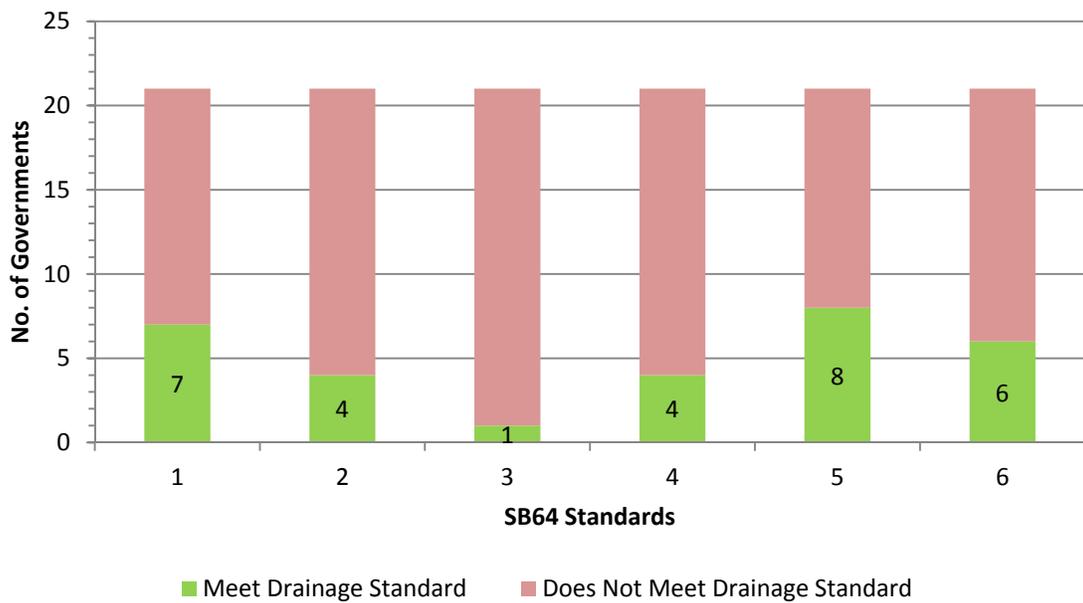
*Drainage:*

1. Adequate easements required.
2. Obstruction prohibited.
3. Conveyance systems meet 10-year storm event.
4. Lot grading away from buildings.
5. Topographic plan submittal.
6. As-built submittal.

### Ordinances that Meet Floodplain Standards in Kent County



### Ordinances that Meet Drainage Standards in Kent County



**Figure 5.** Ordinances that meet floodplain and drainage standards in Kent County.

## Sussex County

In Sussex County, 20 of 25 local government codes were evaluated for consistency with the SB64 floodplain and drainage standards. Ordinances for Bethel, Delmar, Ellendale, Frankford, and Slaughter Beach were unavailable for review. Ellendale is the only municipality of the 5 without a website.

None of the 20 Sussex County codes evaluated met floodplain standards 2 (flood study required in Zone A FEMA mapped floodplains), 9 (Shallow fill above BFE will not exempt a structure from floodplain regulations), 11 (prohibit below-grade crawl spaces or enclosures), 12 (newly subdivided floodplain shall remain deed restricted open space), 13 (Prohibit new non-water dependent structure in floodplains on new lots), and 15 (incorporate FEMA technical bulletins in local floodplain regulations). Floodplain standards 1 and 6 are met the most infrequently. Only Sussex County met standard 1 (requires a flood study in unmapped floodplains). Bethany Beach was the only government that met standard 6 (requires elevation and flood-proofing certificates). Standard 5 (floodplain information included on permitting documentation) was met by 18 of the 21 codes evaluated. Ocean View and Rehoboth Beach have the only ordinances that do not meet floodplain standard 5. Standards 3 (only FEMA approved and BFE data on record plans and development documents) and 4 (use accepted base flood elevations in building permit application documents) are met by 17 of the evaluated ordinances. Sussex County, Greenwood, and Rehoboth Beach do not meet standards 3 and 4. Milton has the most comprehensive floodplain ordinance as it meets 8 of the standards.

Of the 20 ordinances evaluated, Fenwick Island, Laurel, and Lewes did not meet any drainage standards. Standard 3 (only FEMA approved and BFE data on record plans and development documents) is the only drainage standard not met by any ordinance. As in New Castle County and Kent Count, standard 5 (floodplain information included on permitting documentation) is the most frequently met drainage standard, met by 13 Sussex County governments. Dewey Beach, Fenwick Island, Greenwood, Henlopen Acres, Laurel, Lewes, and Seaford do not meet drainage standard 5. Bethany Beach is the most comprehensive drainage ordinance in Sussex County as it met all but drainage standard 3 (only FEMA approved and BFE data on record plans and development documents).

**Table 3.** Review of floodplain and drainage standards in Sussex County

Government	Floodplain Standards															Drainage Standards						
	1	2	3	4	5	6	7	7a	8	9	10	11	12	13	14	15	1	2	3	4	5	6
Sussex Co.	Y				Y						Y				Y		Y				Y	
Bethany Bch.			Y	Y	Y	Y											Y	Y		Y	Y	Y
Bethel																						
Blades			Y	Y	Y						Y						Y				Y	
Bridgeville			Y	Y	Y						Y				Y		Y				Y	Y
Dagsboro			Y	Y	Y												Y			Y	Y	
Delmar																						
Dewey Beach			Y	Y	Y			Y			Y									Y		
Ellendale																						
Fenwick Island			Y	Y	Y			Y			Y											
Frankford																						
Georgetown			Y	Y	Y						Y										Y	Y
Greenwood					Y						Y				Y							Y
Henlopen Acres			Y	Y	Y			Y	Y		Y				Y							
Laurel			Y	Y	Y						Y				Y							
Lewes			Y	Y	Y						Y											Y
Millsboro			Y	Y	Y						Y				Y					Y	Y	
Millville			Y	Y	Y			Y							Y		Y				Y	Y
Milton			Y	Y	Y			Y	Y	Y	Y				Y						Y	Y
Ocean View			Y	Y													Y			Y	Y	Y
Rehoboth Bch								Y			Y										Y	
Seaford			Y	Y	Y						Y							Y				
Selbyville			Y	Y	Y						Y				Y						Y	
Slaughter Bch																						
S. Bethany			Y	Y	Y						Y						Y			Y	Y	Y
<b>Total</b>	<b>1</b>	<b>0</b>	<b>17</b>	<b>17</b>	<b>18</b>	<b>1</b>	<b>3</b>	<b>4</b>	<b>2</b>	<b>0</b>	<b>16</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>9</b>	<b>0</b>	<b>8</b>	<b>2</b>	<b>0</b>	<b>6</b>	<b>13</b>	<b>9</b>

Bethel, Delmar, Ellendale, Frankford, and Slaughter Beach ordinances not available for review yet.

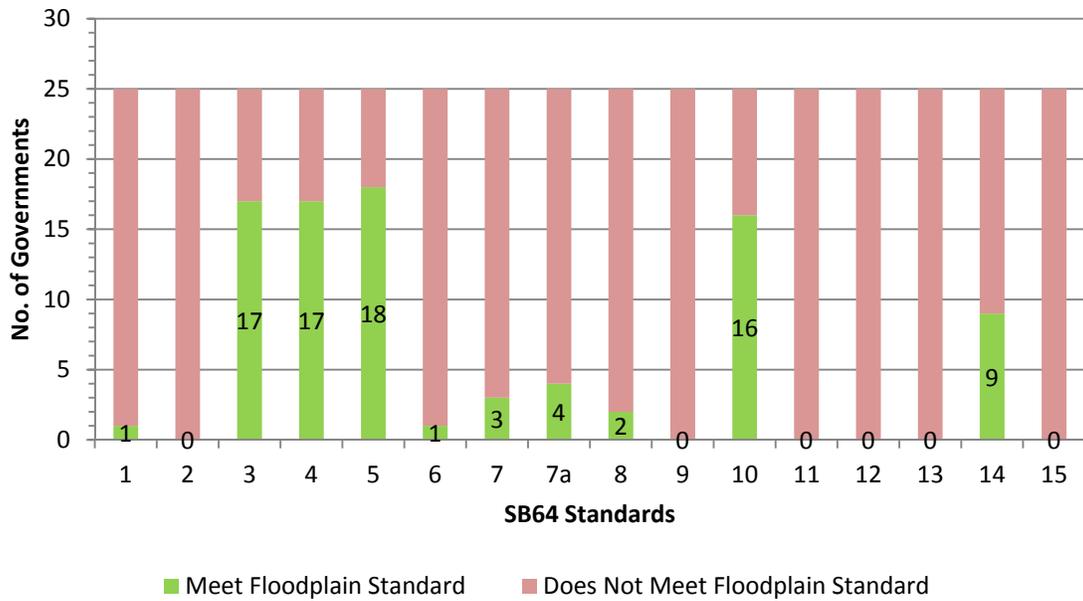
*Floodplain:*

1. Flood study required in unmapped floodplains.
2. Flood study required in Zone A (no BFE) FEMA mapped floodplains.
3. Only FEMA approved and BFE data on record plans and development documents.
4. Use accepted base flood elevations in building permit application documents.
5. Floodplain information included on permitting documentation.
6. Require use of elevation and flood proofing certificates.
7. Require 18 inches of freeboard. 7a. Require one foot of freeboard.
8. Require 18 inches of freeboard for manufactured homes.
9. Shallow fill above BFE will not exempt a structure from floodplain regulations.
10. Hydrostatic vents required.
11. Prohibit below-grade crawl spaces or enclosures.
12. Newly subdivided floodplain shall remain deed restricted open space.
13. Prohibit new non-water dependent structure in floodplains on new lots.
14. Prohibit encroachments that would cause more than 0.1 foot of rise without compensation.
15. Incorporate FEMA technical bulletins in local floodplain regulations.

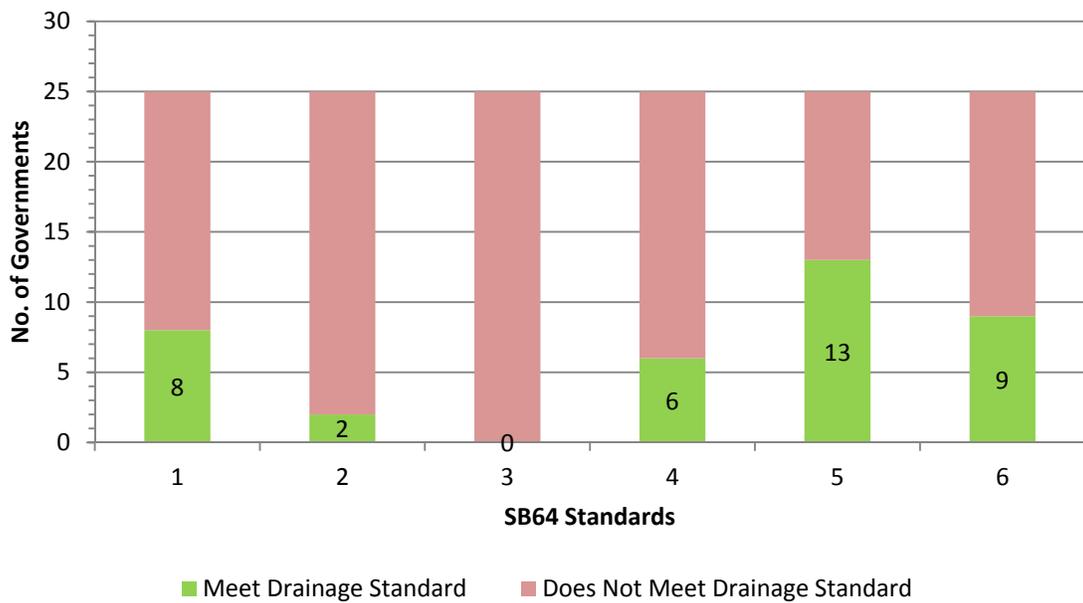
*Drainage:*

1. Adequate easements required.
2. Obstruction prohibited.
3. Conveyance systems meet 10-year storm event.
4. Lot grading away from buildings.
5. Topographic plan submittal.
6. As-built submittal.

### Ordinances that Meet Floodplain Standards in Sussex County



### Ordinances that Meet Drainage Standards in Sussex County



**Figure 6.** Ordinances that meet floodplain and drainage standards in Sussex County.

**Appendix A– Senate Bill 64 Government Checklists**

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## Senate Bill 64 Floodplain and Drainage Standards Checklist (DE)

Community: New Castle County County: New Castle State: DE CID: \_\_\_\_\_

State Reviewer: UDWRA Date: 1/11/13 State Determination: \_\_\_\_\_

**Flood Zones:**     A     AE     AE (w/o FW)     AO     VE

Item Description	State Review	Revised
<b>Senate Bill 64 Floodplain Standards</b>		
1. For all new development activities which exceed 50 lots or 5 acres in locations contiguous to streams without a FEMA-delineated floodplain, a flood study shall be conducted.	Meets Standard	
2. For all new development which exceed 50 lots or 5 acres in Zone A FEMA floodplains, a flood study shall be submitted to FEMA for approval prior to record plan approval.	Sec. 40.10.312	
3. Only FEMA approved floodplain and BFE data shall be shown on record plans and development documents.	Sec. 40.10.312	
4. Only base flood elevation approved by county, municipality or FEMA may be used in building permit application.	Unsure if meets std. Sec. 40.10.313	
5. Floodplain information must be included on permitting documentation.	Unsure if meets std. Sec. 40.10.313	
6. Require use of FEMA elevation certificate and flood-proofing certificate.	Sec. 40.10.316 No floodproofing certificate	
7. Require 18 inches of freeboard for all new construction and substantial improvements.	Sec. 40.10.316 does not contain dry-floodproofing in lieu of freeboard	
7a. Require 12 inches of freeboard for all new construction and substantial improvements.	NA	
8. Require 18 inches of freeboard for manufactures homes.	Sec. 40.10.317 not specified to include basement or new/substantially improved	
9. Fill placed in the floodplain which results in land having an elevation less than 18 inches above base flood elevation will not result in a relaxation of floodplain standards.	Yes because doesn't mention exemptions	
10. Hydrostatic vents shall be required within 1 foot grade.	Sec. 40.10.316 specifically for parking, building access or storage in other than the basement	
11. Elevation of the lowest floor beneath an elevated building, must be above lowest adjacent grade at least one side.		
12. Prohibit subdividing land in floodplain. Newly subdivided floodplain shall remain deed restricted open space.		
13. Prohibit new non-water dependent structures dependent structures in floodplains in newly subdivided lands.	Sec. 40.10.313 Specifies residential lots	
14. Prohibit encroachments that would cause more than 0.1 foot of rise without compensation.		
15. Incorporate FEMA technical bulletins in floodplain regs.		
<b>Senate Bill 64 Drainage Standards</b>		
1. Easements of an adequate width shall be required over drainage conveyance systems within any proposed subdivision.	Does not meet std. 12.004.005	
2. The willful or negligent obstruction of any drainage conveyance shall be prohibited.	Does not meet std. 12.03.001	
3. Drainage conveyance systems within proposed subdivisions shall meet the minimum 10-year storm event.	Unsure if meets std. 12.03.003 100 year flood	
4. Lot grading shall ensure adequate drainage away from buildings and accessory structures without creating an adverse impact to adjacent structures or lands.	12.03.006 Residential lots	
5. A topographic plan submittal shall be required for all construction activity greater than 5,000 square feet.	Does not meet std. 12.04.007	
6. An as-built submittal shall be required for any construction with an approved topographic plan.	Unsure if meets std.	

# Senate Bill 64 Floodplain and Drainage Standards Checklist (DE)

Community: Bellefonte County: New Castle State: DE CID: \_\_\_\_\_

State Reviewer: UDWRA Date: 1/11/13 State Determination: \_\_\_\_\_

**Flood Zones:**    A    AE    AE (w/o FW)    AO    VE

Item Description	State Review	Revised
<b>Senate Bill 64 Floodplain Standards</b>		
1. For all new development activities which exceed 50 lots or 5 acres in locations contiguous to streams without a FEMA-delineated floodplain, a flood study shall be conducted.		
2. For all new development which exceed 50 lots or 5 acres in Zone A FEMA floodplains, a flood study shall be submitted to FEMA for approval prior to record plan approval.		
3. Only FEMA approved floodplain and BFE data shall be shown on record plans and development documents.		
4. Only base flood elevation approved by county, municipality or FEMA may be used in building permit application.		
5. Floodplain information must be included on permitting documentation.		
6. Require use of FEMA elevation certificate and flood-proofing certificate.		
7. Require 18 inches of freeboard for all new construction and substantial improvements.		
7a. Require 12 inches of freeboard for all new construction and substantial improvements.		
8. Require 18 inches of freeboard for manufactures homes.		
9. Fill placed in the floodplain which results in land having an elevation less than 18 inches above base flood elevation will not result in a relaxation of floodplain standards.		
10. Hydrostatic vents shall be required within 1 foot grade.		
11. Elevation of the lowest floor beneath an elevated building, must be above lowest adjacent grade at least one side.		
12. Prohibit subdividing land in floodplain. Newly subdivided floodplain shall remain deed restricted open space.		
13. Prohibit new non-water dependent structures dependent structures in floodplains in newly subdivided lands.		
14. Prohibit encroachments that would cause more than 0.1 foot of rise without compensation.		
15. Incorporate FEMA technical bulletins in local floodplain regulations.		

<b>Senate Bill 64 Drainage Standards</b>		
1. Easements of an adequate width shall be required over drainage conveyance systems within any proposed subdivision.		
2. The willful or negligent obstruction of any drainage conveyance shall be prohibited.		
3. Drainage conveyance systems within proposed subdivisions shall meet the minimum 10-year storm event.		
4. Lot grading shall ensure adequate drainage away from buildings and accessory structures without creating an adverse impact to adjacent structures or lands.		
5. A topographic plan submittal shall be required for all construction activity greater than 5,000 square feet.		
6. An as-built submittal shall be required for any construction with an approved topographic plan.		

# Senate Bill 64 Floodplain and Drainage Standards Checklist (DE)

Community: Delaware City County: New Castle State: DE CID: \_\_\_\_\_

State Reviewer: UDWRA Date: 1/11/13 State Determination: \_\_\_\_\_

**Flood Zones:**    A    AE    AE (w/o FW)    AO    VE

Item Description	State Review	Revised
<b>Senate Bill 64 Floodplain Standards</b>		
1. For all new development activities which exceed 50 lots or 5 acres in locations contiguous to streams without a FEMA-delineated floodplain, a flood study shall be conducted.	Does not meet std. Section 48-24 Site plan necessary for development in floodplain	
2. For all new development which exceed 50 lots or 5 acres in Zone A FEMA floodplains, a flood study shall be submitted to FEMA for approval prior to record plan approval.	Does not meet std Section 48-24 Site plan necessary for development in floodplain	
3. Only FEMA approved floodplain and BFE data shall be shown on record plans and development documents.	Does not meet std Section 48-24 BFE info required: new devs of 5 lots or 2 acres (which is the lesser)	
4. Only base flood elevation approved by county, municipality or FEMA may be used in building permit application.	Section 48-23	
5. Floodplain information must be included on permitting documentation.	Section 48-23 Registered professional engineer	
6. Require use of FEMA elevation certificate and flood-proofing certificate.		
7. Require 18 inches of freeboard for all new construction and substantial improvements.		
7a. Require 12 inches of freeboard for all new construction and substantial improvements.		
8. Require 18 inches of freeboard for manufactures homes.		
9. Fill placed in the floodplain which results in land having an elevation less than 18 inches above base flood elevation will not result in a relaxation of floodplain standards.	Section 48-31 does not have mention of fill elevation	
10. Hydrostatic vents shall be required within 1 foot grade.	Section 48-31	
11. Elevation of the lowest floor beneath an elevated building, must be above lowest adjacent grade at least one side.		
12. Prohibit subdividing land in floodplain. Newly subdivided floodplain shall remain deed restricted open space.		
13. Prohibit new non-water dependent structures dependent structures in floodplains in newly subdivided lands.		
14. Prohibit encroachments that would cause more than 0.1 foot of rise without compensation.		
15. Incorporate FEMA technical bulletins in floodplain regs.		

