

Civil • Environmental Project Management • Permits

January 24, 2019

Adam Yagelski, Town Planner and East Greenbush Planning Board 225 Columbiaurnpike Rensselaer, NY 12144

Re: Covered Bridge Village PDD Application

Town of East Greenbush, Rensselaer County

Dear Mr. Yagelski and Members of the Town of East Greenbush Planning Board:

We have reviewed the project Comments from Greenman Peterson, Inc., dated November 6, 2018, and offer the following information in response, in the order of the comments provided. Comment are in *Italic* and response are in BOLD below.

- 1. As noted in the Town's Comprehensive Zoning Law, Section 2.9 Planned Development District, where a PDD occurs, the density shall not exceed the base density otherwise permitted per developable area. However, the project amenity package will be considered for potential incentive to allow an increased density. Based upon the response, it appears that 34 single-family homes could be constructed on this site. Has the Town given formal approval that the proposed incentives are acceptable relative to the increase in density being proposed? Also, please advise if the Town has reviewed and is on board with sub-responses 3 through 5. As we understand, to date there has been numerous discussions with the town and agreement to the density proposed under the PDD has been set at not to exceed 286 units.
- 2. This project will be constructed in two phases. The plans provided to date do not clearly show the what is being built per phase. We suggest that plans be provided showing all work to be performed in Phase 1 and all work to be performed in phase 2. Plans have been submitted to show Phase I and Phase 2 under the PDD approval. In summary, 160 units will be constructed in Phase 1, including the construction of the bridge, sanitary sewers, water mains, stormwater management and other amenities associated with the 160 units. Phase 2, as agreed, will be constructed upon, at a minimum, of 60% of Phase 1 being rented. Phase 2 will also complete the remaining utilities and amenities.
- **3.** Michael Road is proposed to be improved due to the limited sight distance. This work should be performed during the 1st phase of the project and prior to occupancy of the buildings. The developer should also dedicate right of way for Michael Road and this needs to be added to the plans. In addition, there are no pedestrian connections to the recently constructed walkway facility. A pedestrian connection has been added on the east side of Michael Road to Community Way. However, a crosswalk was not included. A detail should be provided that would include high-visibility crosswalk, ADA ramps and signage. The proposed sidewalk connection appears to be on

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private property. Has the developer obtained or will be obtaining the right of way to construct and maintain the sidewalk? If the right of way has or will be obtained, it should be added to the plans. If due to right of way restrictions the developer cannot construct the connection, perhaps the cost for construction should be determined and the funds be forwarded to the Town so that they could implement the connection as a Town project. Due to the relocation of the site entrance to the north, the Applicant no longer proposes to re-align Michael Road, where site distance is acceptable. Sidewalks are being proposed along Michael Road and a crosswalk provided at Community Way. As noted, if this is not a possibility at this time due to the unavailability of obtaining easements from adjacent property owners, then the cost will be added to the Community Benefits package proposed by Applicant.

- 4. The Traffic Impact Study (TIS) is a "draft" and should be finalized. Any recent developments should be included in the final TIS. The TIS has been finalized and updated based on the proposed location of the entry drive and sight distance along Michael Road. Creighton Manning Engineering has updated the TIS has been submitted to town.
- 5. GPI recommends the Town attorney review and approve the license with National Grid that includes language regarding secondary how access, utility, water and sewer services will be provided to Building 7. Agreed. Information concerning National Grid confirmation that a license would be authorized, has been previously provided, if additional information is needed, please let us know. As previously discussed, the actual license agreement will not be available until the Town approval of the proposed PDD is obtained. The applicant will work with the Town Attorney at the appropriate time to insure the language is acceptable.
- 6. The Covered Bridge will need to be designed by NYS PE. LRFD design standards will apply. An agreement should be in place as to when the bridge is to be inspected and if there are any components of the bridge that needs to be repaired or replaced, how and when is that going to be done. We would also like the fire department's input since the bridge is a wooden structure. Will there need to be any special precautions/apparatus in case the bridge is on fire. The bridge will be design by a NYS Licensed Engineer and will utilize LRFD design standards. A concept of the bridge design developed by the engineers engaged to complete the full design, has been provided to the Town. It is also agreed that an agreement for inspection will be put in place for maintenance and annual inspection.
- 7. Below are Hank LaBarba's comments related to the water and sewer systems:
 - a. Water Supply and Use Information provided by the applicant's engineer indicates water use needs to be about 31,460 gpd for the multi-family development that will contain 286 dwelling units (bedrooms). The total flow is based on a projected use of 110 gallons per day per unit. Water system improvements required will include an extension of an existing Town water main located on Michaels Road at Community Way. An 8-inch diameter main will be extended about 1,800 feet into the site. The applicant should provide a hydraulic analysis of the water system for the proposed project taking into account existing flows and pressures at the point of connection to the Town main and resulting projected water pressures and flows at the farthest and highest point to be served by water within the site. It is presumed that a water sprinkling system will be provided which should also be accountable for water demand. Hydraulic analysis was conducted to evaluate the water pressure at the site based on existing conditions and hydrant flow test performed by the town. This information has been presented in the project narrative where it is stated that

