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March 12, 2020

Chairwoman Parilla and Members of
The Alpine Planning Board
Borough of Alpine
Municipal Building
100 Church Street
Alpine, New Jersey 07620

Attention: Ms. Marilyn Hayward,
Secretary to the Alpine Planning Board

Re: Alpine Three, L.L.C.
Block 43, Lots 6.01, 6.02 and 6.03
982 Closter Dock Road
A & F File No. ALP-448

Dear Mrs. Hayward:

This review letter is being provided to primarily address aspects of this application not covered in review memorandum dated February 11, 2020 from Gary Vander Veer, P.E., which was attached to our letter of February 24, 2020. Issues listed herein are based on the same documents identified in the February 24, 2020 letter. Restating that list of documents would be unnecessarily redundant.

We have attempted to group the comments presented hereafter under the general categories of information presented in the submitted documents. Our comments are as follow:

*** General / Zoning**

1. The plans submitted, and the presentation of the application refer to these proceedings as a request for the approval of an "Amended Preliminary & Final Site Plan." For the sake of a complete understanding by any of the Board members and others who have not followed this matter over the many years and many iterations that have been before the Planning Board, it is respectfully requested that testimony be presented clarifying exactly why this is an 'amended application', and in that light, what has materially changed from the original application. Again, for the purpose of a complete understanding of the procedural aspect of the application, we ask that an explanation be provided as to why the original application can be amended as it has without consent to a time extension since so many years have passed since the original submittal of the '7-unit' plan.

No revision requested.

2. Since the application, plans and documents focus the proposed development of Lots 6.01, 6.02 and 6.03, of Block 43, a point of clarification as to the manner in which the proposed 'force main' is to

be considered by the Board as it pertains to this matter. It should be noted here that the plans of the force main as submitted in conjunction with the current matter under consideration by the Board are unchanged from the submittal of 4-5-13. If the matter under consideration by the Board is indeed an amended application, the Board should be advised as to whether or not they must take the force main into consideration, or if the force main is strictly a technical/legal matter outside of the request for approval to develop Lots 6.01, 6.02 and 6.03. This issue should also be clarified.

No revision requested.

3. The Alpine Zoning Regulations permit specific exceptions to the required setbacks. These include certain architectural features such as cornices, eaves, windowsills and belt course not extending any more than two feet into the required setback. The architectural plans and the Site Plan show bay windows which are dimensioned to be '2'-0" into the setback, and fireplace enclosures dimensioned 1'-0" into the setback. It can be concluded that these are indeed 'architectural features, and their encroachments into the setbacks are permitted.

No revision requested.

4. The Alpine Zoning Regulations also permit unlimited encroachments into the required setbacks for an unroofed terrace, unroofed porch, unroofed steps, an arbor, a trellis, a flagpole or recreational equipment, not including swimming pools. Decks are not included within the exclusions listed in Section 220-13 B. (1) or (2). The regulations further define decks as structures " .. of wood or other material supported ... by columns, posts or piers ...". The Definitions within the Zoning Regulations also define 'Building' to include the word "structure". It therefore follows that a deck should be considered as a building when the zoning limitations are applied. The Site Plan depicts decks at the rear of each proposed dwelling unit having a setback of 10 feet, whereas a minimum building setback of 20 feet is required in the COAH-1. Subject to the interpretation of the Board's attorney, the Zoning Regulations appear to prohibit decks within the required setbacks to proposed buildings.

A variance is requested accordingly.

5. The general topography of the site slopes downward from Closter Dock Road to the rear of the site within the former right-of-way of Schoolhouse Lane at a 5 to 7% grade. However certain areas within the site as they existed at the time of the Existing Conditions Plan, dated 5-22-19, revised 10-7-19, exceed a slope of 15%. The Zoning Regulations define a Steep Slope as being 15% within a 30-foot horizontal distance. The applicant's engineer shall address this issue, and if indeed 'Steep Slope' areas existed within the site at the time of the passage of the Steep Slope Regulations in Section 220-3 E., that Section of the Regulations noted as being added 5-28-1997 (Ord. No. 532). If so, a request for a variance will be required.