<b>Senate Bill 64 Drainage Standards</b>		
1. Easements of an adequate width shall be required over drainage conveyance systems within any proposed subdivision.		
2. The willful or negligent obstruction of any drainage conveyance shall be prohibited.		
3. Drainage conveyance systems within proposed subdivisions shall meet the minimum 10-year storm event.		
4. Lot grading shall ensure adequate drainage away from buildings and accessory structures without creating an adverse impact to adjacent structures or lands.		
5. A topographic plan submittal shall be required for all construction activity greater than 5,000 square feet.		
6. An as-built submittal shall be required for any construction with an approved topographic plan.		

# Senate Bill 64 Floodplain and Drainage Standards Checklist (DE)

Community: Elsmere County: New Castle State: DE CID: \_\_\_\_\_

State Reviewer: UDWRA Date: 1/11/13 State Determination: \_\_\_\_\_

**Flood Zones:**    A    AE    AE (w/o FW)    AO    VE

Item Description	State Review	Revised
<b>Senate Bill 64 Floodplain Standards</b>		
1. For all new development activities which exceed 50 lots or 5 acres in locations contiguous to streams without a FEMA-delineated floodplain, a flood study shall be conducted.		
2. For all new development which exceed 50 lots or 5 acres in Zone A FEMA floodplains, a flood study shall be submitted to FEMA for approval prior to record plan approval.		
3. Only FEMA approved floodplain and BFE data shall be shown on record plans and development documents.		
4. Only base flood elevation approved by county, municipality or FEMA may be used in building permit application.		
5. Floodplain information must be included on permitting documentation.		
6. Require use of FEMA elevation certificate and flood-proofing certificate.	225-11 FEMA approved??	
7. Require 18 inches of freeboard for all new construction and substantial improvements.		
7a. Require 12 inches of freeboard for all new construction and substantial improvements.		
8. Require 18 inches of freeboard for manufactures homes.		
9. Fill placed in the floodplain which results in land having an elevation less than 18 inches above base flood elevation will not result in a relaxation of floodplain standards.		
10. Hydrostatic vents shall be required within 1 foot grade.	225-22	
11. Elevation of the lowest floor beneath an elevated building, must be above lowest adjacent grade at least one side.		
12. Prohibit subdividing land in floodplain. Newly subdivided floodplain shall remain deed restricted open space.		
13. Prohibit new non-water dependent structures dependent structures in floodplains in newly subdivided lands.		
14. Prohibit encroachments that would cause more than 0.1 foot of rise without compensation.	225-22	
15. Incorporate FEMA technical bulletins in floodplain regs.		

<b>Senate Bill 64 Drainage Standards</b>		
1. Easements of an adequate width shall be required over drainage conveyance systems within any proposed subdivision.		
2. The willful or negligent obstruction of any drainage conveyance shall be prohibited.		
3. Drainage conveyance systems within proposed subdivisions shall meet the minimum 10-year storm event.		
4. Lot grading shall ensure adequate drainage away from buildings and accessory structures without creating an adverse impact to adjacent structures or lands.		
5. A topographic plan submittal shall be required for all construction activity greater than 5,000 square feet.		
6. An as-built submittal shall be required for any construction with an approved topographic plan.		

# Senate Bill 64 Floodplain and Drainage Standards Checklist (DE)

Community: Middletown County: New Castle State: DE CID: \_\_\_\_\_

State Reviewer: UDWRA Date: 1/11/13 State Determination: \_\_\_\_\_

**Flood Zones:**    A    AE    AE (w/o FW)    AO    VE

Item Description	State Review	Revised
<b>Senate Bill 64 Floodplain Standards</b>		
1. For all new development activities which exceed 50 lots or 5 acres in locations contiguous to streams without a FEMA-delineated floodplain, a flood study shall be conducted.		
2. For all new development which exceed 50 lots or 5 acres in Zone A FEMA floodplains, a flood study shall be submitted to FEMA for approval prior to record plan approval.		
3. Only FEMA approved floodplain and BFE data shall be shown on record plans and development documents.		
4. Only base flood elevation approved by county, municipality or FEMA may be used in building permit application.		
5. Floodplain information must be included on permitting documentation.		
6. Require use of FEMA elevation certificate and flood-proofing certificate.		
7. Require 18 inches of freeboard for all new construction and substantial improvements.		
7a. Require 12 inches of freeboard for all new construction and substantial improvements.		
8. Require 18 inches of freeboard for manufactures homes.		
9. Fill placed in the floodplain which results in land having an elevation less than 18 inches above base flood elevation will not result in a relaxation of floodplain standards.	Unsure if meets std. 78-17 Drainage Std #4??	
10. Hydrostatic vents shall be required within 1 foot grade.		
11. Elevation of the lowest floor beneath an elevated building, must be above lowest adjacent grade at least one side.		
12. Prohibit subdividing land in floodplain. Newly subdivided floodplain shall remain deed restricted open space.		
13. Prohibit new non-water dependent structures dependent structures in floodplains in newly subdivided lands.		
14. Prohibit encroachments that would cause more than 0.1 foot of rise without compensation.	78-9	
15. Incorporate FEMA technical bulletins in floodplain regs.		

<b>Senate Bill 64 Drainage Standards</b>		
1. Easements of an adequate width shall be required over drainage conveyance systems within any proposed subdivision.		
2. The willful or negligent obstruction of any drainage conveyance shall be prohibited.		
3. Drainage conveyance systems within proposed subdivisions shall meet the minimum 10-year storm event.		
4. Lot grading shall ensure adequate drainage away from buildings and accessory structures without creating an adverse impact to adjacent structures or lands.	Unsure if meets standard 78-17	
5. A topographic plan submittal shall be required for all construction activity greater than 5,000 square feet.		
6. An as-built submittal shall be required for any construction with an approved topographic plan.		

# Senate Bill 64 Floodplain and Drainage Standards Checklist (DE)

Community: New Castle County: New Castle State: DE CID: \_\_\_\_\_

State Reviewer: UDWRA Date: 1/11/13 State Determination: \_\_\_\_\_

**Flood Zones:**    A    AE    AE (w/o FW)    AO    VE

Item Description	State Review	Revised
<b>Senate Bill 64 Floodplain Standards</b>		
1. For all new development activities which exceed 50 lots or 5 acres in locations contiguous to streams without a FEMA-delineated floodplain, a flood study shall be conducted.		
2. For all new development which exceed 50 lots or 5 acres in Zone A FEMA floodplains, a flood study shall be submitted to FEMA for approval prior to record plan approval.		
3. Only FEMA approved floodplain and BFE data shall be shown on record plans and development documents.		
4. Only base flood elevation approved by county, municipality or FEMA may be used in building permit application.		
5. Floodplain information must be included on permitting documentation.		
6. Require use of FEMA elevation certificate and flood-proofing certificate.		
7. Require 18 inches of freeboard for all new construction and substantial improvements.		
7a. Require 12 inches of freeboard for all new construction and substantial improvements.	130-6	
8. Require 18 inches of freeboard for manufactures homes.		
9. Fill placed in the floodplain which results in land having an elevation less than 18 inches above base flood elevation will not result in a relaxation of floodplain standards.	Unsure if meets std. 130-6 No exemptions mentioned	
10. Hydrostatic vents shall be required within 1 foot grade.		
11. Elevation of the lowest floor beneath an elevated building, must be above lowest adjacent grade at least one side.		
12. Prohibit subdividing land in floodplain. Newly subdivided floodplain shall remain deed restricted open space.		
13. Prohibit new non-water dependent structures dependent structures in floodplains in newly subdivided lands.		
14. Prohibit encroachments that would cause more than 0.1 foot of rise without compensation.		
15. Incorporate FEMA technical bulletins in local floodplain regulations.		

<b>Senate Bill 64 Drainage Standards</b>		
1. Easements of an adequate width shall be required over drainage conveyance systems within any proposed subdivision.		
2. The willful or negligent obstruction of any drainage conveyance shall be prohibited.		
3. Drainage conveyance systems within proposed subdivisions shall meet the minimum 10-year storm event.		
4. Lot grading shall ensure adequate drainage away from buildings and accessory structures without creating an adverse impact to adjacent structures or lands.		
5. A topographic plan submittal shall be required for all construction activity greater than 5,000 square feet.		
6. An as-built submittal shall be required for any construction with an approved topographic plan.		

# Senate Bill 64 Floodplain and Drainage Standards Checklist (DE)

Community: Newport County: New Castle State: DE CID: \_\_\_\_\_

State Reviewer: UDWRA Date: 1/11/13 State Determination: \_\_\_\_\_

**Flood Zones:**    A    AE    AE (w/o FW)    AO    VE

Item Description	State Review	Revised
<b>Senate Bill 64 Floodplain Standards</b>		
1. For all new development activities which exceed 50 lots or 5 acres in locations contiguous to streams without a FEMA-delineated floodplain, a flood study shall be conducted.		
2. For all new development which exceed 50 lots or 5 acres in Zone A FEMA floodplains, a flood study shall be submitted to FEMA for approval prior to record plan approval.		
3. Only FEMA approved floodplain and BFE data shall be shown on record plans and development documents.		
4. Only base flood elevation approved by county, municipality or FEMA may be used in building permit application.		
5. Floodplain information must be included on permitting documentation.		
6. Require use of FEMA elevation certificate and flood-proofing certificate.		
7. Require 18 inches of freeboard for all new construction and substantial improvements.		
7a. Require 12 inches of freeboard for all new construction and substantial improvements.		
8. Require 18 inches of freeboard for manufactures homes.		
9. Fill placed in the floodplain which results in land having an elevation less than 18 inches above base flood elevation will not result in a relaxation of floodplain standards.	600-82	
10. Hydrostatic vents shall be required within 1 foot grade.	600-82	
11. Elevation of the lowest floor beneath an elevated building, must be above lowest adjacent grade at least one side.		
12. Prohibit subdividing land in floodplain. Newly subdivided floodplain shall remain deed restricted open space.		
13. Prohibit new non-water dependent structures dependent structures in floodplains in newly subdivided lands.		
14. Prohibit encroachments that would cause more than 0.1 foot of rise without compensation.	600-80	
15. Incorporate FEMA technical bulletins in local floodplain regulations.		
<b>Senate Bill 64 Drainage Standards</b>		
1. Easements of an adequate width shall be required over drainage conveyance systems within any proposed subdivision.		
2. The willful or negligent obstruction of any drainage conveyance shall be prohibited.		
3. Drainage conveyance systems within proposed subdivisions shall meet the minimum 10-year storm event.		
4. Lot grading shall ensure adequate drainage away from buildings and accessory structures without creating an adverse impact to adjacent structures or lands.		
5. A topographic plan submittal shall be required for all construction activity greater than 5,000 square feet.	600-48, 600-16, 600-28	
6. An as-built submittal shall be required for any construction with an approved topographic plan.		

# Senate Bill 64 Floodplain and Drainage Standards Checklist (DE)

Community: Odessa County: New Castle State: DE CID: \_\_\_\_\_

State Reviewer: UDWRA Date: 1/11/13 State Determination: \_\_\_\_\_

**Flood Zones:**    A    AE    AE (w/o FW)    AO    VE

Item Description	State Review	Revised
<b>Senate Bill 64 Floodplain Standards</b>		
1. For all new development activities which exceed 50 lots or 5 acres in locations contiguous to streams without a FEMA-delineated floodplain, a flood study shall be conducted.		
2. For all new development which exceed 50 lots or 5 acres in Zone A FEMA floodplains, a flood study shall be submitted to FEMA for approval prior to record plan approval.		
3. Only FEMA approved floodplain and BFE data shall be shown on record plans and development documents.		
4. Only base flood elevation approved by county, municipality or FEMA may be used in building permit application.		
5. Floodplain information must be included on permitting documentation.		
6. Require use of FEMA elevation certificate and flood-proofing certificate.		
7. Require 18 inches of freeboard for all new construction and substantial improvements.		
7a. Require 12 inches of freeboard for all new construction and substantial improvements.		
8. Require 18 inches of freeboard for manufactures homes.		
9. Fill placed in the floodplain which results in land having an elevation less than 18 inches above base flood elevation will not result in a relaxation of floodplain standards.		
10. Hydrostatic vents shall be required within 1 foot grade.		
11. Elevation of the lowest floor beneath an elevated building, must be above lowest adjacent grade at least one side.		
12. Prohibit subdividing land in floodplain. Newly subdivided floodplain shall remain deed restricted open space.		
13. Prohibit new non-water dependent structures dependent structures in floodplains in newly subdivided lands.		
14. Prohibit encroachments that would cause more than 0.1 foot of rise without compensation.		
15. Incorporate FEMA technical bulletins in local floodplain regulations.		

<b>Senate Bill 64 Drainage Standards</b>		
1. Easements of an adequate width shall be required over drainage conveyance systems within any proposed subdivision.		
2. The willful or negligent obstruction of any drainage conveyance shall be prohibited.		
3. Drainage conveyance systems within proposed subdivisions shall meet the minimum 10-year storm event.		
4. Lot grading shall ensure adequate drainage away from buildings and accessory structures without creating an adverse impact to adjacent structures or lands.		
5. A topographic plan submittal shall be required for all construction activity greater than 5,000 square feet.		
6. An as-built submittal shall be required for any construction with an approved topographic plan.		

# Senate Bill 64 Floodplain and Drainage Standards Checklist (DE)

Community: Townsend County: New Castle State: DE CID: \_\_\_\_\_

State Reviewer: UDWRA Date: 1/11/13 State Determination: \_\_\_\_\_

**Flood Zones:**    A    AE    AE (w/o FW)    AO    VE

Item Description	State Review	Revised
<b>Senate Bill 64 Floodplain Standards</b>		
1. For all new development activities which exceed 50 lots or 5 acres in locations contiguous to streams without a FEMA-delineated floodplain, a flood study shall be conducted.		
2. For all new development which exceed 50 lots or 5 acres in Zone A FEMA floodplains, a flood study shall be submitted to FEMA for approval prior to record plan approval.	Unsure if meets standard Sec 104 Floodplain definition	
3. Only FEMA approved floodplain and BFE data shall be shown on record plans and development documents.		
4. Only base flood elevation approved by county, municipality or FEMA may be used in building permit application.		
5. Floodplain information must be included on permitting documentation.		
6. Require use of FEMA elevation certificate and flood-proofing certificate.		
7. Require 18 inches of freeboard for all new construction and substantial improvements.		
7a. Require 12 inches of freeboard for all new construction and substantial improvements.		
8. Require 18 inches of freeboard for manufactures homes.		
9. Fill placed in the floodplain which results in land having an elevation less than 18 inches above base flood elevation will not result in a relaxation of floodplain standards.	Sec 1103.C.2 No fill permitted in floodways or flood fringe	
10. Hydrostatic vents shall be required within 1 foot grade.		
11. Elevation of the lowest floor beneath an elevated building, must be above lowest adjacent grade at least one side.		
12. Prohibit subdividing land in floodplain. Newly subdivided floodplain shall remain deed restricted open space.		
13. Prohibit new non-water dependent structures dependent structures in floodplains in newly subdivided lands.	Sec 1103.C.1 "No structure shall intrude..."	
14. Prohibit encroachments that would cause more than 0.1 foot of rise without compensation.		
15. Incorporate FEMA technical bulletins in local floodplain regulations.		
<b>Senate Bill 64 Drainage Standards</b>		
1. Easements of an adequate width shall be required over drainage conveyance systems within any proposed subdivision.		
2. The willful or negligent obstruction of any drainage conveyance shall be prohibited.		
3. Drainage conveyance systems within proposed subdivisions shall meet the minimum 10-year storm event.		
4. Lot grading shall ensure adequate drainage away from buildings and accessory structures without creating an adverse impact to adjacent structures or lands.		
5. A topographic plan submittal shall be required for all construction activity greater than 5,000 square feet.		
6. An as-built submittal shall be required for any construction with an approved topographic plan.		

# Senate Bill 64 Floodplain and Drainage Standards Checklist (DE)

Community: Wilmington County: New Castle State: DE CID: \_\_\_\_\_

State Reviewer: UDWRA Date: 1/11/13 State Determination: \_\_\_\_\_

**Flood Zones:**    A    AE    AE (w/o FW)    AO    VE

Item Description	State Review	Revised
<b>Senate Bill 64 Floodplain Standards</b>		
1. For all new development activities which exceed 50 lots or 5 acres in locations contiguous to streams without a FEMA-delineated floodplain, a flood study shall be conducted.		
2. For all new development which exceed 50 lots or 5 acres in Zone A FEMA floodplains, a flood study shall be submitted to FEMA for approval prior to record plan approval.		
3. Only FEMA approved floodplain and BFE data shall be shown on record plans and development documents.		
4. Only base flood elevation approved by county, municipality or FEMA may be used in building permit application.		
5. Floodplain information must be included on permitting documentation.		
6. Require use of FEMA elevation certificate and flood-proofing certificate.		
7. Require 18 inches of freeboard for all new construction and substantial improvements.		
7a. Require 12 inches of freeboard for all new construction and substantial improvements.	48-436	
8. Require 18 inches of freeboard for manufactures homes.		
9. Fill placed in the floodplain which results in land having an elevation less than 18 inches above base flood elevation will not result in a relaxation of floodplain standards.	Within floodway	
10. Hydrostatic vents shall be required within 1 foot grade.		
11. Elevation of the lowest floor beneath an elevated building, must be above lowest adjacent grade at least one side.		
12. Prohibit subdividing land in floodplain. Newly subdivided floodplain shall remain deed restricted open space.		
13. Prohibit new non-water dependent structures dependent structures in floodplains in newly subdivided lands.		
14. Prohibit encroachments that would cause more than 0.1 foot of rise without compensation.		
15. Incorporate FEMA technical bulletins in local floodplain regulations.		
<b>Senate Bill 64 Drainage Standards</b>		
1. Easements of an adequate width shall be required over drainage conveyance systems within any proposed subdivision.		
2. The willful or negligent obstruction of any drainage conveyance shall be prohibited.		
3. Drainage conveyance systems within proposed subdivisions shall meet the minimum 10-year storm event.		
4. Lot grading shall ensure adequate drainage away from buildings and accessory structures without creating an adverse impact to adjacent structures or lands.		
5. A topographic plan submittal shall be required for all construction activity greater than 5,000 square feet.		
6. An as-built submittal shall be required for any construction with an approved topographic plan.		

# Senate Bill 64 Floodplain and Drainage Standards Checklist (DE)

Community: Kent County County: Kent State: DE CID: \_\_\_\_\_

State Reviewer: UDWRA Date: 1/11/13 State Determination: \_\_\_\_\_

**Flood Zones:**    A    AE    AE (w/o FW)    AO    VE

Item Description	State Review	Revised
<b>Senate Bill 64 Floodplain Standards</b>		
1. For all new development activities which exceed 50 lots or 5 acres in locations contiguous to streams without a FEMA-delineated floodplain, a flood study shall be conducted.		
2. For all new development which exceed 50 lots or 5 acres in Zone A FEMA floodplains, a flood study shall be submitted to FEMA for approval prior to record plan approval.	205-372.B.2	
3. Only FEMA approved floodplain and BFE data shall be shown on record plans and development documents.	205-371.A	
4. Only base flood elevation approved by county, municipality or FEMA may be used in building permit application.	205-371.A	
5. Floodplain information must be included on permitting documentation.	SALDO Appendix A	
6. Require use of FEMA elevation certificate and flood-proofing certificate.		
7. Require 18 inches of freeboard for all new construction and substantial improvements.		
7a. Require 12 inches of freeboard for all new construction and substantial improvements.	205-373.B.1.a	
8. Require 18 inches of freeboard for manufactures homes.		
9. Fill placed in the floodplain which results in land having an elevation less than 18 inches above base flood elevation will not result in a relaxation of floodplain standards.		
10. Hydrostatic vents shall be required within 1 foot grade.	205-373.B.1.c	
11. Elevation of the lowest floor beneath an elevated building, must be above lowest adjacent grade at least one side.		
12. Prohibit subdividing land in floodplain. Newly subdivided floodplain shall remain deed restricted open space.	187-57.B	
13. Prohibit new non-water dependent structures dependent structures in floodplains in newly subdivided lands.		
14. Prohibit encroachments that would cause more than 0.1 foot of rise without compensation.	205-372.A.1	
15. Incorporate FEMA technical bulletins in local floodplain regulations.		

