Chapter 4 – Single Family Residential Lot Processes and Requirements

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4.1 Introduction

This chapter is intended to provide specific requirements and guidance for builders and/or property owners on the development (or redevelopment) of existing single-family residential lots.

In the sections below, you will find information regarding the review and permitting processes for land disturbance (removing the soil cover), stormwater and impervious areas, and work in or around flood hazard areas (FEMA or other County regulated areas). Depending on the specifics of the lot or overall development, some or all of these processes may be necessary for construction or projects on your residential lot.

It is important to understand what requirements apply to your lot before submittal of building or land user permits to avoid delays in the overall review or permitting of your project.

4.2 Land Disturbance for Individual Lots

If the developer and builder are the same entity, then the individual lot (lot-by-lot) erosion control plan may be submitted as the final phase of the overall subdivision grading permit. The information in this section of the manual is for use when the builder and developer are not the same entity, or if the builder/developer chooses to permit the lot construction separate from the subdivision grading permit (which may only cover the roads, stormwater control measures, and other common elements).

Per <u>UDO 10-13-1(A)</u>, All builders and developers disturbing land in a subdivision (common plan of development) are required to have a land disturbance permit, even if the disturbance is less than 1 acre.

Common Plan of Development or Sale: A contiguous area where multiple separate and distinct construction activities may be taking place at different times on different schedules under one common plan. The "common plan" of development or sale is broadly defined as any announcement or piece of documentation (including a sign, public notice or hearing, sales pitch, advertisement, drawing, permit application, zoning request, computer design, etc.) or physical demarcation (including boundary signs, lot stakes, surveyor markings, etc.) indicating construction activities may occur on a specific plot.

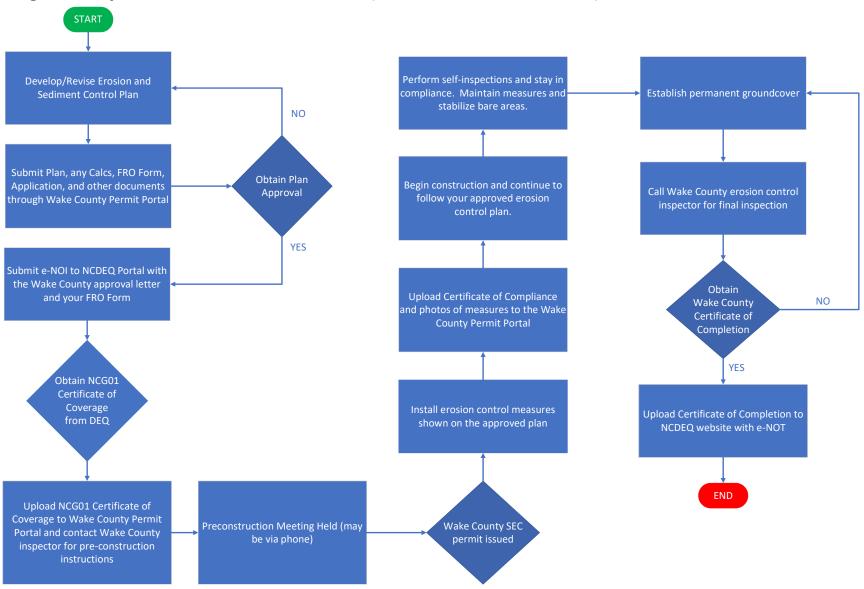
Builders outside a subdivision shall obtain a permit if land disturbance is equal to or greater than 1 acre. Even if no land disturbance permit is required, projects are required to install minimum measures, including a stone construction entrance and silt fence as needed to prevent sediment loss to stream buffers, adjacent lots, or roads.

A flow chart of the overall process and terminology can be found below, and also on the County website here. The process and information in the sections below is intended to ensure that the erosion and sedimentation control plan submitted to and approved by Wake County will be compliant with NCG01 requirements so that you can obtain coverage under that general permit from NCDEQ.

Wake County Terminology		
Term	Description	
E&SC Plan	Erosion and Sedimentation Control Plan – must be SWPPP compliant to obtain NCG01 coverage	
Certificate of Compliance	Document issued once initial E&SC measures are installed per the approved plans. This is required prior to grading and larger land disturbance on the project.	
Certificate of Completion	Document issued once construction is complete and the project has permanent stabilization. This is required to close out the land disturbance (SEC) permit and required for upload to the State's e-NOT	

State of NC Construction Stormwater Permit Terminology		
Term	Description	
e-NOI	Electronic Notice of Intent. This is the required application to obtain NCG01	
	permit coverage from NCDEQ DEMLR. It must be completed and submitted	
	online via the NCDEQ website.	
SWPPP	Stormwater Pollution Prevention Plan. This plan is required in order to	
	obtain NCG01 permit coverage. Your E&SC Plan approval from Wake County	
	can serve as this document and NCG01 Certificate of Coverage, if your	
	submittal to the County included required NCG01 elements.	
COC	Certificate of Coverage. This document is proof that your project is covered	
	by the NCG01 construction stormwater permit.	
DEMLR	NC Division of Energy, Mineral, and Land Resources. This is the Division of	
	the NCDEQ that issues the NCG01 permit.	
NCDEQ	NC Department of Environmental Quality	
E&SC	Erosion and sedimentation control	
e-NOT	Electronic Notice of Termination. This is the required application to close	
	out your NCG01 permit with NCDEQ. It must be completed and submitted	
	online via the NCDEQ website.	