the residual flow is estimated at 2,700 gpm. This information has also been reviewed at length with the Town Engineer.

b. Wastewater - Based on the projected water use, projected wastewater flows were presented by the applicant's engineer. The total flow would be 31,460 gallons per minute using a peak factor of four the instantaneous peak rate would be 87.4 gallons per minute. Arico Associates has prepared a flow analysis for the Town sanitary conveyance system from the project site to the wastewater treatment plant. This analysis is required by NYSDEC for all new developments to demonstrate if there will be any impacts on the Town system including sewers, pump stations and treatment facility. It appears that there will be some flow impacts to the Luther Road pumping station, the first of four consecutive stations in the Town sewer system tributary to the treatment plant.

The applicant's engineer has provided a 3-page summary of the flow analysis. Any spreadsheets, calculations and details of this analysis should also be submitted for review. Also include other reports referenced. The aforementioned analysis concludes that some peak flow mitigation be employed by use of on-site flow equalization. This system would reduce peak flows to an average of 25 gallons per minute and a discharge during off peak hours. There is no spreadsheet showing calculations and analysis that has been prepared for submittal, as large-scale mapping provided by Mr. LaBarba was used to determine existing flow capacities for town system. Applicant also agrees to work with the town to develop a discharge flow during off peak hours as deemed necessary with further study by the town.

The project and this area of Town is serviced by a pump station on Luther Road (aka Luther Road pump station). The station was totally refurbished in 2009. The station serves some homes in the vicinity but mostly; 1) YMCA, 2) library and 3) Columbia High School. In addition to the possible addition of the users from the Covered Bridge project to the pump station there is also a planned residential development on Newkirk Road that is proposing about 144 bedrooms in a multifamily development. It is recommended that the Town and applicant's engineers evaluate the existing capacity at the Luther Road pump and possibly consider increasing the pumping rate and capacity. Notwithstanding the fact that improvements to the Luther Road pump station are not warranted solely on the basis of the additional flows from the Project. Applicant agrees to further evaluate the Luther Road pump station with the town to determine if the pumping rate need to be upgraded for general town needs. Based on the finding, the Applicant can dedicate a portion of the public benefit fees proposed to be paid to aid in the rehabilitation.

- **8.** Our previous comments noted below still applies. Review letters should be coordinated between the applicant and the fire, police and emergency medical services for the current proposed layout. Our initial meeting with the Fire Department resulted in the following: **A meeting was held with the fire department and we have provided information:**
 - The site plan must have adequate turning radius for the fire truck. This includes both the main access driveway and the emergency access road. Please show how fire trucks can make the necessary turns. The site plan does have adequate turning radius for fire vehicles for both the main access driveway and emergency access road. A turning radius for emergency vehicle has been added to the plans.