<b>Senate Bill 64 Drainage Standards</b>		
1. Easements of an adequate width shall be required over drainage conveyance systems within any proposed subdivision.	187-65	
2. The willful or negligent obstruction of any drainage conveyance shall be prohibited.		
3. Drainage conveyance systems within proposed subdivisions shall meet the minimum 10-year storm event.		
4. Lot grading shall ensure adequate drainage away from buildings and accessory structures without creating an adverse impact to adjacent structures or lands.	187-53.B.3	
5. A topographic plan submittal shall be required for all construction activity greater than 5,000 square feet.	SALDO Appendix A	
6. An as-built submittal shall be required for any construction with an approved topographic plan.		

# Senate Bill 64 Floodplain and Drainage Standards Checklist (DE)

Community: Bowers Beach County: Kent State: DE CID: \_\_\_\_\_

State Reviewer: UDWRA Date: 1/11/13 State Determination: \_\_\_\_\_

**Flood Zones:**    A    AE    AE (w/o FW)    AO    VE

Item Description	State Review	Revised
<b>Senate Bill 64 Floodplain Standards</b>		
1. For all new development activities which exceed 50 lots or 5 acres in locations contiguous to streams without a FEMA-delineated floodplain, a flood study shall be conducted.		
2. For all new development which exceed 50 lots or 5 acres in Zone A FEMA floodplains, a flood study shall be submitted to FEMA for approval prior to record plan approval.		
3. Only FEMA approved floodplain and BFE data shall be shown on record plans and development documents.		
4. Only base flood elevation approved by county, municipality or FEMA may be used in building permit application.		
5. Floodplain information must be included on permitting documentation.		
6. Require use of FEMA elevation certificate and flood-proofing certificate.		
7. Require 18 inches of freeboard for all new construction and substantial improvements.		
7a. Require 12 inches of freeboard for all new construction and substantial improvements.		
8. Require 18 inches of freeboard for manufactures homes.		
9. Fill placed in the floodplain which results in land having an elevation less than 18 inches above base flood elevation will not result in a relaxation of floodplain standards.		
10. Hydrostatic vents shall be required within 1 foot grade.		
11. Elevation of the lowest floor beneath an elevated building, must be above lowest adjacent grade at least one side.		
12. Prohibit subdividing land in floodplain. Newly subdivided floodplain shall remain deed restricted open space.		
13. Prohibit new non-water dependent structures dependent structures in floodplains in newly subdivided lands.		
14. Prohibit encroachments that would cause more than 0.1 foot of rise without compensation.		
15. Incorporate FEMA technical bulletins in local floodplain regulations.		

<b>Senate Bill 64 Drainage Standards</b>		
1. Easements of an adequate width shall be required over drainage conveyance systems within any proposed subdivision.		
2. The willful or negligent obstruction of any drainage conveyance shall be prohibited.		
3. Drainage conveyance systems within proposed subdivisions shall meet the minimum 10-year storm event.		
4. Lot grading shall ensure adequate drainage away from buildings and accessory structures without creating an adverse impact to adjacent structures or lands.		
5. A topographic plan submittal shall be required for all construction activity greater than 5,000 square feet.		
6. An as-built submittal shall be required for any construction with an approved topographic plan.		

# Senate Bill 64 Floodplain and Drainage Standards Checklist (DE)

Community: Camden County: Kent State: DE CID: \_\_\_\_\_

State Reviewer: UDWRA Date: 1/11/13 State Determination: \_\_\_\_\_

**Flood Zones:**    A    AE    AE (w/o FW)    AO    VE

Item Description	State Review	Revised
<b>Senate Bill 64 Floodplain Standards</b>		
1. For all new development activities which exceed 50 lots or 5 acres in locations contiguous to streams without a FEMA-delineated floodplain, a flood study shall be conducted.		
2. For all new development which exceed 50 lots or 5 acres in Zone A FEMA floodplains, a flood study shall be submitted to FEMA for approval prior to record plan approval.		
3. Only FEMA approved floodplain and BFE data shall be shown on record plans and development documents.	2008-O-12 Sec 5.	
4. Only base flood elevation approved by county, municipality or FEMA may be used in building permit application.	2008-O-12 Sec 13.2	
5. Floodplain information must be included on permitting documentation.	2008-O-12 Sec 13.2	
6. Require use of FEMA elevation certificate and flood-proofing certificate.	2008-O-12 Sect 11.C.2.c	
7. Require 18 inches of freeboard for all new construction and substantial improvements.		
7a. Require 12 inches of freeboard for all new construction and substantial improvements.		
8. Require 18 inches of freeboard for manufactures homes.		
9. Fill placed in the floodplain which results in land having an elevation less than 18 inches above base flood elevation will not result in a relaxation of floodplain standards.		
10. Hydrostatic vents shall be required within 1 foot grade.	2008-O-12, Sec 12.2	
11. Elevation of the lowest floor beneath an elevated building, must be above lowest adjacent grade at least one side.		
12. Prohibit subdividing land in floodplain. Newly subdivided floodplain shall remain deed restricted open space.	Article 4.F.8	
13. Prohibit new non-water dependent structures dependent structures in floodplains in newly subdivided lands.	240-38.A.1.c	
14. Prohibit encroachments that would cause more than 0.1 foot of rise without compensation.	2008-O-12.Sec .9.A.1	
15. Incorporate FEMA technical bulletins in local floodplain regulations.		
<b>Senate Bill 64 Drainage Standards</b>		
1. Easements of an adequate width shall be required over drainage conveyance systems within any proposed subdivision.	Article 4.I.1.i	
2. The willful or negligent obstruction of any drainage conveyance shall be prohibited.		
3. Drainage conveyance systems within proposed subdivisions shall meet the minimum 10-year storm event.		
4. Lot grading shall ensure adequate drainage away from buildings and accessory structures without creating an adverse impact to adjacent structures or lands.	Ord 82, Article 4.I.1.i	
5. A topographic plan submittal shall be required for all construction activity greater than 5,000 square feet.	240-43.A.6.f	
6. An as-built submittal shall be required for any construction with an approved topographic plan.	Article 4.I.4	

# Senate Bill 64 Floodplain and Drainage Standards Checklist (DE)

Community: Cheswold County: Kent State: DE CID: \_\_\_\_\_

State Reviewer: UDWRA Date: 1/11/13 State Determination: \_\_\_\_\_

**Flood Zones:**    A    AE    AE (w/o FW)    AO    VE

Item Description	State Review	Revised
<b>Senate Bill 64 Floodplain Standards</b>		
1. For all new development activities which exceed 50 lots or 5 acres in locations contiguous to streams without a FEMA-delineated floodplain, a flood study shall be conducted.		
2. For all new development which exceed 50 lots or 5 acres in Zone A FEMA floodplains, a flood study shall be submitted to FEMA for approval prior to record plan approval.		
3. Only FEMA approved floodplain and BFE data shall be shown on record plans and development documents.	LUO Article 12, Sec 12-1.A	
4. Only base flood elevation approved by county, municipality or FEMA may be used in building permit application.	LUO Article 4, Table 4-1	
5. Floodplain information must be included on permitting documentation.	LUO Article 12, Sec 12-1.C.1.a	
6. Require use of FEMA elevation certificate and flood-proofing certificate.		
7. Require 18 inches of freeboard for all new construction and substantial improvements.		
7a. Require 12 inches of freeboard for all new construction and substantial improvements.		
8. Require 18 inches of freeboard for manufactures homes.		
9. Fill placed in the floodplain which results in land having an elevation less than 18 inches above base flood elevation will not result in a relaxation of floodplain standards.		
10. Hydrostatic vents shall be required within 1 foot grade.	LUO Article 12, Sec 12-1.D.2.f.ii	
11. Elevation of the lowest floor beneath an elevated building, must be above lowest adjacent grade at least one side.		
12. Prohibit subdividing land in floodplain. Newly subdivided floodplain shall remain deed restricted open space.	LUO Article 12, Sec 12-1.C.1.b	
13. Prohibit new non-water dependent structures dependent structures in floodplains in newly subdivided lands.	LUO Article 12, Sec 12-1.C.1.b	
14. Prohibit encroachments that would cause more than 0.1 foot of rise without compensation.		
15. Incorporate FEMA technical bulletins in floodplain regs.		
<b>Senate Bill 64 Drainage Standards</b>		
1. Easements of an adequate width shall be required over drainage conveyance systems within any proposed subdivision.	LUO Article 9, Sec 9-4.B	
2. The willful or negligent obstruction of any drainage conveyance shall be prohibited.	LUO Article 9, Sec 9-4.C	
3. Drainage conveyance systems within proposed subdivisions shall meet the minimum 10-year storm event.		
4. Lot grading shall ensure adequate drainage away from buildings and accessory structures without creating an adverse impact to adjacent structures or lands.	LUO Article 12, Sec 12-5.C	
5. A topographic plan submittal shall be required for all construction activity greater than 5,000 square feet.	LUO Article 4, Table 4-1	
6. An as-built submittal shall be required for any construction with an approved topographic plan.	LUO Article 9, Sec 9-6.A	

# Senate Bill 64 Floodplain and Drainage Standards Checklist (DE)

Community: Clayton County: Kent State: DE CID: \_\_\_\_\_

State Reviewer: UDWRA Date: 1/11/13 State Determination: \_\_\_\_\_

**Flood Zones:**    A    AE    AE (w/o FW)    AO    VE

Item Description	State Review	Revised
<b>Senate Bill 64 Floodplain Standards</b>		
1. For all new development activities which exceed 50 lots or 5 acres in locations contiguous to streams without a FEMA-delineated floodplain, a flood study shall be conducted.		
2. For all new development which exceed 50 lots or 5 acres in Zone A FEMA floodplains, a flood study shall be submitted to FEMA for approval prior to record plan approval.		
3. Only FEMA approved floodplain and BFE data shall be shown on record plans and development documents.		
4. Only base flood elevation approved by county, municipality or FEMA may be used in building permit application.		
5. Floodplain information must be included on permitting documentation.		
6. Require use of FEMA elevation certificate and flood-proofing certificate.		
7. Require 18 inches of freeboard for all new construction and substantial improvements.		
7a. Require 12 inches of freeboard for all new construction and substantial improvements.		
8. Require 18 inches of freeboard for manufactures homes.		
9. Fill placed in the floodplain which results in land having an elevation less than 18 inches above base flood elevation will not result in a relaxation of floodplain standards.		
10. Hydrostatic vents shall be required within 1 foot grade.		
11. Elevation of the lowest floor beneath an elevated building, must be above lowest adjacent grade at least one side.		
12. Prohibit subdividing land in floodplain. Newly subdivided floodplain shall remain deed restricted open space.		
13. Prohibit new non-water dependent structures dependent structures in floodplains in newly subdivided lands.		
14. Prohibit encroachments that would cause more than 0.1 foot of rise without compensation.		
15. Incorporate FEMA technical bulletins in local floodplain regulations.		
<b>Senate Bill 64 Drainage Standards</b>		
1. Easements of an adequate width shall be required over drainage conveyance systems within any proposed subdivision.	SALDO Sec 5.4-4.3	
2. The willful or negligent obstruction of any drainage conveyance shall be prohibited.		
3. Drainage conveyance systems within proposed subdivisions shall meet the minimum 10-year storm event.		
4. Lot grading shall ensure adequate drainage away from buildings and accessory structures without creating an adverse impact to adjacent structures or lands.		
5. A topographic plan submittal shall be required for all construction activity greater than 5,000 square feet.	Zoning Sec 6.7-5.4.B.5	
6. An as-built submittal shall be required for any construction with an approved topographic plan.	SALDO Sec 5.3-4.3	

# Senate Bill 64 Floodplain and Drainage Standards Checklist (DE)

Community: Dover County: Kent State: DE CID: \_\_\_\_\_

State Reviewer: UDWRA Date: 1/11/13 State Determination: \_\_\_\_\_

**Flood Zones:**    A    AE    AE (w/o FW)    AO    VE

Item Description	State Review	Revised
<b>Senate Bill 64 Floodplain Standards</b>		
1. For all new development activities which exceed 50 lots or 5 acres in locations contiguous to streams without a FEMA-delineated floodplain, a flood study shall be conducted.		
2. For all new development which exceed 50 lots or 5 acres in Zone A FEMA floodplains, a flood study shall be submitted to FEMA for approval prior to record plan approval.		
3. Only FEMA approved floodplain and BFE data shall be shown on record plans and development documents.		
4. Only base flood elevation approved by county, municipality or FEMA may be used in building permit application.	Sec 50-35.a	
5. Floodplain information must be included on permitting documentation.		
6. Require use of FEMA elevation certificate and flood-proofing certificate.	Sec 50-38.1.b	
7. Require 18 inches of freeboard for all new construction and substantial improvements.		
7a. Require 12 inches of freeboard for all new construction and substantial improvements.		
8. Require 18 inches of freeboard for manufactures homes.		
9. Fill placed in the floodplain which results in land having an elevation less than 18 inches above base flood elevation will not result in a relaxation of floodplain standards.		
10. Hydrostatic vents shall be required within 1 foot grade.	Sec 50-38.1.b	
11. Elevation of the lowest floor beneath an elevated building, must be above lowest adjacent grade at least one side.		
12. Prohibit subdividing land in floodplain. Newly subdivided floodplain shall remain deed restricted open space.		
13. Prohibit new non-water dependent structures dependent structures in floodplains in newly subdivided lands.		
14. Prohibit encroachments that would cause more than 0.1 foot of rise without compensation.	Sec 50-36.a.1	
15. Incorporate FEMA technical bulletins in floodplain regs.		
<b>Senate Bill 64 Drainage Standards</b>		
1. Easements of an adequate width shall be required over drainage conveyance systems within any proposed subdivision.		
2. The willful or negligent obstruction of any drainage conveyance shall be prohibited.		
3. Drainage conveyance systems within proposed subdivisions shall meet the minimum 10-year storm event.		
4. Lot grading shall ensure adequate drainage away from buildings and accessory structures without creating an adverse impact to adjacent structures or lands.		
5. A topographic plan submittal shall be required for all construction activity greater than 5,000 square feet.		
6. An as-built submittal shall be required for any construction with an approved topographic plan.		

# Senate Bill 64 Floodplain and Drainage Standards Checklist (DE)

Community: Farmington County: Kent State: DE CID: \_\_\_\_\_

State Reviewer: UDWRA Date: 1/11/13 State Determination: \_\_\_\_\_

**Flood Zones:**    A    AE    AE (w/o FW)    AO    VE

Item Description	State Review	Revised
<b>Senate Bill 64 Floodplain Standards</b>		
1. For all new development activities which exceed 50 lots or 5 acres in locations contiguous to streams without a FEMA-delineated floodplain, a flood study shall be conducted.		
2. For all new development which exceed 50 lots or 5 acres in Zone A FEMA floodplains, a flood study shall be submitted to FEMA for approval prior to record plan approval.		
3. Only FEMA approved floodplain and BFE data shall be shown on record plans and development documents.		
4. Only base flood elevation approved by county, municipality or FEMA may be used in building permit application.		
5. Floodplain information must be included on permitting documentation.		
6. Require use of FEMA elevation certificate and flood-proofing certificate.		
7. Require 18 inches of freeboard for all new construction and substantial improvements.		
7a. Require 12 inches of freeboard for all new construction and substantial improvements.		
8. Require 18 inches of freeboard for manufactures homes.		
9. Fill placed in the floodplain which results in land having an elevation less than 18 inches above base flood elevation will not result in a relaxation of floodplain standards.		
10. Hydrostatic vents shall be required within 1 foot grade.		
11. Elevation of the lowest floor beneath an elevated building, must be above lowest adjacent grade at least one side.		
12. Prohibit subdividing land in floodplain. Newly subdivided floodplain shall remain deed restricted open space.		
13. Prohibit new non-water dependent structures dependent structures in floodplains in newly subdivided lands.		
14. Prohibit encroachments that would cause more than 0.1 foot of rise without compensation.		
15. Incorporate FEMA technical bulletins in local floodplain regulations.		
<b>Senate Bill 64 Drainage Standards</b>		
1. Easements of an adequate width shall be required over drainage conveyance systems within any proposed subdivision.		
2. The willful or negligent obstruction of any drainage conveyance shall be prohibited.		
3. Drainage conveyance systems within proposed subdivisions shall meet the minimum 10-year storm event.		
4. Lot grading shall ensure adequate drainage away from buildings and accessory structures without creating an adverse impact to adjacent structures or lands.		
5. A topographic plan submittal shall be required for all construction activity greater than 5,000 square feet.		
6. An as-built submittal shall be required for any construction with an approved topographic plan.		

# Senate Bill 64 Floodplain and Drainage Standards Checklist (DE)

Community: Felton County: Kent State: DE CID: \_\_\_\_\_

State Reviewer: UDWRA Date: 1/11/13 State Determination: \_\_\_\_\_

**Flood Zones:**    A    AE    AE (w/o FW)    AO    VE

Item Description	State Review	Revised
<b>Senate Bill 64 Floodplain Standards</b>		
1. For all new development activities which exceed 50 lots or 5 acres in locations contiguous to streams without a FEMA-delineated floodplain, a flood study shall be conducted.		
2. For all new development which exceed 50 lots or 5 acres in Zone A FEMA floodplains, a flood study shall be submitted to FEMA for approval prior to record plan approval.		
3. Only FEMA approved floodplain and BFE data shall be shown on record plans and development documents.	Zoning Article 2	
4. Only base flood elevation approved by county, municipality or FEMA may be used in building permit application.	Zoning Article 2	
5. Floodplain information must be included on permitting documentation.	Zoning Article 4, Table 4-1	
6. Require use of FEMA elevation certificate and flood-proofing certificate.		
7. Require 18 inches of freeboard for all new construction and substantial improvements.		
7a. Require 12 inches of freeboard for all new construction and substantial improvements.		
8. Require 18 inches of freeboard for manufactures homes.		
9. Fill placed in the floodplain which results in land having an elevation less than 18 inches above base flood elevation will not result in a relaxation of floodplain standards.		
10. Hydrostatic vents shall be required within 1 foot grade.		
11. Elevation of the lowest floor beneath an elevated building, must be above lowest adjacent grade at least one side.		
12. Prohibit subdividing land in floodplain. Newly subdivided floodplain shall remain deed restricted open space.		
13. Prohibit new non-water dependent structures dependent structures in floodplains in newly subdivided lands.	Zoning Sec 9-4.D	
14. Prohibit encroachments that would cause more than 0.1 foot of rise without compensation.	Zoning Sec 9-4.D	
15. Incorporate FEMA technical bulletins in floodplain regs.		
<b>Senate Bill 64 Drainage Standards</b>		
1. Easements of an adequate width shall be required over drainage conveyance systems within any proposed subdivision.	Zoning Sec 9-4.C	
2. The willful or negligent obstruction of any drainage conveyance shall be prohibited.	Zoning Sec 9-4.D	
3. Drainage conveyance systems within proposed subdivisions shall meet the minimum 10-year storm event.		
4. Lot grading shall ensure adequate drainage away from buildings and accessory structures without creating an adverse impact to adjacent structures or lands.	Zoning Sec 12-3.A	
5. A topographic plan submittal shall be required for all construction activity greater than 5,000 square feet.	Zoning Article 4, Table 4-1	
6. An as-built submittal shall be required for any construction with an approved topographic plan.	Construction Specs, 38	

# Senate Bill 64 Floodplain and Drainage Standards Checklist (DE)

Community: Frederica County: Kent State: DE CID: \_\_\_\_\_

State Reviewer: UDWRA Date: 1/11/13 State Determination: \_\_\_\_\_

**Flood Zones:**    A    AE    AE (w/o FW)    AO    VE

Item Description	State Review	Revised
<b>Senate Bill 64 Floodplain Standards</b>		
1. For all new development activities which exceed 50 lots or 5 acres in locations contiguous to streams without a FEMA-delineated floodplain, a flood study shall be conducted.		
2. For all new development which exceed 50 lots or 5 acres in Zone A FEMA floodplains, a flood study shall be submitted to FEMA for approval prior to record plan approval.		
3. Only FEMA approved floodplain and BFE data shall be shown on record plans and development documents.		
4. Only base flood elevation approved by county, municipality or FEMA may be used in building permit application.		
5. Floodplain information must be included on permitting documentation.		
6. Require use of FEMA elevation certificate and flood-proofing certificate.		
7. Require 18 inches of freeboard for all new construction and substantial improvements.		
7a. Require 12 inches of freeboard for all new construction and substantial improvements.		
8. Require 18 inches of freeboard for manufactures homes.		
9. Fill placed in the floodplain which results in land having an elevation less than 18 inches above base flood elevation will not result in a relaxation of floodplain standards.		
10. Hydrostatic vents shall be required within 1 foot grade.		
11. Elevation of the lowest floor beneath an elevated building, must be above lowest adjacent grade at least one side.		
12. Prohibit subdividing land in floodplain. Newly subdivided floodplain shall remain deed restricted open space.		
13. Prohibit new non-water dependent structures dependent structures in floodplains in newly subdivided lands.		
14. Prohibit encroachments that would cause more than 0.1 foot of rise without compensation.		
15. Incorporate FEMA technical bulletins in local floodplain regulations.		
<b>Senate Bill 64 Drainage Standards</b>		
1. Easements of an adequate width shall be required over drainage conveyance systems within any proposed subdivision.		
2. The willful or negligent obstruction of any drainage conveyance shall be prohibited.		
3. Drainage conveyance systems within proposed subdivisions shall meet the minimum 10-year storm event.		
4. Lot grading shall ensure adequate drainage away from buildings and accessory structures without creating an adverse impact to adjacent structures or lands.		
5. A topographic plan submittal shall be required for all construction activity greater than 5,000 square feet.		
6. An as-built submittal shall be required for any construction with an approved topographic plan.		

