# Town of Medway Zoning Board of Appeals Meeting School Committee Presentation Room Medway Middle School 45 Holliston St, Medway MA

# MINUTES OF MEETING

October 19, 2016

<u>Present:</u> Chairman David Cole; Clerk Carol Gould; Committee Members: Eric Arbeene, William Kennedy and Brian White; and Associate Member Rori Stumpf.

<u>Also present:</u> Ezra Glenn, Public Planning Research & Implementation, Inc.; Sara White, Senior Project Engineer, Tetra Tech, Inc.

Chairman Cole called the meeting to order at 7:45 PM.

<u>Citizen Comments:</u> There were no members of the public that wished to make comments on items other than those already on the agenda.

### **Correspondence:**

None.

# **Upcoming Meeting:**

November 2, 2016: Continued hearing for Timber Crest Estates [focus area: traffic & safety]

# **Public Hearings:**

7:45 P.M. – The Applicant, Timber Crest, LLC, seeks a Comprehensive Permit under MGL c. 40B, Sections 20-23 as amended, to allow construction of 157 unit development to be called "Timber Crest Estates" containing 25% affordable units on 170.36 acres which is comprised of the properties located at 143 Holliston Street, 153R Holliston Street, 177A Holliston Street, 21R Fairway Lane, 13 Ohlson Circle, 102 Winthrop Street, 11 Woodland Road, 0R Woodland Road, and 165 Holliston Street Medway, MA.

[Focus areas: Stormwater Management, General Comments]

The Board is in receipt of the following documents:

- Letter from Attorney Agostino, RE: Chapter 40B, §§ 20-23 Request to Connect to Medway Town Water & Sewer Timber Crest, LLC
- Letter from Attorney DeProspo, regarding Fern Path access
- Stormwater Review Comment Letter provided by Tetra Tech, Inc.

The developer, Mounir Tayara, the developer's 40B consultant, Paul Cusson of Delphic Associates; the developer's engineer, Jim Pavlik of Outback Engineering; and the developer's attorney, Mr. Agostino were present to discuss the project with the Board.

Chairman Cole offered Mr. Agostino an opportunity for a brief rebuttal on the comments presented at the last hearing (October 5, 2016) regarding wetlands. Mr. Agostino stated that a comprehensive written response has been generated by Goddard Consulting and was submitted for the Board's review. Mr. Agostino believes that further discussions will be better to be reserved for a work session to discuss some wetlands and stormwater related issues, and added that at this point the team is conducting studies and producing initial reports and the final project will comply with state regulations.

Mr. Cusson asked if the Board had received the 20 page response letter from Goddard Consulting. Chairman Cole answered that the Board was not in receipt of the letter. [At later date, there was a statement made that there was no written response from Goddard Consulting regarding wetlands.]

Mr. Agostino noted that at this stage, the purpose of reviewing stormwater and wetlands is to find limiting factors and site conditions that might prevent the applicant from complying with state DEP regulations and a problem with the applicant's design.

Mr. Pavlik provided an overview of pre- and post-development conditions. He explained that as the first step, models are used to generate runoff rates and volumes of the existing conditions, the topography, land use, and where the discharge points are. As the second step, there is a similar analysis conducted for the proposed development, understanding that runoff rates and volumes will typically increase. The stormwater control chosen for the project is based on best management practices and include retention and infiltration basins, underground leaching chambers, and roof drains for the houses. Preliminary results show a decrease in runoff rates and volumes. Mr. Pavlik also noted that there is a requirement for treatment and recharge of runoff. Mr. Pavlik noted that the project is a fairly large site, 170 acres, and that there 4 primary discharge points were identified based on topography of the land. The majority of site focuses on central wetland system that flows out to a drainage easement and a drain pipe under Lovering Street. The proposed roads are graded off to strategically located detention basins across the site; all of the runoff from the roadways are directed to those basins.

Chairman Cole asked for more detail.

Mr. Pavlik continued that on Road A, there is a high point at the intersection of Road C. The road runoff will filter to an infiltration basin near the wetland on Winthrop Street. There is a small rain garden in the back of the northern part of the properties located to the north of Road A to collect some of the runoff from properties above the site. Road C has a high point under the High Tension Wires that runs off to the north and south infiltration basins.

