Grading design shall be based on the following:
1. Baltimore County Code, Article 33, Title 5.
2. Baltimore County Grading Regulations.

I. SUBMISSION DOCUMENTS

1. Two (2) copies of Grading plans.
2. Two (2) copies of Erosion and Sediment Control plans.

Note: All submissions have to go to Permits, Approvals and Inspections (PAI).

II. PLAN REQUIREMENTS

All plans shall be on 24” x 36” or 30” x 42” sheets. 36” x 48” Architectural Plan sheets may be allowed with prior approval only.

A. Standard Title and Signature Blocks (all sheets)

1. Owner/Developer name, address and phone number.
2. Design Professional name, address, phone number and email.
3. Project name, address, election and councilmanic districts.
4. Plan scale, date and sheets numbered.
5. Design Professional’s seal, signature and professional certification.
6. Maryland Coordinate System (MCS) should be indicated in the lower right corner of each sheet.

B. Vicinity Map Requirements (first sheet only)

1. Scale: 1” = 1,000’ (max.) with north arrow.
2. Benchmark(s) described and location(s) shown on map.
3. Site delineated.
C. Certifications and Stamps

1. The grading plan must be prepared and signed by a professional engineer, land surveyor, landscape architect or architect, licensed to practice in the State of Maryland. (Seal required).

2. Owner's/Developer's Certification:

**OWNER’S/DEVELOPER’S CERTIFICATION - GRADING:**

I/We certify that all grading on this site will be done in accordance with the current grading requirements as set forth by the Baltimore County Department of Environmental Protection and Sustainability and with the requirements specified in Article 33, Title 5 of the Baltimore County Code.

<table>
<thead>
<tr>
<th>Signature of Owner/Developer</th>
<th>Title</th>
<th>Date</th>
</tr>
</thead>
</table>

Print Name

3. A certification note (shown below) must also be placed in a conspicuous location within the seal block of all Phase II Development Plans.

![Seal]

**SEAL**

**THIS PLAN IS SEALED & CERTIFIED AS BEING IN ACCORDANCE WITH THE APPROVED DEVELOPMENT PLAN**

4. Grading stamps must be placed on the first sheet of plans. Required stamps may be found at the link below:

(http://resources.baltimorecountymd.gov/Documents/Environment/SWM/swmstamps.pdf)

D. Base and Topographic Information

1. Existing and proposed contours are shown in contrasting line types and are adequately labeled at no greater an interval than 2’.
   Note: Field run topography is required within limit of disturbance.

2. Offsite topography (at no greater an interval than 2’) extending a min. of 100’ beyond the property boundaries. Note: Baltimore County GIS may be used.

3. Existing features, trees, buildings, pavement, utilities with size, etc. shown and labeled where appropriate.

4. Lines/line weight and symbols used are defined in legend and follow the standard plates C-A and C-B as found in the DPW Baltimore County Design Manual.

5. Legend, north arrow and scale (minimum 1” = 50’ or larger).

6. Minimum three (3) grid ticks.
E. General Plan Information:

1. Proposed contours reflect grading for scope of plan, i.e., Mass Grading, Roads Only or Final Grading Plan. Interim mass grading contours should not be shown on Final Grading Plan.

2. Limits of disturbance/grading delineated and total area stated in square feet and acres.

3. Property information:
   a. On-site and adjacent properties clearly labeled with owner, deed reference, etc.
   b. 100 year Floodplain delineation as accepted by Dept. of Public Works.
   c. Temporary easement or letter of permission required for grading shown off-site.
   d. Limits of SWM easements or reservations, streams, wetlands, forest buffer and tree conservation areas designated and delineated.

4. The grading plan reflects the proposed condition of the SWM hydrology.

5. Sediment control devices should not be shown unless needed for coordination.

6. Erosion and sediment control devices should be perimeter type, located sufficiently outside of proposed grading, therefore, proposed grading should not be shown to the limits of property lines, wetlands, floodplains or buffers.

7. All storm drain inlets and their connections to the main storm drain system must be shown up to a suitable outfall.

F. Slope Benching Requirements:

1. For 2H (horizontal): 1V (vertical) grade, the maximum slope height without bench is 20 feet.

2. For 3H:1V grade, the maximum slope height without bench is 30 feet.

3. For 4H:1V grade, the maximum slope height without bench is 40 feet.

G. Building Requirements:

1. Building locations shown.

2. Sidewalks and driveways shown.

3. Positive drainage shown away from all building foundation walls.

4. Indicate whether the proposed (or minimum) first floor is a concrete slab or wood.

5. Indicate whether the proposed walls are masonry or wood frame.

6. Building code requires a minimum distance 8 inches from any part of the wood framing to proposed ground.

7. Proposed first floor or minimum first floor elevations are shown with related spot ground elevations.

8. Proposed sanitary and water lines and their connections to the existing systems are shown and are included within the Limits of Disturbance.

H. Grade Requirements:

1. Minimum Gradient (To prevent standing water):
   a. Concrete or other impervious surface, 1/8 inch per foot (1%).
   b. Pervious surface, 1/4 inch per foot (2%).

2. Maximum gradient within 6 feet away from all building foundation walls shall be 4H:IV, 3 inches per foot (25%).

3. 3H:1V maximum grade on residential use.

4. 2H:1V maximum grade on non-residential use.

5. Retaining walls shown with bottom and top of wall elevations where slopes cannot meet maximum grade (2:1 or 3:1) requirements.
I. Well and Septic Requirements:

   1. Well and septic reserve areas shown.
   2. Positive drainage away from water supply wells and septic systems.
   3. Excavation is prohibited in septic reserve area.
   4. Slopes 4H:1V or steeper are not permitted within 25 feet on the downslope side of septic reserve area.
   5. Maintain a min. 25’ setback from septic reserve area to sediment basin/traps.

J. Swale Requirements:

   1. Swales must outfall to a public road, drainage and utility easement, inlet, or other suitable location.
   2. Swales must meet longitudinal gradient standard, 2% min. for vegetative swale.
   3. Safe drainage conveyance overland must be available should the underground drainage systems surcharge or below ground systems fail.

K. Required Notes:

   1. The proposed grading shown on this plan meets the requirements set forth by Baltimore County Department of Environmental Protection and Sustainability and complies with Article 33, Title 5 of the Baltimore County Code. However, due to building types and layout, some field adjustments may be required. All changes must comply with the above mentioned requirements.
   2. All swales have been designed by the engineer to convey runoff according to Baltimore County Department of Public Works design standards.
   3. There shall be no clearing, grading, construction or disturbance of vegetation in the Forest Buffer Easement or other forest retention areas, except as permitted by the Baltimore County Department of Environmental Protection and Sustainability.
   4. Stormwater management has been addressed/approved by/through (payment of a fee in lieu to the Baltimore County stormwater management fund / Stormwater Management Variance / Stormwater Management Exemption / Environmental Site Design).

III. GENERAL COMMENTS:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Plans reviewed by: ____________________________ Date: ________________

Updated 10/01/18