There are no areas of the site where the slopes over 30 ft of horizontal distance exceed the 15% slope limit.

*** Soil Moving**

1. The most recent revision to the Amended Site Plan, dated 12-18-19, indicates on the Cover Sheet that the revision is to modify the locations of the Cross Sections as they are labelled on Sheet 3 of 11 (Drawing No. 495-42). On the plan dated of 5-22-19, seven cross sections running from generally from north to south through the site are indicated. On the plan revised through 12-18-2019, twelve cross sections are indicated running from east to west across the site. Despite the change in the number of cross sections indicated and the change in the orientation of the cross sections', the 'cut', 'fill' and 'net' soil moving volumes are indicated to be exactly the same on both the 5-22-19 and 12-18-19 iterations of the plans which would seem to be highly unlikely. This discrepancy needs to be investigated by the applicant's engineer and either explained or corrected as needed.

Cross sections are relabeled consistently with the stations along the access roadway as requested. The revised cross sections depict existing and proposed grades and structures accordingly.

2. At the last session of the public hearing, the applicant's engineer indicated that he will be revising the cross sections to add the rock profiles in response to questions concerning whether or not blasting would be necessary. Those revised drawings have not been received as of the date of this letter.

Cross sections are updated to include bedrock as requested.

*** Drainage / Grading**

1. The Site Plan indicates ramps and a van parking space for use by persons with disabilities. If this application is approved, the applicant's engineer shall submit the following for review prior to construction: a design specific for each ramp and van accessible parking space along with a Certification indicating that these facilities meet the design criteria indicated in the guidance published in accordance with the Americans with Disabilities Act ('ADA'), and, if constructed shall also submit an as-built survey showing the elevations and grades of these facilities as-constructed, along with a Certification indicating that construction has been in accordance with the approved design drawings and the requirements of ADA.

No revision requested at the present time. ADA Ramps are configured with the ADA requirements in mind. Will provide requested info at proper time.

2. The Site Plan indicates an exterior stair at the bottom end of the access driveway extending down to the ground level outside of the proposed retaining wall along the rear of the site. The Landscape Plan, prepared by Bradley Meuman, LLA indicates a continuous row of large evergreens having a height at planting of minimally 8-feet between the existing ditch and the proposed retaining wall including the area at the bottom of the proposed stairs. The Site Plan indicates 'Ditch to Remain

Undisturbed'. Given these two factors, we question where the stairs are intended to lead to, and how a person using the stairs is intended to reach the travelled roadbed or other destination in the immediate vicinity of the bottom of the stairs.

The proposed stairs are intended to provide a safe path for residents to access the Borough hall.

3. Specifically, with regard to the proposed 'Grass-Lined Swales', we note no specific detail regarding these proposed features. Given the proposed grading in the vicinity of portions of these swales, including the swales, which is quite steep and exceeds the maximum allowable grading of 1:4, we question first the susceptibility of these swales to erosion, and how it would be prevented. The grading in excess of 1:4 is not consistent with the maximum permitted by the Borough's Regulations and would require a Waiver Request if the grading cannot be rectified.

Section 17 - Grading along westerly side of the property is revised as requested. The detail of the grass lined swale is revised to reflect the required grading slopes of 1V:4H.

4. Much has been discussed regarding the 'spring' on the property. The Site Plan shall be revised to indicate this water feature as a spring, not as an 'Existing Well', as per Mr. Phillips' direction at a prior session of the public hearing. Additionally, the Site Plan and other plans within the set of drawings submitted there are no details of the manner in which this feature will be managed going forward should the application be approved. Representations have been made that the NJDEP is aware of the spring since their personnel has visited the site a number of times in the past, but there is nothing in writing from the Department regarding their jurisdiction over what is in our opinion a regulated watercourse. A finite jurisdictional determination from the NJDEP regarding this issue specifically is warranted.

