

MIAMI BEACH

PLANNING DEPARTMENT Staff Report & Recommendation

Design Review Board

TO: DRB Chairperson and Members

FROM: Thomas R. Mooney, AICP
Planning Director

SUBJECT: DRB22-0867
4350 Nautilus Drive

DATE: January 3, 2023

An application has been filed requesting Design Review Approval for the construction of a new 2-story home with an understory, including one or more waivers, front and rear setback variances, and a variance from the minimum pervious open space requirements, to replace an existing home.

RECOMMENDATION:

Approval of the design.
Approval of the variances.

LEGAL DESCRIPTION:

Lot 7, Block 18, of NAUTILUS EXTENSION SECOND, according to Plat thereof, as recorded in Plat Book 34, Page 81, of the Public Records of Miami-Dade County, Florida.

BACKGROUND

On November 1, 2022, the application was continued to a date certain of January 3, 2023 in order to address design concerns expressed by the Board.

SITE DATA:

Zoning:	RS-4
Future Land Use:	RS
Lot Size:	9,946 SF
Lot Coverage:	
Proposed:	2,979 / 29.9%
Maximum:	2,983 SF / 30%
Unit size:	
Proposed:	4,360 SF / 44%
Maximum:	4,973 SF / 50%
Height:	
Proposed:	23'-4" flat roof
Maximum:	24'-0" flat roof

Grade: +3.9' NGVD
Base Flood Elevation: +8.00' NGVD
Adjusted Grade: 5.95' NGVD

First Floor Elevation: +11 NGVD (BFE+ 3' FB)

EXISTING PROPERTY:

Year:	1948
Architect:	E. A. Nolan
Vacant:	No
Demolition:	Total

SURROUNDING PROPERTIES:

East:	Two-story 2017 residence
North:	Two-Story 1939 residence
South:	Two-Story 1937 residence
West:	Two-Story 1935 residence two- Story 1938 residence

THE PROJECT:

The applicant has submitted plans entitled "4350 Nautilus Dr – First Submittal" as designed by **Miguel Concha Arquitectura**, signed and sealed 12/12/2022. The applicant is proposing a new, two-story single-family residence with an understory, including variances.

The applicant is requesting review for an understory area:

1. Understory area shall be subject to the review and approval of the Design Review Board in accordance with Section 142-105(b)(4)(d).

The applicant is requesting the following variance(s):

1. **Sec. 142-106(1).** A variance from the minimum required **30'-0" front setback** in order to construct a new two-story single family residence at **27'-1"** from the front property line.
2. **Sec. 142-106(3).** A variance from the minimum required **20'-0" rear setback** in order to construct a new two-story single family residence at **18'-7"** from the rear property line.
3. **Section 142-105(b)(4)d.1.** Understory area(s) shall be used only for open air activities, parking, building access, mechanical equipment, non-enclosed restrooms and storage. Such areas shall be designed and maintained to be free of obstructions and shall not be enclosed and/or air-conditioned at any time, with the exception of limited access areas to the first habitable floor. However, understory area(s) below the lowest habitable floor can utilize non-supporting breakaway walls, open-wood lattice work, louvers or similar architectural treatments, **provided they are open a minimum of 50 percent on each side.**
4. **Section 142-105(b)(4)d.7.** *At least 70 percent of the required front yard and street side yard areas shall consist of sodded or landscaped pervious open space. For purposes of this section, the required front yard shall be the same as the required front setback of the principal structure. All allowable exterior walkways and driveways within the front and street side yards shall consist of pavers set in sand or other semi-pervious material. The use of concrete, asphalt or similar material within the required front or street side yards shall be prohibited.*
5. **Section 142-105(b)(4)d.10.** Understory edge. All allowable decking, gravel, pavers, non-supporting breakaway walls, open-wood lattice work, louvers or similar architectural treatments located in the understory area **shall be set back a minimum of five feet from each side of the underneath of the slab of the first habitable floor above**, with the exception of driveways and walkways leading to the property, and access walkways and/or steps or ramps for the front and side area. The front and side understory edge shall be designed to accommodate on-site water capture from adjacent surfaces and expanded landscaping opportunities from the side yards.