Single Family Lot Erosion Control Process (Land Disturbance Permit)



4.2.1 Individual Lot (Lot by Lot) Application Submittal

The County has developed a standard erosion and sedimentation control plan which may be used without the assistance of a design professional <u>on lots disturbing less than 1 acre</u>. Alternatively, a custom erosion and sedimentation control plan may be developed by a design professional for submission. Additional information on the submittal and review process for individual residential lots, including required documents, may be found on the County webpage <u>here</u>.

The Wake County Standard Plan assumes that the entirety of the lot will be disturbed. If you wish to use the <u>Wake County Standard Plan</u> but do NOT intend to disturb the whole lot, then a plot plan for the lot shall be submitted to show the specific location of the limits of disturbance. (If you have a 1-acre lot but only intend to disturb 0.5 acres, staff need to know where those 0.5 acres are.) Disturbed area includes all areas that will be cleared for construction activity including septic and well installation and tree removal.

The following documents shall be uploaded to the <u>Wake County permit portal</u> for review of an individual lot (Lot by Lot) erosion control plan:

Wake County Financial Responsibility/Ownership (FRO) Form

- Note that a copy of the **Deed** must be submitted with the FRO form. The deed can be downloaded for the property from <u>iMaps</u>.
- Signed and notarized **landowner consent**, if the owner of the property is not the same person as the financially responsible party. The owner must give consent for the FRP to permit and construct on their property. The County has developed a <u>sample form</u> which may be used.
- Signed and notarized signature authority form, if the financially responsible party is a company and
 the person signing on their behalf is not a company officer. This signed and notarized document
 gives authority for a non-officer to sign on behalf of the company. The County has developed a
 sample form which may be used. If used, this sample form should be printed on company
 letterhead.

Residential Lot Application requires:

USGS Topographic Map* with the site location shown (to scale)

Note that this may now also be downloaded from the new NCDEQ mapping tool: <u>USGS Topo/NRCS Published Soil Survey Mapping Tool (arcgis.com)</u>. If the DEQ mapping tool is used, ensure that the map is zoomed to the appropriate level to obtain the correct map. The USGS quadrangle and 1970 Soil Survey map will show at different levels.

NRCS Soil Survey* (1970, hardbound) Map with the site location shown (to scale)

Note that this may now also be downloaded from the new NCDEQ mapping tool: <u>USGS Topo/NRCS Published Soil Survey Mapping Tool (arcgis.com)</u>. If the DEQ mapping tool is used, ensure that the map is zoomed to the appropriate level to obtain the correct map. The USGS quadrangle and 1970 Soil Survey map will show at different levels.

- If a potential feature is shown on the lot(s) on the USGS Topo or NRCS Soil Survey map, provide 50 ft undisturbed buffer to water feature OR an NCDEQ Division of Water Resources **Stream/Buffer Determination Letter**. Builders may wish to contact the original developer of their subdivision to obtain a copy of any buffer determination letters, as they should have been submitted with the original subdivision. Buffer determination letters from NCDEQ are valid for 5 years. If impacts are present within the buffer, provide Impact map and permitting from NCDEQ Division of Water Resources may be required. See the following web site for allowable impacts by clicking here.
- Plot plan (with limits of disturbance shown, if the entire lot will not be disturbed AND the Wake County Standard Plan is to be used). Erosion and Sediment Control measures should be shown on the plot plan.

Wake County Standard Plan OR custom erosion and sedimentation control plan

- If the <u>Wake County Standard Plan</u> is used, and the entirety of the lot is not proposed to be disturbed, then a plot plan shall be submitted to show the specific location of the limits of disturbance.
- If a custom erosion control plan is used, it must be sealed by a design professional and should be submitted with all items (including any necessary calculations) from the <u>Wake County Erosion</u>
 <u>Control checklist</u>. NCG01 Detail Sheets (<u>Ground Stabilization & Materials Handling</u> and <u>Inspection</u>, <u>Recordkeeping</u>, <u>& Recording</u>) or Standard details for structural best management practices (BMPs) to be installed to manage the anticipated materials listed in Part II, Section F such as construction debris management, concrete washout, paint washout, petroleum product storage and pesticide/herbicide handling, along with spill prevention practices.

