

BRUNSWICK COUNTY PUBLIC UTILITIES

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May 18, 2020

Re: Revisions to Brunswick County Sewer Use Ordinance (SUO) & Utility Policy regarding Sewer Backflow devices and updated Technical Specifications regarding Low Pressure Sewer Systems and Grinder Pumps

To whom it may concern,

Brunswick County Public Utilities recently made changes to the existing SUO (Sewer Use Ordinance) and Utility policy as it relates to requirements for backflow devices, particularly identifying building drain relief points and requirements for installation of applicable backflow devices. The amendment to the SUO, Article II, Section 3.7 Backwater (Backflow) Device Requirement and the Utility Policy, Section K, Sewage Backflow Policy was approved at our March 16, 2020 Board of Commissioners meeting and states:

“The building drain relief point of a public sewer is the location that wastewater from a particular building drain (service) will exit the public sewer when the downstream sewer is blocked. For gravity sewers this is the top of the manhole where the building drain (service) ties into the manhole, or in the case that the building drain ties directly into the gravity main using a saddle, the top of the next upstream manhole. For vacuum sewers, the building drain relief point is the top of the air intake connected to the building drain. For pressurized grinder pump systems, the building drain relief point is the top of the vent on the grinder tank. Where plumbing fixtures are installed on a floor with a finished floor elevation below the building drain relief point of the public sewer, such fixtures shall be protected by a backwater (backflow) device installed in the building drain, branch of the building drain or horizontal branch serving such fixtures. Plumbing fixtures installed on a floor with a finished floor elevation above the public sewer building drain relief point shall not discharge through the *required* backwater (backflow) device and branch building drain serving plumbing fixtures on a floor with a finished floor elevation below the building drain relief point of the public sewer. In multifamily developments, each unit or portion thereof, with plumbing fixtures installed on a floor with a finished floor elevation below the building drain relief point of the public sewer shall have a separate building drain horizontal branch with a backwater (backflow) device. All multifamily developments shall have a cleanout installed on the building drain horizontal branch that is most distant from the public sewer. In accordance with the General Provisions of the Sewer Use Ordinance, the POTW Director authorizes and delegates the implementation and enforcement of this section to the Chief Building Code Official having jurisdiction of the area that the building is located within. The absence of a properly functioning backwater (backflow) device eliminates responsibility of the



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POTW for any wastewater backup into a structure that is required to have one in accordance with this ordinance.”

The entire SUO can also be found at this link: <https://www.brunswickcountync.gov/wp-content/uploads/2020/03/Sewer-Use-Ordinance-3-16-2020.pdf>

As noted in the SUO amendment above, “the POTW Director (Brunswick County) authorizes and delegates the implementation and enforcement of this section (Backflow device requirements) to the Chief Building Code official”. By way of this letter, we request the Chief Code Enforcement official of their respective areas to both implement and enforce the approved backflow device requirements within the SUO. We have developed illustrations for typical gravity, vacuum (both beach and inland), and multi-family connections that identify requirements for backflow devices (per the amended SUO). These illustrations are being provided to assist Code Enforcement officials and Utility Directors, for jurisdictions subject to the Brunswick County SUO. If local jurisdictional requirements are more stringent, we would defer to the entity’s requirements. Our wastewater service agreement states (Section 1.10 Observance of Sewer Use Ordinance): “each participant covenants and agrees to observe the Sewer Use ordinance of the County adopted Nov 21, 1994 and as amended (the County Sewer Use Ordinance), respecting the discharge of wastewater to the Sewer System”. It is our intention, by transmittal of this letter, that our wholesale and retail sewer customers make the necessary changes to their SUO to meet requirements within the sewer service agreement.

The illustrations can also be found at this link:

<https://www.brunswickcountync.gov/utilities/policies-ordinances/sewer-backflow-requirements-illustrations/>

Additionally, Brunswick County recently made changes to its Grinder Pump specifications regarding local disconnects for Simplex grinder pump installations. The Technical Specification 021, Revision 1.10, Low Pressure Sewer Systems and Grinder Pumps, Section 3.0 Packaged Grinder Pump Systems, Paragraph 9- Local Disconnects states:

Simplex Pump local disconnect: Single family residential grinder pumps are required to have the pump alarm and control circuit powered independently of the pump power circuit. Therefore, two local disconnects are required adjacent to the grinder pump control panel:

Pump Alarm & Control Circuit: 120 VAC, single phase, (15) amperes, single pole disconnect

Pump Power Circuit: 240 VAC, single phase, (30) amperes, double pole disconnect

Disconnects shall be UL listed and rated for outdoor applications and installed per all NEC and Authority Having Jurisdiction (AHJ) requirements.

The disconnects are required on the homeowner’s branch circuit supplying the grinder pump panel and shall be installed before county staff will energize the grinder pump system.



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The entire technical specifications for Low Pressure Sewer and Grinder Pumps can be found here: <https://online.bruncl.d.aspgov.com/finance/edge/https://www.brunswickcountync.gov/wp-content/uploads/2020/04/021-Low-Pressure-Sewer-and-Grinder-Pumps-Rev-1.10.pdf>

If you have any questions regarding this letter or changes to the Sewer Use Ordinance or Grinder Pump specifications, please feel free to contact me.

Best regards,

Donald Dixon

Deputy Director, WW Operations

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