

TOWN OF NORWELL
WATER DEPARTMENT
345 MAIN STREET
NORWELL, MA 02061
(781) 659 - 8076

July 26, 2021

Ms. Louis Barbour, Chair
Zoning Board of Appeals
345 Main Street
Norwell, MA 02061

Re: 15 High Street, Comprehensive Permit Application, As Revised - January 29, 2021

Dear Ms. Barbour,

At their meeting of July 25, 2021, the Board of Water Commissioners (BOWC) and I reviewed the Comprehensive Permit Application regarding the above and offer the following:

The proposed development 15 High Street is comprised of 3.88 acres, all of which are upland, with frontage on High Street and two points of access and egress via the same. The site is within Zone III of the Town's Aquifer Protection District (APD) and subject to all the conditions of the APD by-law.

The proposed 15 High Street in its present form will be comprised of 10 free standing buildings, containing 56 apartments units with varying bedrooms per unit, resulting in 90 bedrooms total. Also shown, is an on-site wastewater treatment facility.

The Comprehensive Permit Preliminary Utility Layout Plan Sheet C5.1 depicts a utility schematic, with the proposed project being supplied municipal water via two connections to an existing 12 inch water main on High Street creating a hydraulic loop within the project site via an eight inch Cement Lined Ductile Iron (CLDI) water main.

1. There is no provision depicted for fire protection, such as an on-site fire hydrant for the project.
2. The plan does not show any individual building water service detail.
3. A fire flow test was conducted on March 23, 2021, during the day, and a static pressure of 49 PSI was recorded. The static water pressure should be considered, when justifying the sizing of the 8 inch supply water main and water service detail, yet to be shown on the plan.
4. Utility sheet C6.4 is not consistent with Norwell Water Department (NWD) standards.

5. Although vague and lacking the necessary detail for more concise comment, the plan does show other utilities, such as underground gas, electric cable, and gravity sewer mains. The plan in its present form has no vertical or horizontal elevations shown to ensure that proper offsets are maintained.


The BOWC requests that a comprehensive utility plan with detail sheets be presented to them for review and comment. More concise comments relative to water main sizing, connections, hydrant requirements, water service sizing, water metering, and the proximity and crossings of other utilities, specifically gravity sewer mains, and all other water infrastructure components will follow as more detailed utility plans are made available. Further, that the project's proposed water infrastructure meets or exceeds the regulations of the NWD and complies with water infrastructure standards as currently denoted in the Department of Environmental Protection's (DEP) "Guidelines and Policies for Public Water Suppliers". Lastly, there shall be no irrigation system installed that is supplied by Town water for either private or public areas of the project site.

As the ZBA is aware the Water Department has found it necessary to impose water restrictions during most peak demand summer month periods. Recently NWD has developed a Four Tiered water restriction program. Tier 4 is the most restrictive level and has been implemented most summers. These actions are necessary to ensure the maintenance of adequate water storage tank levels for firefighting efforts and the availability of water for the most essential domestic uses during these high demand periods. The Water Department has taken other actions to address this situation by conducting new well exploration projects and well field upgrade projects focusing on recovering lost capacity from existing groundwater sources. These actions are both costly to existing rate payers and time consuming to implement. Large, unexpected demands for water, above that which normal growth would require, could effectively negate the progress made toward increasing supply, providing redundancy, and eliminating the need for perennial water restrictions.

The BOWC is concerned that projects of this nature (dense development of properties) place a disproportionate demand on the municipal water system than does land development of a more traditional nature, such as subdivisions constructed under current subdivision control by-laws. The Water Department withdraws groundwater under Water Management Act (WMA) permits issued by MassDEP. These permits have limits and conditions with respect to how much water can be withdrawn from our aquifers.

Providing water to the proposed the proposed High Street project, using wastewater discharge criteria as a basis for domestic water demands, a project of this scope would require 9,900 gallons/day or 3,615,000 gallons/year. A water demand of 3,615,000 gallons annually would represent a 1.0% increase over current production as reported to MassDEP in the Water Department's 2020 "Annual Statistical Report".

For the Board of Water Commissioners,



John R. McInnis, Water Superintendent

Cc: Planning Board
Board of Water Commissioners