A flood certification review may be required if there is a buffered feature or a flood hazard area, stormwater control measure on the lot, flood backwater, etc. Refer to Section 4.4 of this manual for more information.

*Note: While USGS Quad Maps and the Wake County 1970 NRCS Soil Survey Map are not required for lot by lot erosion control submittals that disturb less than 1 acre within a common plan of development, they are a required component of NCDEQ's NCG01 General Construction Stormwater Permit. If these items are not provided with the lot-by-lot erosion control plan, then staff must identify on the approval letter that the plans are not NCG01 compliant and NCDEQ will require revisions to the County approved plan or submittal (to DEQ) of a separate compliant plan for review and approval before issuing NCG01 coverage.

Helpful Hints for the Residential Lot Application:

One of the most common difficulties that applicants have in completing the application is the completion of the "Waterbody Index" (Item I-8). This is not only required for the Wake County application, but it – along with the Receiving Waterbody Name – will also be required when submitting for NCG01 coverage through NCDEQ.

The <u>NC Surface Water Classifications (arcgis.com)</u> map from DEQ should be used to identify your Waterbody Index and Receiving Waterbody Name by doing the following steps. We will use the address of 704 Pelzer Drive in Wake Forest, NC, as an example.

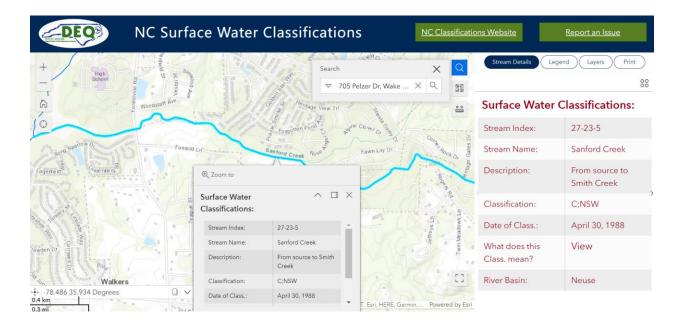
 Enter the address of your lot on the <u>NC Surface Water Classifications (arcgis.com)</u> map. This map shows streams/waterbodies with a bright blue line and will also show topography with gray colored lines.



2. Zoom out from your lot until you can see nearby streams or waterbodies.



- 3. Make sure to look at the topographic lines to see which way your lot is draining. In this example, the lot drains toward Sanford Creek (the bright blue line). If it is difficult to read the topography on this mapper, you may wish to use iMaps and its topography layer to be sure you know where the water from your lot flows.
- 4. Click on the bright blue line that represents the stream to which your lot drains. [You MUST click on the actual blue line for any information to show.] When you do that, the bright blue line will be highlighted, and the stream details will show in both a pop-up as well as the right-hand side of the application.



In this example, the Waterbody Index (or stream index) is 27-23-5. The receiving waterbody is the Stream Name – Sanford Creek.

If your site drains to more than one waterbody, both should be identified.

4.2.2 Individual Lot (Lot by Lot) Permit Approval and Issuance

After a complete application is received (including required review fees), Wake County will review your plans and request additional information as needed until the plan submission is determined to be compliant and approvable. Once you have received an approval letter for your "lot by lot" erosion control plan, the building permit review process for your lot may continue. However, the following process shall be followed in order for Wake County to be able to issue the SEC permit BEFORE any land disturbance associated with the project can begin.

- 1. Obtain your letter of approval from the Wake County plan reviewer. Read it carefully for any special conditions of approval. These must be met before a preconstruction meeting can be held.
- 2. Obtain NCG01 Coverage from NCDEQ. See "How to Apply for a Certificate of Coverage."
- 3. Upload a copy of the NCG01 Certificate of Coverage to the SEC permit in the Wake County Permit Portal.
- 4. Contact your Environmental Consultant for preconstruction meeting (precon) their name and phone number will be your approval letter. This precon is generally held over the phone for lot construction.
- 5. The Environmental Consultant will issue the SEC permit, and the permit status in the County's Portal will change from approved to issued.
- 6. Install the erosion control measures shown on the approved plan (construction entrance, silt fence, etc.).
- 7. Upload the <u>Certificate of Compliance</u> (along with pictures of the measures) to the SEC permit in the portal. Your Environmental Consultant will receive an automatic notification that this has been done. The builder shall notify Environmental Consultant via email, text, or phone call.

4.2.3 Individual Lot (Lot by Lot) Ownership Changes and Permit Transfers

If lot ownership changes during the review or construction process, a new Financial Responsibility Ownership (FRO) form and deed shall be provided to the County (<u>UDO 10-30-9(F)</u>). If new landowner and the financially responsible party are not the same person/entity, a signed and notarized letter of landowner consent shall be provided with the updated FRO form and deed. The County has developed a <u>sample landowner consent</u> form which may be used.

