# LFUCG PROCEDURES MANUAL FOR INFRASTRUCTURE DEVELOPMENT DATED OCTOBER 1, 2016

**AMENDMENT NO. 1 - FINAL** 

**JANUARY 1, 2024** 

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## **AMENDMENT NO. 1**

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Amendment No. 1 consists of various changes to reflect the new Composite Drainage Plan requirements in Amendment No. 1 to the October 1, 2020 Stormwater Manual.

## DEFINITIONS

**Composite Drainage Plan** – A component of the Improvement Plans or Stormwater Management Plan prepared by the Engineer. The requirements for the Composite Drainage Plan are contained in Chapter 4 of the Stormwater Manual. The Preliminary Composite Drainage Plan shall be submitted as part of the Improvement Plans. The Final Composite Drainage Plan shall be submitted as part of the streets, sanitary sewers, and storm sewers. The plan shall show all information on the Preliminary Composite Drainage and must reflect any changes that occurred during construction. In addition, the plan shall show the finished ground elevation of critical flow points. The critical flow points will be (1) the rear corners of each lot in the subdivision, (2) the flowline elevation of swales where they cross property lines, and (3) the elevation of surface inlets.

### **RESIDENTIAL AND COMMERCIAL BUILDING CONSTRUCTION**

#### Introduction

These procedures describe the interaction of the Division of Engineering, Division of Water Quality, Division of Building Inspection, the Engineer, and the Builders. The Builder is the individual or company who obtains the building permit from the Division of Building Inspection.

Developers that are subdividing land must construct the infrastructure and record the lots before the Division of Building Inspection issues building permits for homes or commercial structures.

Developers that are not subdividing land may obtain a building permit while constructing the infrastructure in accordance with the Improvement Plans accepted by the Division of Engineering.

The Builder cannot obtain a Building Permit or a Sewer Tap-On Permit until the Division of Water Quality has certified that the property is located in an area with adequate sewer capacity to handle the additional flow from the new building in accordance with the Capacity Assurance Program (CAP). More information on the CAP can be obtained from the Division of Water Quality.

#### Engineer Responsibilities

- 1. Revise and republish the Composite Drainage Plan as needed to ensure proper drainage in the subdivision.
- 2. Submit the revised Composite Drainage Plan to the Division of Engineering.
- 3. Provide the Composite Drainage Plan to Builders upon request.

#### Builder Responsibilities

- 1. Inspect the lot before purchasing it to ensure that there are no covered manholes, damaged curbs, damaged sidewalks, or other damaged infrastructure on the lot that needs to be repaired by the Developer, utility company, or other party. The Builder shall be responsible for repairing any damaged infrastructure that exists on the lot when the Builder purchases it. Any verbal or written agreements between the Builder and another party, such as a Developer, for repairing damaged infrastructure shall not relieve the Builder of the responsibility to make the repairs if the other party fails to make the repairs.
- 2. Obtain from the Engineer the Final Composite Drainage Plan (see definitions) for the subdivision or commercial development prepared by the Developer's Engineer and included in the Record Drawings.
- 3. Submit a drainage plan for the lot to the Division of Engineering as part of the application for a Land Disturbance Permit. The drainage plan shall show the following information:
  - a. surface drainage easements on the lot
  - b. sanitary sewers and manholes on the lot and the elevation of the manhole lids
  - c. location of proposed grease traps for food preparation facilities, such as restaurants
  - d. non-buildable areas on the lot as shown on the Final Composite Drainage Plan prepared by the Developer's Engineer
  - e. storm sewers and manholes on the lot
  - f. surface inlets, curb inlets, and constructed channels on the lot
  - g. location of stormwater controls on the lot
  - h. flow arrows that indicate the direction of surface drainage through each surface drainage easement
  - i. flow arrows that indicate the direction of proposed surface drainage away from the building line to the surface drainage easement, surface inlet, constructed channel, or curb inlet
  - j. the Flood Protection Elevation as shown on the Composite Drainage Plan and plat prepared by the Developer's Engineer
  - k. the lowest floor elevation and lowest adjacent grade for proposed buildings (as shown on the plat or Final Composite Drainage Plan)
  - 1. building setbacks shown on the plat
  - m. the location and elevation of the nearest downstream sanitary manhole lid