Drawings are revised to indicate the location of the "existing spring" instead of "existing well".

5. The area of impervious surface of the site would increase significantly by the implementation of the proposed development. In testimony, the extent of compliance with the NJDEP's limitations regarding the increase in flow rate stemming from increased impervious area has been discussed. However, little if anything has been discussed regarding the increase in runoff volume due to development. An evaluation of the impact of additional runoff volumes on the adjacent property to the southwest (Lot 3) has not been presented. Similarly, impacts to downstream overland water courses, and piped culverts has not been presented. An analysis of the complete downstream impacts of the increased volume of anticipated runoff is warranted.

The proposed mitigations due to impervious area increase comply with the requirements set forth in the NJAC 7:8 and NJAC 5:21-RSIS which requires compliance with one out of four (4) scenarios. The project selectively complies with the following: NJAC 7:8-5.4(a)(3) iii: Design stormwater management measures so that the post-construction peak

runoff rates for the two, 10 and 100-year storm events are 50, 75 and 80 percent, respectively, of the pre-construction peak runoff rates. The percentages apply only to the post-construction stormwater runoff that is attributable to the portion of the site on which the proposed development or project is to be constructed;

In addition, the project complies with the NJAC 7:8-5.4(a)(2)(i)(1): Demonstrate through hydrologic and hydraulic analysis that the site and its stormwater management measures maintain 100 percent of the average annual pre-construction groundwater recharge volume for the site;

Therefore, no additional runoff volumes are introduced to the properties downstream. This is addressed in the drainage report sections 1-4 and 8.

6. From the testimony presented regarding the position of the NJDEP specifically with regard to the Category 1 Riparian Buffer issue, it has been represented that the Department has exempted Lots 6.01, 6.02 and 6.03 from the limitations that the 300-foot Category 1 Riparian Buffer would impose upon the applicant's site. From that we can conclude that the open watercourse immediately downstream of the site has been recognized as a Category 1 Stream. Although the 'exemption' may eliminate the constraints that could be imposed on the site by a 300-foot Riparian Buffer, the storm runoff from the site will nonetheless be discharged into a Category 1 watercourse. In conjunction with the potential impacts from additional pavement area associated with the proposed development, the applicant has proposed to install a water quality treatment device (WQTD) that is rated for 80% removal of total suspended solids (TSS). Regarding water quality, N.J.A.C. 7:13-11.2(j)4 requires "runoff from the water quality design storm that is discharged within a 300-foot riparian zone shall be treated ... to reduce the post-construction load of total suspended solids by 95% of the anticipated load from the developed site, expressed as an annual average. "That applicant's engineer must address this requirement.

This statement is not correct; The riparian zone is truncated, therefore the proposed 80% TSS removal is all that is required for this project. The property is not within the 300 ft riparian zone.

7. The applicant is proposing underground 'recharge' basins to manage the storm runoff from portions of the additional impervious areas that would be created by the development. No 'ground mounding' analysis has been presented regarding the possible impact of accumulated runoff that would be introduced beneath the ground surface. This issued should be addressed.

Groundwater mounding analysis have been included in the Section 8, pg. 8.10 to 8.12 of the drainage report.

8. Certain plan details must be added or require amendment:

o Keystone Walls -these are shown on the plan along a portion of the Westerly limit of the site. The scaled distance from the property line to the inside face of the wall is two feet. The wall as proposed with the clean stone backfill has accumulative dimension of at least two feet. To construct the wall as detailed, it must be moved further into the site to

avoid disruption of the property immediately to the west. If the applicant prefers not to move the wall is shall be necessary to obtain a temporary construction easement from the owner of lot 5.

Keystone wall parallel to the property line on the westerly side of the site is eliminated as this area is regraded. The keystone wall detail on drawing sheet 495.1-44 is for the location near the proposed unit #3 and the northwest corner of the proposed unit #2.

o Generator Pad and Screening -these details do not appear on the drawings and must be provided.