If lot ownership changes during the construction process AND the financial responsible party wishes to transfer the SEC permit to the new property owners, the following steps must occur in order to modify the permit:

- Updated documentation shall be submitted to the SEC permit via the <u>Wake County Permit Portal</u>.
 This documentation includes:
 - Signed transfer request letter from the current permittee
 - o Updated Financial Responsibility/Ownership (FRO) Form, with a copy of the new deed
 - A signed and notarized statement from the new property owner(s)/FRP that they have received a copy of the approved plans and understand that they are responsible for compliance with the approved plans and the Wake County UDO.
 - Note: The County has a <u>template form</u> which may be used as part of the transfer request for lots disturbing less than 1 acre, where the builder/developer is both the landowner and the financially responsible party.
- The new Financially Responsible Party (new owner) shall register for an account on the Wake County Permit portal, and be added as a contact on the existing SEC permit record.
- A permit revision fee (\$75) shall be invoiced and paid.
- Wake County inspection staff shall conduct a site inspection to document current conditions onsite.
- The Wake County plan reviewer shall review the documentation associated with the transfer and, if acceptable, shall issue a letter of approval/transfer to the new permittee. A corresponding inspection report shall be issued documenting the transfer between permittees.

Once the SEC permit has been transferred with the County, updated NCG01 coverage must be addressed through NCDEQ. DEQ does not allow for the transfer of NCG01 coverage between owners. Therefore, the new permittee/owner must apply for and obtain NCG01 coverage for themselves. Only after new coverage has been obtained by the new permittee will DEQ accept and process a Notice of Termination from the original permittee.

After new NCG01 permit coverage has been obtained by the new permittee, the <u>new permittee must</u> upload a copy of that coverage to the SEC permit on the Wake County permit portal. At that point, all

responsibility for compliance with both the SEC permit and NCG01 permit (including establishment of permanent stabilization at project completion) lies with the new owner/permittee.

4.2.4 Individual Lot (Lot by Lot) Permit Completion

When all items listed below have been completed, the Financially Responsible Party shall contact the Watershed Management field consultant to request a Certificate of Completion inspection for the land disturbance permit.

- All conditions of the land disturbance permit have been met
- All temporary erosion and sedimentation control measures have been removed with approval of the Watershed Management field consultant
- All disturbed areas are stabilized with established permanent groundcover and landscaping or impervious surfaces
- All conditions and requirements of any associated flood certifications have been met, including elevation certificates if required

Permanent stabilization of disturbed areas shall be required prior to close out of any land disturbance permit, and may be achieved by one or more of the following methods (refer to Chapter 5, Erosion and Sedimentation Control, for more information):

Grass

- Where grass is used to meet stabilization requirements, permanent groundcover must be applied over 100% of the disturbed area.
- Permanent stabilization will be considered achieved when 80% density of the permanent groundcover is established with no evidence of large bare patches or erosion. Annual rye is NOT a permanent groundcover.

Sod

- Sod should be laid across the slope working from the bottom to the top of a slope
- Sod strips should be placed so that there are snug, even joints. Joints should be staggered to prevent gaps or voids which may allow roots to dry out or be more susceptible to erosion.
- Roll or tamp sod immediately after placement to ensure that there is solid contact between the sod and the ground.
- On steep slopes, sod may need to be stapled to the surface of the soil.
- Sod should be watered immediately once secured, and regularly as needed to ensure sod grows.
- Sod should not be applied to compact soil. Till the soil to a depth of four to six inches below sod
 placement.

<u>Mulch</u>

• Pine straw and mulch may be applied at a minimum depth of 6 inches to achieve permanent stabilization on level areas.

Impervious surface

• Impervious surface such as gravel, rip rap, asphalt, etc. may be used for permanently stabilization.

All such impervious surfaces must be permitted appropriately.

Once the Wake County Certificate of Completion for the land disturbance permit has been obtained, the Financially Responsible Party may request termination of their General Construction Stormwater Permit (NCG01) from NCDEQ. Refer to "How to Terminate a Certificate of Coverage" at the NCDEQ website.

4.3 State and County Stormwater for Residential Lots

For projects within a common plan of development, State and County stormwater compliance has already been addressed through the developer's plans for the overall subdivision – which include proposed stormwater control measures and maximum impervious limitations on lots within the development.

 The builder/property owner will be required to obtain a land disturbance permit for the lot and comply with the recorded impervious limitations for the lot, as well as any assumed drainage patterns (ex: if impervious from the lot was intended to drain to a stormwater control measure, lot grading should allow this to happen). No further stormwater compliance is required for the lot development.