PRACTICAL DIFFICULTY AND HARDSHIP CRITERIA

The applicant has submitted plans and documents with the application that staff has concluded satisfy Article 1, Section 2 of the Related Special Acts.

Additionally, staff has concluded that the plans and documents submitted with the application comply with the following hardship criteria, as they relate to the requirements of Section 118-353(d), Miami Beach City Code:

- That special conditions and circumstances exist which are peculiar to the land, structure, or building involved and which are not applicable to other lands, structures, or buildings in the same zoning district;
- That the special conditions and circumstances do not result from the action of the applicant;
- That granting the variance requested will not confer on the applicant any special privilege that is denied by this Ordinance to other lands, buildings, or structures in the same zoning district;
- That literal interpretation of the provisions of this Ordinance would deprive the applicant of rights commonly enjoyed by other properties in the same zoning district under the terms of this Ordinance and would work unnecessary and undue hardship on the applicant;
- That the variance granted is the minimum variance that will make possible the reasonable use of the land, building or structure;
- That the granting of the variance will be in harmony with the general intent and purpose of this Ordinance and that such variance will not be injurious to the area involved or otherwise detrimental to the public welfare; and
- That the granting of this request is consistent with the comprehensive plan and does not reduce the levels of service as set forth in the plan.
- The granting of the variance will result in a structure and site that complies with the sea level rise and resiliency review criteria in chapter 133, article II, as applicable.

COMPLIANCE WITH ZONING CODE:

A preliminary review of the project indicates that the application, as proposed, appears to be consistent with the City Code, with the exception of the requested variances.

The above noted comments shall not be considered final zoning review or approval. These and all zoning matters shall require final review and verification by the Zoning Administrator prior to the issuance of a Building Permit.

COMPLIANCE WITH DESIGN REVIEW CRITERIA:

Design Review encompasses the examination of architectural drawings for consistency with the criteria stated below with regard to the aesthetics, appearances, safety, and function of the structure or proposed structures in relation to the site, adjacent structures and surrounding community. Staff recommends that the following criteria are found to be satisfied, not satisfied or not applicable, as hereto indicated:

1. The existing and proposed conditions of the lot, including but not necessarily limited to topography, vegetation, trees, drainage, and waterways.
Satisfied

2. The location of all existing and proposed buildings, drives, parking spaces, walkways, means of ingress and egress, drainage facilities, utility services, landscaping structures, signs, and lighting and screening devices.
Satisfied. The applicant is requesting understory review from the Board.
3. The dimensions of all buildings, structures, setbacks, parking spaces, floor area ratio, height, lot coverage and any other information that may be reasonably necessary to determine compliance with the requirements of the underlying zoning district, and any applicable overlays, for a particular application or project.
Satisfied. The applicant is requesting understory review from the Board.
4. The color, design, selection of landscape materials and architectural elements of Exterior Building surfaces and primary public interior areas for Developments requiring a Building Permit in areas of the City identified in section 118-252.
Satisfied
5. The proposed site plan, and the location, appearance and design of new and existing Buildings and Structures are in conformity with the standards of this Ordinance and other applicable ordinances, architectural and design guidelines as adopted and amended periodically by the Design Review Board and Historic Preservation Boards, and all pertinent master plans.
Satisfied. The applicant is requesting understory review from the Board.
6. The proposed Structure, and/or additions or modifications to an existing structure, indicates a sensitivity to and is compatible with the environment and adjacent Structures, and enhances the appearance of the surrounding properties.
Satisfied. The applicant is requesting understory review from the Board.
7. The design and layout of the proposed site plan, as well as all new and existing buildings shall be reviewed so as to provide an efficient arrangement of land uses. Particular attention shall be given to safety, crime prevention and fire protection, relationship to the surrounding neighborhood, impact on contiguous and adjacent Buildings and lands, pedestrian sight lines and view corridors.
Satisfied. The applicant is requesting understory review from the Board.
8. Pedestrian and vehicular traffic movement within and adjacent to the site shall be reviewed to ensure that clearly defined, segregated pedestrian access to the site and all buildings is provided for and that all parking spaces are usable and are safely and conveniently arranged; pedestrian furniture and bike racks shall be considered. Access to the Site from adjacent roads shall be designed so as to interfere as little as possible with traffic flow on these roads and to permit vehicles a rapid and safe ingress and egress to the Site.
Satisfied
9. Lighting shall be reviewed to ensure safe movement of persons and vehicles and reflection on public property for security purposes and to minimize glare and reflection on adjacent properties. Lighting shall be reviewed to assure that it enhances the appearance of structures at night.
Not Satisfied; a lighting plan has not been submitted.