- n. the elevation of critical flow points shown on the Final Composite Drainage Plan for residential development. The critical flow points will be (1) the rear corners of each lot in the subdivision, (2) the flowline elevation of swales where they cross property lines, and (3) the elevation of surface inlets.
- 4. Obtain a Land Disturbance Permit from the Division of Engineering.
- 5. Construct the home or commercial structure in accordance with Article 19 of the Zoning Ordinance and the requirements on the plat.
- 6. Coordinate with the plumber and state plumbing inspector to ensure the structure is constructed in accordance with Section 16-41 (k), (l), and (m) of the Code of Ordinances regarding the elevation of the floor and nearest downstream sanitary sewer manhole lid.
- 7. Notify the Division of Water Quality when the plumber proposes to connect the lateral to the LFUCG sanitary sewer system, and leave the connection uncovered until the Division of Water Quality inspects it.
- 8. Construct and maintain erosion and sediment controls on the lot in accordance with the requirements of the Land Disturbance Permit.
- 9. Ensure that manholes are not damaged or filled during construction, and that manhole lids are not covered. In addition, grade the lot to ensure the ground elevation is equal to the manhole lid elevation. The Builder shall obtain approval from the Division of Engineering before raising or lowering a manhole lid and frame.
- 10. Ensure that the final grading on the lot does not fill or excavate the drainage easement, or otherwise alter the drainage pattern on the lot.
- 11. Repair curbs, sidewalks, and other infrastructure damaged by the Builder.
- 12. Inspect the work of utility companies on the lot to ensure that they repair curbs, sidewalks, or other infrastructure they damage. However, the Builder shall be ultimately responsible for repairing any damages that the utility company fails to repair.
- 13. Ensure that other parties, such as building supply companies, repair curbs, sidewalks, or other infrastructure they damage while delivering materials. However, the Builder shall be ultimately responsible for repairing any damages that the other party fails to repair.
- 14. For structures on lots in a mapped FEMA floodplain, submit to the Division of Building Inspection and Division of Engineering a certification from a Registered Land Surveyor stating that the lowest floor elevation is at or above the Flood Protection Elevation shown on the plat or Final Composite Drainage Plan.
- 15. For structures on lots that are not in a mapped FEMA floodplain, submit to the Division of Building Inspection and Division of Engineering a certification from a Registered Land Surveyor stating that the lowest adjacent grade (LAG) next to the building is at or above the LAG shown on the plat or Final Composite Drainage Plan.
- 16. Notify the Division of Engineering in writing when construction is complete and schedule an on-site meeting with the Division of Engineering to inspect the lot. The Division of Engineering shall meet with the Builder within 5 working days of being notified that the construction is complete.
- 17. In residential development, use the elevations on the Final Composite Drainage Plan to grade the lot properly. The Builder shall provide proof that the elevation of the critical flow points agrees with the Engineer's Final Composite Drainage Plan. The Builder shall retain a Registered Land Surveyor to submit a survey showing the "as-built" ground elevations of the critical flow points. The survey shall be performed after all grading is completed. The survey must certify that the critical flow point elevations are within +4 inches of the elevations on the Final Composite Drainage Plan. The Division of Engineering will not close the Builder's Land Disturbance Permit until they receive and accept the survey.

#### Division of Building Inspection Responsibilities

1. Issue building permits.

## Division of Engineering Responsibilities

- 1. Review residential lot drainage plans submitted by the Builder.
- 2. Conduct a final inspection of the lot within 5 working days after the Builder notifies them in writing that the construction is complete and final grading is complete. The final inspection shall be conducted as follows:
  - a. Inspect the lot for covered manholes and notify the Builder in writing to uncover manholes within 10 working days.
  - b. Inspect the lot to confirm compliance with the lot drainage plan, and notify the Builder in writing to correct any observed drainage problems within 10 working days.

- c. Inspect for damaged curbs and sidewalks and notify the Builder in writing to make necessary repairs within 10 working days.
- d. Inspect for other damaged infrastructure on the lot and notify the Builder to repair the infrastructure within 10 working days.
- e. Complete the Lot Inspection Checklist in Appendix H.
- 3. Close the Land Disturbance Permit.

#### Division of Water Quality Responsibilities

- 1. Issue sanitary sewer tap-on permits in accordance with the Capacity Assurance Program.
- 2. Ensure that the plumber makes the proper connection to the LFUCG sanitary sewer service fitting that was constructed by the Developer's Contractor. The Division of Water Quality shall notify plumbers in writing to repair improper connections within five working days. Plumbers who fail to make repairs shall be subject to the enforcement actions described in this manual.
- 3. Inspect the installation of grease traps for food preparation facilities such as restaurants.
- 4. Coordinate with the state plumbing inspector the inspection of sewer pipe construction, including service laterals.
- 5. Notify the Division of Building Inspection of any deficiencies related to Items 2-4 above.
- 6. Inspect the erosion and sediment controls in accordance with the Construction Site Stormwater Runoff Control Enforcement Response Plan.