For isolated lots not within a common plan of development (including many created through minor or minor-limited subdivisions), projects on individual residential lots may trigger larger State and County stormwater requirements if certain disturbance thresholds are met. These disturbance thresholds are as follows for residential projects not within a common plan of development:

• Falls Lake: ½ acre of disturbance

If you have questions regarding whether your lot may County stormwater requirements, please reach out to <u>Watershed Management staff</u> prior to submitting building permits for review. This will avoid delays in the review and permitting process.

4.4 Exceeding Recorded Maximum Impervious Limitations on Individual Residential Lots

In Wake County, each residential zoning district generally has a maximum impervious limitation ranging between 6% and 30%. All lots within a new residential subdivision, other than exempt subdivisions or lots greater than 10 acres created by a minor or minor-limited subdivision, have maximum impervious surface area (MISA) limitations on their record plat.

Since approximately 2006, new residential developments have had a perpetuity statement recorded on their plats which notes that the MISA will be strictly enforced into perpetuity. The perpetuity statement ensures that future expansions do not exceed the assumptions that were made when permitting and that the overall development remains compliant with UDO requirements. Lots with perpetuity statements have two options for increasing their impervious allocations:

- 1. Obtain impervious from other landowners (from their recorded MISA) and undergo a County review and re-recordation process to document the exchange. To transfer impervious between lots that are within the same development/phase, an exempt subdivision application and plat must be submitted for review and approval.
- 2. Apply for a new stormwater permit for the subdivision/phase. A qualified professional must develop and permit a new stormwater management plan for the subdivision/phase, install any additional measures, and re-record all lots with any new MISAs.

Prior to approximately 2006, MISAs on lots were recorded without a perpetuity statement. These lots may apply for a stormwater deviation (see below). The stormwater deviation will allow an individual lot to exceed the recorded MISA but remain below its zoning-based impervious limitation. As part of the deviation approval, individual lots are required to install an approved stormwater treatment device for a certain treatment volume based on the 1-year, 24-hour storm (approximately 3 inches). Within Swift Creek, this volume requirement may vary from ½ inch to 3 inches per square foot of impervious overage, based on the Swift Creek Land Management Plan regulations and the percentage of impervious proposed. Stormwater deviations are not allowed on newer recorded lots which have a perpetuity statement recorded on their plats.

The information below is meant for individual residential lot landowners with small drainage areas only.

4.4.1 Stormwater Certification Process

The first step in the process is a stormwater certification review, which is initiated through a building permit submission and will determine whether a property is eligible to apply for a deviation.

If there is no recorded perpetuity statement on the plat, individual lot stormwater management may be permitted by the installation of approved stormwater treatment device(s). A treatment volume will be calculated by the permit reviewer. This volume will be based upon capturing the 1- year, 24-hour storm event (approximately 3") for projects in Wake County's jurisdiction and subject to the Neuse River Stormwater Rules and or any combination of other applicable stormwater requirements. Projects located in the Swift Creek Watershed must meet state stormwater rules and the Swift Creek Land Management Plan.

Note: The Swift Creek requirements apply for the portion of impervious between 12% and 15%. Above 15% impervious surface area, the three (3) inch design criteria shall apply. Only lots created via subdivisions after July 1, 2001, are required to mitigate 3" for impervious above 15% if there was not a perpetuity statement on the plat. Impervious existing prior to the Swift Creek Rules adoption (October 22, 1998) and deemed nonconforming would also be deemed grandfathered.

The stormwater certification process is described below:

- 1. The applicant will apply for a building permit (RBPR or RABS) through the Permit Portal.
- 2. Wake County Planning, Development, and Inspections (PDI) staff will flag the project for exceeding maximum impervious surface area (MISA) and will add a review item for Watershed Management within the building permit review.
- 3. The Customer Support Center staff will invoice the applicant a \$50 fee for Stormwater Certification review and create a stormwater certification (SFR-) permit for the Watershed Management staff review. This SFR- permit will be linked to the building permit.
- 4. The applicant must pay the invoiced \$50 fee before the stormwater certification review will begin.
- 5. Once the invoice is paid, Customer Support Center staff will route the stormwater certification for Watershed Management staff review.
- 6. Watershed Management staff will review the proposed plan, verify the MISA and check for a perpetuity statement on the recorded plat.
- 7. If eligible to deviate from the recorded MISA, the plan reviewer will send a review checklist to owner with the volume required to be captured for the impervious proposed. The checklist will be uploaded to the Permit Portal and emailed to the applicant.

- If the lot is not eligible to deviate, the plan reviewer will send a review checklist to the applicant/owner and indicate that they do not qualify to submit a deviation. The SFR permit review will be disapproved.
- 8. The stormwater certification (SFR-) permit will be approved and completed. A pre-issuance hold will be placed on the building permit for the project pending the applicant's submission of a stormwater deviation application.

