

Date: 3/5/2025

Project No.: 13848C

To: Ronald McDaniel, Montville WPCA Administrator
Derek Albertson, Montville WPCA Superintendent

From: Mariusz Jedrychowski, PE
Joe Hausman, PE
Tim Henry

Subject: Water and Sewer Utility Plans Review for 145 Route 32

The Montville WPCA has requested that Wright-Pierce assist in the review of the water and sewer utility components of a proposed development. We received the following documents for "Madison Place Luxury Townhouse" development (Madison Place development) at 145 Route 32 in Montville prepared by Fuller Engineering & Land Surveying, LLC for JNE Holdings, LLC:

- Utility Plan (C-3.2) dated 3/20/2024
- Utility Details (C-6.2 and C-6.3) both dated 3/20/2024

This memorandum is a summary of our initial review and comments.

Water System Comments

The proposed 12"x2" water service connection includes a connection to the exiting water main on Powerhouse Road with a tapping sleeve, gate valve and valve box. The proposed 2" water service line runs north from the proposed Powerhouse Road connection, then branches off in two different directions to serve each side of the development complex without looping. There is a single proposed service connection to each of the 11 townhouses on site, each with its own isolation valve. Our review checked for adherence to the Town of Montville Water Pollution Control Authority Specifications for the Installation of Watermains and Appurtenances (WPCA Specifications). Based on this review we have the following comments:

1. Provide a range for the expected water demand (standard and fire flow conditions) of the Madison Place development and confirm that the 2-inch service lines are adequate.
2. It is understood that the existing hydrant on Powerhouse Road will be used for fire protection, is this sufficient for the entire development? Confirm with Town of Montville Fire Marshall.
3. The Water Line Trench detail indicates 3.5-ft depth. The water pipe depth is to be 4-ft minimum below ground level.
4. Maintain a horizontal separation distance of at least 10' between water, sewer, and stormwater mains. Confirm and verify that the proposed water service line meets the required State of Connecticut Department of Health and WPCA Specifications vertical and horizontal separation distances from the proposed sewer and storm lines.
5. A minimum 4-inch layer of sand shall be provided under the entire length of service line. Clarify sand thickness on all sides of the service line.

6. Note location of water meter(s). WPCA Specifications require that each separate residential unit be separately metered. Confirm that each building service line will have its own water meter.
7. 2" blow off hydrants at the end of each service line should not be directly adjacent to the corner of buildings.

Sanitary Sewer Comments

The proposed sewer connection includes a PVC at a 3.4% slope from the connecting sanitary sewer manhole located on Powerhouse Road. It is assumed that the sewers located on the developed parcel will be privately owned and maintained.

1. Provide anticipated average day and peak sanitary sewer flows for the development.
2. Specify size of proposed PVC piping.
3. Provide explanation on why new manhole is required as opposed to tying proposed sewer line into existing manhole on Powerhouse Road.
4. Masonry manholes are not considered to be acceptable. Precast manholes only.
5. Flows discharged to the sewer from this development will flow through a series of isolated pipes further down Route 32 identified in the 2011 wastewater facility plan and I/I study as potentially having capacity limitations during high-flow / storm events. Depending on the estimated peak flows proposed to be discharged from the site, these pipes may need to be reviewed and considered for replacement to provide adequate capacity during peak flow events.
6. A sewer main near to and below the bottom of the infiltration basin means the sewer pipe is going to be below groundwater for a period of time every significant rain. This is a potential long term I/I problem.
7. Design should consider proximity of sewer line to infiltration basin. If the required separation distances are not met, the inclusion of impervious dam materials in the sewer bedding may be necessary for steep pipe segments to avoid groundwater collection and downstream groundwater issues.
8. A cleanout or manhole at intersection of main and line to buildings 1-4 should be present.
9. Each occurrence of a pipe direction change and every 75' of continuous piping without a service, a cleanout should be present per Montville WPCA specifications.