

Chapter 9 The Sanitary Board of The City of Charleston, West Virginia, A Municipal Utility

9. Introduction

The Sanitary Board of the City of Charleston, West Virginia, a Municipal Utility (CSB), is a Publicly Owned Treatment Works (POTW) that owns, operates and maintains the sanitary and combined sewer treatment infrastructure within and in some parts outside the City Limits of Charleston. The CSB operates the POTW in accordance with its NPDES permit, as regulated through the WVDEP.

The CSB's section of the City of Charleston Stormwater Management Guidance Manual is to serve only as an overview of CSB requirements for new residential and commercial development and re-development projects within CSB service area that will **discharge domestic sewage and/or site stormwater into a CSB combined sewer**. All development and re-development projects must comply with all applicable rules and regulations of the CSB, City of Charleston Ordinance Chapter 118, Article III, the West Virginia Public Service Commission (Publicly Owned Treatment Works

), WVDEP, the West Virginia State Health Department and the Kanawha-Charleston Health Department.

CSB will arrange to meet with inquiring owners of proposed residential and commercial developments and re-developments to discuss CSB requirements in detail. The telephone number for the CSB Office is (304) 348-1084.

The CSB's section of this manual **does not** include CSB requirements for connection of industrial customers for new development or renovations of existing industrial facilities. CSB requirements for Industrial Customers are covered in City Ordinances, Chapter 118, Article III and per CSB NPDES Permit. For further information contact the CSB's Operation Manager.

All plans, profiles, details, computations and other pertinent information for proposed residential and commercial development and re-development projects, as required by CSB, must be submitted through the City of Charleston Building Department. In turn, the City of Charleston Building Department will forward the plans to CSB for its review and approval. The CSB then forwards its detailed review comments to the City of Charleston Building Department.





Connection to CSB Sanitary Sewer System (other than new subdivision)

9.1 Connection to CSB Sanitary Sewer System (other than new subdivision)

The following procedures must be followed when connecting to the CSB sanitary sewer system:

1. Upon CSB review and approval of the project plans, the owner shall inquire with CSB Maintenance Department, (304) 348-1084, x 238, regarding the estimated cost for CSB to install a utility service pipe [from its sewer main to its point of service (the property line or easement edge)] for the sanitary service. Only CSB personnel or CSB contractors are permitted to install the utility service pipe.

Likewise, upon review and approval of all plans and its site visit, CSB will determine what kind of agreement is required to serve the proposed project. CSB has three standard forms of agreement to provide service:

- a). Tap and Utility Service Pipe Agreement.
 - b). Main Line Extension Agreement.
 - c). Alternate Main Line Extension Agreement. An explanation of these forms of agreement will be provided by CSB as part of its plan review comments.
2. Restaurant facilities may be required to install a grease interceptor (depends on menus), per CSB requirements, which also requires separate piping systems for grease waste and sanitary sewer waste. Details of grease interceptors may be discussed with CSB's Environmental Compliance Coordinator.
 3. Wash facilities (car washes, vehicle/equipment wash bays, etc.) will be required to install oil water separators and grit traps, per CSB requirements.
 4. CSB must inspect all of the site customer service piping prior to being back filled. Customer service piping and appurtenances must meet CSB requirements and must be bedded in sand or gravel.

9.2 Connection to CSB Combined Sewer System (other than new subdivision)

The following procedures must be followed to connect to the CSB Combined Sewer System:

1. Permitted by CSB only when an existing separate storm sewer is not in place and when a discharge point (on site or off site, to a local storm water drainage shed) is not available for the installation of a new storm sewer system. This applies to all new construction, as well as renovations to existing structures (regardless of existing structures that are currently connected to the combined sewer).
2. CSB requires two distinctly separate customer service pipes (one for site storm water and one for site sanitary, from the structure to the edge of the property line and/or edge of the sewer easement) to be installed by the property owner. Integrating site storm and sanitary piping into a common customer service pipe will not be permitted.
3. CSB requires a WV Registered Professional Engineer to compile pre and post construction site run-off calculations for a 2-year, 15 minute event. If the post-construction runoff exceeds the pre-construction runoff, then the difference in volume must be stored in an underground facility on the site. The post-construction flow rate leaving the site shall be limited to the pre-construction flow rate, which is achieved via an orifice in the grit/gas trap drop inlet.
4. Upon CSB review and approval of the project plans and storm water calculations, the owner shall inquire with CSB Maintenance Department, (304) 348-1084, x 238, regarding the estimated cost for CSB to install a utility service pipe [from its combined sewer main to its point of service (the property line or easement edge) for either or both the sanitary service and/or storm water service. Only CSB personnel or CSB contractors are permitted to install the utility service pipe.

Likewise, upon review and approval of all plans and its site visit, CSB will determine what kind of agreement is required to serve the proposed project. CSB has three standard forms of agreement to provide service:

- Tap and Utility Service Pipe Agreement;
- Main Line Extension Agreement; and
- Alternate Main Line Extension Agreement.

An explanation of these forms of agreement will be provided by CSB as part of its plan review comments.

5. Restaurant facilities may be required to install a grease interceptor per CSB requirements, which also requires separate piping systems for grease waste and sanitary sewer waste. Details of grease interceptors may be discussed with CSB Environmental Compliance Coordinator.
6. Wash facilities (car washes, vehicle/equipment wash bays, etc.) will be required to install oil water separators and grit traps, per CSB requirements.
7. CSB must inspect all of the site customer service piping prior to being back filled. Customer service piping and appurtenances must meet CSB requirements and must be bedded in sand or gravel.

