Clean Streets Clean Waters
Working Together To Protect Our Beaches & Bays

Permit # _____

Eng Approval_____

Standard Stormwater Management Plan/Water Quality Management Plan and Engineering Conditions

for Single Family over 5,000 sf

I. SITE INFORMATION (Please Print)

Name/Site Address _____

Owner/Agent's Name _____Phone #_____

Permanent Address _____

Tax Map_____ Parcel_Lot_____ Block_____ Zone _____

Contractor's Name _____ Phone #_____

Contractor's Address_____

Total Area of Site _____ Total Proposed Impervious _____ Total Existing Impervious _____

II. GENERAL INFORMATION

1. Review Fee $50 **Attach**
2. Stormwater Permit application/engineering conditions
3. Sediment Control approval or waiver- **Attach**
4. Building permit application form and approval check list; **Attach**
5. Wetlands and wetland buffers if applicable **Attach**
6. Wetland JD (Jurisdictional Delineation) or copy of application if applicable **Attach**
7. Geotechnical investigations **Attach**
   a. Soil borings, Soil Texture Classification with ground water elevation
   b. Infiltration test which shows the percolation rate of the soil
   c. Site-specific data and any additional information necessary to support the proposed stormwater management design. Made land will have soil boing to three feet minimum.
8. Cost estimate of stormwater management designs _____

III. STORMWATER MANAGEMENT - Requirements for Standard Stormwater

Management on Single Family residential lots, which implement the following site planning techniques, shall meet the intent of the Stormwater Management Ordinance and the 10% rule regulation. Provide four copies of the site plan with the following information illustrated.

1. **Site Plan**
   a. Proposed improvements including location of buildings, structures, utilities, impervious surfaces, Stormwater management BMP, roof drainage discharge location, property lines, insurance rate map zone designations and flood elevation.
   b. Topographic map showing drainage, existing and proposed spot elevations of all curbs, paving and landscaped areas and drainage direction.
   c. Location of existing and proposed structures, utilities and any easements or rights-of-way;
   d. Unified sizing criteria volume computations according to Design Manual, Redevelopment is 20% reduction of impervious surface or treat 20% of existing and 100% of new/increase**;**

i. SWM computations: (Site Plan must show exactly the proposed footprint of imperviousness)
WQ_v cf = (New Impervious area + 20% of existing impervious) * .95/12 = _____ cf, treated in a BMP below, or

ii. Required surface area of pervious non-structural measures (sf) = WQv x 4 =_____ sf (b and c only below)

(Impervious area is the roof top, sidewalk, driveways patios covered decks etc.)

e. All necessary structural and construction details and specifications for all components of the proposed drainage system or systems, and storm water management BMP's/facilities
f. Dimensions, volume and cross section of each structure;
g. Sequence of construction including any phasing;
h. A planting schedule for BMP vegetation and its maintenance schedule coordinated with the landscaping plan for entire site.

2. **BMP's to be incorporated**: **Show on SWM site Plan the areas comparable to this formula.**
   a. **Impervious Surface Limit** -Apply impervious surface limits as listed above**,** % or SF.
      i. Minimize impervious surface use pervious paving and landscaping should be maximized.
         1. Lots 5,001 to 6,000 SF maximum imperviousness 3,000 SF and
         2. Lots over 6,000 maximum imperviousness 50% of lot area.

      _____SF maximum impervious area

      If property owner is unwilling to maintain the impervious surface limit they must provide stormwater for the Water Quality volume and 10% rule worksheet with appropriate mitigation.