Detail is added on drawing sheet 495-47.

o Permeable Paver Notes - Reference is made to General Notes on Sheet 1. No such notes exist on the plans and should be added as necessary. The reference to "AASHTO #8 'cleaning' stone under Joint Fill shall be changed to 'clean' stone.

Detail revised accordingly.

o Drainage Outlet Pipe -the proposed drainage plan proposes to "reutilize an existing 12" Reinforced Concrete Pipe at the extreme southwesterly corner of the site. No report regarding the inspection of this pipe and the condition thereof has been provided. This shall be provided.

A Field Inspection is performed on 03/31/2020. Findings of the report are attached to the Drainage Report, Appendix 4.

9. Permeable Concrete Pavers are proposed for specific areas within the proposed development. Please note that for the purposes of drainage calculations, these areas shall be considered to be 'impervious.

Calculations were updated to reflect the requested runoff coefficient change from 0.92 (pervious pavers) to 0.99 which corresponds to impervious areas. This change did not result in any changes to the required detention system volumes since the weighted runoff coefficient for both cases were calculated to be 0.79 (in case of pervious pavers the weighted runoff coef. was calculated to be 0.788 and rounded to 0.79 while the calculated runoff coef. presently was calculated to be 0.7923 and it was rounded to 0.79). This change has resulted in slight increase of peak runoff flows for areas A1a, A1b, A3a and A3b. Pipe capacity tables are updated accordingly.

*** Fire/Safety**

1. Applicant's Site Plan Depicts a 25-foot wide access driveway into the site terminating a few feet from the retaining wall which parallels the southerly lot line. This is the sole means of access to the interior of the site for firefighting and other emergency purposes. As such, the access driveway meets the definition of 'Fire Apparatus Access Road' as per Section 503 of the Fire Code of the State of New Jersey. The length of the access road is approximately 205 feet from the existing southerly edge of the Closter Dock Road Pavement, and 200 feet from the northerly

property line of the site which parallels Closter Dock Road to its terminus near the proposed retaining wall at the southerly end of the site. In the case of a 'dead-end' fire apparatus access road, which is the case with the development as proposed, Section 503.25 states:

"Dead-end fire apparatus access roads in excess of 150 feet (45720mm J in length shall be provided with an approved area for turning around fire apparatus."

Neither a cul-de-sac, 'hammer-head', or other suitable area to accommodate this requirement has been proposed at the southerly end of the access road. This requirement must be addressed.

In coordination with the local Fire Department an "acceptable alternative to a 120' hammerhead" consistent with the provisions of Appendix D - Fire Apparatus Access Road of the New Jersey Fire Code is proposed. Engineering drawings are updated to include requisite information and details about the Fire Apparatus Access Road.

*** Tree Removal**

1. Plan sheet 9 of 11(Drawing No. 495-48) is entitled Existing Conditions Plan; Tree Removal Plan. The plan indicates a total of 44 trees to be removed and four to remain. Neither the Existing Conditions Plan; Tree Removal Plan nor the Landscape Plan prepared by the applicant's landscape architect tabulate the trees to be removed with an indication of which trees are dead, damaged or diseased, which trees are exempt from tree replacement requirements and a calculation indicating the number of replacement trees to be provided .. None of the 11 sheets in the Amended Site Plan set nor the Landscape Plan include a detail of the manner of protection to be provided for those trees to remain. These items must be addressed.

Existing conditions plan is updated to include a tabulation of the trees to be removed accounting for the trees that are dead, damaged or diseased.

The items listed herein require revisions to the plans and supporting documents in many cases and additional testimony concerning others. Upon these matters being addressed we will continue our review of this matter. If there are any questions concerning the comments herein, please contact me.

Very truly yours,

cc: John Phillips, Esq.
Michael Kates, Esq.
Gary Vander Veer, P.E.
Guliet Hirsch, Esq.
Hubschman Engineering, P.A.