To: Supervisor Bob Valentine and Town Board

Cc: Don Serotta, Planning Board Chairman
Scott Bonacic , Town Attorney
Dave Donovan, Planning Board Attorney
Al Fusco, Jr. , P.E., Planning Board Engineering
Bill Keller, Water System Operator

From : Jim Farr, P.E., Town Water Engineer and Building Inspector

Date: 28 February 2019

Re: Tin Barn Brewing Water and Wastewater

Pursuant to the request of the Town Supervisor, I have reviewed the proposed potential wastewater and water impacts of the Tin Barn Brewing project on the Town's water and wastewater systems.

I have also spoken with Ms. Elizbeth Mansfield, Real Estate Agent, apparently representing the project sponsor and Billy Keller the Town's Water Operator. I have also attached an e-mail from Ms. Mansfield summarizing the project's sponsor's proposed protocol for water and wastewater usage.

The following is a summary of my opinions and recommendations:

A. WASTEWATER

Wastewater is proposed to be conveyed to the Moodna Sewer Basin collection and conveyance system for ultimate treatment at the Harriman Wastewater Treatment Plant. The Planning Board should be provided with a "will serve" letter confirming that the Moodna Sewer Basin Commission is willing to accept the wastewater.

The applicant should also agree to pre-treat the wastewater if deemed necessary by the Moodna Sewer Basin Commission. The project sponsor will be responsible for all capital, inspection, operation and maintenance costs for the conveyance and treatment of the wastewater.

If necessary, the Town Board shall either expand the Sewer District or enter into an outside sewer user agreement with the applicant.

Beer brewing produces a high strength wastewater. The Town should confirm if the Moodna Sewer Basin Commission will charge an extra fee for this higher than normal domestic strength wastewater, so the applicant and the Town's billing department is aware of this extra charge , if applicable.

The applicant shall be responsible for all applications/permits, construction, inspections and sampling costs if sampling is deemed necessary by Moodna Sewer Basin Commission.

B. WATER SUPPLY

It appears that the subject parcel is located outside of the Sugar Loaf Water District. If necessary, the Town Board can either expand the Water District or enter into an outside sewer user agreement with the applicant.

It is my understanding that the homes on Derose Lane where the applicant's engineer has proposed a connection to the Sugar Loaf Water District's 6-inch water main has historically experienced low water flow and water pressure during typical peak residential water usage periods in the morning and evening. There have also been several service lines breaks in the vicinity.

Based on the exiting water system conditions and the attached the proposal from the project sponsor's e-mail I recommend the following:

1. The applicant's representative stated in the e-mail that the project sponsor would comply with the following conditions:

    a. They will fill one (1) 930-gallon beer brewing barrel on Sunday and Monday nights.

    b. They would start filling the tank around midnight and continuing filling the tank for approximately 7 hours at an approximate rate of 2.2 gallons per minute.

c. The project sponsor would ONLY use the Town's water for filling the beer brewing tanks.

d. The project sponsor would use the existing on-site well and building plumbing for ALL other potable water uses in the building that may include washdown, food preparation, drinking, bathroom facilities, cooking, cleaning etc.

2. The connection to the Water District shall be subject to the following conditions that should be noted on the site plan:

   a. The maximum size of the water service connection shall be 1-inch in diameter. The applicant's engineer shall provide a report to the Planning Board and Water Department that the 1-inch service and 2.2 gpm flowrate will have no adverse impacts to the water district's existing customers.

   b. The water service shall be copper with a burial depth of a minimum of 48-inches to 60 inches maximum.

   c. A backflow preventor (double check valve or reduced pressure zone) per the NYSDOH code for the use shall be provided. The backflow preventor must be tested annually and the report submitted to the Town with the September water bill. If the test report is not submitted, water service can be terminated by the Town.

   d. The project sponsor shall purchase a water meter from the Water Department. The meter shall be installed by the project sponsor.

   e. Water flows from the Town connection shall be recorded by the project sponsor on a daily basis if water is used or not. The tabulated water usage shall be maintained by the project sponsor and be made available to the Town upon request. If proper records are not being maintained the Town may terminate water service.

   f. A curb stop shall be provided at the County right-of-way to allow closing of the water service.

   g. A flow control valve shall be provided to limit the flow to 2.2 gpm. The use of a manually adjustable valve is NOT acceptable.

h. A pressure relief valve shall be provided to prevent water hammer.

i. The applicant shall establish an escrow fee to allow inspection of all work by Town representatives.

j. Design of the complete water supply system shall be detailed on the plans for review by the Water Department.

k. There shall be no cross-connections between the Town's water supply to be used for beer tank filling ONLY and the on-site well to be used for all other building purposes.

l. The project sponsor shall agree that at any time that the proposed project operations create an adverse impact to the existing Town water operations, they shall immediately cease use of the Town's water supply until such time that the matter is resolved by the project sponsor to the Town's satisfaction.

If the applicant is in agreement with all the conditions outlined above, it is my opinion that the Town can provide water and wastewater capacity to the proposed project.