

October 22, 2026

Michael Greco, Board Secretary
Zoning Board of Adjustment
Borough of Demarest
118 Serpentine Road
Demarest, NJ 07627

354 Hardenburgh Avenue (JPB-26-010)
Block 116, Lot 127.02
Borough of Demarest, Bergen County, NJ
Joint Land Use Board Application - Engineering Review
Colliers Engineering & Design Project No. DEZ0066

Dear Mr. Greco:

Pursuant to your request, our office has reviewed the following plans and other documents filed by the Applicant in support of a Variance Application. The Applicant is proposing to renovate and expand the existing driveway as well as construct a new raised wood deck with hot tub, retaining walls, drainage improvements and other related improvements on the property;

- a) Site plans consisting of three (3) sheets, prepared and signed by Michael J. Hubschman, P.E., P.P, and Robert J. Mueller, P.L.S., of Hubschman Engineering, dated August 4, 2026, last revised October 6, 2026;
- b) Architectural Plans consisting of three (3) sheets, prepared by Jordan Rosenberg, A.I.A., of Jordan Rosenberg Architects and Associates., dated October 2, 2026;
- c) Variance Application for the subject property and attachments; signed and dated September 2, 2026;
- d) Zoning Denial letter dated September 4, 2026; and
- e) Completeness letter dated October 15, 2026.

The Property Owner/Applicant is:

Amad Soto
354 Hardenburgh Avenue
Demarest, NJ 07627

The Applicant/Owner shall notify the Borough of Demarest Zoning Board of Adjustment of any changes to the above information.

Engineering Review

I. Project Description & Location

According to the existing conditions plan, the site is currently occupied by a 2-story single-family dwelling with rear pool, paver patio, associated driveway, walkways, deck, and other

related improvements. The Applicant is proposing to renovate and expand the existing driveway as well construct a new raised wood deck/balcony with hot tub, retaining walls, drainage improvements and other related improvements on the property. There is also an existing frame garage on the southeasterly side of the property that is to be removed.

The property is an irregular shaped parcel consisting of 43,928 SF. The property is located to the east of Anderson Avenue. The dwelling front faces Hardenburgh Avenue and driveway access is provided on Hardenburgh Avenue. The property is located in the residential R-A Zone according to the Borough Zoning Map.

The property is located in Zone X (area determined to be outside the 0.2% annual chance floodplain) as shown on the Flood Insurance Rate Map (FIRM) for the Borough of Demarest dated August 2019.

II. Zoning Requirements & List of Variances / Waivers Requested

A. Bulk Zoning Requirements:

Zone: R-A

Use: Single Family Residential

Description	Required	Existing	Proposed	Complies
Lot area	40,000 sf.	43,928 sf.	43,928 sf.	☒ Yes ☐ No
Lot Frontage	200 ft.	300.00 ft.	300.00 ft.	☒ Yes ☐ No
Lot depth**	200 ft.	142.59 ft.**	142.59 ft.**	☐ Yes ☒ No
Front yard setback	50 ft.	54.20 ft.	54.20 ft.	☒ Yes ☐ No
Side yard setback	25 ft.	68.50 ft.	68.50 ft.	☒ Yes ☐ No
Rear yard setback**	50 ft.	39.25 ft.**	39.25 ft.**	☐ Yes ☒ No
Rear yard width	200 ft.	300.00 ft.	300.00 ft.	☒ Yes ☐ No
Building Height	30 ft.	29.95 ft	29.95 ft.	☒ Yes ☐ No
Max Building Coverage	15 %	13.70 %	11.53 %	☒ Yes ☐ No
Max Livable Floor Area*	22.5 %	<22.5 %	<22.25 %	☒ Yes ☐ No
Residential & Parking Coverage*	25 %	10,220 sf* (23.2 %)	12,920 sf* (29.41 %)	☐ Yes ☒ No
Improved Coverage*	30 %	29.99%*	34.84 %*	☐ Yes ☒ No
Max fence Height in front yard	4 ft	4.0 ft	4.0 ft	☒ Yes ☐ No
Max step encroachment in front yard	5 ft	0.0 ft	4.5 ft	☒ Yes ☐ No

N/A = not applicable

* = variance required

** = pre-existing non-conformance

B. The Following Variances Appear to be Required:

1. Lot depth – There is a pre-existing nonconformance for a lot depth of 142.59 FT, where a minimum of 200 FT is required.
2. Rear Yard Setback – There is a pre-existing nonconformance for a rear yard setback of 39.25 FT, where a minimum of 50 FT is required.
3. Residential & Parking Coverage – The Applicant is proposing a Residential & Parking Coverage of 12,920 SF (29.41%) where a maximum of 10,982 SF (25%) is permitted. An itemized breakdown of residential and parking coverage should be added to the site plan.