# Senate Bill 64 Floodplain and Drainage Standards Checklist (DE)

Community: Harrington County: Kent State: DE CID: \_\_\_\_\_

State Reviewer: UDWRA Date: 1/11/13 State Determination: \_\_\_\_\_

**Flood Zones:**    A    AE    AE (w/o FW)    AO    VE

Item Description	State Review	Revised
<b>Senate Bill 64 Floodplain Standards</b>		
1. For all new development activities which exceed 50 lots or 5 acres in locations contiguous to streams without a FEMA-delineated floodplain, a flood study shall be conducted.		
2. For all new development which exceed 50 lots or 5 acres in Zone A FEMA floodplains, a flood study shall be submitted to FEMA for approval prior to record plan approval.	212-4.B	
3. Only FEMA approved floodplain and BFE data shall be shown on record plans and development documents.	212-3	
4. Only base flood elevation approved by county, municipality or FEMA may be used in building permit application.	212-3	
5. Floodplain information must be included on permitting documentation.		
6. Require use of FEMA elevation certificate and flood-proofing certificate.	212-5.A.2.b	
7. Require 18 inches of freeboard for all new construction and substantial improvements.		
7a. Require 12 inches of freeboard for all new construction and substantial improvements.	212-5.B	
8. Require 18 inches of freeboard for manufactures homes.		
9. Fill placed in the floodplain which results in land having an elevation less than 18 inches above base flood elevation will not result in a relaxation of floodplain standards.		
10. Hydrostatic vents shall be required within 1 foot grade.	212-5.B	
11. Elevation of the lowest floor beneath an elevated building, must be above lowest adjacent grade at least one side.		
12. Prohibit subdividing land in floodplain. Newly subdivided floodplain shall remain deed restricted open space.		
13. Prohibit new non-water dependent structures dependent structures in floodplains in newly subdivided lands.		
14. Prohibit encroachments that would cause more than 0.1 foot of rise without compensation.	212-4	
15. Incorporate FEMA technical bulletins in floodplain regs.		
<b>Senate Bill 64 Drainage Standards</b>		
1. Easements of an adequate width shall be required over drainage conveyance systems within any proposed subdivision.		
2. The willful or negligent obstruction of any drainage conveyance shall be prohibited.	212-4	
3. Drainage conveyance systems within proposed subdivisions shall meet the minimum 10-year storm event.		
4. Lot grading shall ensure adequate drainage away from buildings and accessory structures without creating an adverse impact to adjacent structures or lands.		
5. A topographic plan submittal shall be required for all construction activity greater than 5,000 square feet.	370-32.C	
6. An as-built submittal shall be required for any construction with an approved topographic plan.	370-35	

# Senate Bill 64 Floodplain and Drainage Standards Checklist (DE)

Community: Hartly County: Kent State: DE CID: \_\_\_\_\_

State Reviewer: UDWRA Date: 1/11/13 State Determination: \_\_\_\_\_

**Flood Zones:**    A    AE    AE (w/o FW)    AO    VE

Item Description	State Review	Revised
<b>Senate Bill 64 Floodplain Standards</b>		
1. For all new development activities which exceed 50 lots or 5 acres in locations contiguous to streams without a FEMA-delineated floodplain, a flood study shall be conducted.		
2. For all new development which exceed 50 lots or 5 acres in Zone A FEMA floodplains, a flood study shall be submitted to FEMA for approval prior to record plan approval.		
3. Only FEMA approved floodplain and BFE data shall be shown on record plans and development documents.		
4. Only base flood elevation approved by county, municipality or FEMA may be used in building permit application.		
5. Floodplain information must be included on permitting documentation.		
6. Require use of FEMA elevation certificate and flood-proofing certificate.		
7. Require 18 inches of freeboard for all new construction and substantial improvements.		
7a. Require 12 inches of freeboard for all new construction and substantial improvements.		
8. Require 18 inches of freeboard for manufactures homes.		
9. Fill placed in the floodplain which results in land having an elevation less than 18 inches above base flood elevation will not result in a relaxation of floodplain standards.		
10. Hydrostatic vents shall be required within 1 foot grade.		
11. Elevation of the lowest floor beneath an elevated building, must be above lowest adjacent grade at least one side.		
12. Prohibit subdividing land in floodplain. Newly subdivided floodplain shall remain deed restricted open space.		
13. Prohibit new non-water dependent structures dependent structures in floodplains in newly subdivided lands.		
14. Prohibit encroachments that would cause more than 0.1 foot of rise without compensation.		
15. Incorporate FEMA technical bulletins in local floodplain regulations.		
<b>Senate Bill 64 Drainage Standards</b>		
1. Easements of an adequate width shall be required over drainage conveyance systems within any proposed subdivision.		
2. The willful or negligent obstruction of any drainage conveyance shall be prohibited.		
3. Drainage conveyance systems within proposed subdivisions shall meet the minimum 10-year storm event.		
4. Lot grading shall ensure adequate drainage away from buildings and accessory structures without creating an adverse impact to adjacent structures or lands.		
5. A topographic plan submittal shall be required for all construction activity greater than 5,000 square feet.		
6. An as-built submittal shall be required for any construction with an approved topographic plan.		

# Senate Bill 64 Floodplain and Drainage Standards Checklist (DE)

Community: Houston County: Kent State: DE CID: \_\_\_\_\_

State Reviewer: UDWRA Date: 1/11/13 State Determination: \_\_\_\_\_

Flood Zones:  A  AE  AE (w/o FW)  AO  VE

Item Description	State Review	Revised
<b>Senate Bill 64 Floodplain Standards</b>		
1. For all new development activities which exceed 50 lots or 5 acres in locations contiguous to streams without a FEMA-delineated floodplain, a flood study shall be conducted.		
2. For all new development which exceed 50 lots or 5 acres in Zone A FEMA floodplains, a flood study shall be submitted to FEMA for approval prior to record plan approval.		
3. Only FEMA approved floodplain and BFE data shall be shown on record plans and development documents.		
4. Only base flood elevation approved by county, municipality or FEMA may be used in building permit application.		
5. Floodplain information must be included on permitting documentation.		
6. Require use of FEMA elevation certificate and flood-proofing certificate.		
7. Require 18 inches of freeboard for all new construction and substantial improvements.		
7a. Require 12 inches of freeboard for all new construction and substantial improvements.		
8. Require 18 inches of freeboard for manufactures homes.		
9. Fill placed in the floodplain which results in land having an elevation less than 18 inches above base flood elevation will not result in a relaxation of floodplain standards.		
10. Hydrostatic vents shall be required within 1 foot grade.		
11. Elevation of the lowest floor beneath an elevated building, must be above lowest adjacent grade at least one side.		
12. Prohibit subdividing land in floodplain. Newly subdivided floodplain shall remain deed restricted open space.		
13. Prohibit new non-water dependent structures dependent structures in floodplains in newly subdivided lands.		
14. Prohibit encroachments that would cause more than 0.1 foot of rise without compensation.		
15. Incorporate FEMA technical bulletins in local floodplain regulations.		
<b>Senate Bill 64 Drainage Standards</b>		
1. Easements of an adequate width shall be required over drainage conveyance systems within any proposed subdivision.		
2. The willful or negligent obstruction of any drainage conveyance shall be prohibited.		
3. Drainage conveyance systems within proposed subdivisions shall meet the minimum 10-year storm event.		
4. Lot grading shall ensure adequate drainage away from buildings and accessory structures without creating an adverse impact to adjacent structures or lands.		
5. A topographic plan submittal shall be required for all construction activity greater than 5,000 square feet.	Zoning Article 6, Section 2.2.B.1.f	
6. An as-built submittal shall be required for any construction with an approved topographic plan.		

# Senate Bill 64 Floodplain and Drainage Standards Checklist (DE)

Community: Kenton County: Kent State: DE CID: \_\_\_\_\_

State Reviewer: UDWRA Date: 1/11/13 State Determination: \_\_\_\_\_

**Flood Zones:**    A    AE    AE (w/o FW)    AO    VE

Item Description	State Review	Revised
<b>Senate Bill 64 Floodplain Standards</b>		
1. For all new development activities which exceed 50 lots or 5 acres in locations contiguous to streams without a FEMA-delineated floodplain, a flood study shall be conducted.		
2. For all new development which exceed 50 lots or 5 acres in Zone A FEMA floodplains, a flood study shall be submitted to FEMA for approval prior to record plan approval.		
3. Only FEMA approved floodplain and BFE data shall be shown on record plans and development documents.		
4. Only base flood elevation approved by county, municipality or FEMA may be used in building permit application.		
5. Floodplain information must be included on permitting documentation.		
6. Require use of FEMA elevation certificate and flood-proofing certificate.		
7. Require 18 inches of freeboard for all new construction and substantial improvements.		
7a. Require 12 inches of freeboard for all new construction and substantial improvements.		
8. Require 18 inches of freeboard for manufactures homes.		
9. Fill placed in the floodplain which results in land having an elevation less than 18 inches above base flood elevation will not result in a relaxation of floodplain standards.		
10. Hydrostatic vents shall be required within 1 foot grade.		
11. Elevation of the lowest floor beneath an elevated building, must be above lowest adjacent grade at least one side.		
12. Prohibit subdividing land in floodplain. Newly subdivided floodplain shall remain deed restricted open space.		
13. Prohibit new non-water dependent structures dependent structures in floodplains in newly subdivided lands.		
14. Prohibit encroachments that would cause more than 0.1 foot of rise without compensation.		
15. Incorporate FEMA technical bulletins in local floodplain regulations.		

<b>Senate Bill 64 Drainage Standards</b>		
1. Easements of an adequate width shall be required over drainage conveyance systems within any proposed subdivision.		
2. The willful or negligent obstruction of any drainage conveyance shall be prohibited.		
3. Drainage conveyance systems within proposed subdivisions shall meet the minimum 10-year storm event.		
4. Lot grading shall ensure adequate drainage away from buildings and accessory structures without creating an adverse impact to adjacent structures or lands.		
5. A topographic plan submittal shall be required for all construction activity greater than 5,000 square feet.		
6. An as-built submittal shall be required for any construction with an approved topographic plan.		

# Senate Bill 64 Floodplain and Drainage Standards Checklist (DE)

Community: Leipsic County: Kent State: DE CID: \_\_\_\_\_

State Reviewer: UDWRA Date: 1/11/13 State Determination: \_\_\_\_\_

**Flood Zones:**    A    AE    AE (w/o FW)    AO    VE

Item Description	State Review	Revised
<b>Senate Bill 64 Floodplain Standards</b>		
1. For all new development activities which exceed 50 lots or 5 acres in locations contiguous to streams without a FEMA-delineated floodplain, a flood study shall be conducted.		
2. For all new development which exceed 50 lots or 5 acres in Zone A FEMA floodplains, a flood study shall be submitted to FEMA for approval prior to record plan approval.		
3. Only FEMA approved floodplain and BFE data shall be shown on record plans and development documents.		
4. Only base flood elevation approved by county, municipality or FEMA may be used in building permit application.		
5. Floodplain information must be included on permitting documentation.		
6. Require use of FEMA elevation certificate and flood-proofing certificate.		
7. Require 18 inches of freeboard for all new construction and substantial improvements.		
7a. Require 12 inches of freeboard for all new construction and substantial improvements.		
8. Require 18 inches of freeboard for manufactures homes.		
9. Fill placed in the floodplain which results in land having an elevation less than 18 inches above base flood elevation will not result in a relaxation of floodplain standards.		
10. Hydrostatic vents shall be required within 1 foot grade.		
11. Elevation of the lowest floor beneath an elevated building, must be above lowest adjacent grade at least one side.		
12. Prohibit subdividing land in floodplain. Newly subdivided floodplain shall remain deed restricted open space.		
13. Prohibit new non-water dependent structures dependent structures in floodplains in newly subdivided lands.		
14. Prohibit encroachments that would cause more than 0.1 foot of rise without compensation.		
15. Incorporate FEMA technical bulletins in local floodplain regulations.		

<b>Senate Bill 64 Drainage Standards</b>		
1. Easements of an adequate width shall be required over drainage conveyance systems within any proposed subdivision.		
2. The willful or negligent obstruction of any drainage conveyance shall be prohibited.		
3. Drainage conveyance systems within proposed subdivisions shall meet the minimum 10-year storm event.		
4. Lot grading shall ensure adequate drainage away from buildings and accessory structures without creating an adverse impact to adjacent structures or lands.		
5. A topographic plan submittal shall be required for all construction activity greater than 5,000 square feet.		
6. An as-built submittal shall be required for any construction with an approved topographic plan.		

# Senate Bill 64 Floodplain and Drainage Standards Checklist (DE)

Community: Little Creek County: Kent State: DE CID: \_\_\_\_\_

State Reviewer: UDWRA Date: 1/11/13 State Determination: \_\_\_\_\_

**Flood Zones:**    A    AE    AE (w/o FW)    AO    VE

Item Description	State Review	Revised
<b>Senate Bill 64 Floodplain Standards</b>		
1. For all new development activities which exceed 50 lots or 5 acres in locations contiguous to streams without a FEMA-delineated floodplain, a flood study shall be conducted.		
2. For all new development which exceed 50 lots or 5 acres in Zone A FEMA floodplains, a flood study shall be submitted to FEMA for approval prior to record plan approval.		
3. Only FEMA approved floodplain and BFE data shall be shown on record plans and development documents.		
4. Only base flood elevation approved by county, municipality or FEMA may be used in building permit application.		
5. Floodplain information must be included on permitting documentation.		
6. Require use of FEMA elevation certificate and flood-proofing certificate.		
7. Require 18 inches of freeboard for all new construction and substantial improvements.		
7a. Require 12 inches of freeboard for all new construction and substantial improvements.		
8. Require 18 inches of freeboard for manufactures homes.		
9. Fill placed in the floodplain which results in land having an elevation less than 18 inches above base flood elevation will not result in a relaxation of floodplain standards.		
10. Hydrostatic vents shall be required within 1 foot grade.		
11. Elevation of the lowest floor beneath an elevated building, must be above lowest adjacent grade at least one side.		
12. Prohibit subdividing land in floodplain. Newly subdivided floodplain shall remain deed restricted open space.		
13. Prohibit new non-water dependent structures dependent structures in floodplains in newly subdivided lands.		
14. Prohibit encroachments that would cause more than 0.1 foot of rise without compensation.		
15. Incorporate FEMA technical bulletins in local floodplain regulations.		
<b>Senate Bill 64 Drainage Standards</b>		
1. Easements of an adequate width shall be required over drainage conveyance systems within any proposed subdivision.		
2. The willful or negligent obstruction of any drainage conveyance shall be prohibited.		
3. Drainage conveyance systems within proposed subdivisions shall meet the minimum 10-year storm event.		
4. Lot grading shall ensure adequate drainage away from buildings and accessory structures without creating an adverse impact to adjacent structures or lands.		
5. A topographic plan submittal shall be required for all construction activity greater than 5,000 square feet.		
6. An as-built submittal shall be required for any construction with an approved topographic plan.		

# Senate Bill 64 Floodplain and Drainage Standards Checklist (DE)

Community: Magnolia County: Kent State: DE CID: \_\_\_\_\_

State Reviewer: UDWRA Date: 1/11/13 State Determination: \_\_\_\_\_

**Flood Zones:**    A    AE    AE (w/o FW)    AO    VE

Item Description	State Review	Revised
<b>Senate Bill 64 Floodplain Standards</b>		
1. For all new development activities which exceed 50 lots or 5 acres in locations contiguous to streams without a FEMA-delineated floodplain, a flood study shall be conducted.		
2. For all new development which exceed 50 lots or 5 acres in Zone A FEMA floodplains, a flood study shall be submitted to FEMA for approval prior to record plan approval.		
3. Only FEMA approved floodplain and BFE data shall be shown on record plans and development documents.		
4. Only base flood elevation approved by county, municipality or FEMA may be used in building permit application.		
5. Floodplain information must be included on permitting documentation.		
6. Require use of FEMA elevation certificate and flood-proofing certificate.		
7. Require 18 inches of freeboard for all new construction and substantial improvements.		
7a. Require 12 inches of freeboard for all new construction and substantial improvements.		
8. Require 18 inches of freeboard for manufactures homes.		
9. Fill placed in the floodplain which results in land having an elevation less than 18 inches above base flood elevation will not result in a relaxation of floodplain standards.		
10. Hydrostatic vents shall be required within 1 foot grade.		
11. Elevation of the lowest floor beneath an elevated building, must be above lowest adjacent grade at least one side.		
12. Prohibit subdividing land in floodplain. Newly subdivided floodplain shall remain deed restricted open space.		
13. Prohibit new non-water dependent structures dependent structures in floodplains in newly subdivided lands.		
14. Prohibit encroachments that would cause more than 0.1 foot of rise without compensation.		
15. Incorporate FEMA technical bulletins in floodplain regs.		
<b>Senate Bill 64 Drainage Standards</b>		
1. Easements of an adequate width shall be required over drainage conveyance systems within any proposed subdivision.		
2. The willful or negligent obstruction of any drainage conveyance shall be prohibited.		
3. Drainage conveyance systems within proposed subdivisions shall meet the minimum 10-year storm event.		
4. Lot grading shall ensure adequate drainage away from buildings and accessory structures without creating an adverse impact to adjacent structures or lands.		
5. A topographic plan submittal shall be required for all construction activity greater than 5,000 square feet.		
6. An as-built submittal shall be required for any construction with an approved topographic plan.		

