



135 Keyes Road
Concord, MA 01742

DATE: June 2, 2020

MEMORANDUM

TO: Elizabeth Hughes, Town Planner
VIA: Alan Cathcart, Director Public Works
FROM: Valerie Doerrer, Public Works Engineer-Water Systems
SUBJECT: 1651-1657 Main Street – Waterside Commons PRD Special Permit
Revised Application Materials and Applicant Response Letter

The Water/Sewer Division has reviewed the revised materials dated March 12, 2020 prepared by Stamski and McNary, Inc., and were submitted by Now Communities, LLC. The revised materials submitted included responses to address the Water/Sewer Division’s Comment letter dated April 6, 2020. The Division’s comments can be seen below with the applicant’s response in italics. Upon review of the applicant’s response letter, and the revised site utility plan, the Water/Sewer Division offers the following comments in bold:

1. Sewer eligibility: 1651 Main Street, Parcel 2685, has an existing sewer service connection and is eligible for a single sewer service connection (see #2 below). 1657 Main Street, Parcel 2687, has been identified as part of the Comprehensive Wastewater Management Plan as a sewer eligible parcel as part of a future Phase 3 expansion of the sewer system. In order for a parcel that is identified in a future phase of municipal sewer expansion to be considered for a connection to the sewer system prior to the future expansion effort, the proposed connection must be proposed in a manner that would allow for the proper design of the sewer system for the rest of the area included in their phase. In reviewing this proposal, the applicant is seeking to decouple this parcel from a larger municipal initiative by the proposing of a common sewer main, which requires additional review by the Division (see #2 below), and the Public Works Commission.
 - **1657 Main Street, Parcel 2687, will be considered for sewer service eligibility if the Planning Board approves the consolidation of the two parcels into one single parcel to create the proposed PRD.**

2. One connection per parcel to single building: The Site Development Plan, Sheet 5 of 8, shows a single sewer service connection from the municipal sewer main in Main Street to the proposed development serving a total of seven of the proposed buildings within the development (Units 1, 2, 6A-6B, 7A-7B, 8, 9 and 10). The Sewer Rules and Regulations (reference: Article III, Section 2, Paragraph (a)) states a parcel of real property that abuts a public or private way in which a public sewer has been laid shall be allowed a single service connection that shall be dedicated to a single building on that parcel. In accordance with these Rules and Regulations, only one parcel included in this PRD is eligible for a single sewer service connection to a single building. A revised plan should be submitted showing conformance with the Sewer Rules and Regulations.
 - *The applicant will request a hearing before the Public Works Commission to request a waiver to allow a single service connection dedicated to more than one building (9 units from 7 buildings)*
 - **W/S has found precedent with respect to the proposed scope that will allow for the administrative approval of a sewer service configuration that consists of a**

single private common sewer service connection to the public sewer main, and allow for a single service connection to multiple units on the private property. A complete sewer system design is required for review by the Water/Sewer Division.

3. Wastewater capacity: The ZBA application form states on page 3 that the estimated Town sewer demand will be 1,980 gpd. The narrative submitted with the ZBA application form states on Page 6 under section “D. Permits Considered-Not Required” indicates an estimated increase of over 1,000 gpd. Conversely, on Page 11 under section “(g) Town Services” the narrative states that there will be no increase in design flow to the municipal system. The applicant is required to submit to the Concord Board of Health a Request for Title 5 Building Review (Form S) to identify any potential increase in wastewater flow and associated Sewer Improvement Fee. Based on existing wastewater capacity constraints, flow increases over 1,000 gallons per day will be administratively denied by the Water/Sewer Superintendent. An appeal may be made to the Public Works Commission seeking relief for an increase in flow over 1,000 gallons per day.
 - *An appeal to the Public Works Commission will be requested seeking relief for an increase in flow over 1,000 gallons per day. A Title 5 Building Review Form will also be submitted to the Concord Board of Health to determine the Sewer Improvement Fee.*
 - **Considering that there are two sewer eligible parcels proposed to be combined into one parcel to create the proposed PRD, an administrative approval can be given as long as the total flow increase is not more than 2,000 GPD. Increase in flow will be determined when the applicant submits to the Concord Board of Health a Request for Title 5 Building Review (Form S) to identify any potential increase in wastewater flow and associated Sewer Improvement Fee. The Form S should be submitted as soon as possible to assist the applicant in determining the actual flow increase the proposed PRD will have in order for the applicant to know whether or not PWC appeal is required.**
4. Common water main: The proposed common water main to serve the PRD connects to two dead end common water mains on adjacent properties that are each owned by different private entities, and does not provide a system loop with Town owned water distribution system. The proposed configuration results in the proposed PRD being interdependent on other private entities, and raises questions that must be addressed regarding future water service rights including the ownership, reliability, maintenance responsibilities, etc. that would not arise if the common water service was connected to the municipal water distribution system as allowed by the Water Use Rules and Regulations.
 - *The proposed common water main is no longer proposed to connect to Westvale Meadow, but now instead back into the Riverwalk development. A draft agreement will be provided for the interdependent water supply.*
 - **The proposed 8-inch common water service is shown to be connected to an existing 2-inch private common water service within the Riverwalk development. This configuration is not acceptable to the Division. The applicant is directed to evaluate the use of a common water service that shall be connected to the municipal water main in Main Street. The size of this service shall be designed in accordance with demand needs of the proposed PRD, including dedicated fire suppression systems proposed for each dwelling unit (see below for additional comments on proposed fire suppression system), and contain adequate provisions such that water quality is not degraded.**

5. Constructability: While detailed design documents for the proposed water and sewer utilities are not required until the applicant submits an application for Water/Sewer Service for review and approval by the Division, the applicant shall provide some minimum information to show that the proposed sewer service configurations can be designed to conform to the Division's Design and Construction Standards (i.e. approx. elevations, service size, service slope, etc.). Currently the plan shows a 2-inch diameter sewer service connection to the sewer main in Main Street (minimum 6-inch diameter connection is required), and service connections to each dwelling, but no other information is provided. The plans show an 8-inch common water main with individual connections to the dwellings, and hydrant locations, but no other information is provided.
- *The project is proposing to connect 18 bedrooms from 9 dwelling units to the Town Sewer. Because Main Street is several feet higher in elevation than the area of development, the sewer will have to be pumped. A series of E-one grinder pumps are now shown from the units proposed to be on sewer that will pump the effluent to the existing sewer manhole on Main Street.*
 - *As noted above, the sewer connection to Main Street will have to be pumped because of the change in elevation. We now show E-one grinder pumps at each of the units proposed to be on Town sewer, which connect to a 2" pressure sewer line which will send the effluent to the existing sewer manhole on Main Street. A more detailed Sewer Connection Plan will be provided when the project is before the Public Works Commission.*
 - **Comment addressed. Applicant is advised that prior to the start of sitework applicant shall submit a complete sewer system design to the Water/Sewer Division.**

Water/Sewer Division Comments of revised documents dates May 12, 2020:

1. Response #4 to the Fire Department comments states that the individual dwelling units are now proposed to have approved fire suppression systems in all newly constructed buildings. The revised plan submitted shows the proposed 8-inch common water service connected to the 2-inch common water service in the Riverwalk development. Additional information regarding the fire suppression system must be provided so that the Water/Sewer Division can be assured that there are no cross connection or water quality concerns. The preferred suppression system shall be a fire pump with holding tank to be sized accordingly. The fire protection system shall be separated from the potable water plumbing by an air gap.