Mr. Stumpf noted that as per Mr. Pavlik, the volume of up flows will be decreased. Mr. Stumpf asked if there will be any potential effects on volume of flow to existing locations out of the project site—for example the drying up of streams, or "overdoing infiltration." Mr. Pavlik explained that a wetland actually acts as an infiltration system. Stormwater is collected and stored during wet months and levels recede during the summer months; infiltration basins generally mimic that system and are considered the preferred method for dealing with stormwater.

Mr. Stumpf asked how vernal pools get their annual water "feed." Mr. Pavlik responded it is from precipitation over the course of the year, mostly from rain water. The water levels at those locations will be the highest in the spring. Mr. Stumpf asked if there was a way to determine the impact on the proposed runoff and management systems and the impact on the existing vernal pool water levels. Mr. Cusson explained that some of those concerns were addressed in Goddard Consulting's response regarding wetlands. [As previously noted the applicant team later stated there was no 20 page report submitted from Goddard Consulting.] Mr. Pavlik stated that there are a number of requirements that need to be met for the siting and location of the infiltration basins, and generally, stormwater management systems are very conservatively designed.

Mr. White asked if the locations for the basins were selected in connection with what would best manage the stormwater and also address conservation and wetlands concerns or if there were placed based on aesthetic reasons and locations to make best use of the land. Mr. Pavlik said that all of it was taken into consideration along with the topography of the land.

Mr. White asked what priority was given to conservation knowing that there are wetland and vernal pools on the proposed project site (what is best for the vernal pools and wetlands according to the existing runoff locations v. the locations required to meet the guidelines for stormwater management). Mr. Pavlik explained that no stormwater discharge is allowed within 100 feet of a vernal pool. In one example, the infiltration basins at the ends of Road C are located 300 feet away to the north and 400 feet away to the south. Mr. Pavlik explained that infiltration basins are also located 50 feet away from any wetland and placed within setbacks accordingly.

Mr. Stumpf said that he assumes that runoff would be uncontaminated, with no discharge from the roadways. He asked if the catch basins extract the salt used for snow removal. Mr. Pavlik noted that having the basins catch the salt is one way to handle it. A plan for the operation and maintenance plan will be generated.

Mr. Agostino interjected stating that Mr. Stumpf seemed to be asking about water quality for which there are DEP regulations that need to be met. Mr. Pavlik explained that all of the drainage calculations will be included in the NOI filed with the Conservation Commission.

Mr. Stumpf noted that the road for the proposed project seem narrow and houses very close together and is concerned that there isn't room for large amounts of snow and salt. Mr. Cusson said that the Conservation Commission and the state regulate the type of salt to be used. Mr. Agostino explained that Mr. Pavlik and the applicant team can identify where the snow storage will be on the plans. Mr. Cusson also stated that Mr. Pavlik and representatives from Tetra Tech will ensure that requirements are met.

Mr. White asked if the design for the project will change based on whether the roads are accepted by the town or not. Mr. Pavlik stated that the design needs to be done the same way whether the roads are maintained by the town or homeowner's association. The types of techniques proposed are standard systems (open basins, underground leaching chambers) which are fairly easy to maintain.

Mr. Glenn asked if the developer is seeking any waivers at the local level related to stormwater that the Board will need to weigh in on. Mr. Pavlik responded yes, from the Subdivision Regulations, Sections 5.7.23 and 7.7. Mr. Pavlik noted that the local regulations generally mimic DEP regulations, however the

DEP regulations have been more recently updated (2008, where the local regulations were updated in 2005). The biggest problem identified in the local regulations, according to Mr. Pavlik, is the requirement for setbacks of drainage basins to be 30 feet away from lot lines and any right of way. That will be difficult due to space considerations (Section 5.7.23P). Mr. Glenn stated that might be a matter that the Board would want to flag.

Mr. Stumpf asked if any standing water would be present at any of the basins. He also wondered if fencing would be used as a safety precaution, especially for children. Mr. Pavlik said that all of these basins are intended to drain out within a 72 hour period. He also noted that no fences have been discussed and Mr. Agostino added that usually the sentiment is that fences are unsightly. Mr. Cusson stated that fencing may be required based on depth of the standing water. Mr. Pavlik stated that there are wet basins that hold water but the applicant was not looking to include those. Mr. Agostino noted that some of the setback requirements are "for aesthetics" and the applicant is willing to consider discussing plantings, screening, and overall design of the basins.

Mr. Glenn recommended that the applicant provide in writing a list of all local regulations from which they are seeking waivers, why they are looking to have the regulations waived and where they comply.

Mr. White stated that he would appreciate if alternate design plans showing compliance with all local bylaws was provided to Tetra Tech for any exemptions being sought in the event that the waiver is not approved.

