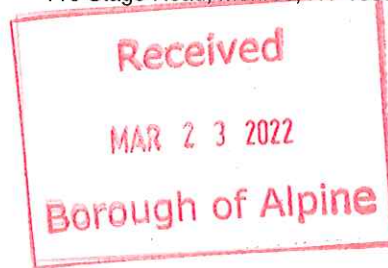




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March 15, 2022

Borough of Alpine
Zoning Board of Adjustment
Municipal Building
100 Church Street
Alpine, New Jersey 07620

Attention: Ms. Jo Anna Myung, Secretary to the Alpine Zoning Board of Adjustment

Re: Marrow Residence – Pool, Patio & Septic Alterations
Block 90, Lot 6
92 Ruckman Road
A & F File No. ALP-1445

Dear Board Members and Ms. Myung:

Regarding the matter identified above, we are in receipt of the following documents:

- A plan titled 'Pool, Septic Plan & Soil Erosion and Sediment Control Plan', Marrow, Block 90, Lot 6, 92 Ruckman Avenue, Borough of Alpine, Bergen County, New Jersey', prepared by McNally, Doolittle Engineering, L.L.C. and dated 10/23/2021;
- A document titled 'Soil Moving Calculations', prepared by McNally, Doolittle Engineering, L.L.C. and dated 12/17/21;
- A document titled 'Application to the Alpine Board of Adjustment', prepared by McNally Doolittle Engineering, LLC, dated 1/6/2022;
- A document titled 'Application for Zoning Review', dated 12/13/21, signed by Matthew G. Capizzi, Esq. as Attorney for the Applicant;
- A copy of A letter titled 'Zoning Review' prepared by Brian Frugis, Alpine Zoning Officer and Construction Official, which denies the Zoning Application due to three issues which do not comply with the R-A Residential Zoning Regulations.

Pursuant to your request we have reviewed these documents and offer the following comments:

I. General/Zoning

1. The site is currently listed in the records of the Borough as an existing 5-bedroom single family dwelling. The new owner has requested certain modifications/alterations to the site in addition to any changes to the interior of the home. The subject property is located at the southeast corner intersection of Route 9W and Ruckman Road. The easterly portion of the site is subject to the required 200-foot buffer from Route 9W, and is also

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encumbered by Freshwater Wetlands which cover portions of the 200-foot Route 9W buffer and the southerly side yard.

On March 20, 2014, the Alpine Board of Adjustment approved by Resolution three variances and a Soil Moving Application with waivers. More specifically, the variances approved were as follow:

- Front Yard Setback Variance - 72.4 feet proposed, whereas a 75-foot setback is required. The portion of the structure that does not meet the setback requirement is a triangular area on the Ruckman Road dwelling façade having a total area of approximately 40 square feet. The current application proposes a “covered terrace” at the westerly end of the home, adjacent to the existing patio which would have a setback of 73.1 feet from Ruckman Road. The portion of the covered terrace which would fall within the 75-foot setback is less than 15 square feet.
- Side Yard Setback – 48-feet approved whereas a 50-foot setback is required on the southerly side of the dwelling. The current proposal has no bearing on this variance.
- Rear Yard Setback – since this is a corner lot, the ‘rear yard’ is actually the westerly side of the dwelling when viewed from Ruckman Road. A rear yard setback of 100-feet is required, and a variance for an 80 foot setback from the westerly lot line to the dwelling as originally proposed and constructed was approved. As per the current application, a 60.9 foot setback to the covered terrace is proposed.

In addition to the variances described above, the applicant of also seeking relief from the required 30-foot setback to an accessory structure, said structure being the proposed pool. A variance to permit a 23.7 foot setback has been proposed.

The Resolution of March 20, 2014 also approves, subject to final acceptance by the Mayor and Council, a Soil Moving Permit which allowed the import of 3,448 cubic yards of fill to raise the site to bring the elevations thereof upward enough to permit the installation of a septic system evidenced by the standing surface water in the wooded wetland areas to the west of the subject in an area of the Borough where the groundwater table is exceptionally high. The groundwater conditions/elevations vary throughout the Borough, but are noticeably higher in the area surrounding applicant’s property. This condition and the resulting need to raise the site were acknowledged in the March 2014 Resolution.

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Over the past two to three years, most likely due to the extraordinary rainfalls in our area, the elevations of the groundwater appear to have risen higher than they were at the time of the 2014 Soil Moving Application. Standing water has been and often can be observed in the forested areas to the immediate west and northwest of the applicant's property. Fully developed upland trees have been observed with ponded surface water up to the bases thereof. The impacts of the groundwater situation had caused seepage onto the Kiku site to the immediate south of the subject property. The former property owner implemented a plan to capture runoff from surface waters and groundwater onto the Kiku property, and to re-direct those flows via a new piping/drain system to the wetland areas nearest Rt. 9W. This change in groundwater flow patterns and elevations will most likely impact the effectiveness of existing septic systems. In that regard, this application also is requesting approval to upgrade the existing septic system from a 'gravity-fed' system to a 'pressure-dosed' system which will provide a more efficient and effective distribution of septic effluent across the entire surface of the disposal field in the northwesterly side ('rear' yard) of the site. Details of the proposed system appear on the submitted Pool, Septic Plan & Soil Erosion and Sediment Control Plan.

