

# SOIL DRAINAGE MANAGEMENT PLAN

## CHECKLIST

NAME/ACCOUNT NO.: \_\_\_\_\_

TAX MAP NUMBER (13 DIGITS): \_\_\_\_\_

REVIEW ENGINEER: \_\_\_\_\_

ENGINEER: \_\_\_\_\_ FIRM: \_\_\_\_\_

DEVELOPER: \_\_\_\_\_

DATE: \_\_\_\_\_

- A. For SDMP's with more than one lot, or when any subdivision of property is involved, route a copy of plans to Planning Note: Major subdivisions shall use subdivision checklist.
- B. A copy of the CHS-201A form from the Chesapeake Health Department or a plan must meet these requirements. (II-X-A-S 3.21)
- C. Field Inspection of the site with the area superintendent.
- D. Provide on-site topography and indicate basis of datum.  
(II-X-A-2) Title block to include tax map and parcel number. (I-A-17) Property line shall be shown. (I-A-27)
- E. A soil drainage management plan may be prepared by CLS, PE, or individual property owner.  
(I-A-13)
- F. Lot must be a minimum of three acres or more (not including swamp or marsh land).  
(II-X-S 3.20-B-9)
  - 1. Acreage must be stated on plan excluding wetlands.  
(II-X-A-16)
- G. The size of the drainfield must meet the dimension requirements of the Chesapeake Health Department as provided on the CHS-201A form (or other acceptable form as in #B above).  
(II-X-A-S 32.1)
- H. A minimum of 0.5% positive surface grading in the subsurface soil absorption area an dwelling area. (II-X-S 3.20-B-1)
- I. Drainage ditches for diverting surface water and for lowering the seasonal groundwater table which shall meet the following requirements. (II-X-S-3.20 - B-2):

- \_\_ 1. Completely surround the subsurface soil absorption system. (See Item K below)
  - \_\_ 2. Minimum grade of 0.2%. (II-X-A-6)
  - \_\_ 3. Drainfield ditch inverts shall be a minimum of  $2.0'+0.005(L)$  lower than edge of drainfield elevation where L is the distance from the edge of the drainfield to the centerline of the ditch). (II-X-A-5). However, the highest ditch elevation shall be at least 26" lower than the pre-developed minimum grade of the drainfield area. (Unless a variance is approved by the Chesapeake Health Department).
  - \_\_ 4. The 60'-80' offset from the edge of the drain field to the centerline of the ditch (when one of the ditches carries public water and its ultimate size exceeds 10' top-of-bank width, the offset shall be measured from the edge of the drainfield to the top-of-bank). (II-X-A-4)
- \_\_ J. French drain may be used on one of the four sides in lieu of an open drainage ditch. (II-X-S 3.20-B-4). The drainfield ditches should be graded so that no other perimeter ditches are required to drain through the french drain.
- \_\_ 1. Placement of the french drain must be in accordance with City Standard. (FD-1).
- \_\_ K. Diversion ditches or swales. (II-X-S 3.20-B-4)
- \_\_ 1. Required where adjacent property is equal to or higher than the proposed site and may be expected to discharge water onto the site.
  - \_\_ 2. Design to meet flows from contributing drainage areas.
- \_\_ L. Receiving Facility. (II-X-A-9)
- \_\_ 1. Must be City maintained facility. (II-X-A-9) Public drainage easements shall be dedicated on the part of the ditch which lies on the property. (II-I-P-1)
    - \_\_ a. Determine if any public facility encroaches the lot to determine if any drainage easements are necessary.
    - \_\_ b. Easement sized per PFM. (II-I-P-1)
  - \_\_ 2. Must exhibit a positive grade. Elevations of the receiving private ditch shall be provided for 200' upstream and 200' downstream of site to demonstrate positive grades. (II-X-A-10) If public ditch is not dry ensure tie in is above standing water. (II-X-A-12)
  - \_\_ 3. Should the receiving ditch serve as one of the side property ditches and standing water exists in the section with off-site grading unable or not economically feasible to alleviate the situation, then the tie-in of the side property ditches must be at the normal water elevation. (II-X-A-12)

- \_\_ M. Ditches will remain open and will not be piped and covered unless approved by appropriate local government official. (II-X-S 3.20-B-7)
- \_\_ N. If no C & G, driveway culvert must be sized for ultimate flow and reflected on plan. Culvert location to accommodate 10'-12' shoulder width.
- \_\_ O. SDMP plans for existing parcels shall have a 50' minimum of ditch and shoulder improvements in the location of the proposed entrance. In any event, deepening a roadside ditch .5' will require ditch and shoulder improvements.
  - \_\_ 1. Based on road design speed and traffic volume - VDOT Standard. (12' desired minimum shoulder required).
  - \_\_ 2. Shoulder slope of 1": 1'.
- \_\_ P. Appropriate easements must be dedicated for drainage to ensure access for proper maintenance prior to plan approval. (II-X-A-15)
  - \_\_ 1. Plan/plat includes SDMP and septic tank Easement and Drainage Statement (Appendix VII).
  - \_\_ 2. Where public receiving facility does not lie within a drainage easement or right-of-way, a drainage easement (Appendix XXI), sized to ultimate, must be dedicated on that part of the ditch which lies on the property.
  - \_\_ 3. Subdivisions may record necessary two-party septic tank drainage easements with the subdivision plat. Verbiage to be included on subdivision plats requiring drainage plans for septic tanks included in Appendix VII.
  - \_\_ 4. Single lots must submit/record necessary two-party septic drainage easements with the appropriate maintenance agreement and attached Exhibit A, drawing of easement. (See Appendix XI).
  - \_\_ 5. Subdivisions and single lots must submit properly executed three-party (off-site) maintenance agreements and septic tank drainage easements where necessary. (See Appendix XII) Verbiage may be included on the subdivision plat if offsite owner signs the plat.
- \_\_ Q. Approval of subdivisions requiring SDMP shall be conditional to recordation of plat.  
(Copies of subdivision plat attached to approved plans). Plats are to be checked using the Plat Check-list. (Bonding will be required per (II-I-J))
- \_\_ R. Subdivisions which have a curb and gutter variance from the Planning Commission shall meet the following criteria. (II-III-A-1)

- \_\_\_ 1. Ditches shall have 0.5% minimum longitudinal slope.
  - \_\_\_ 2. Ditches shall have a 2.5' maximum depth and a 0.5' minimum depth.
  - \_\_\_ 3. 3:1 side slopes.
  - \_\_\_ 4. Pavement width shall be no less than 30 feet.
  - \_\_\_ 5. The shoulder shall be 10' or greater as specified by VDOT Standard Highway Geometry. (VDOT Road and Bridge Standards)
  - \_\_\_ 6. A minimum 50' right-of-way and drainage easements dedicated to the outside top of the ditch banks are required.
- \_\_\_ S. Major Subdivisions perimeter ditch requirements shall be in accordance with (II-I-4-d).