# Senate Bill 64 Floodplain and Drainage Standards Checklist (DE)

Community: Milford County: Kent State: DE CID: \_\_\_\_\_

State Reviewer: UDWRA Date: 1/11/13 State Determination: \_\_\_\_\_

**Flood Zones:**    A    AE    AE (w/o FW)    AO    VE

Item Description	State Review	Revised
<b>Senate Bill 64 Floodplain Standards</b>		
1. For all new development activities which exceed 50 lots or 5 acres in locations contiguous to streams without a FEMA-delineated floodplain, a flood study shall be conducted.		
2. For all new development which exceed 50 lots or 5 acres in Zone A FEMA floodplains, a flood study shall be submitted to FEMA for approval prior to record plan approval.		
3. Only FEMA approved floodplain and BFE data shall be shown on record plans and development documents.	Article II, Sec 130-5	
4. Only base flood elevation approved by county, municipality or FEMA may be used in building permit application.	Article II, Sec 130-6.C	
5. Floodplain information must be included on permitting documentation.	Chapter 130-14	
6. Require use of FEMA elevation certificate and flood-proofing certificate.	Chapter 130-14	
7. Require 18 inches of freeboard for all new construction and substantial improvements.		
7a. Require 12 inches of freeboard for all new construction and substantial improvements.	Chapter 130-16.A.1	
8. Require 18 inches of freeboard for manufactures homes.		
9. Fill placed in the floodplain which results in land having an elevation less than 18 inches above base flood elevation will not result in a relaxation of floodplain standards.		
10. Hydrostatic vents shall be required within 1 foot grade.	Chapter 130-16.A.3	
11. Elevation of the lowest floor beneath an elevated building, must be above lowest adjacent grade at least one side.		
12. Prohibit subdividing land in floodplain. Newly subdivided floodplain shall remain deed restricted open space.	Chapter 200-5.E.8	
13. Prohibit new non-water dependent structures dependent structures in floodplains in newly subdivided lands.		
14. Prohibit encroachments that would cause more than 0.1 foot of rise without compensation.	Chapter 130-10	
15. Incorporate FEMA technical bulletins in local floodplain regulations.		
<b>Senate Bill 64 Drainage Standards</b>		
1. Easements of an adequate width shall be required over drainage conveyance systems within any proposed subdivision.	Chapter 200-5.C	
2. The willful or negligent obstruction of any drainage conveyance shall be prohibited.	Chapter 130-10	
3. Drainage conveyance systems within proposed subdivisions shall meet the minimum 10-year storm event.		
4. Lot grading shall ensure adequate drainage away from buildings and accessory structures without creating an adverse impact to adjacent structures or lands.		
5. A topographic plan submittal shall be required for all construction activity greater than 5,000 square feet.		
6. An as-built submittal shall be required for any construction with an approved topographic plan.		

# Senate Bill 64 Floodplain and Drainage Standards Checklist (DE)

Community: Smyrna County: Kent State: DE CID: \_\_\_\_\_

State Reviewer: UDWRA Date: 1/11/13 State Determination: \_\_\_\_\_

**Flood Zones:**    A    AE    AE (w/o FW)    AO    VE

Item Description	State Review	Revised
<b>Senate Bill 64 Floodplain Standards</b>		
1. For all new development activities which exceed 50 lots or 5 acres in locations contiguous to streams without a FEMA-delineated floodplain, a flood study shall be conducted.		
2. For all new development which exceed 50 lots or 5 acres in Zone A FEMA floodplains, a flood study shall be submitted to FEMA for approval prior to record plan approval.		
3. Only FEMA approved floodplain and BFE data shall be shown on record plans and development documents.		
4. Only base flood elevation approved by county, municipality or FEMA may be used in building permit application.		
5. Floodplain information must be included on permitting documentation.	SALDO Sec 4.01.q	
6. Require use of FEMA elevation certificate and flood-proofing certificate.		
7. Require 18 inches of freeboard for all new construction and substantial improvements.		
7a. Require 12 inches of freeboard for all new construction and substantial improvements.		
8. Require 18 inches of freeboard for manufactures homes.		
9. Fill placed in the floodplain which results in land having an elevation less than 18 inches above base flood elevation will not result in a relaxation of floodplain standards.		
10. Hydrostatic vents shall be required within 1 foot grade.		
11. Elevation of the lowest floor beneath an elevated building, must be above lowest adjacent grade at least one side.		
12. Prohibit subdividing land in floodplain. Newly subdivided floodplain shall remain deed restricted open space.		
13. Prohibit new non-water dependent structures dependent structures in floodplains in newly subdivided lands.		
14. Prohibit encroachments that would cause more than 0.1 foot of rise without compensation.		
15. Incorporate FEMA technical bulletins in local floodplain regulations.		
<b>Senate Bill 64 Drainage Standards</b>		
1. Easements of an adequate width shall be required over drainage conveyance systems within any proposed subdivision.	SALDO Sec 5.16	
2. The willful or negligent obstruction of any drainage conveyance shall be prohibited.		
3. Drainage conveyance systems within proposed subdivisions shall meet the minimum 10-year storm event.	Appendix 5, Sec 5.c	
4. Lot grading shall ensure adequate drainage away from buildings and accessory structures without creating an adverse impact to adjacent structures or lands.		
5. A topographic plan submittal shall be required for all construction activity greater than 5,000 square feet.	SALDO Sec 4.01.g	
6. An as-built submittal shall be required for any construction with an approved topographic plan.	SALDO Sec 4.07	

# Senate Bill 64 Floodplain and Drainage Standards Checklist (DE)

Community: Viola County: Kent State: DE CID: \_\_\_\_\_

State Reviewer: UDWRA Date: 1/11/13 State Determination: \_\_\_\_\_

**Flood Zones:**     A     AE     AE (w/o FW)     AO     VE

Item Description	State Review	Revised
<b>Senate Bill 64 Floodplain Standards</b>		
1. For all new development activities which exceed 50 lots or 5 acres in locations contiguous to streams without a FEMA-delineated floodplain, a flood study shall be conducted.		
2. For all new development which exceed 50 lots or 5 acres in Zone A FEMA floodplains, a flood study shall be submitted to FEMA for approval prior to record plan approval.		
3. Only FEMA approved floodplain and BFE data shall be shown on record plans and development documents.		
4. Only base flood elevation approved by county, municipality or FEMA may be used in building permit application.		
5. Floodplain information must be included on permitting documentation.		
6. Require use of FEMA elevation certificate and flood-proofing certificate.		
7. Require 18 inches of freeboard for all new construction and substantial improvements.		
7a. Require 12 inches of freeboard for all new construction and substantial improvements.		
8. Require 18 inches of freeboard for manufactures homes.		
9. Fill placed in the floodplain which results in land having an elevation less than 18 inches above base flood elevation will not result in a relaxation of floodplain standards.		
10. Hydrostatic vents shall be required within 1 foot grade.		
11. Elevation of the lowest floor beneath an elevated building, must be above lowest adjacent grade at least one side.		
12. Prohibit subdividing land in floodplain. Newly subdivided floodplain shall remain deed restricted open space.		
13. Prohibit new non-water dependent structures dependent structures in floodplains in newly subdivided lands.		
14. Prohibit encroachments that would cause more than 0.1 foot of rise without compensation.		
15. Incorporate FEMA technical bulletins in local floodplain regulations.		
<b>Senate Bill 64 Drainage Standards</b>		
1. Easements of an adequate width shall be required over drainage conveyance systems within any proposed subdivision.		
2. The willful or negligent obstruction of any drainage conveyance shall be prohibited.		
3. Drainage conveyance systems within proposed subdivisions shall meet the minimum 10-year storm event.		
4. Lot grading shall ensure adequate drainage away from buildings and accessory structures without creating an adverse impact to adjacent structures or lands.		
5. A topographic plan submittal shall be required for all construction activity greater than 5,000 square feet.		
6. An as-built submittal shall be required for any construction with an approved topographic plan.		

# Senate Bill 64 Floodplain and Drainage Standards Checklist (DE)

Community: Woodside County: Kent State: DE CID: \_\_\_\_\_

State Reviewer: UDWRA Date: 1/11/13 State Determination: \_\_\_\_\_

**Flood Zones:**    A    AE    AE (w/o FW)    AO    VE

Item Description	State Review	Revised
<b>Senate Bill 64 Floodplain Standards</b>		
1. For all new development activities which exceed 50 lots or 5 acres in locations contiguous to streams without a FEMA-delineated floodplain, a flood study shall be conducted.		
2. For all new development which exceed 50 lots or 5 acres in Zone A FEMA floodplains, a flood study shall be submitted to FEMA for approval prior to record plan approval.		
3. Only FEMA approved floodplain and BFE data shall be shown on record plans and development documents.		
4. Only base flood elevation approved by county, municipality or FEMA may be used in building permit application.		
5. Floodplain information must be included on permitting documentation.		
6. Require use of FEMA elevation certificate and flood-proofing certificate.		
7. Require 18 inches of freeboard for all new construction and substantial improvements.		
7a. Require 12 inches of freeboard for all new construction and substantial improvements.		
8. Require 18 inches of freeboard for manufactures homes.		
9. Fill placed in the floodplain which results in land having an elevation less than 18 inches above base flood elevation will not result in a relaxation of floodplain standards.		
10. Hydrostatic vents shall be required within 1 foot grade.		
11. Elevation of the lowest floor beneath an elevated building, must be above lowest adjacent grade at least one side.		
12. Prohibit subdividing land in floodplain. Newly subdivided floodplain shall remain deed restricted open space.		
13. Prohibit new non-water dependent structures dependent structures in floodplains in newly subdivided lands.		
14. Prohibit encroachments that would cause more than 0.1 foot of rise without compensation.		
15. Incorporate FEMA technical bulletins in local floodplain regulations.		
<b>Senate Bill 64 Drainage Standards</b>		
1. Easements of an adequate width shall be required over drainage conveyance systems within any proposed subdivision.		
2. The willful or negligent obstruction of any drainage conveyance shall be prohibited.		
3. Drainage conveyance systems within proposed subdivisions shall meet the minimum 10-year storm event.		
4. Lot grading shall ensure adequate drainage away from buildings and accessory structures without creating an adverse impact to adjacent structures or lands.		
5. A topographic plan submittal shall be required for all construction activity greater than 5,000 square feet.		
6. An as-built submittal shall be required for any construction with an approved topographic plan.		

# Senate Bill 64 Floodplain and Drainage Standards Checklist (DE)

Community: Wyoming County: Kent State: DE CID: \_\_\_\_\_

State Reviewer: UDWRA Date: 1/11/13 State Determination: \_\_\_\_\_

**Flood Zones:**    A    AE    AE (w/o FW)    AO    VE

Item Description	State Review	Revised
<b>Senate Bill 64 Floodplain Standards</b>		
1. For all new development activities which exceed 50 lots or 5 acres in locations contiguous to streams without a FEMA-delineated floodplain, a flood study shall be conducted.		
2. For all new development which exceed 50 lots or 5 acres in Zone A FEMA floodplains, a flood study shall be submitted to FEMA for approval prior to record plan approval.		
3. Only FEMA approved floodplain and BFE data shall be shown on record plans and development documents.		
4. Only base flood elevation approved by county, municipality or FEMA may be used in building permit application.		
5. Floodplain information must be included on permitting documentation.		
6. Require use of FEMA elevation certificate and flood-proofing certificate.		
7. Require 18 inches of freeboard for all new construction and substantial improvements.		
7a. Require 12 inches of freeboard for all new construction and substantial improvements.		
8. Require 18 inches of freeboard for manufactures homes.		
9. Fill placed in the floodplain which results in land having an elevation less than 18 inches above base flood elevation will not result in a relaxation of floodplain standards.		
10. Hydrostatic vents shall be required within 1 foot grade.		
11. Elevation of the lowest floor beneath an elevated building, must be above lowest adjacent grade at least one side.		
12. Prohibit subdividing land in floodplain. Newly subdivided floodplain shall remain deed restricted open space.		
13. Prohibit new non-water dependent structures dependent structures in floodplains in newly subdivided lands.		
14. Prohibit encroachments that would cause more than 0.1 foot of rise without compensation.		
15. Incorporate FEMA technical bulletins in local floodplain regulations.		
<b>Senate Bill 64 Drainage Standards</b>		
1. Easements of an adequate width shall be required over drainage conveyance systems within any proposed subdivision.		
2. The willful or negligent obstruction of any drainage conveyance shall be prohibited.		
3. Drainage conveyance systems within proposed subdivisions shall meet the minimum 10-year storm event.		
4. Lot grading shall ensure adequate drainage away from buildings and accessory structures without creating an adverse impact to adjacent structures or lands.		
5. A topographic plan submittal shall be required for all construction activity greater than 5,000 square feet.		
6. An as-built submittal shall be required for any construction with an approved topographic plan.		

# Senate Bill 64 Floodplain and Drainage Standards Checklist (DE)

Community: Sussex County County: Sussex State: DE CID: \_\_\_\_\_

State Reviewer: UDWRA Date: 1/11/13 State Determination: \_\_\_\_\_

**Flood Zones:**    A    AE    AE (w/o FW)    AO    VE

Item Description	State Review	Revised
<b>Senate Bill 64 Floodplain Standards</b>		
1. For all new development activities which exceed 50 lots or 5 acres in locations contiguous to streams without a FEMA-delineated floodplain, a flood study shall be conducted.	Definitions	
2. For all new development which exceed 50 lots or 5 acres in Zone A FEMA floodplains, a flood study shall be submitted to FEMA for approval prior to record plan approval.		
3. Only FEMA approved floodplain and BFE data shall be shown on record plans and development documents.		
4. Only base flood elevation approved by county, municipality or FEMA may be used in building permit application.		
5. Floodplain information must be included on permitting documentation.	115-220 B	
6. Require use of FEMA elevation certificate and flood-proofing certificate.		
7. Require 18 inches of freeboard for all new construction and substantial improvements.		
7a. Require 12 inches of freeboard for all new construction and substantial improvements.		
8. Require 18 inches of freeboard for manufactures homes.		
9. Fill placed in the floodplain which results in land having an elevation less than 18 inches above base flood elevation will not result in a relaxation of floodplain standards.		
10. Hydrostatic vents shall be required within 1 foot grade.	115-189 H (4)	
11. Elevation of the lowest floor beneath an elevated building, must be above lowest adjacent grade at least one side.		
12. Prohibit subdividing land in floodplain. Newly subdivided floodplain shall remain deed restricted open space.		
13. Prohibit new non-water dependent structures dependent structures in floodplains in newly subdivided lands.		
14. Prohibit encroachments that would cause more than 0.1 foot of rise without compensation.	115-189 K (3)	
15. Incorporate FEMA technical bulletins in local floodplain regulations.		
<b>Senate Bill 64 Drainage Standards</b>		
1. Easements of an adequate width shall be required over drainage conveyance systems within any proposed subdivision.	99-20 A.	
2. The willful or negligent obstruction of any drainage conveyance shall be prohibited.		
3. Drainage conveyance systems within proposed subdivisions shall meet the minimum 10-year storm event.		
4. Lot grading shall ensure adequate drainage away from buildings and accessory structures without creating an adverse impact to adjacent structures or lands.		
5. A topographic plan submittal shall be required for all construction activity greater than 5,000 square feet.	115-220 B.	
6. An as-built submittal shall be required for any construction with an approved topographic plan.		

# Senate Bill 64 Floodplain and Drainage Standards Checklist (DE)

Community: Bethany Beach County: Sussex State: DE CID: \_\_\_\_\_

State Reviewer: UDWRA Date: 1/11/13 State Determination: \_\_\_\_\_

**Flood Zones:**    A    AE    AE (w/o FW)    AO    VE

Item Description	State Review	Revised
<b>Senate Bill 64 Floodplain Standards</b>		
1. For all new development activities which exceed 50 lots or 5 acres in locations contiguous to streams without a FEMA-delineated floodplain, a flood study shall be conducted.		
2. For all new development which exceed 50 lots or 5 acres in Zone A FEMA floodplains, a flood study shall be submitted to FEMA for approval prior to record plan approval.		
3. Only FEMA approved floodplain and BFE data shall be shown on record plans and development documents.	435-5	
4. Only base flood elevation approved by county, municipality or FEMA may be used in building permit application.	435-5	
5. Floodplain information must be included on permitting documentation.	453-13	
6. Require use of FEMA elevation certificate and flood-proofing certificate.	453-12	
7. Require 18 inches of freeboard for all new construction and substantial improvements.		
7a. Require 12 inches of freeboard for all new construction and substantial improvements.		
8. Require 18 inches of freeboard for manufactures homes.		
9. Fill placed in the floodplain which results in land having an elevation less than 18 inches above base flood elevation will not result in a relaxation of floodplain standards.		
10. Hydrostatic vents shall be required within 1 foot grade.		
11. Elevation of the lowest floor beneath an elevated building, must be above lowest adjacent grade at least one side.		
12. Prohibit subdividing land in floodplain. Newly subdivided floodplain shall remain deed restricted open space.		
13. Prohibit new non-water dependent structures dependent structures in floodplains in newly subdivided lands.		
14. Prohibit encroachments that would cause more than 0.1 foot of rise without compensation.		
15. Incorporate FEMA technical bulletins in local floodplain regulations.		
<b>Senate Bill 64 Drainage Standards</b>		
1. Easements of an adequate width shall be required over drainage conveyance systems within any proposed subdivision.	410-42	
2. The willful or negligent obstruction of any drainage conveyance shall be prohibited.	516-41	
3. Drainage conveyance systems within proposed subdivisions shall meet the minimum 10-year storm event.		
4. Lot grading shall ensure adequate drainage away from buildings and accessory structures without creating an adverse impact to adjacent structures or lands.	475-1	
5. A topographic plan submittal shall be required for all construction activity greater than 5,000 square feet.	410-34	
6. An as-built submittal shall be required for any construction with an approved topographic plan.	410-34	

# Senate Bill 64 Floodplain and Drainage Standards Checklist (DE)

Community: Bethel County: Sussex State: DE CID: \_\_\_\_\_

State Reviewer: UDWRA Date: 1/11/13 State Determination: \_\_\_\_\_

**Flood Zones:**     A     AE     AE (w/o FW)     AO     VE

Item Description	State Review	Revised
<b>Senate Bill 64 Floodplain Standards</b>		
1. For all new development activities which exceed 50 lots or 5 acres in locations contiguous to streams without a FEMA-delineated floodplain, a flood study shall be conducted.		
2. For all new development which exceed 50 lots or 5 acres in Zone A FEMA floodplains, a flood study shall be submitted to FEMA for approval prior to record plan approval.		
3. Only FEMA approved floodplain and BFE data shall be shown on record plans and development documents.		
4. Only base flood elevation approved by county, municipality or FEMA may be used in building permit application.		
5. Floodplain information must be included on permitting documentation.		
6. Require use of FEMA elevation certificate and flood-proofing certificate.		
7. Require 18 inches of freeboard for all new construction and substantial improvements.		
7a. Require 12 inches of freeboard for all new construction and substantial improvements.		
8. Require 18 inches of freeboard for manufactures homes.		
9. Fill placed in the floodplain which results in land having an elevation less than 18 inches above base flood elevation will not result in a relaxation of floodplain standards.		
10. Hydrostatic vents shall be required within 1 foot grade.		
11. Elevation of the lowest floor beneath an elevated building, must be above lowest adjacent grade at least one side.		
12. Prohibit subdividing land in floodplain. Newly subdivided floodplain shall remain deed restricted open space.		
13. Prohibit new non-water dependent structures dependent structures in floodplains in newly subdivided lands.		
14. Prohibit encroachments that would cause more than 0.1 foot of rise without compensation.		
15. Incorporate FEMA technical bulletins in local floodplain regulations.		
<b>Senate Bill 64 Drainage Standards</b>		
1. Easements of an adequate width shall be required over drainage conveyance systems within any proposed subdivision.		
2. The willful or negligent obstruction of any drainage conveyance shall be prohibited.		
3. Drainage conveyance systems within proposed subdivisions shall meet the minimum 10-year storm event.		
4. Lot grading shall ensure adequate drainage away from buildings and accessory structures without creating an adverse impact to adjacent structures or lands.		
5. A topographic plan submittal shall be required for all construction activity greater than 5,000 square feet.		
6. An as-built submittal shall be required for any construction with an approved topographic plan.		