Chairman Cole asked how big of a storm the stormwater system capable of handling. Mr. Pavlik said that they looked at 2, 10, and 100 year storm events.

Mr. White asked which waivers the applicant was requesting for stormwater. Mr. Pavlik stated that the applicant had asked for a general waiver for all stormwater requirements within the Subdivision Regulations.

Bridget Graziano, Conservation Agent, stated that one waiver being requested is the calculation for the 25 year storm event. She stated that the Conservation Commission had previously requested to include in the calculations and added that Tetra Tech had also requested it. Mr. Agostino stated that the applicant believed that the DEP regulations were sufficient in this instance but asked that if there was a rational from the Conservation Commission for requesting the calculation to be included, it was discussed. Mr. White pointed out that this is a request that had been presented before the Board months ago and it still hasn't been addressed. He would have appreciated if the requested information would have been submitted between then and now. Mr. Cusson stated that the applicant could supply that information. Mr. Agostino assured the Board that it would be submitted. Bridget Graziano explained that "a variety of calculations is the Peak Rate, volume and velocity can vary depending on the storm event. This additional calculation provides a base line for proper design based on the number of storms and the portion of the stormwater system such as erosion, velocity, riprap sizing, and stabilization of outlets. This is #1 on the stormwater state regulations." Mr. White stated that he would have appreciated if the applicant had provided that information at the hearing, as it had been previously requested.

Ms. White from Tetra Tech spoke to some of the comments from the peer review, including:

- Some leaching chambers don't have test pits

Mr. Pavlik explained that most sites had been tested but the newer parcel at 165 Holliston Street did not have test pits.

- Roof drainage going into cul-de-sac of Fern Path

Mr. Pavlik answered that testing would be done in that area.

- Plan for treatment for chambers; it was noted that it may be easier to have a surface treatment chamber as opposed to having it underground to ensure maintenance

Mr. Pavlik said that the applicant could look at that for the final design of the project and offset changes elsewhere.

- Several sub-catchments in the hydro-cad report weren't discharging to a design point during the post-development and they might impact the post-development runoff rate

Mr. Pavlik noted that the applicant combined the data for roof drainage without a design point as roof drains would [individually] be designed for 100 year storms.

Mr. Pavlik stated that it might be best for him to go through Tetra Tech's review on stormwater management and to provide comments on that review at a later date as the applicant only received the review on that date (October 19, 2016).

Mr. Glenn stated that the goal is that Tetra Tech can get to the point to review the project and let the Board know that they are complying with state standards and anywhere they don't see that there would be conditions.

Mr. Arbeene stated that multiple residents have expressed having water issues, particularly on Fairway Lane. He asked how the development will affect abutting properties. Mr. Agostino explained that the purpose of DEP regulations is to make sure that off-site conditions are not adversely affected. He noted that it is always helpful to hear neighbor's conditions and current problems. He concluded by saying that often times you see improvements for abutting neighbors as a result of stormwater management systems. Mr. Cusson stated that their experience is that conditions are usually improved.

Mr. White asked for more in-depth information on the geographical survey conducted. Mr. Pavlik said that they we were out there for 5-6 days, dug 50 test pits, in some cases sand and gravel was found, and the water table was 4 feet below grade. He explained that a test pit is generally bucket size, and go down about 10 feet. Mr. Pavlik also showed all soil logs and test pit locations on the map.

### **Public Comments:**

Kurt Schaefer of 13 Fairway Lane pointed to his property on the map. He noted that in between his yard and his neighbor's yard, everyone along that road has septic systems. From his experience as the owner of that home since 1988, water doesn't flow as expected along his property. He had a drain put in at his own expense. Mr. Schaefer asked if ledge was hit on test pits. He asked that more investigation be done as he is concerned due to the number of homes, all the septic systems, and vernal pools present.

Mr. White asked the developer's team if drains installed by residents (private systems), such as Mr. Schaefer, showed up for calculations. Mr. Agostino said that Fairway Lane was looked at specifically, but they can certainly go out and meet with neighbors and walk that area. He added that the developer

wants to improve conditions for abutting neighbors. Mr. Pavlik noted that he was aware of that drainage system.