- The emergency access road must be maintained and be structurally sound to handle the weight of the fire truck. It is recommended that the emergency access road be paved utilizing the same structural section as the main access road. In addition, a maintenance agreement should be provided for the emergency access road to make sure that it is always clear for use. The emergency access road is to be designed to support emergency vehicles (up to 75,000 lbs) and paved to provide agreement to have roadway clear for all season use.
- The fire department would like to be able to access all sides of the proposed buildings, main concern is having adequate access to proposed building number 7. The site design does not allow for vehicle access to all four side of the building due to grade limitations, though accessibility is provided for all four sides. This was discussed at length with the fire department and determined to be acceptable, to the Applicant's understanding.
- The buildings need to be designed so that center stairs are provided for access into the units.
 The buildings entrance and exits will be designed according to NYS Building code standards, as will the entire building.
- Snow pile buildup on site is a concern. The proposed design must address how and where the snow will be stored on site so that it will not be an obstacle for the fire trucks. Snow will be removed for all parking areas and roadways. A has been put in place and added to the plan set showing potential areas to pile snow before removal from site.
- Elevation view of the proposed buildings should be provided. Elevations for the building have been submitted in previous submissions.
- 9. It appears that the three 3 wind mills are no longer being considered and please confirm. Response indicates possible use of fuel cells. Is this still under consideration and if so, provide details? Wind mills are no longer proposed in connection to the project. Fuel cells are still being considered as are other green energy concepts. Installation of any energy concepts will be provided and designed according with the NYS Building and local codes.
- 10. Please provide details as to how the handicap accessible parking have ADA acceptable grades. Additionally, it is recommended that handicap accessible parking be included at the Clubhouse. The site has been designed to meet all ADA compliant standards. ADA details will be provided on detail sheets at final review.
- **11.** It is our understanding that the project will require coordinated SEQR review and Part 2 will be submitted in future submittals. It is expected that coordinated review is needed for SEQRA.
- 12. Our previous comment noted below still applies: "Considering the overall project proposes to disturb approximately 25 acres, a staging plan should be developed for each phase of the project. Each Stage should depict the disturbance of 5 acres of land maximum with the appropriate temporary grading and erosion and sediment controls. If 5 acres or more of land is planned to be disturbed at one time than written approval from NYSDEC is required." We are, and have always maintained that more than 5-acres will be disturbed for a short period of time and approval from NYSDEC will be obtained in accordance with the Permit GP-0-15-002.
- 13. Our previous comment noted below still applies:

 "The project narrative identifies there are no impacts to wetlands except the possibility of temporary impact during construction. However, the site plans show multiple impacts of the wetland boundary from the proposed trails, pond and emergency access road. The disturbance of the federal wetlands will require a permit from the Army Corp of Engineers and the cumulative

impact may require mitigation. Additionally, clearly indicate the 25' Town wetland setback and 50' Mill Creek Water Course protection corridor on the plans. Wetland delineation must have been performed at one time for the site. A report should be provided to GPI to confirm work was done and shown properly on the plans." The trails proposed are not to designed to disturb ground. The trails will be designed to maintain their present condition. When obtaining permits with ACOE for temporary disturbances, the crossings will be included. At that time if ACOE requires permitting we will do so, or provide raised walkways spanning the wetlands.

14. Our previous comment noted below still applies:

"Wetland boundaries should include permanent fencing around the wetlands to prevent disturbance." Please provide documentation from agency indicating that fencing is not appropriate. The wetlands will be protected as required by ACOE. Typically, permanent fencing along the perimeter is not allowed, though periodic fencing is. The fencing proposed on the plans depict three (3) sections of split rail fencing, and signs, every 300-400 feet along the perimeter of the wetlands.

- **15.** Our previous comment noted below still applies "The plans should show the limits of disturbance." **Limits of disturbance is shown on the plans.**
- 16. Our previous comment noted below still applies: "Clearly indicate the FEMA Flood Plain Boundary and any associated flood elevations." FEMA flood plain limits is shown on the plans.
- **17.** Our previous comment noted below still applies:

"The property line setbacks should be displayed on the plans to verify no encroachment." The property line setbacks to buildings and improvements are shown on the plans. Since this is a proposed PDD the setbacks shown are typically shown from the building corners and pavement edges to the property lines.

In addition to the above, we have not received responses to our 7/3/18 memos with respect to Michael Road realignment, Michael Road/Luther Road safety concerns, Michael Road/Elliot Road safety concerns, Michael Road Pedestrian Crossing and Updated Narrative Engineer's Report. The Michaels Road re- alignment is not being proposed and the TIS prepared by CME is complete showing there are no safety issues with Covered Bridge Way other than adding a right turn lane at Luther Road, which has been completed. The pedestrian crossing at Community Way is shown on the plans.

As always, we are available at your convenience to sit and discuss any concerns in part so we can keep the review process current. Thank you for your attentiveness in this matter. If there are any questions, or additional information is needed, please contact our office.

Sincerely,
ARICO ASSOCIATES

Dominick F. Arico, PE
Jack Conway, Supervisor
Alison Lovely, Planning Coordinator Matt Mastin, Planning Board Chairman
Fred Mastroianni GPI, Town Designated Engineer
Mary Elizabeth Slevin, Attorney
Armand Quadrini, Applicant