# Senate Bill 64 Floodplain and Drainage Standards Checklist (DE)

Community: Blades County: Sussex State: DE CID: \_\_\_\_\_

State Reviewer: UDWRA Date: 1/11/13 State Determination: \_\_\_\_\_

**Flood Zones:**    A    AE    AE (w/o FW)    AO    VE

Item Description	State Review	Revised
<b>Senate Bill 64 Floodplain Standards</b>		
1. For all new development activities which exceed 50 lots or 5 acres in locations contiguous to streams without a FEMA-delineated floodplain, a flood study shall be conducted.		
2. For all new development which exceed 50 lots or 5 acres in Zone A FEMA floodplains, a flood study shall be submitted to FEMA for approval prior to record plan approval.		
3. Only FEMA approved floodplain and BFE data shall be shown on record plans and development documents.	Articles 4. Table 4-2	
4. Only base flood elevation approved by county, municipality or FEMA may be used in building permit application.	Articles 4. Table 4-3	
5. Floodplain information must be included on permitting documentation.	Section 4-2. Site-Plan Approval	
6. Require use of FEMA elevation certificate and flood-proofing certificate.		
7. Require 18 inches of freeboard for all new construction and substantial improvements.		
7a. Require 12 inches of freeboard for all new construction and substantial improvements.		
8. Require 18 inches of freeboard for manufactures homes.		
9. Fill placed in the floodplain which results in land having an elevation less than 18 inches above base flood elevation will not result in a relaxation of floodplain standards.		
10. Hydrostatic vents shall be required within 1 foot grade.	Article 12 (C.2.e.)	
11. Elevation of the lowest floor beneath an elevated building, must be above lowest adjacent grade at least one side.		
12. Prohibit subdividing land in floodplain. Newly subdivided floodplain shall remain deed restricted open space.		
13. Prohibit new non-water dependent structures dependent structures in floodplains in newly subdivided lands.		
14. Prohibit encroachments that would cause more than 0.1 foot of rise without compensation.		
15. Incorporate FEMA technical bulletins in floodplain regs.		
<b>Senate Bill 64 Drainage Standards</b>		
1. Easements of an adequate width shall be required over drainage conveyance systems within any proposed subdivision.	9-4	
2. The willful or negligent obstruction of any drainage conveyance shall be prohibited.		
3. Drainage conveyance systems within proposed subdivisions shall meet the minimum 10-year storm event.		
4. Lot grading shall ensure adequate drainage away from buildings and accessory structures without creating an adverse impact to adjacent structures or lands.		
5. A topographic plan submittal shall be required for all construction activity greater than 5,000 square feet.	Art. 4, Table 4-2 Under "Information Required for Development Plan Review"- Environmental Information: Topographical features of the site from the USC&GS map.	
6. An as-built submittal shall be required for any construction with an approved topographic plan.		

# Senate Bill 64 Floodplain and Drainage Standards Checklist (DE)

Community: Bridgeville County: Sussex State: DE CID: \_\_\_\_\_

State Reviewer: UDWRA Date: 1/11/13 State Determination: \_\_\_\_\_

**Flood Zones:**    A    AE    AE (w/o FW)    AO    VE

Item Description	State Review	Revised
<b>Senate Bill 64 Floodplain Standards</b>		
1. For all new development activities which exceed 50 lots or 5 acres in locations contiguous to streams without a FEMA-delineated floodplain, a flood study shall be conducted.		
2. For all new development which exceed 50 lots or 5 acres in Zone A FEMA floodplains, a flood study shall be submitted to FEMA for approval prior to record plan approval.		
3. Only FEMA approved floodplain and BFE data shall be shown on record plans and development documents.	138-6	
4. Only base flood elevation approved by county, municipality or FEMA may be used in building permit application.	138-6	
5. Floodplain information must be included on permitting documentation.	138-13/14	
6. Require use of FEMA elevation certificate and flood-proofing certificate.		
7. Require 18 inches of freeboard for all new construction and substantial improvements.		
7a. Require 12 inches of freeboard for all new construction and substantial improvements.		
8. Require 18 inches of freeboard for manufactures homes.		
9. Fill placed in the floodplain which results in land having an elevation less than 18 inches above base flood elevation will not result in a relaxation of floodplain standards.		
10. Hydrostatic vents shall be required within 1 foot grade.	138-15	
11. Elevation of the lowest floor beneath an elevated building, must be above lowest adjacent grade at least one side.		
12. Prohibit subdividing land in floodplain. Newly subdivided floodplain shall remain deed restricted open space.		
13. Prohibit new non-water dependent structures dependent structures in floodplains in newly subdivided lands.		
14. Prohibit encroachments that would cause more than 0.1 foot of rise without compensation.	138-10	
15. Incorporate FEMA technical bulletins in local floodplain regulations.		
<b>Senate Bill 64 Drainage Standards</b>		
1. Easements of an adequate width shall be required over drainage conveyance systems within any proposed subdivision.	234-58	
2. The willful or negligent obstruction of any drainage conveyance shall be prohibited.		
3. Drainage conveyance systems within proposed subdivisions shall meet the minimum 10-year storm event.		
4. Lot grading shall ensure adequate drainage away from buildings and accessory structures without creating an adverse impact to adjacent structures or lands.		
5. A topographic plan submittal shall be required for all construction activity greater than 5,000 square feet.	234-38	
6. An as-built submittal shall be required for any construction with an approved topographic plan.	234-60	

# Senate Bill 64 Floodplain and Drainage Standards Checklist (DE)

Community: Dagsboro County: Sussex State: DE CID: \_\_\_\_\_

State Reviewer: UDWRA Date: 1/11/13 State Determination: \_\_\_\_\_

**Flood Zones:**    A    AE    AE (w/o FW)    AO    VE

Item Description	State Review	Revised
<b>Senate Bill 64 Floodplain Standards</b>		
1. For all new development activities which exceed 50 lots or 5 acres in locations contiguous to streams without a FEMA-delineated floodplain, a flood study shall be conducted.		
2. For all new development which exceed 50 lots or 5 acres in Zone A FEMA floodplains, a flood study shall be submitted to FEMA for approval prior to record plan approval.		
3. Only FEMA approved floodplain and BFE data shall be shown on record plans and development documents.	118-5	
4. Only base flood elevation approved by county, municipality or FEMA may be used in building permit application.	118-5	
5. Floodplain information must be included on permitting documentation.	118-12	
6. Require use of FEMA elevation certificate and flood-proofing certificate.		
7. Require 18 inches of freeboard for all new construction and substantial improvements.		
7a. Require 12 inches of freeboard for all new construction and substantial improvements.		
8. Require 18 inches of freeboard for manufactures homes.		
9. Fill placed in the floodplain which results in land having an elevation less than 18 inches above base flood elevation will not result in a relaxation of floodplain standards.		
10. Hydrostatic vents shall be required within 1 foot grade.		
11. Elevation of the lowest floor beneath an elevated building, must be above lowest adjacent grade at least one side.		
12. Prohibit subdividing land in floodplain. Newly subdivided floodplain shall remain deed restricted open space.		
13. Prohibit new non-water dependent structures dependent structures in floodplains in newly subdivided lands.		
14. Prohibit encroachments that would cause more than 0.1 foot of rise without compensation.		
15. Incorporate FEMA technical bulletins in local floodplain regulations.		
<b>Senate Bill 64 Drainage Standards</b>		
1. Easements of an adequate width shall be required over drainage conveyance systems within any proposed subdivision.	31	
2. The willful or negligent obstruction of any drainage conveyance shall be prohibited.		
3. Drainage conveyance systems within proposed subdivisions shall meet the minimum 10-year storm event.		
4. Lot grading shall ensure adequate drainage away from buildings and accessory structures without creating an adverse impact to adjacent structures or lands.	275-31	
5. A topographic plan submittal shall be required for all construction activity greater than 5,000 square feet.	275-40	
6. An as-built submittal shall be required for any construction with an approved topographic plan.		

# Senate Bill 64 Floodplain and Drainage Standards Checklist (DE)

Community: Delmar County: Sussex State: DE CID: \_\_\_\_\_

State Reviewer: UDWRA Date: 1/11/13 State Determination: \_\_\_\_\_

**Flood Zones:**     A     AE     AE (w/o FW)     AO     VE

Item Description	State Review	Revised
<b>Senate Bill 64 Floodplain Standards</b>		
1. For all new development activities which exceed 50 lots or 5 acres in locations contiguous to streams without a FEMA-delineated floodplain, a flood study shall be conducted.		
2. For all new development which exceed 50 lots or 5 acres in Zone A FEMA floodplains, a flood study shall be submitted to FEMA for approval prior to record plan approval.		
3. Only FEMA approved floodplain and BFE data shall be shown on record plans and development documents.		
4. Only base flood elevation approved by county, municipality or FEMA may be used in building permit application.		
5. Floodplain information must be included on permitting documentation.		
6. Require use of FEMA elevation certificate and flood-proofing certificate.		
7. Require 18 inches of freeboard for all new construction and substantial improvements.		
7a. Require 12 inches of freeboard for all new construction and substantial improvements.		
8. Require 18 inches of freeboard for manufactures homes.		
9. Fill placed in the floodplain which results in land having an elevation less than 18 inches above base flood elevation will not result in a relaxation of floodplain standards.		
10. Hydrostatic vents shall be required within 1 foot grade.		
11. Elevation of the lowest floor beneath an elevated building, must be above lowest adjacent grade at least one side.		
12. Prohibit subdividing land in floodplain. Newly subdivided floodplain shall remain deed restricted open space.		
13. Prohibit new non-water dependent structures dependent structures in floodplains in newly subdivided lands.		
14. Prohibit encroachments that would cause more than 0.1 foot of rise without compensation.		
15. Incorporate FEMA technical bulletins in local floodplain regulations.		
<b>Senate Bill 64 Drainage Standards</b>		
1. Easements of an adequate width shall be required over drainage conveyance systems within any proposed subdivision.		
2. The willful or negligent obstruction of any drainage conveyance shall be prohibited.		
3. Drainage conveyance systems within proposed subdivisions shall meet the minimum 10-year storm event.		
4. Lot grading shall ensure adequate drainage away from buildings and accessory structures without creating an adverse impact to adjacent structures or lands.		
5. A topographic plan submittal shall be required for all construction activity greater than 5,000 square feet.		
6. An as-built submittal shall be required for any construction with an approved topographic plan.		

# Senate Bill 64 Floodplain and Drainage Standards Checklist (DE)

Community: Dewey Beach County: Sussex State: DE CID: \_\_\_\_\_

State Reviewer: UDWRA Date: 1/11/13 State Determination: \_\_\_\_\_

**Flood Zones:**    A    AE    AE (w/o FW)    AO    VE

Item Description	State Review	Revised
<b>Senate Bill 64 Floodplain Standards</b>		
1. For all new development activities which exceed 50 lots or 5 acres in locations contiguous to streams without a FEMA-delineated floodplain, a flood study shall be conducted.		
2. For all new development which exceed 50 lots or 5 acres in Zone A FEMA floodplains, a flood study shall be submitted to FEMA for approval prior to record plan approval.		
3. Only FEMA approved floodplain and BFE data shall be shown on record plans and development documents.	101-5	
4. Only base flood elevation approved by county, municipality or FEMA may be used in building permit application.	101-5	
5. Floodplain information must be included on permitting documentation.	101-19	
6. Require use of FEMA elevation certificate and flood-proofing certificate.		
7. Require 18 inches of freeboard for all new construction and substantial improvements.		
7a. Require 12 inches of freeboard for all new construction and substantial improvements.	101-11	
8. Require 18 inches of freeboard for manufactures homes.		
9. Fill placed in the floodplain which results in land having an elevation less than 18 inches above base flood elevation will not result in a relaxation of floodplain standards.		
10. Hydrostatic vents shall be required within 1 foot grade.	101-10	
11. Elevation of the lowest floor beneath an elevated building, must be above lowest adjacent grade at least one side.		
12. Prohibit subdividing land in floodplain. Newly subdivided floodplain shall remain deed restricted open space.		
13. Prohibit new non-water dependent structures dependent structures in floodplains in newly subdivided lands.		
14. Prohibit encroachments that would cause more than 0.1 foot of rise without compensation.		
15. Incorporate FEMA technical bulletins in local floodplain regulations.		
<b>Senate Bill 64 Drainage Standards</b>		
1. Easements of an adequate width shall be required over drainage conveyance systems within any proposed subdivision.		
2. The willful or negligent obstruction of any drainage conveyance shall be prohibited.		
3. Drainage conveyance systems within proposed subdivisions shall meet the minimum 10-year storm event.		
4. Lot grading shall ensure adequate drainage away from buildings and accessory structures without creating an adverse impact to adjacent structures or lands.	185-89	
5. A topographic plan submittal shall be required for all construction activity greater than 5,000 square feet.		
6. An as-built submittal shall be required for any construction with an approved topographic plan.		

# Senate Bill 64 Floodplain and Drainage Standards Checklist (DE)

Community: Ellendale County: Sussex State: DE CID: \_\_\_\_\_

State Reviewer: UDWRA Date: 1/11/13 State Determination: \_\_\_\_\_

**Flood Zones:**    A    AE    AE (w/o FW)    AO    VE

Item Description	State Review	Revised
<b>Senate Bill 64 Floodplain Standards</b>		
1. For all new development activities which exceed 50 lots or 5 acres in locations contiguous to streams without a FEMA-delineated floodplain, a flood study shall be conducted.		
2. For all new development which exceed 50 lots or 5 acres in Zone A FEMA floodplains, a flood study shall be submitted to FEMA for approval prior to record plan approval.		
3. Only FEMA approved floodplain and BFE data shall be shown on record plans and development documents.		
4. Only base flood elevation approved by county, municipality or FEMA may be used in building permit application.		
5. Floodplain information must be included on permitting documentation.		
6. Require use of FEMA elevation certificate and flood-proofing certificate.		
7. Require 18 inches of freeboard for all new construction and substantial improvements.		
7a. Require 12 inches of freeboard for all new construction and substantial improvements.		
8. Require 18 inches of freeboard for manufactures homes.		
9. Fill placed in the floodplain which results in land having an elevation less than 18 inches above base flood elevation will not result in a relaxation of floodplain standards.		
10. Hydrostatic vents shall be required within 1 foot grade.		
11. Elevation of the lowest floor beneath an elevated building, must be above lowest adjacent grade at least one side.		
12. Prohibit subdividing land in floodplain. Newly subdivided floodplain shall remain deed restricted open space.		
13. Prohibit new non-water dependent structures dependent structures in floodplains in newly subdivided lands.		
14. Prohibit encroachments that would cause more than 0.1 foot of rise without compensation.		
15. Incorporate FEMA technical bulletins in local floodplain regulations.		
<b>Senate Bill 64 Drainage Standards</b>		
1. Easements of an adequate width shall be required over drainage conveyance systems within any proposed subdivision.		
2. The willful or negligent obstruction of any drainage conveyance shall be prohibited.		
3. Drainage conveyance systems within proposed subdivisions shall meet the minimum 10-year storm event.		
4. Lot grading shall ensure adequate drainage away from buildings and accessory structures without creating an adverse impact to adjacent structures or lands.		
5. A topographic plan submittal shall be required for all construction activity greater than 5,000 square feet.		
6. An as-built submittal shall be required for any construction with an approved topographic plan.		

# Senate Bill 64 Floodplain and Drainage Standards Checklist (DE)

Community: Fenwick Island County: Sussex State: DE CID: \_\_\_\_\_

State Reviewer: UDWRA Date: 1/11/13 State Determination: \_\_\_\_\_

**Flood Zones:**    A    AE    AE (w/o FW)    AO    VE

Item Description	State Review	Revised
<b>Senate Bill 64 Floodplain Standards</b>		
1. For all new development activities which exceed 50 lots or 5 acres in locations contiguous to streams without a FEMA-delineated floodplain, a flood study shall be conducted.		
2. For all new development which exceed 50 lots or 5 acres in Zone A FEMA floodplains, a flood study shall be submitted to FEMA for approval prior to record plan approval.		
3. Only FEMA approved floodplain and BFE data shall be shown on record plans and development documents.	88-3	
4. Only base flood elevation approved by county, municipality or FEMA may be used in building permit application.	88-3	
5. Floodplain information must be included on permitting documentation.	88-8	
6. Require use of FEMA elevation certificate and flood-proofing certificate.		
7. Require 18 inches of freeboard for all new construction and substantial improvements.	88-5	
7a. Require 12 inches of freeboard for all new construction and substantial improvements.		
8. Require 18 inches of freeboard for manufactures homes.		
9. Fill placed in the floodplain which results in land having an elevation less than 18 inches above base flood elevation will not result in a relaxation of floodplain standards.		
10. Hydrostatic vents shall be required within 1 foot grade.	88-5	
11. Elevation of the lowest floor beneath an elevated building, must be above lowest adjacent grade at least one side.		
12. Prohibit subdividing land in floodplain. Newly subdivided floodplain shall remain deed restricted open space.		
13. Prohibit new non-water dependent structures dependent structures in floodplains in newly subdivided lands.		
14. Prohibit encroachments that would cause more than 0.1 foot of rise without compensation.		
15. Incorporate FEMA technical bulletins in local floodplain regulations.		
<b>Senate Bill 64 Drainage Standards</b>		
1. Easements of an adequate width shall be required over drainage conveyance systems within any proposed subdivision.		
2. The willful or negligent obstruction of any drainage conveyance shall be prohibited.		
3. Drainage conveyance systems within proposed subdivisions shall meet the minimum 10-year storm event.		
4. Lot grading shall ensure adequate drainage away from buildings and accessory structures without creating an adverse impact to adjacent structures or lands.		
5. A topographic plan submittal shall be required for all construction activity greater than 5,000 square feet.		
6. An as-built submittal shall be required for any construction with an approved topographic plan.		

# Senate Bill 64 Floodplain and Drainage Standards Checklist (DE)

Community: Frankford County: Sussex State: DE CID: \_\_\_\_\_

State Reviewer: UDWRA Date: 1/11/13 State Determination: \_\_\_\_\_

**Flood Zones:**     A     AE     AE (w/o FW)     AO     VE

Item Description	State Review	Revised
<b>Senate Bill 64 Floodplain Standards</b>		
1. For all new development activities which exceed 50 lots or 5 acres in locations contiguous to streams without a FEMA-delineated floodplain, a flood study shall be conducted.		
2. For all new development which exceed 50 lots or 5 acres in Zone A FEMA floodplains, a flood study shall be submitted to FEMA for approval prior to record plan approval.		
3. Only FEMA approved floodplain and BFE data shall be shown on record plans and development documents.		
4. Only base flood elevation approved by county, municipality or FEMA may be used in building permit application.		
5. Floodplain information must be included on permitting documentation.		
6. Require use of FEMA elevation certificate and flood-proofing certificate.		
7. Require 18 inches of freeboard for all new construction and substantial improvements.		
7a. Require 12 inches of freeboard for all new construction and substantial improvements.		
8. Require 18 inches of freeboard for manufactures homes.		
9. Fill placed in the floodplain which results in land having an elevation less than 18 inches above base flood elevation will not result in a relaxation of floodplain standards.		
10. Hydrostatic vents shall be required within 1 foot grade.		
11. Elevation of the lowest floor beneath an elevated building, must be above lowest adjacent grade at least one side.		
12. Prohibit subdividing land in floodplain. Newly subdivided floodplain shall remain deed restricted open space.		
13. Prohibit new non-water dependent structures dependent structures in floodplains in newly subdivided lands.		
14. Prohibit encroachments that would cause more than 0.1 foot of rise without compensation.		
15. Incorporate FEMA technical bulletins in local floodplain regulations.		
<b>Senate Bill 64 Drainage Standards</b>		
1. Easements of an adequate width shall be required over drainage conveyance systems within any proposed subdivision.		
2. The willful or negligent obstruction of any drainage conveyance shall be prohibited.		
3. Drainage conveyance systems within proposed subdivisions shall meet the minimum 10-year storm event.		
4. Lot grading shall ensure adequate drainage away from buildings and accessory structures without creating an adverse impact to adjacent structures or lands.		
5. A topographic plan submittal shall be required for all construction activity greater than 5,000 square feet.		
6. An as-built submittal shall be required for any construction with an approved topographic plan.		