Charlie Myers of 9 Curtis Lane stated his concern for routine maintenance of the 4 retention locations as most abut property lines and houses are in close proximity to each other. Mr. Myers also observed that unless a homeowner's association is formed, the town will incur all of the cost associated with the maintenance of the basins. He stated that looking at the map showing Holliston Street, noted a leaching chamber listed on the north side of Holliston Street in an uphill configuration. A driveway mark is present and due to the significant slope change, the resident asked if there is a chance that runoff will go into that driveway. The resident asked if the road should that road be moved north. This abutter's driveway may get flooded. Mr. Agostino assured the resident that the developer and his team will look at that location more closely and thanked the resident for raising the potential issue.

Dave Johnson of 163 Holliston Street noted that the pits had been dug in August of 2016, which was an extremely dry month. He is concerned that the water table depth is incorrect. Mr. Agostino stated that lines in the soil show a long term trend. Mr. Pavlik pointed out that DEP soil guidelines were followed. Mr. Johnson asked if a permeability test had been performed. Mr. Cusson reiterated that DEP regulations and standards are being followed. Mr. Johnson also asked if the town wants to be responsible for maintaining the stormwater underground systems.

Mr. White asked if more test pits will be dug; Mr. Pavlik responded yes. Mr. Pavlik explained that sticking a PVC pipe in a hole in the ground isn't an accurate way to measure groundwater levels but stated that what was done based on soil modeling tends to lead to conservative results.

Mr. Kennedy asked if the leach chamber at 163 Holliston Street will be looked at. Mr. Agostino responded that it will be discussed and some comfort level provided to the Board.

Mr. Glenn reminded everyone that at this point the objective is to identify potential issues, not resolve problems.

Mr. Dalheimer of 21 Fairway Lane asked if a 3-4 feet water table is considered normal. Mr. Pavlik explained that it varies based on a number of conditions. Mr. Stumpf asked if the houses will need sump pumps. Mr. Pavlik said that most homes will have walkout basements. Mr. Dalheimer thought 3-4 feet seemed pretty close to the ground for homes that will have basements. Mr. Cusson stated that the road is being raised and the design takes into consideration the water table level. Mr. Kennedy seemed concerned over the downward slope and how it will affect abutting neighbors. Mr. Agostino stated that the developer and his team don't want to build homes that will have water in the basement. Mr. Dalheimer asked if there is a possibility that all the water will go in his basement. Mr. Agostino noted that all of this will be addressed. Mr. Dalheimer asked if Tetra Tech has looked at where the snow storage is on the current plans; he is concerned with the locations and sizes of the snow storage.

Kurt Schaefer of 13 Fairway Lane asked if abutting neighbors with septic can be hooked up to town sewer system if the sewer is built through the applicant's proposed development.

Mr. White asked if every house will have a walk out basement. Mr. Pavlik, answered no, basements are not located below the water table per standard practice. The homes will be elevated properly and a "pitcher's mound" will be created around the foundation.

The Applicant, Mr. Tayara stated that when excavating a house, if water is found, everything gets raised automatically. Precautions are also taken such as building a perimeter drain. Ultimately, these homes need to be sold without issues.

Mr. Kennedy asked if infiltration basins have been shown to affect the value of existing abutting homes in a negative way. Mr. Tayara stated that these are usually seeded and look like a backyard. They are a landscaping aspect and blend in. Mr. Kennedy also asked who will be responsible for their maintenance as the developer phases out. Mr. Tayara said that it will be homeowner's association until the town takes over. Mr. Agostino added that it can be part of an order of conditions that can be enforced by the town if the association doesn't maintain them.

Mr. Cusson requested that time be set for a workshop. Mr. Glenn agreed that small work groups will be beneficial to set up, but recommended doing so after the traffic meeting. Mr. Agostino concurred with that approach so that all comments can be bundled into one meeting.

Mr. Glenn pointed out that some towns choose to hold the workshops as large public meetings, others do it in smaller groups and bring information back to ZBA meetings.

Chairman Cole noted that the proposed plan shows a long connector from the south eastern half down to 4 houses on Fern Path. The fact that Fern Path remains a private way deems further legal discussions necessary.

Mr. Kennedy requested pictures and locations of some of the other developments that Mr. Tayara and his team have worked on. Mr. Agostino stated that pictures and locations will be submitted. Mr. Kennedy further added that it should be noted which developments are also 40B. Mr. White asked that they please select a location that can accurately be accessed on googled maps.

### <u>Adjournment</u>

A motion to adjourn was made by Mr. White, seconded by Mr. Kennedy and passed unanimously. The Board adjourned at 10:07 p.m.

Respectfully submitted,

Filipa LeClair Meeting Recording Secretary