4.4.2 Stormwater Deviation Process

If the applicant was found to be eligible to deviate from their recorded MISA via the stormwater certification permit review, the next step will be submission of the stormwater deviation application and required documents, including the proposed stormwater management plan. Depending on the complexity of the design and the measure(s) chosen, a design professional may need to be engaged in the development of the stormwater management plan.

When designing the stormwater management plan, note that discharges from stormwater devices must flow to an appropriate downhill location. It is important to identify where the septic and repair fields are onsite, as the design cannot negatively impact these areas. In addition, upstream property owners may be held responsible for downstream property damaged. Such drainage issues are a private civil matter between the parties.

The most common devices used for stormwater deviations are rainwater harvesting (rain barrels, cisterns, or underground detention tanks) and rain gardens. Legislative changes adopted in 2025 clarified the definition of impervious and allow the use of artificial turf or permeable pavement as pervious. Artificial turf requires a land use permit from the Planning Department. Permeable pavement shall be permitted with a Stormwater Deviation Permit, must be designed by a licensed professional and meet all requirements of the NC Minimum Design Criteria for permeable pavement and designed as an infiltrating system.

Example Single Lot Photos







Raingarden (Bioretention)

Example Single Lot Photos continued



Underground Detention Tanks

All applications to deviate are reviewed by Watershed Management staff. Applicants shall apply through the <u>Permit Portal</u> and will upload the deviation application, a drawn to-scale plot plan showing the lot and its existing and proposed impervious features (driveway, sidewalk, house, patios, porches, outbuildings, etc.), and a stormwater mitigation plan; a design by a licensed professional is required for underground systems and permeable pavement.

- The applicant will apply for a stormwater deviation permit (SWF- permit, work class = Stormwater Individual Lot) through the <u>Permit Portal</u> and will upload the <u>deviation application</u>, plot plan, and proposed stormwater management plan. Refer to the <u>stormwater deviation submittal checklist</u> for all required items. The owner must sign the application.
- 2. Customer Support Center staff will perform an application completeness check to verify that the required documents have been uploaded and will invoice the applicant for \$400 permit review fee.
- 3. The applicant must pay the invoiced \$400 fee before the stormwater deviation review will begin.
- 4. Once the invoice is paid, Customer Support Center Staff will route the stormwater deviation to Watershed Management staff for review.
- 5. Watershed Management staff will review the plan and provide a review checklist with comments or approval, including requirements for completing the permit. The checklist will be uploaded to the Portal and emailed to the applicant. The checklist will either disapprove the deviation and request additional information or it will approve the proposed stormwater management plan and authorize construction.

- 6. Once the stormwater management plan is approved, the Watershed Management plan reviewer will approve the stormwater deviation (SWF-) permit. At this point, issuance of the building permit can proceed.
- 7. The Watershed Management plan reviewer will place the building permit on a Pre-Final Hold pending receipt of a final as built survey and recorded maintenance agreement.
- 8. Once all permits have been issued, the project may proceed, and the applicant shall comply with the approved stormwater management plan.
- 9. When the stormwater control measure has been completed, the applicant shall notify the stormwater inspector that the measure has been installed and is ready for inspection. Note that for underground devices, the stormwater inspector must be informed prior to the date of installation so that they may inspect the measure during the installation process.
- 10. The applicant shall submit all required as-built documentation and agreements through the Wake County permit portal for staff review. This shall include:
 - a. If parcel is less than 5 acres, scales of 1" = 30', 40', 50', 60' or 100' are acceptable.
 - b. A detailed impervious summary for the lot.
 - c. Plan and profile views of the stormwater device(s) (an addendum documented by the designer may also be provided).
 - d. Indicate impervious areas from which stormwater is collected (an addendum documented by the designer may also be provided).
 - e. Conveyance system for routing stormwater from impervious area to device (an addendum documented by the designer may also be provided).
 - f. Location of wells, septic and repair areas.
 - g. Property setbacks, buffers, flood zones or any existing easements.
 - h. Location of the stormwater devices.
 - i. Note: Permeable pavement must be designed and installed by licensed professionals.
- 11. Once the as-built documentation and field inspection are acceptable, the plan reviewer will indicate that the documents are ready to be recorded with the Register of Deeds.
- 12. The applicant shall record both agreements, as well as the as-built with new MISA, with the Register of Deeds and upload proof of recordation through the SWF permit on the Permit Portal.
- 13. The plan reviewer will then issue an as-built acceptance document, complete the stormwater deviation permit, and release the pre-final hold on the building permit.

No Building permit shall be completed, or Certificate of Occupancy issued, until Stormwater Management Plan is approved, implemented and any required as-built documentation accepted and recorded

4.4.2 Post-Construction Owner Requirements

Stormwater improvements include not only any stormwater control measures, but also drainage facilities (ex: conveyances) and easements. While the developer is responsible for the initial completion of stormwater control measures and any other stormwater improvements, the responsibility for long-term maintenance passes to future owners – which may be a homeowners' or property owners' association. All stormwater improvements are required to be maintained into perpetuity so that they continue to function and meet the purpose and requirements of the County's stormwater ordinance.