10. Landscape and paving materials shall be reviewed to ensure an adequate relationship with and enhancement of the overall Site Plan design.
Not Satisfied; staff recommends reduction of the proposed vehicular hardscape.
11. Buffering materials shall be reviewed to ensure that headlights of vehicles, noise, and light from structures are adequately shielded from public view, adjacent properties and pedestrian areas.
Satisfied
12. The proposed structure has an orientation and massing which is sensitive to and compatible with the building site and surrounding area and which creates or maintains important view corridor(s).
Satisfied. The applicant is requesting understory review from the Board.
13. The building has, where feasible, space in that part of the ground floor fronting a street or streets which is to be occupied for residential or commercial uses; likewise, the upper floors of the pedestal portion of the proposed building fronting a street, or streets shall have residential or commercial spaces, shall have the appearance of being a residential or commercial space or shall have an architectural treatment which shall buffer the appearance of the parking structure from the surrounding area and is integrated with the overall appearance of the project.
Not Applicable
14. The building shall have an appropriate and fully integrated rooftop architectural treatment which substantially screens all mechanical equipment, stairs and elevator towers.
Satisfied
15. An addition on a building site shall be designed, sited and massed in a manner which is sensitive to and compatible with the existing improvement(s).
Not Applicable
16. All portions of a project fronting a street or sidewalk shall incorporate an architecturally appropriate amount of transparency at the first level in order to achieve pedestrian compatibility and adequate visual interest.
Not Applicable
17. The location, design, screening and buffering of all required service bays, delivery bays, trash and refuse receptacles, as well as trash rooms shall be arranged so as to have a minimal impact on adjacent properties.
Not Applicable
18. In addition to the foregoing criteria, subsection [118-]104(6)(t) of the city Code shall apply to the design review board's review of any proposal to place, construct, modify or maintain a wireless communications facility or other over the air radio transmission or radio reception facility in the public rights-of-way.
Not Applicable
19. The structure and site complies with the sea level rise and resiliency review criteria in Chapter 133, Article II, as applicable.
Not Satisfied; see below

COMPLIANCE WITH SEA LEVEL RISE AND RESILIENCY REVIEW CRITERIA

Section 133-50(a) of the Land Development establishes review criteria for sea level rise and resiliency that must be considered as part of the review process for board orders. The following is an analysis of the request based upon these criteria:

1. A recycling or salvage plan for partial or total demolition shall be provided.
Not Satisfied
A recycling plan shall be provided as part of the submittal for a demolition/building permit to the building department.
2. Windows that are proposed to be replaced shall be hurricane proof impact windows.
Satisfied
3. Where feasible and appropriate, passive cooling systems, such as operable windows, shall be provided.
Satisfied
4. Resilient landscaping (salt tolerant, highly water-absorbent, native or Florida friendly plants) shall be provided, in accordance with Chapter 126 of the City Code.
Satisfied
5. The project applicant shall consider the adopted sea level rise projections in the Southeast Florida Regional Climate Action Plan, as may be revised from time-to-time by the Southeast Florida Regional Climate Change Compact. The applicant shall also specifically study the land elevation of the subject property and the elevation of surrounding properties.
Satisfied
6. The ground floor, driveways, and garage ramping for new construction shall be adaptable to the raising of public rights-of-ways and adjacent land and shall provide sufficient height and space to ensure that the entry ways and exits can be modified to accommodate a higher street height of up to three (3) additional feet in height.
Satisfied
7. In all new projects, all critical mechanical and electrical systems shall be located above base flood elevation. Due to flooding concerns, all redevelopment projects shall, whenever practicable, and economically reasonable, move all critical mechanical and electrical systems to a location above base flood elevation.
Satisfied
8. Existing buildings shall be, where reasonably feasible and economically appropriate, elevated up to base flood elevation, plus City of Miami Beach Freeboard.
Not Applicable
9. When habitable space is located below the base flood elevation plus City of Miami Beach Freeboard, wet or dry flood proofing systems will be provided in accordance with Chapter of 54 of the City Code.
Not Applicable
10. In all new projects, water retention systems shall be provided.
Satisfied; additional information will be required at the time of building permit

