

# City of Charlotte Storm Water

## Drainage Permit Submittal Expectations

**Tier 1** – Minimal or no impact to existing drainage patterns or drainage infrastructure.

- No sealed drawings or design required.
- Plan Requirements
  - Site plan to scale which includes all structures on the property, topography\*, as well as driveways and patios
  - Plan must show all Built-Upon Area (BUA)
  - Existing and proposed drainage infrastructure within and adjacent to the property and along the street frontage. (Proposed drainage infrastructure will require a Tier 2 review)
  - Dimensions from all drainage infrastructure. For ditches and/or channels – dimension from the top of bank
- Review will verify no impacts to existing pipes and/or channels and easement encroachments.
- Connections to the City’s drainage system with minor drainage items such as gutter downspouts or underdrains can be considered under this tier. Need to show appropriate details for the connection.

**Tier 2** – New storm drainage infrastructure or other impacts to existing drainage or drainage infrastructure.

- Tier 1 plan requirements plus the following:
  - Sealed by appropriate design professional (PLS, PE, RLA) as allowed under state law.
  - Proposed drainage plan with existing and proposed easements
  - Supporting calculations
- Review will verify proposed drainage plan meets all design standards
- Plat will be required to record public drainage easements

**Tier 3** – Flood Study required (Q100>50cfs) and/or PCSO compliance is required.

- Tiers 1&2 plan and calculation requirements plus the following:
  - Flood Study to be guided by the Stormwater Design Manual and Land Development Checklist  
<https://charlottenc.gov/DevelopmentCenter/Documents/Checklist/Site%20Checklist%20-%20Engineering.pdf>
  - PCSO Compliance must use the BMP Design manual  
<https://charlottenc.gov/StormWater/Regulations/Pages/BMPDesignStandardsManual.aspx>
- Plat will be required to record public drainage easements, SWPE (Stormwater Protection Elevation) and SWEL (Stormwater Elevation Line)

**\*Note:** Topography may be obtained from Mecklenburg County LIDAR data for Tiers 1 and 2. Tier 2 may need survey to ensure pipes and ditches will drain properly, but not a full topo survey.