A variance is required for this condition.

4. Improved Coverage – The Applicant is proposing an improved coverage of 13,175 SF (29.99%) where a maximum of 15,306 SF (34.84%) is permitted.

A variance is required for this condition.

5. We note the proposed balcony (referred to on the site plans as a wood deck) extends 9 feet from the building where 5 feet is permitted.

A variance is required for this condition.

III. Engineering Review

- C. The Applicant is proposing to increase improved lot coverage from 13,175 SF (29.99%) to 15,306 SF (34.84%) with a net increase in coverage of 2,131 SF.
- D. The Applicant shall confirm in testimony if retaining walls, the footbridge, and the fire pit are included in the coverage calculations.
- E. The Applicant is proposing two (2) precast concrete seepage pits in the front yard area to collect and store stormwater runoff from the new driveway area via inlets. We offer the following comments related to the drainage design:
 1. The Applicant should provide drainage calculations demonstrating the collection and storage of the 2-inch runoff from the proposed roof area for review by our office.
 2. The Applicant should provide testimony indicating where the seepage pits are proposed to overflow.

3. The Applicant should provide a means of preventing debris from entering the driveway inlets. Buildup of sediment and debris over time can impact the proper functionality of the seepage pits.
 4. A soil test shall be provided prior to the installation of the proposed seepage pits. Soil test shall include information regarding the location of the seasonal high-water table (SHWT) and percolation rate of the soil.
 5. The Applicant proposed an at-grade manhole cover for future maintenance. We take no exception.
 6. The Borough Engineer shall be notified to inspect the seepage pits prior to backfilling.
- F. The Applicant is proposing a front yard retaining wall with a max height of four feet. The Applicant should provide testimony to clarify what is planned in the empty space between the retaining wall and the dwelling.
- G. The Applicant should provide top and bottom curb elevations for all proposed curbing on site.
- H. There appears to be a missing 103 contour in the southern end of the driveway area.
- I. The proposed western portion of the driveway and drainage improvements appear to be in close proximity to several existing trees on the site. Testimony should be provided regarding proposed tree removal to construct the proposed improvements. Tree protection should be shown on any trees near proposed improvements.
- J. A tree removal and replacement schedule should be provided.
- K. The sequence of construction on sheet 2 of the site plans indicates under item 2 "Remove Existing Dwelling" and item 5 "construct new dwelling". The construction sequence should be reviewed and revised to be applicable to this project.
- L. There is an existing trellis adjacent to the pool area. The applicant should provide additional information on the trellis so the board can determine whether this should be included as building coverage.
- M. The Applicant has depicted existing and proposed contours on the property. We offer the following comments related to grading:
1. Under existing conditions, the site drains from east to west. The highest point of the property is in the eastern side of the property where elevations are approximately 108 and the lowest point of the property is in the western corner, where elevations are approximately 90 where the driveway connects to Hardenburgh Ave.
 2. Under proposed conditions, the high and low points are generally maintained, and drainage patterns should not be substantially impacted. Proposed grading appears to be minimal.

- N. The Applicant shall provide cut/fill calculations and provide testimony regarding the proposed soil movement on site. The Applicant should be aware that any soil movement quantity in excess of 250 CY will require Mayor and Council approval pursuant to Chapter 147 of Borough Ordinance
- O. Should the Board act favorably upon this application, the Applicant is hereby made aware that drainage issues may arise during or after the proposed construction. It will be the Applicant's responsibility to remedy any drainage issues caused by the proposed improvements. In addition, water runoff directed to neighboring properties is prohibited. If runoff water does enter neighboring properties as a result of the proposed improvements, the Applicant will be responsible to remedy the situation at no cost to the Borough.

Should you have any questions, you may contact me at (201) 775-1283.

Sincerely,

Colliers Engineering & Design



Nick Chelius, P.E., C.M.E.
Joint Land Use Board Engineer

CC: Board Members (via Joint Land Use Board Secretary)
Matthew Capizzi, Applicant's Attorney (via email)