in order to demonstrate compliance.

11. Cool pavement materials or porous pavement materials shall be utilized.
Satisfied; additional information will be required at the time of building permit in order to demonstrate compliance.
- (12) The project design shall minimize the potential for a project causing a heat island effect on site.
Satisfied; additional information will be required at the time of building permit in order to demonstrate compliance.

STAFF ANALYSIS:

DESIGN REVIEW

The applicant is proposing to construct a new two-story residence on an irregularly shaped lot (9,946 SF) located on Nautilus Avenue. The lot is in the RS-4 district and with an area of nearly 10,000 SF it is more in line with RS-3 district properties. This neighborhood, just north of W 41st Street between Alton Road to the west and Biscayne Waterway, has similar large sized RS-4 lots. The proposed new home will replace an existing 1948 residence and the application is requesting review of the understory, as well as variances.

The proposed home features a split-level plan with a partial understory, which is reserved for the garage area. The majority of the first fully-enclosed, habitable floor of the residence is designed at an elevation of +11 NGVD, or BFE plus 3' of freeboard.

Designed in a contemporary style, the home has a u-shaped footprint that embraces an open courtyard facing the south interior yard; the proposed swimming pool is sited in this area. The design of the residence contrasts finished concrete structural elements and wall plane with expansive glazing that at times are screened by wooden lattice doors. Throughout the interior and exterior of the design, finished concrete and bronze metal details contrast with wood-like accented stairs, ceilings and eaves. Staff is supportive of the design as proposed.

VARIANCE REVIEW

The applicant is requesting the following variances:

1. A variance from the minimum required 30'-0" front setback in order to construct a new two-story single family residence at **27'-1"** from the front property line.
2. A variance from the minimum required 20'-0" rear setback in order to construct a new two-story single family residence at **18'-7"** from the rear property line.

Variances #1 & #2 requested from:

Sec. 142-106. Setback requirements for a single-family detached dwelling

- (1) ***Front yards.*** The minimum front yard setback requirement for these districts shall be as follows:

- a. ***One-story structures.*** Twenty feet, provided that any portion of a two-story attached structure shall be setback a minimum of 40 feet.
- b. ***Two-story structures.*** Thirty feet, provided subsection (a)(1)a. above does not apply.

- (3) **Rear.** *The rear setback requirement shall be 15 percent of the lot depth, **20 feet minimum**, 50 feet maximum. At least 70 percent of the required rear yard shall be sodded or landscaped pervious open space; when located at or below adjusted grade, the water portion of a swimming pool may count toward this requirement, when located above adjusted grade, the water portion of a swimming pool may count towards 50 percent of this requirement, provided adequate infrastructure is incorporated into the design of the pool to fully accommodate on-site stormwater retention.*

Variance requests #1 and #2 stem from the irregular shape of the subject site, with curving front and rear property lines and non-parallel side property lines. Due to the curving of the property lines, the subject home, as proposed, has a front setback of approximately 27 feet towards the south side of the site, which increases to approximately 32 feet on the north side of the site. The proposed rear setback ranges from approximately 18'-7" on the south side of the site to 21'-2" on the north side of the site. These dimensions and the irregular shape of the site result in a hardship in designing a new home for the property; as such, staff recommends approval of Variances #1 and #2.

