

Town of Oak Island, North Carolina

Stormwater Management Guidelines for One and Two Family Residences (revised 7-1-22)

General Requirements

These guidelines are intended to simplify and expedite the review and approval of stormwater management applications, but they are not all-inclusive. The Town of Oak Island reserves the option to require submittal of a stormwater management application prepared by a licensed engineer and or surveyor for the land use project.

A stormwater management application must be submitted to Development Services that describes how stormwater runoff will be contained, controlled, and managed to meet Town requirements. If the Stormwater Administrator finds that the application complies with the intent and standards of the Town ordinance, the application will be approved. The Stormwater Administrator may include additional conditions as part of the approval.

The applicant must include completed to signed Stormwater Management Worksheets (Appendix E) and a site plan or survey of the property showing the proposed stormwater and sediment/erosion control practices including:

- 1) Size and location of all buildings and structures including driveways, pools, sheds, and walkways.
- 2) Location, details, and dimensions of all stormwater management practices including bio-retention cells, chambers, drip-line trenches, drywells, gutter over-flows, stone filled trenches and/or other stormwater management systems.
- 3) Location, details, and dimensions of all erosion and sediment control practices including check dams, retention basins, sediment fences, and/or other sediment/erosion control measures. Remember sediment must be retained on your site.
- 4) Other site specific features if required by the Town and/or Stormwater Administrator.

If the project meets or exceeds any of three (3) conditions listed below, the stormwater management plan must be prepared, signed, dated, and stamped by a licensed professional engineer or surveyor.

- 1) Impervious surface area of 30% or greater.
- 2) Addition of six (6) inches or more of uncompacted fill material.
- 3) Grading resulting in a slope of 5% or greater (6 inches of fall in 10 feet horizontal distance).

If the project does not meet any of the conditions listed above and is not located in an area governed by a State issued stormwater permit the owner, contractor, or authorized agent may prepare the stormwater application. Projects located in an area governed by a State issued stormwater permit must comply with those requirements and Town specific requirements. The Stormwater Administrator will determine the method utilized to calculate stormwater runoff including The Standard Method outlined below.

The stormwater management application/plan must be approved by the Stormwater Administrator before any work begins.

The Standard Method

The standard method requires routing roof runoff from all buildings and impervious structures (concrete sidewalks, patios, and pool decks) into infiltration devices and/or structures including bio-retention cells, chambers, drip-line trenches, drywells, and stone filled trenches. These stormwater management structures temporarily stores stormwater runoff until it can infiltrate or soak into the soil on your property. These stormwater management devices and structures help protect water quality by reducing polluted runoff from entering water bodies and riparian areas. Infiltrating stormwater runoff back into the soil helps reduce flooding.

Raised slab homes, slab on grade homes, crawl space homes and piling homes with habitable enclosures under them must have gutters with downspouts routed into appropriately sized infiltration devices and/or structures. When gutter downspouts are routed into underground stormwater infiltration devices and/or structures a bypass must be installed on the downspouts. The gutter bypass will allow rainwater to escape in the event rainfall in excess of the design capacity occurs. These gutter bypasses will stop water from backing up in the downspouts. Piling homes without habitable enclosures under them may utilize continuous drip line stone filled infiltration trenches under all eves.

The following site conditions must be met in order for infiltration devices and/or structures to be effective and installed.

- 1) Soils must be sufficient permeable.
- 2) The property must have available room for the infiltration devices and/or structures to be installed properly within the required setbacks of the lot. The minimum setback from the foundation for raised slab homes, slab on grade homes, crawl space homes and piling homes with habitable enclosures is five (5) feet.
- 3) Water table depths allow for the installation of the designed infiltration devices and/or structures.

The Stormwater Administrator will provide and approve the sizing and design guidelines for stormwater infiltration devices and/or structures. The Stormwater Administrator may request additional information, test results, soil reports, seed rates, or other site specific information.

No polystyrene materials will be allowed for stormwater infiltration devices and/or structures.

All infiltration devices and/or structures must be filled with washed AASHTO #57 stone.

Geo-textile fabric must be NCDOT approved, 3.5 ounce non-woven drainage fabric.

For additional information, questions and/or comments please contact the Stormwater Administrator at 910-933-4026.