2. Our office had previously been to the site to observe the test-hole explorations which were conducted by McNally, Doolittle Engineering. The data presented on the plan accurately represents the findings of those explorations and the soil profiles, and the results of similar explorations//evaluations conducted in 2009 and 2012. In general rock was present at depths of approximately six-feet below the ground surface with evidence of water inundation at higher levels.

II. Soil Moving

1. The submitted plan and supporting documents indicate that an excavation of approximately 70 cubic yards of soil is necessary to expose the treatment layer of the system. Lateral piping will be changed to be compatible with the pressure dosed system requirements and a 1,500 gallon pressure dosing tank with pumping capability will be added to the system. A total of about 5 cubic yards of crushed stone will be imported for the base beneath the dosing tank. The total soil moving volume is 75 cubic yards which is within the limit of 1,000 cubic yards which can be approved administratively without referral to the Planning Board or the Mayor and Council for final action. The proposed soil moving activity in conjunction with the septic upgrade has been reviewed and is acceptable. The submittal also addresses the soil moving volumes associated with the

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construction of the pool and related improvements. This quantity is 343.68 cubic yards which can be approved administratively if the Board acts favorably concerning the requested improvements. Soil moving calculations were submitted, have been reviewed and appear to be an accurate assessment of the proposed soil moving activity.

III. Tree Removal

1. I have inspected the area to of the site wherein the septic system improvement and the pool and covered terrace are proposed. There are no trees within the area that would be disturbed by the construction of the proposed improvements. No Tree Removal Permit is therefore required.

IV. Stormwater Management

1. To manage the anticipated runoff from the proposed pool, patio and cover terrace areas, the submitted site plan indicates three (3) shallow seepage pits to be installed within the existing grassed area in the southwest corner of the site. Supporting design calculations have been provided in the Storm Drainage Report prepared by McNally, Doolittle Engineering, and are acceptable. However, despite that fact that the seepage pits will be installed in a previously graded and grassed area of the site, the pits would be installed within a required tree buffer, A request for a waiver from the appropriate section of the Borough's 'Trees' ordinance must be addressed in the presentation to the Zoning Board.

V. Summary and Recommendations

The applications that are the subject of this review pertain to two separate improvements:

1. Upgrading the existing septic system to a more efficient pressure-dosed system.
2. Requesting the approval of the Zoning Board of Adjustment for the addition of a pool, patio areas, a covered terrace and related stormwater management improvements.

Regarding the proposed septic system upgrade, we have reviewed the application and plans, discussed same with the design engineer, and take no exception to the issuance of a Septic Permit for the improvements to the existing system

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Regarding the proposed pool, patio, covered terrace and related improvements, we find the application to be complete and ask that the applicant be advised of the next available date for presentation of this matter to the Zoning Board of Adjustment. The variances and waivers which would be necessary for approval, should the Board approve the subject improvements, are identified in Sections I. and IV. herein.

If the Board moves to approve the application for the subject improvements, we respectfully request that the following conditions be included in the Resolution memorializing the action of the Board:

1. Prior to the issuance of the Septic System Permit, all required fees and escrow shall be posted with the Borough.
2. Prior to the commencement of any construction activity associated with this project, the Borough shall be notified at least 48 hours in advance of the intended activity. Should there be a lapse in the construction process, a 48 hour notification before the re-start of construction shall also be required.
3. The applicant shall, if required, make application to the Bergen County Soil Conservation District for Plan Certification. A copy of the certification shall be submitted to the Borough.
4. The applicant / applicant's contractor shall be responsible for immediate clean-up of any soil material tracked or spilled onto the Borough's roadways, and for the repair of any damage to the street pavement, curbing or any other component of the public rights-of-way resulting from the proposed construction activity.
5. The proposed system is a 'pressure-dosed system which requires the installation of a pump. Prior to construction, the applicant/applicant's contractors shall apply for and obtain Plumbing and Electrical Subcode Permits from the Alpine Building Department. Once the system is completed, final signoffs by the Plumbing and Electrical Inspectors shall be required in addition to final approval by our office, and an approvable as-built survey of the new system shall be submitted to the Borough.

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If there are any questions or if we can be of any further assistance regarding this matter, please do not hesitate to contact us.

Very truly yours,

AZZOLINA & FEURY ENGINEERING, INC.

Perry E. Frenzel, P.E., P.P.

PEF

cc: Tracey Marrow – Owner/Applicant
Matthew G. Capizzi, Esq.
McNally, Doolittle Engineering, LLC
Brian Frugis – Alpine Zoning Officer/Construction Official
Alpine Environmental Commission