All owners should familiarize themselves with any Operations and Maintenance Plan and/or Maintenance Agreement for the measures for which they are responsible. It is also important for owners of stormwater improvements to ensure that they have budgeted appropriately to pay for third party inspections as well as routine and future maintenance needs. Owners shall register in the County Permit Portal and notify the County when there are changes in the ownership of a stormwater control measure.

Wake County Watershed Management staff have the right to inspect sites to determine whether the stormwater improvements have been installed and are being properly maintained (Refer to <u>UDO Article 9, Part 6</u>). Enforcement actions, including but not limited to Notices of Violation or civil penalties, may be issued for failure to submit annual inspections, failure to maintain SCMs, removal of SCMs, or any other violations of <u>Article 9</u> of Wake County's UDO.

Annual Inspections

Owners of stormwater control measures are required to submit an annual inspection report for each measure by June 30th of each year.

- Annual inspections for stormwater control measures that were installed as part of a stormwater
 deviation approval to increase the maximum impervious surface area (MISA) limitation on an
 individual lot are not typically required to be performed by a qualified professional. These
 inspections may be performed by the individual property owners. The exceptions to this are
 underground devices and permeable pavement, which both require a qualified professional to
 inspect and certify each year.
- The inspection report(s) shall be submitted via the Wake County Permit Portal by uploading it to the associated stormwater permit via Attachments.
- To upload documents to the Portal, owners and their representatives must register for an account and be linked to the appropriate permit(s) in the system. Please contact Watershed Management staff at watershedmanagement@wake.gov to request access to your permit case files (Subject Line: Add Case Contact).
- All inspection reports shall be on a form provided by or approved by Wake County. An example of an approved annual inspection report form may be found on the County website below:

<u>Stormwater Control Measure (SCM) Annual Inspection Form – Single Family Lot</u> <u>Stormwater Control Measure (SCM) Annual Inspection Form – Subdivision and Non-Residential</u>

Records of Maintenance

The owner of the stormwater control measure(s) is responsible for maintaining it so that it continues to serve the intended functions. Specific operation and maintenance requirements, including inspections at certain timeframes or after rainfall events, for each measure are identified in the Operation and Maintenance Plan(s) for the SCMs. Owners of SCMs shall keep all maintenance records for a minimum of 5 years, and these records shall be made available to the County upon request. Reference UDO 9-32-1.

Operation and Maintenance Plans

The owner of an SCM (lot owner/home owners association/property owners association) is required to update the operations and maintenance plans for stormwater control measures at least once every 10 years (<u>UDO 9-32-3(B)</u>). This provision does not apply to measures installed as part of an approved stormwater deviation.

Change of Ownership

While legal responsibility for the maintenance of SCMs automatically transfers to successive owners with property transfer in accordance with the recorded Stormwater Agreement, the County requests notification of any change in ownership. The County requests to be notified in writing within 30 days of any change in ownership/responsibility for stormwater control measures. Contact information for the new owner should be included within the notification.

Owners may wish to view additional information, including videos, regarding operation and maintenance of specific types of stormwater control measures at NCDEQ's website.

4.5 Flood Hazards and Residential Lots

Wake County prohibits development, including fill, in special flood hazard areas except for certain limited uses specified in UDO Article 14. Special flood hazard areas include:

- flood hazard soils,
- FEMA flood zones,
- delineated backwater areas,
- Impoundments and dam breach areas, and
- other hazard areas as required by the Wake County Floodplain Administrator.

Permits for new construction, substantial improvements, substantial repairs, or other development proposed in an area of special flood hazard areas shall not be issued until plans for the development have been reviewed be Watershed Management staff and are found to comply with Wake County's UDO. If it is found that the improvements or developments were completed without a permit, the site shall be found to be in violation and may be subject to civil penalties and/or other enforcement action.

4.5.1 Flood Certification Review and Permit

The applicant for any building, manufactured home, or land use permits shall identify all flood hazards on the site plan submitted for review to the County.

A flood certification review is required for a lot where any of the following are identified:

- Any proposed structure is within 100 feet of flood hazard soils or FEMA flood hazard area.
- There is FEMA floodplain on or adjacent to the lot.
- Development is proposed in or near a stream buffer or water feature (dam, flood backwater, stormwater control measure, etc.)
- A road or driveway crosses a flood hazard area.
- Fill is proposed within a flood hazard area.

