

Date: **11/21/2024**

Project No.: **13848C**

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

From: **Mariusz Jedrychowski, PE**
Barry Parfitt, PE
Tim Henry

Subject: **Water and Sewer Utility Plans Review for 1758-1790 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 “Shantok Village” development at 1758 Route 32 in Montville prepared by Loureiro Engineering Associates, Inc. for 1758 RTE 32, LLC:

- Utility Plan (C-7) dated 10/29/2024
- Utility Details (C-14) dated 10/29/2024

We reviewed the plans and discussed our initial comments with Montville WPCA staff via phone call on August 12th, 2024. This memorandum is a summary of our updated review and comments.

Water System Comments

The proposed water connection includes a connection to the exiting water main on Route 32 with a tapping sleeve, gate valve and valve box. There are two proposed service connections to each of the six buildings on site. The proposed water main loops around the proposed development with five fire hydrants located around the proposed buildings. Based on our review we have the following comments:

1. The hydraulic grade line for the water service zone is approximately elevation 430 to 450 (NGVD). Based on a preliminary review of the building elevations, it does not appear that adequate water pressure will be provided to the highest building elevation. Therefore, propose a means of boosting the water pressure for the development of that will meet the State’s minimum pressure and fire flow requirements.
2. Provide a range for the water demand (standard and fire flow conditions) of Shantok Village.
3. The Water Line Trench detail indicates 3-ft depth. The water pipe depth is to be 4-ft minimum below ground level.
4. Note location of water meter(s). Will these be located at each building or one for the whole complex?
5. Confirm the proposed fire hydrant locations with the Town of Montville Fire Marshall.
6. Plans should label water main pipe size and material throughout the development.
7. The valves on the service lines should be located close to the water main loop as opposed to buildings to facilitate isolation in the event of a service line break.
8. Maintain required separation distances per Utility Note 4C. Confirm and verify that the proposed water meets the required State of Connecticut Department of Health vertical and horizontal separation distances from the proposed sewer and storm lines.

9. Backflow preventers must be installed on each service line per Utility Note 4A. Will these be located inside buildings?

Sanitary Sewer Comments

The proposed sewer connection includes an 8-inch PVC at a 1% slope from the center of the building complex and property extending approximately 215-feet eastward and connecting to a sanitary sewer manhole located at the intersection of Route 32 and Fort Shantok Road.

1. Provide a range of anticipated average and peak sanitary sewer flows.
2. Confirm adequate separation distance according to CT Public Health Code at the intersection with the storm drain and water main, approximately 30-feet east of SMH-1 and include a utility crossing profile.
3. Confirm adequate separation distance at the intersection of utilities in the right of way of Route 32. These include communication utilities, gas, and water utility and include a utility crossing profile.
4. Investigate alternative sewer connection point. It appears there is a sewer manhole approximately 70 to 80-feet to the south, on the west side of the road. Confirm this location and pipe size, and the existence of connection stubs. (See attached utility drawing and profile for reference.)