Connection to CSB Combined Sewer System (other than new subdivision)



Connection of Subdivisions to CSB Sewers

9.3 Connection of Subdivisions to CSB Sewers

The following excerpts are from the City of Charleston Subdivision Ordinance, adapted August 1st of 2008. Reference the Subdivision Ordinance for further details and contact CSB with any questions pertaining to sanitary sewers from a subdivision.

1. The developer's proposed method of sanitary sewage collection, conveyance, and disposal for the subdivision, and the design and construction of the facilities to provide sanitary sewer service to the subdivision, must comply with all applicable rules and regulations of the Sanitary Board, the PSC of West Virginia, the WVDEP, the West Virginia State Health Department, and the Kanawha-Charleston Health Department.
2. Every subdivision shall be provided with satisfactory collection, conveyance, and disposal of sanitary sewage adequate to serve the subdivision. The developer shall, prior to preparing plans for, or developing in any way, the sanitary sewage collection, conveyance, and disposal facilities, contact the Sanitary Board for the Sanitary Board's determination of whether the subdivision can be served by an existing Sanitary Board main or whether a mainline extension will be required. The Sanitary Board will also determine the sanitary sewer facilities that are necessary within the subdivision to adequately serve the area. If the Sanitary Board questions whether the capacity of the existing collection system that the proposed subdivision will connect to is adequate to accept the proposed new flows, the developer, at its expense, shall cause a West Virginia Registered Professional Engineer to conduct a flow study. The flow study shall be conducted per the Sanitary Board's requirements to determine the existing flows in the affected sanitary sewers and whether or not capacity is available to serve the proposed subdivision. If the flow study finds that there is inadequate capacity, the Sanitary Board will not approve the proposed subdivision.
3. The provision of sanitary sewer service to the subdivision will be governed by the Sanitary Board's Mainline Extension Agreement or Alternate Mainline Extension Agreement, whichever is deemed applicable by the Sanitary Board. The Mainline Extension Agreement and the Alternate Mainline Extension Agreement authorized by the Sanitary Board, as they may be amended from time to time, are incorporated by reference herein. All subdivision applications will be subject to compliance with these Agreements.
4. The developer shall provide the subdivision with a complete sanitary sewer system connected with a Sanitary Board sewer main, including a utility service pipe for each lot, in accordance with the Mainline Extension Agreement or the Alternate Mainline Extension Agreement, as required by the Sanitary Board.
5. The sanitary sewer system of any subdivision of property in the City shall not connect, in any way whatsoever, with the sanitary sewer system owned and maintained by the CSB, until and unless the developer of such sanitary sewer system shall first have complied with the requirements regarding entering into a Mainline Extension Agreement or an Alternate Mainline Extension Agreement with the CSB; and not then unless and until the developer shall have first obtained the written approval and permission of the CSB to do so.

6. As provided in the Mainline Extension Agreement or the Alternate Mainline Extension Agreement with the Sanitary Board, the developer must include a utility service pipe for each lot in the subdivision.
7. The developer must preserve all existing sanitary sewer laterals of all razed structures, and such existing laterals must be either re-used by the developer, or plugged at the property line in accordance with the Sanitary Board 's requirements.
8. The developer shall grant to the CSB on its prescribed form(s) all real property and easements necessary for the ownership, operation and maintenance of the sanitary sewer system, and necessary to allow the CSB to make future extensions into unserved areas, as required by the Mainline Extension Agreement and the Alternate Mainline Extension Agreement required above. All sanitary sewer easements shall be exclusively for the CSB; no other utilities will be permitted within the CSB's easement.

Connection of Subdivisions to CSB Sewers



Demolition of Existing Structures Connected to CSB Sanitary and Combined Sewers

9.4 Demolition of Existing Structures Connected to CSB Sanitary and Combined Sewers

The following procedures must be followed for the demolition of existing structures connected to CSB sanitary and combined sewers:

1. All site sanitary and storm customer service pipes that connect to the CSB's sanitary and combined sewers must be capped at the property line, per the CSB's requirements. The best time to locate the customer service pipes are prior to total demolition, when plumbing fixtures have been removed and the existing waste piping is intact. The CSB, with advanced notice, can assist the contractor with locating the customer service pipes outside the building with its camera equipment. Contact CSB Maintenance Department at (304) 348-1084, x 238 to coordinate a camera inspection.
2. Prior to capping the existing site sanitary and storm service, the contractor must make advanced arrangements for the CSB's camera crew to perform a camera inspection of all utility service pipes. Contact CSB Maintenance Department at (304) 348-1084, x 238 to coordinate a camera inspection.
3. Upon completion of the CSB's camera inspection, the contractor shall cap all customer service pipes.
4. Prior to backfilling capped laterals, the contractor must make advanced arrangements with the CSB to inspect each cap. Contact CSB Maintenance Department at (304) 348-1084, x 238 to coordinate an inspection of the capped customer service pipes.
5. Failure of the contractor to contact the CSB for a camera inspection and cap inspection of the laterals will result in the contractor having to excavate all laterals and coordinate an inspection with the CSB.
6. The City of Charleston Building Department requires that all sanitary and combined sewer service pipes must first be capped, per CSB requirements, before the Building Department will issue a demolition permit.