Variance requests #3 – #5 are related to the following understory requirements:

3. **Section 142-105(b)(4)d.1.** *Understory area(s) shall be used only for open air activities, parking, building access, mechanical equipment, non-enclosed restrooms and storage. Such areas shall be designed and maintained to be free of obstructions and shall not be enclosed and/or air-conditioned at any time, with the exception of limited access areas to the first habitable floor. However, understory area(s) below the lowest habitable floor can utilize non-supporting breakaway walls, open-wood lattice work, louvers or similar architectural treatments, **provided they are open a minimum of 50 percent on each side.***
4. **Section 142-105(b)(4)d.7.** *At least **70 percent** of the required front yard and street side yard areas shall consist of sodded or landscaped pervious open space. For purposes of this section, the required front yard shall be the same as the required front setback of the principal structure. All allowable exterior walkways and driveways within the front and street side yards shall consist of pavers set in sand or other semi-pervious material. The use of concrete, asphalt or similar material within the required front or street side yards shall be prohibited.*
5. **Section 142-105(b)(4)d.10.** *Understory edge. All allowable decking, gravel, pavers, non-supporting breakaway walls, open-wood lattice work, louvers or similar architectural treatments located in the understory area **shall be set back a minimum of five feet from each side of the underneath of the slab of the first habitable floor above**, with the exception of driveways and walkways leading to the property, and access walkways and/or steps or ramps for the front and side area. The front and side understory edge shall be designed to accommodate on-site water capture from adjacent surfaces and expanded landscaping opportunities from the side yards.*

The subject home is unique in that only a portion of the home, consisting of the garage, storage and main entrance, is part of the proposed understory, with the level above located at an elevation of BFE +6'-6". The remainder of the home is more traditional in nature, with the first level located at BFE +3 feet. The majority of the front elevation is comprised of a

single habitable floor above the garage with a relatively small study (329 SF) located at the second level above the garage, setback from the floor below. As the garage is flanked by the entrance stairs on one side, and a pool on the other side, the understory portion is not compliant with the requirement that the elevations are open a minimum of 50% on each side, and that non-supporting elements are setback 5 feet from the floor above. Due to the limited area of the understory as part of the hybrid design approach, which is not contemplated in the City Code, and the unique characteristics of the site, as more particularly described in the analysis for variance requests #1 and #2, staff is supportive of variances #3 & #5.

A home without an understory is required to provide a minimum open space of 50% within the required front yard. The percentage of required open space in the front yard is increased for understory homes because the understory regulations require that all parking be provided under the building. Parking for three parking spaces has been provided in the proposed understory area in this application; however due to the expanded entrance to the garage area, the applicant is requesting a variance from the minimum required open space of 70%. Because the pool has been located predominantly along the side yard, the rear yard consists almost entirely of pervious landscaped area. Because of the unique characteristics of the site, as more particularly described in the analysis for variance requests #1 and #2, as well as the fact that the landscaping in the rear of the property exceeds the minimum requirements of the Code and mitigates the reduction of open space in the front yard, staff is supportive of variance #4. However, staff would recommend that the driveway entrance be reduced to 10 feet in width at the property line, which can then expand to access the three parking spaces in the understory area.

January 3, 2023 update

When the project was initially presented on November 1, 2022, the Board was largely supportive of overall design proposed for the home. However, concerns were expressed with the monumentality of the design shown for the front elevation, which included 2-story high screening elements, accentuating the verticality of the home. The applicant has since revised the design of the front elevation with a more horizontal emphasis, in keeping with the successful architecture of the other elevations. There are only a few outstanding concerns that remain, related to the width of the driveway as noted in the original submission, which can be resolved administratively. Staff is very supportive of the changes and recommends approval of the application.

RECOMMENDATION:

In view of the foregoing analysis, staff recommends the application be **approved, including the requested variances**, subject to the conditions enumerated in the attached Draft Order, which address the inconsistencies with the aforementioned Design Review and Sea Level Rise criteria.