Truro Board of Health Minutes July 8, 2020 10:15am - REMOTE MEETING

OPEN WORK SESSION

Members Present: Clerk Peter Van Stratum, Alternate Member Meredith Goff

Others Present: Health Agent Emily Beebe, Town Counsel Barbara Carboni and Town Planner Jeffrey Ribeiro, Mark Nelson, Horsley Witten Group (HWG)

Review of Cloverleaf Truro Community Housing Project

The Board has reviewed revised documents for the Cloverleaf proposal.

Mark Nelson, PE has been the consulting Engineer conducting the peer review of the Cloverleaf development project for the ZBA who is reviewing the comprehensive permit application for the 40B proposal. Mr. Nelson provided an overview of the wastewater treatment system for the project. The original application included a standard title 5 septic system; a re-design proposed alternative treatment that would treat the effluent to 19 mg/liter. The applicant has requested a waiver from the Board's nitrogen loading regulation. HWG reviewed the plans and recommended to the Zoning Board of Appeals that if the waiver was to be granted, the applicant should provide a higher level of waste-water treatment in order to meet an effluent standard for N-nitrogen at 10mg/liter. Stormwater collection and bioretention was also suggested to address groundwater quality concerns.

At the Zoning Board of Appeals meeting in March, the applicant agreed to address those recommendations. The plans were revised in June and show the use of a <u>Biomicrobics biobarrier</u> wastewater treatment facility designed to meet the wastewater effluent standard of 10mg/liter for N-nitrogen.

Mr. Nelson discussed the technical specifications of the revised proposal and shared data from a project using this system in Westport, MA with a similar application and design flow. The results from this project showed monthly influent and effluent water quality profiles that reflect a 98% removal of N-nitrogen.

Mr. Nelson stated that provided that this system functions as proposed and by employing the stormwater management techniques the applicant has designed, the project essentially meets the town's regulations and the request for the waiver in that regard would be appropriate.

Mr. Van Stratum asked about contamination in the area of the proposed project. Mr. Nelson responded that he is aware that some of the drinking water wells along the Pond Road area have some elevated nitrogen concentration; likely from existing sources of nitrogen that are affecting individual wells. Mr. Nelson discussed the various details of contaminants in wastewater.

Mr. Van Stratum suggested taking a water sample from each property west of the Cloverleaf to indicate how much nitrate is in the wells currently.

in response the Agent

There was discussion about the level of treatment proposed, compared to a development designed under standard title 5 treatment. Mr. Nelson discussed the proposed sampling and monitoring of the system at the Cloverleaf property.

The Agent asked Mr. Nelson to verify that the most recent plans he has reviewed reflect a revision date of June 5, 2020; Mr. Nelson confirmed.

Mr. Ribeiro commented that in his experience, many projects on the Upper Cape that have similar alternative treatment systems, with proper O&M, commonly perform better than traditional septic systems.

Mr. Van Stratum asked what happens if the system doesn't work. The Agent responded that the system will operate under an O&M contract with a licensed wastewater operator to ensure that the system is meeting the removal requirements; any indication that the removal standard is exceeded would trigger adjustments to the wastewater system.

Mr. Nelson did not have any further concerns about rainwater run-off. The applicant was asked to upgrade the storm water facilities to include additional treatment; improvements were made as requested. The roof run-off has the potential to add a little dilution to what else is coming into the ground.

Ms. Goff supported the project moving forward in a safe way, and said the proposal appears to be on the right path.

Discussion occurred regarding the frequency and cost of monitoring the system. Mr. Nelson also discussed the importance of the Town's management plan.

The Agent provided suggestions for conditions within the management plan:

- 1. An O&M agreement with language that would specify that at such time as the numbers exceed 10ppm, some mitigation strategy is arrived at immediately;
- 2. To obtain a cost for monthly analysis of influent and affluent; and
- 3. Quarterly monitoring at the property line and what that will be analyzed for.

The Agent was optimistic about the revisions to the wastewater system that were made by the applicant.

Meeting concluded.

Respectfully Submitted

Michelle Fogarty