# Senate Bill 64 Floodplain and Drainage Standards Checklist (DE)

Community: Georgetown County: Sussex State: DE CID: \_\_\_\_\_

State Reviewer: UDWRA Date: 1/11/13 State Determination: \_\_\_\_\_

**Flood Zones:**    A    AE    AE (w/o FW)    AO    VE

Item Description	State Review	Revised
<b>Senate Bill 64 Floodplain Standards</b>		
1. For all new development activities which exceed 50 lots or 5 acres in locations contiguous to streams without a FEMA-delineated floodplain, a flood study shall be conducted.		
2. For all new development which exceed 50 lots or 5 acres in Zone A FEMA floodplains, a flood study shall be submitted to FEMA for approval prior to record plan approval.		
3. Only FEMA approved floodplain and BFE data shall be shown on record plans and development documents.	107-5	
4. Only base flood elevation approved by county, municipality or FEMA may be used in building permit application.	107-5	
5. Floodplain information must be included on permitting documentation.	107-13	
6. Require use of FEMA elevation certificate and flood-proofing certificate.		
7. Require 18 inches of freeboard for all new construction and substantial improvements.		
7a. Require 12 inches of freeboard for all new construction and substantial improvements.		
8. Require 18 inches of freeboard for manufactures homes.		
9. Fill placed in the floodplain which results in land having an elevation less than 18 inches above base flood elevation will not result in a relaxation of floodplain standards.		
10. Hydrostatic vents shall be required within 1 foot grade.	107-15	
11. Elevation of the lowest floor beneath an elevated building, must be above lowest adjacent grade at least one side.		
12. Prohibit subdividing land in floodplain. Newly subdivided floodplain shall remain deed restricted open space.		
13. Prohibit new non-water dependent structures dependent structures in floodplains in newly subdivided lands.		
14. Prohibit encroachments that would cause more than 0.1 foot of rise without compensation.		
15. Incorporate FEMA technical bulletins in local floodplain regulations.		
<b>Senate Bill 64 Drainage Standards</b>		
1. Easements of an adequate width shall be required over drainage conveyance systems within any proposed subdivision.		
2. The willful or negligent obstruction of any drainage conveyance shall be prohibited.		
3. Drainage conveyance systems within proposed subdivisions shall meet the minimum 10-year storm event.		
4. Lot grading shall ensure adequate drainage away from buildings and accessory structures without creating an adverse impact to adjacent structures or lands.		
5. A topographic plan submittal shall be required for all construction activity greater than 5,000 square feet.	230-211	
6. An as-built submittal shall be required for any construction with an approved topographic plan.	194-34	

# Senate Bill 64 Floodplain and Drainage Standards Checklist (DE)

Community: Greenwood County: Sussex State: DE CID: \_\_\_\_\_

State Reviewer: UDWRA Date: 1/11/13 State Determination: \_\_\_\_\_

**Flood Zones:**     A     AE     AE (w/o FW)     AO     VE

Item Description	State Review	Revised
<b>Senate Bill 64 Floodplain Standards</b>		
1. For all new development activities which exceed 50 lots or 5 acres in locations contiguous to streams without a FEMA-delineated floodplain, a flood study shall be conducted.		
2. For all new development which exceed 50 lots or 5 acres in Zone A FEMA floodplains, a flood study shall be submitted to FEMA for approval prior to record plan approval.		
3. Only FEMA approved floodplain and BFE data shall be shown on record plans and development documents.		
4. Only base flood elevation approved by county, municipality or FEMA may be used in building permit application.		
5. Floodplain information must be included on permitting documentation.	Art. 5, Sec. 3	
6. Require use of FEMA elevation certificate and flood-proofing certificate.		
7. Require 18 inches of freeboard for all new construction and substantial improvements.		
7a. Require 12 inches of freeboard for all new construction and substantial improvements.		
8. Require 18 inches of freeboard for manufactures homes.		
9. Fill placed in the floodplain which results in land having an elevation less than 18 inches above base flood elevation will not result in a relaxation of floodplain standards.		
10. Hydrostatic vents shall be required within 1 foot grade.	Art. 6, Section A3a	
11. Elevation of the lowest floor beneath an elevated building, must be above lowest adjacent grade at least one side.		
12. Prohibit subdividing land in floodplain. Newly subdivided floodplain shall remain deed restricted open space.		
13. Prohibit new non-water dependent structures dependent structures in floodplains in newly subdivided lands.		
14. Prohibit encroachments that would cause more than 0.1 foot of rise without compensation.	Article 5, Sec. 2	
15. Incorporate FEMA technical bulletins in local floodplain regulations.		
<b>Senate Bill 64 Drainage Standards</b>		
1. Easements of an adequate width shall be required over drainage conveyance systems within any proposed subdivision.		
2. The willful or negligent obstruction of any drainage conveyance shall be prohibited.		
3. Drainage conveyance systems within proposed subdivisions shall meet the minimum 10-year storm event.		
4. Lot grading shall ensure adequate drainage away from buildings and accessory structures without creating an adverse impact to adjacent structures or lands.		
5. A topographic plan submittal shall be required for all construction activity greater than 5,000 square feet.		
6. An as-built submittal shall be required for any construction with an approved topographic plan.	Unsure if meets std. 14.8.1	

# Senate Bill 64 Floodplain and Drainage Standards Checklist (DE)

Community: Henlopen Acres County: Sussex State: DE CID: \_\_\_\_\_

State Reviewer: UDWRA Date: 1/11/13 State Determination: \_\_\_\_\_

**Flood Zones:**    A    AE    AE (w/o FW)    AO    VE

Item Description	State Review	Revised
<b>Senate Bill 64 Floodplain Standards</b>		
1. For all new development activities which exceed 50 lots or 5 acres in locations contiguous to streams without a FEMA-delineated floodplain, a flood study shall be conducted.		
2. For all new development which exceed 50 lots or 5 acres in Zone A FEMA floodplains, a flood study shall be submitted to FEMA for approval prior to record plan approval.		
3. Only FEMA approved floodplain and BFE data shall be shown on record plans and development documents.	Art. 3, 71-4; 71-6	
4. Only base flood elevation approved by county, municipality or FEMA may be used in building permit application.	Art. 3, 71-4	
5. Floodplain information must be included on permitting documentation.	Art. 5, 71-15	
6. Require use of FEMA elevation certificate and flood-proofing certificate.		
7. Require 18 inches of freeboard for all new construction and substantial improvements.	Art. 6, 71-16	
7a. Require 12 inches of freeboard for all new construction and substantial improvements.	Art. 6, 71-16	
8. Require 18 inches of freeboard for manufactures homes.		
9. Fill placed in the floodplain which results in land having an elevation less than 18 inches above base flood elevation will not result in a relaxation of floodplain standards.		
10. Hydrostatic vents shall be required within 1 foot grade.	Art. 5, 71-16	
11. Elevation of the lowest floor beneath an elevated building, must be above lowest adjacent grade at least one side.		
12. Prohibit subdividing land in floodplain. Newly subdivided floodplain shall remain deed restricted open space.		
13. Prohibit new non-water dependent structures dependent structures in floodplains in newly subdivided lands.		
14. Prohibit encroachments that would cause more than 0.1 foot of rise without compensation.	Art. 4, 71-9	
15. Incorporate FEMA technical bulletins in local floodplain regulations.		
<b>Senate Bill 64 Drainage Standards</b>		
7. Easements of an adequate width shall be required over drainage conveyance systems within any proposed subdivision.		
8. The willful or negligent obstruction of any drainage conveyance shall be prohibited.		
9. Drainage conveyance systems within proposed subdivisions shall meet the minimum 10-year storm event.		
10. Lot grading shall ensure adequate drainage away from buildings and accessory structures without creating an adverse impact to adjacent structures or lands.		
11. A topographic plan submittal shall be required for all construction activity greater than 5,000 square feet.		
12. An as-built submittal shall be required for any construction with an approved topographic plan.		

# Senate Bill 64 Floodplain and Drainage Standards Checklist (DE)

Community: Laurel County: Sussex State: DE CID: \_\_\_\_\_

State Reviewer: UDWRA Date: 1/11/13 State Determination: \_\_\_\_\_

**Flood Zones:**    A    AE    AE (w/o FW)    AO    VE

Item Description	State Review	Revised
<b>Senate Bill 64 Floodplain Standards</b>		
1. For all new development activities which exceed 50 lots or 5 acres in locations contiguous to streams without a FEMA-delineated floodplain, a flood study shall be conducted.		
2. For all new development which exceed 50 lots or 5 acres in Zone A FEMA floodplains, a flood study shall be submitted to FEMA for approval prior to record plan approval.		
3. Only FEMA approved floodplain and BFE data shall be shown on record plans and development documents.	Art. 3, 80-6	
4. Only base flood elevation approved by county, municipality or FEMA may be used in building permit application.	Art. 3, 80-5	
5. Floodplain information must be included on permitting documentation.	Art. 5, 80-12	
6. Require use of FEMA elevation certificate and flood-proofing certificate.		
7. Require 18 inches of freeboard for all new construction and substantial improvements.		
7a. Require 12 inches of freeboard for all new construction and substantial improvements.		
8. Require 18 inches of freeboard for manufactures homes.		
9. Fill placed in the floodplain which results in land having an elevation less than 18 inches above base flood elevation will not result in a relaxation of floodplain standards.		
10. Hydrostatic vents shall be required within 1 foot grade.	Art. 6, 80-13	
11. Elevation of the lowest floor beneath an elevated building, must be above lowest adjacent grade at least one side.		
12. Prohibit subdividing land in floodplain. Newly subdivided floodplain shall remain deed restricted open space.		
13. Prohibit new non-water dependent structures dependent structures in floodplains in newly subdivided lands.		
14. Prohibit encroachments that would cause more than 0.1 foot of rise without compensation.	Art. 4, 80-8	
15. Incorporate FEMA technical bulletins in local floodplain regulations.		
<b>Senate Bill 64 Drainage Standards</b>		
1. Easements of an adequate width shall be required over drainage conveyance systems within any proposed subdivision.		
2. The willful or negligent obstruction of any drainage conveyance shall be prohibited.		
3. Drainage conveyance systems within proposed subdivisions shall meet the minimum 10-year storm event.		
4. Lot grading shall ensure adequate drainage away from buildings and accessory structures without creating an adverse impact to adjacent structures or lands.		
5. A topographic plan submittal shall be required for all construction activity greater than 5,000 square feet.		
6. An as-built submittal shall be required for any construction with an approved topographic plan.		

# Senate Bill 64 Floodplain and Drainage Standards Checklist (DE)

Community: Lewes County: Sussex State: DE CID: \_\_\_\_\_

State Reviewer: UDWRA Date: 1/11/13 State Determination: \_\_\_\_\_

**Flood Zones:**    A    AE    AE (w/o FW)    AO    VE

Item Description	State Review	Revised
<b>Senate Bill 64 Floodplain Standards</b>		
1. For all new development activities which exceed 50 lots or 5 acres in locations contiguous to streams without a FEMA-delineated floodplain, a flood study shall be conducted.		
2. For all new development which exceed 50 lots or 5 acres in Zone A FEMA floodplains, a flood study shall be submitted to FEMA for approval prior to record plan approval.		
3. Only FEMA approved floodplain and BFE data shall be shown on record plans and development documents.	Art. 9, 197-73	
4. Only base flood elevation approved by county, municipality or FEMA may be used in building permit application.	Art. 9, 197-73	
5. Floodplain information must be included on permitting documentation.	Art. 9, 197-73	
6. Require use of FEMA elevation certificate and flood-proofing certificate.		
7. Require 18 inches of freeboard for all new construction and substantial improvements.		
7a. Require 12 inches of freeboard for all new construction and substantial improvements.		
8. Require 18 inches of freeboard for manufactures homes.		
9. Fill placed in the floodplain which results in land having an elevation less than 18 inches above base flood elevation will not result in a relaxation of floodplain standards.		
10. Hydrostatic vents shall be required within 1 foot grade.	Art. 9, 197-73	
11. Elevation of the lowest floor beneath an elevated building, must be above lowest adjacent grade at least one side.		
12. Prohibit subdividing land in floodplain. Newly subdivided floodplain shall remain deed restricted open space.		
13. Prohibit new non-water dependent structures dependent structures in floodplains in newly subdivided lands.		
14. Prohibit encroachments that would cause more than 0.1 foot of rise without compensation.		
15. Incorporate FEMA technical bulletins in local floodplain regulations.		
<b>Senate Bill 64 Drainage Standards</b>		
1. Easements of an adequate width shall be required over drainage conveyance systems within any proposed subdivision.		
2. The willful or negligent obstruction of any drainage conveyance shall be prohibited.		
3. Drainage conveyance systems within proposed subdivisions shall meet the minimum 10-year storm event.		
4. Lot grading shall ensure adequate drainage away from buildings and accessory structures without creating an adverse impact to adjacent structures or lands.		
5. A topographic plan submittal shall be required for all construction activity greater than 5,000 square feet.		
6. An as-built submittal shall be required for any construction with an approved topographic plan.	170-19	

# Senate Bill 64 Floodplain and Drainage Standards Checklist (DE)

Community: Millsboro County: Sussex State: DE CID: \_\_\_\_\_

State Reviewer: UDWRA Date: 1/11/13 State Determination: \_\_\_\_\_

**Flood Zones:**    A    AE    AE (w/o FW)    AO    VE

Item Description	State Review	Revised
<b>Senate Bill 64 Floodplain Standards</b>		
1. For all new development activities which exceed 50 lots or 5 acres in locations contiguous to streams without a FEMA-delineated floodplain, a flood study shall be conducted.		
2. For all new development which exceed 50 lots or 5 acres in Zone A FEMA floodplains, a flood study shall be submitted to FEMA for approval prior to record plan approval.		
3. Only FEMA approved floodplain and BFE data shall be shown on record plans and development documents.	109-7	
4. Only base flood elevation approved by county, municipality or FEMA may be used in building permit application.	109-7	
5. Floodplain information must be included on permitting documentation.	109-13	
6. Require use of FEMA elevation certificate and flood-proofing certificate.		
7. Require 18 inches of freeboard for all new construction and substantial improvements.		
7a. Require 12 inches of freeboard for all new construction and substantial improvements.		
8. Require 18 inches of freeboard for manufactures homes.		
9. Fill placed in the floodplain which results in land having an elevation less than 18 inches above base flood elevation will not result in a relaxation of floodplain standards.		
10. Hydrostatic vents shall be required within 1 foot grade.	109-14	
11. Elevation of the lowest floor beneath an elevated building, must be above lowest adjacent grade at least one side.		
12. Prohibit subdividing land in floodplain. Newly subdivided floodplain shall remain deed restricted open space.		
13. Prohibit new non-water dependent structures dependent structures in floodplains in newly subdivided lands.		
14. Prohibit encroachments that would cause more than 0.1 foot of rise without compensation.	109-9	
15. Incorporate FEMA technical bulletins in floodplain regs.		
<b>Senate Bill 64 Drainage Standards</b>		
1. Easements of an adequate width shall be required over drainage conveyance systems within any proposed subdivision.		
2. The willful or negligent obstruction of any drainage conveyance shall be prohibited.		
3. Drainage conveyance systems within proposed subdivisions shall meet the minimum 10-year storm event.		
4. Lot grading shall ensure adequate drainage away from buildings and accessory structures without creating an adverse impact to adjacent structures or lands.	210-36	
5. A topographic plan submittal shall be required for all construction activity greater than 5,000 square feet.	210-66	
6. An as-built submittal shall be required for any construction with an approved topographic plan.		

# Senate Bill 64 Floodplain and Drainage Standards Checklist (DE)

Community: Millville County: Sussex State: DE CID: \_\_\_\_\_

State Reviewer: UDWRA Date: 1/11/13 State Determination: \_\_\_\_\_

**Flood Zones:**    A    AE    AE (w/o FW)    AO    VE

Item Description	State Review	Revised
<b>Senate Bill 64 Floodplain Standards</b>		
1. For all new development activities which exceed 50 lots or 5 acres in locations contiguous to streams without a FEMA-delineated floodplain, a flood study shall be conducted.		
2. For all new development which exceed 50 lots or 5 acres in Zone A FEMA floodplains, a flood study shall be submitted to FEMA for approval prior to record plan approval.		
3. Only FEMA approved floodplain and BFE data shall be shown on record plans and development documents.	155-15	
4. Only base flood elevation approved by county, municipality or FEMA may be used in building permit application.	155-15	
5. Floodplain information must be included on permitting documentation.	125-36	
6. Require use of FEMA elevation certificate and flood-proofing certificate.		
7. Require 18 inches of freeboard for all new construction and substantial improvements.		
7a. Require 12 inches of freeboard for all new construction and substantial improvements.	155-15	
8. Require 18 inches of freeboard for manufactures homes.		
9. Fill placed in the floodplain which results in land having an elevation less than 18 inches above base flood elevation will not result in a relaxation of floodplain standards.		
10. Hydrostatic vents shall be required within 1 foot grade.		
11. Elevation of the lowest floor beneath an elevated building, must be above lowest adjacent grade at least one side.		
12. Prohibit subdividing land in floodplain. Newly subdivided floodplain shall remain deed restricted open space.		
13. Prohibit new non-water dependent structures dependent structures in floodplains in newly subdivided lands.		
14. Prohibit encroachments that would cause more than 0.1 foot of rise without compensation.	155-15	
15. Incorporate FEMA technical bulletins in local floodplain regulations.		
<b>Senate Bill 64 Drainage Standards</b>		
1. Easements of an adequate width shall be required over drainage conveyance systems within any proposed subdivision.	126-26	
2. The willful or negligent obstruction of any drainage conveyance shall be prohibited.		
3. Drainage conveyance systems within proposed subdivisions shall meet the minimum 10-year storm event.		
4. Lot grading shall ensure adequate drainage away from buildings and accessory structures without creating an adverse impact to adjacent structures or lands.		
5. A topographic plan submittal shall be required for all construction activity greater than 5,000 square feet.	125-36	
6. An as-built submittal shall be required for any construction with an approved topographic plan.	125-18	

# Senate Bill 64 Floodplain and Drainage Standards Checklist (DE)

Community: Milton County: Sussex State: DE CID: \_\_\_\_\_

State Reviewer: UDWRA Date: 1/11/13 State Determination: \_\_\_\_\_

**Flood Zones:**    A    AE    AE (w/o FW)    AO    VE

Item Description	State Review	Revised
<b>Senate Bill 64 Floodplain Standards</b>		
1. For all new development activities which exceed 50 lots or 5 acres in locations contiguous to streams without a FEMA-delineated floodplain, a flood study shall be conducted.		
2. For all new development which exceed 50 lots or 5 acres in Zone A FEMA floodplains, a flood study shall be submitted to FEMA for approval prior to record plan approval.		
3. Only FEMA approved floodplain and BFE data shall be shown on record plans and development documents.	125-5	
4. Only base flood elevation approved by county, municipality or FEMA may be used in building permit application.	125-5	
5. Floodplain information must be included on permitting documentation.	125-13	
6. Require use of FEMA elevation certificate and flood-proofing certificate.		
7. Require 18 inches of freeboard for all new construction and substantial improvements.	Unsure if meets standard 125-14	
7a. Require 12 inches of freeboard for all new construction and substantial improvements.	Unsure if meets standard 125-14	
8. Require 18 inches of freeboard for manufactures homes.	Unsure if meets standard 125-14	
9. Fill placed in the floodplain which results in land having an elevation less than 18 inches above base flood elevation will not result in a relaxation of floodplain standards.		
10. Hydrostatic vents shall be required within 1 foot grade.	125-14	
11. Elevation of the lowest floor beneath an elevated building, must be above lowest adjacent grade at least one side.		
12. Prohibit subdividing land in floodplain. Newly subdivided floodplain shall remain deed restricted open space.		
13. Prohibit new non-water dependent structures dependent structures in floodplains in newly subdivided lands.		
14. Prohibit encroachments that would cause more than 0.1 foot of rise without compensation.	125-9	
15. Incorporate FEMA technical bulletins in local floodplain regulations.		
<b>Senate Bill 64 Drainage Standards</b>		
1. Easements of an adequate width shall be required over drainage conveyance systems within any proposed subdivision.		
2. The willful or negligent obstruction of any drainage conveyance shall be prohibited.		
3. Drainage conveyance systems within proposed subdivisions shall meet the minimum 10-year storm event.		
4. Lot grading shall ensure adequate drainage away from buildings and accessory structures without creating an adverse impact to adjacent structures or lands.		
5. A topographic plan submittal shall be required for all construction activity greater than 5,000 square feet.	188-26	
6. An as-built submittal shall be required for any construction with an approved topographic plan.	188-38	

