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January 8, 2018

Gwen M. Miller
Land Use Director and Town Planner
Town of Lenox
6 Walker Street
Lenox, MA 01240

Re: Peer Review Comments #2
The Landings Special Permit Application for 241 Walker Street, Lenox, MA

Dear Gwen,

Per your request, Foresight Land Services, Inc. has reviewed SK Design Group, Inc.'s Additional Information, dated December 8, 2017, regarding its Special Permit Application for The Landings Project. We note that the project has been renamed "The Landings", and the street will now be referred to as "Golf View Drive".

Our original review was based on the document entitled *Special Permit Application for Fairway Landings An Open Space Flexible Development (OSFD)*, Prepared for Stone Path Development, Inc. for property located at 241 Walker Street, Lenox, MA, prepared by SK Design Group, Inc., dated October 2017.

Our original comments are listed below, with SK Design Group's response following in italics, and our follow-up comments in blue.

1. Roadway

- a. Recommend applicant submit a roadway profile to depict roadway grading, especially the leveling area at the intersection of Fairway Landing and Walker Street.

SK Design Group, Inc. has received the MassDOT plans for the Walker Street Improvements. These improvements, as necessary, have been depicted on the project plans. The proposed driveway will align with the new improvements and this information can be seen on the attached road profile. Continued cooperation and coordination could be a condition of approval as the timing of the project construction and Walker Street improvements may differ.

Comment addressed. We recommend Applicant ensure coordination with Walker Street reconstruction as a condition.

- b. Applicant is proposing a 145 foot offset between Fairway Landing and Fairwynds Drive. Fairwynds Drive is a heavily used intersection serving the golf course, resort, and other functions. Applicant should address the adequacy of the intersection offset of 145 feet.

The geometry, as proposed, increases the existing setback between offset roadways from 70 feet to 145 feet. The setback has been maximized to avoid traffic conflicts. Conflicts are further minimized by the low percentage of traffic traveling from Golf View Drive to Cranwell property. Lastly, the low trip generation rates for the project are indicative of low impact project with very low ADTs. Trip generation estimates are provided below:

Land use code	Description	AM PEAK HOUR	PM PEAK HOUR	WEEKDAY DAILY TRIPS	WEEKEND PEAK HOUR	WEEKEND DAILY TRIPS
260	Recreational Homes	23	17	28	43	28
210	Housing, Single Family	18	13	115	17	108
Hybrid	Mixed Use	21	15	72	30	68

Comment addressed.

2. Landscaping/Screening

- a. The Town is going to be widening Walker Street and adding sidewalks on the North side of the road. This work, in addition to the Fairway Landings work, will eliminate much of the vegetation between the development and Walker Street. Applicant should consider planting a vegetative buffer strip between the development and Walker Street outside the right of way.

This proposed work associated with Walker Street has been depicted on the proposed project plans. The applicant proposes the installation of a landscape mounds along Walker Street. A detail is attached hereto.

Comment addressed.

3. Water/Sewer Usage

- a. Water and sewer usage estimates appear consistent with Title V flow estimates.

No comment necessary.

- b. Recommend applicant address adequacy of fire flow capacity for the development.

According to a hydrant test in 2015 the available fire flow for the property is 1,560 gpm at 86 psi. This is adequate for fire protection purposes.

Comment addressed.

- c. Recommend, at a minimum, installing a gate valve at the new Walker Street water connection. Discuss with Town whether or not additional gate valving is required.

A new water gate valve is proposed at the proposed connection as recommended.

Comment addressed.

4. Stormwater

- a. Provide storm sewer analysis of proposed drainage systems and verify pipe capacity, hydraulic grade line, and inlet/gutter capacity.

A storm sewer analysis has been prepared that illustrates the adequacy of the proposed system to convey the 25-year storm frequency. (See Attachment #9 in the revised Stormwater Report)

Comment addressed. Has applicant evaluated downstream impacts for 100 year storm event?

- b. Provide outlet protection sizing calculations for all proposed stone discharge aprons. The outlet of the infiltration basin appears to be discharging to a relatively steep slope (8-10%). Will the downstream area be adequate to handle the concentrated flow generated by the infiltration basin outlet? The flow is directed to private property within 50-60 feet of the basin. Is the offsite topography and soil suitable to handle the concentrated flow of the infiltration basin?

The basin outlet has been revised to redirect stormwater away from the abutting property. Additional topography and location in the area of Birchwood Unit #6 shows that stormwater from the project site flows towards the building and parking area. Installation of a drainage pipe to a level spreader located northwest of the building will redirect water away from the abutting property. Also, along the base of the slope constructed as a part of the road construction, is a stone diaphragm which will collect stormwater and divert it away from the Birchwood Development as well. As seen in the revised stormwater report, the peak storm events towards Building 6 are reduced by a minimum of 50%. The volume in both basins adequately handles the increased run-off from the proposed development. The stormwater report has been modified to include calculations for outlet protections and rip-rap sizing.

Applicant is providing level spreader along the base of the 2:1 slope (north of the site). The elevation of the level spreader is noted as elevation 78.0 feet. The grades at the easterly end of the spreader/diaphragm indicate ~89 feet +/- . We recommend Applicant clarify limits, grading, and adequacy (volume, downstream protection, etc.) of the level spreader. Additionally, grading and the diaphragm is extremely close to adjacent property lines that are labeled as "approximate". We recommend Applicant ensure accuracy of property lines.

- c. The Stormwater Standards recommend a 15 foot wide access around infiltration basins. How is this access being provided?

A 10'-0" wide berm is proposed around the eastern side of the infiltration basin. This should provide access around the basin for maintenance with a small machine. Access from Golf View Drive can be located around the north of Unit 8 and along the back of Units 6 & 8, which will allow for continued maintenance of the basin on the western side of the basin. The smaller basin to the south can be accessed by the same means.

Comment addressed.

- d. The Stormwater Standards require that a Registered Professional Engineer conduct field tests at the actual locations of all infiltration areas/recharge areas to determine soil conditions. Applicant should provide the results of the onsite soil testing per Stormwater Standards to confirm design.

Field tests were completed on November 14, 2017. The onsite soils reveal a consistent groundwater elevation at 24"-30" inches below existing grade.

Comment addressed.

- e. Infiltration basins and subsurface structures require a 2 foot separation to groundwater per DEP standards. Without onsite soils review, it is impossible to address this requirement.

Based upon field tests, the revised design accommodates this requirement. The site will be filled to accommodate house and driveway construction. The fill will create the requisite separation to groundwater.

Comment addressed.

- f. The stormwater calculations for the proposed conditions use "links". In order to finalize a review of the stormwater calculations, we would need the "link" data. Recommend applicant submit data for review.

The links in the analysis were utilized to provide travel time of concentration from the various design points to facilitate the accumulation and timing of stormwater to evaluate downstream flooding potential. The design has been modified to include the "links" as design points for each subarea, directly reaching to a common design point, the downstream wetlands on the abutting property.

Comment addressed.

- g. Infiltration basin calculations show 0-6 inches of "freeboard" in the 100-year storm event. We would recommend 12 inches of freeboard for this structure.

During the 100-year storm event the infiltration basin provides approximately 12 inches of freeboard. The southern detention basin provides approximately 8 inches of freeboard during the 100-year storm event.

Comment addressed.

If you have any questions or comments on the information provided above, please let me know.

Very truly yours,
Foresight Land Services, Inc.



Steven A. Mack, P.E., Principal Engineer