When a development application is submitted to the County, Planning, Development, and Inspections (PDI) staff shall confirm the hazards for the lot using iMAPS and/or the recorded plat. A residential lot may have been identified for potential flood hazard during subdivision construction plan or minor subdivision review. Flood hazard restricted lots are designated on the record plat with an asterisk (*). Fill is proposed within a flood hazard area.

Lots or projects which meet the criteria listed above are referred to Watershed Management for flood certification review. The review process will continue until the project is exempted from further review, approved, or denied. The process for this review is detailed below:

- 1. The applicant will apply for a building permit, manufactured home permit, or land use permit through the <u>Permit Portal</u>. The plans submitted should identify all flood hazards.
- 2. Wake County Planning, Development, and Inspections (PDI) staff confirm any flood hazards for the lot using iMaps and the plat.
- 3. Lots meeting the criteria listed at the beginning of this section will be routed to Watershed Management staff for flood certification review.
- 4. Customer Support Center staff will invoice the applicant a \$50 fee for Flood Certification review and create a flood certification (SFR-) permit for the Watershed Management staff review. This SFR-permit will be linked to the building permit.
- 5. The applicant must pay the invoiced \$50 fee before the flood certification review will begin.
- 6. Once the invoice is paid, Customer Support Center staff will route the flood certification for Watershed Management staff review. The initial benchmark review time is 5 business days.
- 7. Watershed Management staff will review the proposed plan and flood hazards.

- The plan reviewer may exempt the project from further review if the structure is set back and naturally elevated from the flood hazard and/or if the drainage area of the flood hazard is less than 5 acres.
- If more information is needed, the reviewer will complete a review checklist and contact the applicant. A hold will be placed on the building or land use permit until:
 - o a revised site plan is received,
 - a flood hazard soil redelineation is completed modifying the boundaries of the flood hazard soils, or
 - o a flood study has been submitted, reviewed, and approved.

Depending on the circumstances, an applicant may be required to move the proposed structure outside of the special flood hazard area. For example, structures proposed in FEMA flood zones MUST be relocated outside of the FEMA special flood hazard areas.

Driveway Crossings:

If there is a driveway crossing a flood hazard area, a separate flood study permit will also be required. However, driveways in flood hazard soils with a drainage area of less than 5 acres are exempted from this requirement. See Chapter 6 for more information on flood studies. If there is an existing culvert crossing, we will review our records for a prior flood study and field check to ensure the culvert meets the approved study requirements. Replacements of existing permitted culverts require new permits if the pipe size and materials are modified.

4.5.2 Required Documentation

During the flood certification review, Watershed Management staff will identify whether additional documentation (ex: elevation certifications) will be required as a condition of approval.

There are three potential elevation certifications that may be required. All must be performed by a NC licensed surveyor. It is strongly recommended that an applicant engage a surveyor with experience with floodplain requirements. North Carolina participates in the <u>Certified Floodplain Surveyor (CFS) Program</u>, and a list of those certified may be found <u>here</u>.

<u>Pre-construction elevation survey</u>: An elevation survey will be required to determine the ground elevations at the proposed structure. Example form may be found <u>here</u>.

- A pre-issuance hold will be placed on the building permit until the pre-construction elevation certificate is received.
- Based on the elevation survey, staff may approve the flood certification or require additional information.

<u>During construction elevation survey</u>: A second elevation survey will be required prior to the foundation inspection, if the first elevation survey result is lower than the required elevation. The finished floor elevation may have to be set at 2 feet above the highest adjacent grade.

A pre-final hold will be placed on the structure permit until this certificate is received.

<u>Post-construction elevation survey</u>: If the elevation is still found to be too low, a post-construction elevation certificate will be required to ensure the structure meets its required minimum finished floor elevation.

• The Certificate of Occupancy will not be issued until this is received.

4.5.3 Drainage

Wake County Watershed Management does not regulate lot drainage except for requiring drainage easements to be shown on the construction plan and record plat. These easements and any associated conveyances within them should be installed by the developer or builder. Positive drainage from structures is required through the NC Building Code.

Storm drainage issues between property owners are a private civil matter and must be resolved between the property owners as private parties, through private legal action if necessary. If you plan improvements or modifications to your landscape or property which impact the flow of water leaving your property, you should take the potential impact to your neighbor's property into consideration. If you make improvements or modifications to your landscape or property which impact the flow of water off your property and cause damage to your neighbor's property, your neighbor may choose to pursue private legal action against you, which could result in you being held liable for damages to your neighbor's property.

Please keep in mind:

- It is a violation of State law (see NCGS Chapter 77, Article 2: Obstructions in Streams and Drainage Ditches) to block the natural flow of water in certain circumstances. For example, fences across easements must allow water to flow.
- Any land-disturbing activity that may cause erosion or sedimentation must be controlled at the source.
- Drainage modifications within the right of way (ROW) of a public road may require NCDOT approval.

Additional information may be found within the "Frequently Asked Questions" on Wake County's website.