# Senate Bill 64 Floodplain and Drainage Standards Checklist (DE)

Community: Ocean View County: Sussex State: DE CID: \_\_\_\_\_

State Reviewer: UDWRA Date: 1/11/13 State Determination: \_\_\_\_\_

**Flood Zones:**    A    AE    AE (w/o FW)    AO    VE

Item Description	State Review	Revised
<b>Senate Bill 64 Floodplain Standards</b>		
1. For all new development activities which exceed 50 lots or 5 acres in locations contiguous to streams without a FEMA-delineated floodplain, a flood study shall be conducted.		
2. For all new development which exceed 50 lots or 5 acres in Zone A FEMA floodplains, a flood study shall be submitted to FEMA for approval prior to record plan approval.		
3. Only FEMA approved floodplain and BFE data shall be shown on record plans and development documents.	Unsure if meets standard 116-1	
4. Only base flood elevation approved by county, municipality or FEMA may be used in building permit application.	Unsure if meets standard 116-1	
5. Floodplain information must be included on permitting documentation.		
6. Require use of FEMA elevation certificate and flood-proofing certificate.		
7. Require 18 inches of freeboard for all new construction and substantial improvements.		
7a. Require 12 inches of freeboard for all new construction and substantial improvements.		
8. Require 18 inches of freeboard for manufactures homes.		
9. Fill placed in the floodplain which results in land having an elevation less than 18 inches above base flood elevation will not result in a relaxation of floodplain standards.		
10. Hydrostatic vents shall be required within 1 foot grade.		
11. Elevation of the lowest floor beneath an elevated building, must be above lowest adjacent grade at least one side.		
12. Prohibit subdividing land in floodplain. Newly subdivided floodplain shall remain deed restricted open space.		
13. Prohibit new non-water dependent structures dependent structures in floodplains in newly subdivided lands.		
14. Prohibit encroachments that would cause more than 0.1 foot of rise without compensation.		
15. Incorporate FEMA technical bulletins in local floodplain regulations.		
<b>Senate Bill 64 Drainage Standards</b>		
1. Easements of an adequate width shall be required over drainage conveyance systems within any proposed subdivision.	132-8	
2. The willful or negligent obstruction of any drainage conveyance shall be prohibited.		
3. Drainage conveyance systems within proposed subdivisions shall meet the minimum 10-year storm event.		
4. Lot grading shall ensure adequate drainage away from buildings and accessory structures without creating an adverse impact to adjacent structures or lands.	132-1	
5. A topographic plan submittal shall be required for all construction activity greater than 5,000 square feet.	132-8	
6. An as-built submittal shall be required for any construction with an approved topographic plan.	132-8	

# Senate Bill 64 Floodplain and Drainage Standards Checklist (DE)

Community: Rehoboth Beach County: Sussex State: DE CID: \_\_\_\_\_

State Reviewer: UDWRA Date: 1/11/13 State Determination: \_\_\_\_\_

**Flood Zones:**    A    AE    AE (w/o FW)    AO    VE

Item Description	State Review	Revised
<b>Senate Bill 64 Floodplain Standards</b>		
1. For all new development activities which exceed 50 lots or 5 acres in locations contiguous to streams without a FEMA-delineated floodplain, a flood study shall be conducted.		
2. For all new development which exceed 50 lots or 5 acres in Zone A FEMA floodplains, a flood study shall be submitted to FEMA for approval prior to record plan approval.		
3. Only FEMA approved floodplain and BFE data shall be shown on record plans and development documents.		
4. Only base flood elevation approved by county, municipality or FEMA may be used in building permit application.		
5. Floodplain information must be included on permitting documentation.		
6. Require use of FEMA elevation certificate and flood-proofing certificate.		
7. Require 18 inches of freeboard for all new construction and substantial improvements.		
7a. Require 12 inches of freeboard for all new construction and substantial improvements.		
8. Require 18 inches of freeboard for manufactures homes.	159-7	
9. Fill placed in the floodplain which results in land having an elevation less than 18 inches above base flood elevation will not result in a relaxation of floodplain standards.		
10. Hydrostatic vents shall be required within 1 foot grade.	159-4	
11. Elevation of the lowest floor beneath an elevated building, must be above lowest adjacent grade at least one side.		
12. Prohibit subdividing land in floodplain. Newly subdivided floodplain shall remain deed restricted open space.		
13. Prohibit new non-water dependent structures dependent structures in floodplains in newly subdivided lands.		
14. Prohibit encroachments that would cause more than 0.1 foot of rise without compensation.		
15. Incorporate FEMA technical bulletins in local floodplain regulations.		
<b>Senate Bill 64 Drainage Standards</b>		
1. Easements of an adequate width shall be required over drainage conveyance systems within any proposed subdivision.		
2. The willful or negligent obstruction of any drainage conveyance shall be prohibited.		
3. Drainage conveyance systems within proposed subdivisions shall meet the minimum 10-year storm event.		
4. Lot grading shall ensure adequate drainage away from buildings and accessory structures without creating an adverse impact to adjacent structures or lands.		
5. A topographic plan submittal shall be required for all construction activity greater than 5,000 square feet.	263-13	
6. An as-built submittal shall be required for any construction with an approved topographic plan.		

# Senate Bill 64 Floodplain and Drainage Standards Checklist (DE)

Community: Seaford County: Sussex State: DE CID: \_\_\_\_\_

State Reviewer: UDWRA Date: 1/11/13 State Determination: \_\_\_\_\_

**Flood Zones:**    A    AE    AE (w/o FW)    AO    VE

Item Description	State Review	Revised
<b>Senate Bill 64 Floodplain Standards</b>		
1. For all new development activities which exceed 50 lots or 5 acres in locations contiguous to streams without a FEMA-delineated floodplain, a flood study shall be conducted.		
2. For all new development which exceed 50 lots or 5 acres in Zone A FEMA floodplains, a flood study shall be submitted to FEMA for approval prior to record plan approval.		
3. Only FEMA approved floodplain and BFE data shall be shown on record plans and development documents.	15-62	
4. Only base flood elevation approved by county, municipality or FEMA may be used in building permit application.	15-62	
5. Floodplain information must be included on permitting documentation.	15-62	
6. Require use of FEMA elevation certificate and flood-proofing certificate.		
7. Require 18 inches of freeboard for all new construction and substantial improvements.		
7a. Require 12 inches of freeboard for all new construction and substantial improvements.		
8. Require 18 inches of freeboard for manufactures homes.		
9. Fill placed in the floodplain which results in land having an elevation less than 18 inches above base flood elevation will not result in a relaxation of floodplain standards.		
10. Hydrostatic vents shall be required within 1 foot grade.	15-62H	
11. Elevation of the lowest floor beneath an elevated building, must be above lowest adjacent grade at least one side.		
12. Prohibit subdividing land in floodplain. Newly subdivided floodplain shall remain deed restricted open space.		
13. Prohibit new non-water dependent structures dependent structures in floodplains in newly subdivided lands.		
14. Prohibit encroachments that would cause more than 0.1 foot of rise without compensation.		
15. Incorporate FEMA technical bulletins in local floodplain regulations.		
<b>Senate Bill 64 Drainage Standards</b>		
1. Easements of an adequate width shall be required over drainage conveyance systems within any proposed subdivision.		
2. The willful or negligent obstruction of any drainage conveyance shall be prohibited.	15-62F	
3. Drainage conveyance systems within proposed subdivisions shall meet the minimum 10-year storm event.		
4. Lot grading shall ensure adequate drainage away from buildings and accessory structures without creating an adverse impact to adjacent structures or lands.		
5. A topographic plan submittal shall be required for all construction activity greater than 5,000 square feet.		
6. An as-built submittal shall be required for any construction with an approved topographic plan.		

# Senate Bill 64 Floodplain and Drainage Standards Checklist (DE)

Community: Selbyville County: Sussex State: DE CID: \_\_\_\_\_

State Reviewer: UDWRA Date: 1/11/13 State Determination: \_\_\_\_\_

**Flood Zones:**    A    AE    AE (w/o FW)    AO    VE

Item Description	State Review	Revised
<b>Senate Bill 64 Floodplain Standards</b>		
1. For all new development activities which exceed 50 lots or 5 acres in locations contiguous to streams without a FEMA-delineated floodplain, a flood study shall be conducted.		
2. For all new development which exceed 50 lots or 5 acres in Zone A FEMA floodplains, a flood study shall be submitted to FEMA for approval prior to record plan approval.		
3. Only FEMA approved floodplain and BFE data shall be shown on record plans and development documents.	91-5	
4. Only base flood elevation approved by county, municipality or FEMA may be used in building permit application.	91-5	
5. Floodplain information must be included on permitting documentation.	91-12	
6. Require use of FEMA elevation certificate and flood-proofing certificate.		
7. Require 18 inches of freeboard for all new construction and substantial improvements.		
7a. Require 12 inches of freeboard for all new construction and substantial improvements.		
8. Require 18 inches of freeboard for manufactures homes.		
9. Fill placed in the floodplain which results in land having an elevation less than 18 inches above base flood elevation will not result in a relaxation of floodplain standards.		
10. Hydrostatic vents shall be required within 1 foot grade.	91-13	
11. Elevation of the lowest floor beneath an elevated building, must be above lowest adjacent grade at least one side.		
12. Prohibit subdividing land in floodplain. Newly subdivided floodplain shall remain deed restricted open space.		
13. Prohibit new non-water dependent structures dependent structures in floodplains in newly subdivided lands.		
14. Prohibit encroachments that would cause more than 0.1 foot of rise without compensation.	91-8	
15. Incorporate FEMA technical bulletins in local floodplain regulations.		
<b>Senate Bill 64 Drainage Standards</b>		
1. Easements of an adequate width shall be required over drainage conveyance systems within any proposed subdivision.		
2. The willful or negligent obstruction of any drainage conveyance shall be prohibited.		
3. Drainage conveyance systems within proposed subdivisions shall meet the minimum 10-year storm event.		
4. Lot grading shall ensure adequate drainage away from buildings and accessory structures without creating an adverse impact to adjacent structures or lands.		
5. A topographic plan submittal shall be required for all construction activity greater than 5,000 square feet.	200-151	
6. An as-built submittal shall be required for any construction with an approved topographic plan.		

# Senate Bill 64 Floodplain and Drainage Standards Checklist (DE)

Community: Slaughter Beach County: Sussex State: DE CID: \_\_\_\_\_

State Reviewer: UDWRA Date: 1/11/13 State Determination: \_\_\_\_\_

**Flood Zones:**    A    AE    AE (w/o FW)    AO    VE

Item Description	State Review	Revised
<b>Senate Bill 64 Floodplain Standards</b>		
1. For all new development activities which exceed 50 lots or 5 acres in locations contiguous to streams without a FEMA-delineated floodplain, a flood study shall be conducted.		
2. For all new development which exceed 50 lots or 5 acres in Zone A FEMA floodplains, a flood study shall be submitted to FEMA for approval prior to record plan approval.		
3. Only FEMA approved floodplain and BFE data shall be shown on record plans and development documents.		
4. Only base flood elevation approved by county, municipality or FEMA may be used in building permit application.		
5. Floodplain information must be included on permitting documentation.		
6. Require use of FEMA elevation certificate and flood-proofing certificate.		
7. Require 18 inches of freeboard for all new construction and substantial improvements.		
7a. Require 12 inches of freeboard for all new construction and substantial improvements.		
8. Require 18 inches of freeboard for manufactures homes.		
9. Fill placed in the floodplain which results in land having an elevation less than 18 inches above base flood elevation will not result in a relaxation of floodplain standards.		
10. Hydrostatic vents shall be required within 1 foot grade.		
11. Elevation of the lowest floor beneath an elevated building, must be above lowest adjacent grade at least one side.		
12. Prohibit subdividing land in floodplain. Newly subdivided floodplain shall remain deed restricted open space.		
13. Prohibit new non-water dependent structures dependent structures in floodplains in newly subdivided lands.		
14. Prohibit encroachments that would cause more than 0.1 foot of rise without compensation.		
15. Incorporate FEMA technical bulletins in local floodplain regulations.		
<b>Senate Bill 64 Drainage Standards</b>		
1. Easements of an adequate width shall be required over drainage conveyance systems within any proposed subdivision.		
2. The willful or negligent obstruction of any drainage conveyance shall be prohibited.		
3. Drainage conveyance systems within proposed subdivisions shall meet the minimum 10-year storm event.		
4. Lot grading shall ensure adequate drainage away from buildings and accessory structures without creating an adverse impact to adjacent structures or lands.		
5. A topographic plan submittal shall be required for all construction activity greater than 5,000 square feet.		
6. An as-built submittal shall be required for any construction with an approved topographic plan.		

# Senate Bill 64 Floodplain and Drainage Standards Checklist (DE)

Community: South Bethany County: Sussex State: DE CID: \_\_\_\_\_

State Reviewer: UDWRA Date: 1/11/13 State Determination: \_\_\_\_\_

**Flood Zones:**    A    AE    AE (w/o FW)    AO    VE

Item Description	State Review	Revised
<b>Senate Bill 64 Floodplain Standards</b>		
1. For all new development activities which exceed 50 lots or 5 acres in locations contiguous to streams without a FEMA-delineated floodplain, a flood study shall be conducted.		
2. For all new development which exceed 50 lots or 5 acres in Zone A FEMA floodplains, a flood study shall be submitted to FEMA for approval prior to record plan approval.		
3. Only FEMA approved floodplain and BFE data shall be shown on record plans and development documents.	145-46	
4. Only base flood elevation approved by county, municipality or FEMA may be used in building permit application.	145-46	
5. Floodplain information must be included on permitting documentation.	145-48	
6. Require use of FEMA elevation certificate and flood-proofing certificate.		
7. Require 18 inches of freeboard for all new construction and substantial improvements.		
7a. Require 12 inches of freeboard for all new construction and substantial improvements.		
8. Require 18 inches of freeboard for manufactures homes.		
9. Fill placed in the floodplain which results in land having an elevation less than 18 inches above base flood elevation will not result in a relaxation of floodplain standards.		
10. Hydrostatic vents shall be required within 1 foot grade.	Unsure if meets standard, 145-50	
11. Elevation of the lowest floor beneath an elevated building, must be above lowest adjacent grade at least one side.		
12. Prohibit subdividing land in floodplain. Newly subdivided floodplain shall remain deed restricted open space.		
13. Prohibit new non-water dependent structures dependent structures in floodplains in newly subdivided lands.		
14. Prohibit encroachments that would cause more than 0.1 foot of rise without compensation.		
15. Incorporate FEMA technical bulletins in local floodplain regulations.		
<b>Senate Bill 64 Drainage Standards</b>		
1. Easements of an adequate width shall be required over drainage conveyance systems within any proposed subdivision.	C-18	
2. The willful or negligent obstruction of any drainage conveyance shall be prohibited.		
3. Drainage conveyance systems within proposed subdivisions shall meet the minimum 10-year storm event.		
4. Lot grading shall ensure adequate drainage away from buildings and accessory structures without creating an adverse impact to adjacent structures or lands.	104-11	
5. A topographic plan submittal shall be required for all construction activity greater than 5,000 square feet.	116-20	
6. An as-built submittal shall be required for any construction with an approved topographic plan.	116-25	

## Appendix B – Contacts for Floodplain and Drainage Code Not Yet Evaluated

County	City	Website
New Castle	Bellefonte	<a href="http://www.townofbellefonte.com/">http://www.townofbellefonte.com/</a>
New Castle	Odessa	<a href="http://odessa.delaware.gov/">http://odessa.delaware.gov/</a>
New Castle	Bethel	NO WEBSITE
Kent	Bowers Beach	<a href="http://www.townofbowersbeach.org/1.html">http://www.townofbowersbeach.org/1.html</a>
Kent	Farmington	NO WEBSITE
Kent	Frederica	<a href="http://townoffrederica.com/">http://townoffrederica.com/</a>
Kent	Hartly	NO WEBSITE
Kent	Kenton	NO WEBSITE
Kent	Leipsic	NO WEBSITE
Kent	Little Creek	NO WEBSITE
Kent	Magnolia	<a href="http://magnolia.delaware.gov/">http://magnolia.delaware.gov/</a>
Kent	Viola	<a href="http://www.violade.com/">http://www.violade.com/</a>
Kent	Woodside	NO WEBSITE
Kent	Wyoming	<a href="http://wyoming.delaware.gov/">http://wyoming.delaware.gov/</a>
Sussex	Delmar	<a href="http://www.townofdelmar.us/">http://www.townofdelmar.us/</a>
Sussex	Ellendale	NO WEBSITE
Sussex	Slaughter Beach	<a href="http://www.townofslaughterbeach.com/">http://www.townofslaughterbeach.com/</a>

City	Contact Name	Position	Contact	Phone	Address
Bellefonte	Kathy MacDonough	Commission Secretary	kathymacdonough@aol.com	302-761-9638	901A Rosedale Avenue Wilmington, DE 19809
Odessa	Barbara Roberts	Town Secretary		302-378-2510	315 Main Street, PO Box 111 Odessa, DE 19730
Bethel	Mary McCoy	Council/Secretary	302-519-4609	302-875-5314	Main Street, PO Box 310 Bethel, DE 19973
Delmar	Cindy Fisher	Clerk of Council		302-846-2664	100 S. Pennsylvania Avenue Delmar, MD 21875
Ellendale	John Wothers	Secretary	302-424-3196	302-422-6727	300 McCauley Street Ellendale, DE 19941
Slaughter Beach	Bill Krause	Secretary	610-239-6796	302-424-7659	357 Bay Avenue Slaughter Beach, DE 19963
Bowers Beach	Shirley Pennington	Secretary	302-335-9912	302-335-3857	3231 Main Street Frederica, DE 19946
Farmington	Bonnie Knox	Commissioner Secretary/Treasurer	302-349-5398		98 School Street Farmington, DE 19950
Frederica	Robert Volkemer	Council Secretary	302-335-3390	302-335-5417	2 West David Street, PO Box 294 Frederica, DE 19946
Hartly	Raymond Morris, Jr.	President	302-492-8337		PO Box 84 Hartly, DE 19953
Kenton	Amy M. Wells	Secretary		302-389-8270	PO Box 102 Kenton, DE 19955
Leipscic	Nancy Goodfellow	Secretary		302-736-0595	207 Main Street Leipscic, DE 19901
Little Creek	Penny Gentry	Commissioner/Secretary	302-653-4728		PO Box 298 Little Creek, DE 19961
Magnolia	Diane P. Cahall	Secretary	PO Box 72 302-363-1546	302-335-5891	PO Box 233 Magnolia, DE 19962
Viola	Debra Kosciuszko	Secretary	302-531-7447	302-284-3734	PO Box 121 Viola, DE 19979
Woodside	Mae Mathiem	Secretary	302-698-1888	302-697-1467	PO Box 211 Woodside, DE 19980
Wyoming	Jacqueline Stokes	Secretary	Ext 13	302-697-2966	1 North Railroad Avenue Wyoming, DE 19934