   b. **Grass Swale** - Grass/vegetated Swale will be utilized for conveyance and disconnection of rooftop runoff. Minimum of 2 foot wide by 20' long disconnect at maximum 2% slope and soil depth of one foot consisting of sandy or sandy/loam soil. Substitute other ground cover media. (Mulch, stone, etc) if desired but impervious plastic may not be used as a weed barrier. Attach standard detail. All roof water and downspouts must be directed to this pervious surface. Detail attached Length provided_____ X 2 = _____SF
   c. **Rain Garden** – Rain Garden/ Bioretention Areas will be installed according to the attached standard detail. Area will be depressed 4 to 6" and with a sandy/loam soil. Area will be defined with stone, landscaping ties, edging, etc. Landscaping plan/schedule listed below must cover 50% of the garden, see landscaping requirement below. Surface area of Rain Garden (SF) =_____ Tree is 5' high and a shrub is a 3 gallon container
   d. **Dry Wells or Gravel Trenches-** can be utilized according to the attached detail. Minimum depth is 1'. These areas cannot be covered with impervious surfaces however they can be covered with deck material and/or with topsoil and vegetated. Surface area of gravel trench or drywell (SF) _____ minimum 1 ' to water table.
   e. **Pervious Deck Detail –** Uncovered deck see attached detail. Must have 1/8' board spacing at construction and filter fabric and gravel beneath for erosion control. Area must not be used for storage.
   f. Vegetative mitigation

      Out of buffer – 1 tree or 3 shrubs for every 100 sf of impervious surface, or
      In buffer first 25'- 3 trees or 9 shrubs for every 100 sf of new impervious surface than 1 tree or 3 shrubs for every 100 sf impervious
      - Provide vegetation _____ trees or _____shrubs

      (Tree is 4' minimum and shrub is a 3 gal container)
   g. **Other BMP as approved by the Department – Attached for review**

3. **Landscaping Plan**: Rain Gardens have to provide a landscaping plan with proposed plantings. Use native water tolerant species. Surface area must cover 50% with vegetation See attached list
    a. Grasses and ground cover 1 plant = 2 sf, 1 shrub = 15 sf 1 tree=100 sf. Plants have to be water and drought tolerant and salt tolerant. For every one tree you need 3 shrub and 5 grasses. **Attach plant list and schedule**
    b. Soil textures of Sand, Sandy Loam, or Loamy Sand, as per the USDA Soils Textural Triangle will be required for all vegetated BMP's to a depth of 1 foot. Site soils may be used if meet this criteria else soil amendments will be required.
    c. All drainage will be disconnected from impervious surfaces and drain toward the proposed BMP's. Rooftop downspouts (if present) will be directed to landscaping.
4. **Additional Stormwater Management Requirements**
    a. No bare soil will be allowed. Silt Fence will remain until stabilized. All property will be stabilized before Certificate of Occupancy. Under decks will be stabilized with filter cloth and stone.
    b. Positive Drainage toward street with 1"in 10 feet minimum will be required for site grading.
    c. Roof top and Driveway will be directed to grass swale or vegetation
    d. Sheet Flow to a vegetated buffer with a 20 foot minimum disconnect
    e. A maintenance and inspection agreement will be executed for this site in accordance with the City Ordinance and recorded within the Land Records of Worcester County for a Fee of $40 made payable to the Worcester County Clerk of Court.

IV. CONDITIONS

1. Access to site shall be available at all time for inspection s by the Town of Ocean City
2. Call Engineering Department to schedule inspections at 410-289-8845. The following inspection requests are the responsibility of the developer/contractor/owner as per the Stormwater Management Ordinance:
    a. Pre-construction meeting
    b. Grading inspection prior to landscaping
    c. Sidewalk/driveway forming inspection
    d. Stormwater Management inspection
    e. Final inspection prior to Certificate of Occupancy
3. In the event that the applicant fails to provide adequate stormwater management according to the provisions of this plan, the Town of Ocean City, Engineering Department reserves the right to require corrective action
4. Nothing herein relieves the applicant from complying with and all other Federal, State, County and Town regulations.
5. Permits required by Federal or State Agencies for the protection of Tidal and Non-Tidal wetland are the responsibility of the owner of the property or the person conduction the activity. Contact the Maryland Department of the Environment at (410) 537-3000.

IV. CERTIFICATION

I certify that I have the authority to make the foregoing application and that the information contained herein is correct and that and clearing, filling, grading, or development will be done pursuant to this plan

Applicant's Signature _____

Owner's Signature _____