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Mrs. Meredith Badalucca
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Town of Montville

RE: Response to Comments
Madison Place, Luxury Townhouse Development
145 Route 32 & 18 Powerhouse Road
Montville, Connecticut

The following are our responses to comments from the Wright-Pierce. Our responses are designated in ***bold and italics***. Engineers, Inc.

Technical Review by Wright-Pierce dated 3/5/2025

Water System 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.

Response: Please see the attached Sanitary Sewer & Water System Calculations for the anticipated water demand analysis.

A 2" water main has been calculated as adequate to serve the project.

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.

Response: All comments from the current Fire Marshal have been addressed under previous comment responses.

3. The Water Line Trench detail indicates 3.5-ft depth. The water pipe depth is to be 4-ft minimum below ground level.

Response: The minimum pipe depth has been increased to 4 feet minimum as shown on Sheet C-6.1.

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.

Response: Water main has been relocated to create a 10' minimum separation distance from the sanitary sewer main. The crossing separation of the water main over the sanitary main elevation difference has been increased to 1.8'

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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.

Response: Detail on Sheet C-6.1 has been clarified to indicate 7" minimum sand bed, 6" minimum side sand bed, and 12" sand cover.

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.

Response: Water meters have been added to Sheet C-3.2.

7. 2" blow-off hydrants at the end of each service line should not be directly adjacent to the corner of buildings.

Response: Blow-off hydrants have been located further away from the building corners.

Sanitary Sewer Comments

1. Provide anticipated average day and peak sanitary sewer flows for the development.

Response: Please see the attached Sanitary Sewer & Water System Calculations for the anticipated water demand analysis.

Sanitary main size of 6" was determined sufficient

2. Specify size of proposed PVC piping.

Response: Sanitary sewer pipe sizes have been added to Sheet C-3.2 indicating 4" PVC laterals and a 6" PVC main.

3. Provide explanation on why new manhole is required as opposed to tying into existing manhole on Powerhouse Road.

On-site manhole has been eliminated and direct connection to the existing Powerhouse Road manhole has been made.

Additionally, the two existing houses are now proposed to retain their existing sewer connections to Powerhouse Road and RT 32.

4. Masonry manholes are not considered to be acceptable. Precast manholes only.

Response: A precast sanitary manhole has been added to sheet C-6.3.

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 1/1 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.

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Response: See calculations provided under Comment 1 of this section to analyze the system capacity.

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 a potential long term 1/1 problem.

Response: No ground water was identified to 14 feet within the additional test pit areas within the infiltrations system. It is our opinion the proximity of the sanitary main should not be of concern.

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.

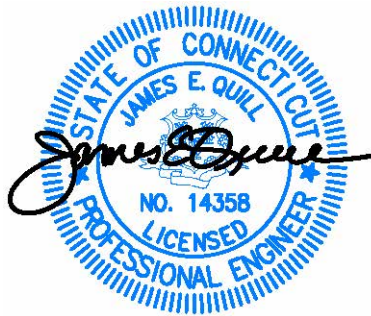
Response: No ground water was identified to 14 feet within the additional test pit areas within the infiltrations system. It is our opinion the proximity of the sanitary main should not be of concern.

8. A cleanout or manhole at the intersection of main and line to buildings 1-4 should be present.

Response: A sanitary manhole has been added at the requested location.

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.

Response: Cleanouts have been added at 75' increments and at changes in pipe direction as required on Sheet C-3.2.



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