

NOTE: A three-minute maximum time limit will be imposed on all comments from the public, regardless of the subject matter. A request form is available from the Deputy Town Clerk; fill it in and return it to her prior to the start of the meeting. When you speak, you must come to the podium in the front and clearly state your name and address for the record. Please turn off or mute your cell phone or pager at the start of the meeting.

TOWN OF BAY HARBOR ISLANDS

WORKSHOP MEETING

AGENDA

May 1, 2018

CALL TO ORDER: 6:30 p.m.

PLEDGE OF ALLEGIANCE

ROLL CALL

1. **Discussion and Direction** requested by the Town Council and the Planning & Zoning Board regarding possible code amendments in the RD Single Family District. Enclosed is a copy of a Memorandum from the Planning & Zoning Board and supporting documents.

ADJOURNMENT - Approximately 7:30 PM

Pursuant to Florida Statutes 286.0105, the Town hereby advises the public that should any person decide to appeal any decision of the Town Council with respect to any matter to be considered at this meeting or hearing, he or she will need a record of the proceedings, and that, for such purpose he or she may need to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is to be based.

AGENDA ITEM REPORT

May 1, 2018

ITEM NUMBER: 1.

ITEM: Discussion and Direction requested by the Town Council and the Planning & Zoning Board regarding possible code amendments in the RD Single Family District. Enclosed is a copy of a Memorandum from the Planning & Zoning Board and supporting documents.

DESCRIPTION:

The Planning & Zoning Board has had several discussion and debate for many hours at the request of the Town Council regarding the existing and future code provisions for the RD Single-Family District on the West Island. The Board made the following recommendations for possible code amendments:

- **Open Space Requirements**: Each plot shall provide for a minimum of fifty (50) percent landscaped "green" pervious open space at ground level in the front yard area. Consideration should be given for some credits for pervious pavers (not more than 50% credit).

- **Building Articulation**: Architectural embellishments, including but not limited to, windows, eyebrows, material changes, reliefs, reveals, ornamentation, banding, canopies, copings, etc must be incorporated into the design to avoid large flat uninterrupted wall surfaces for at least 50% of the length of all elevations of the main house and any accessory structures.

On April 16th, Regular Council Meeting, the Town Council approved an ordinance on first reading relating to building articulation and open space requirements in the RD Single-Family District, subject to additional landscaping in the front yard area (4 trees instead of 2) and the removal of percentage credit for pervious pavers.

The Planning and Zoning Board has been discussion other options such as regulating lot coverage, building coverage, square footage of the structure, reducing the second floor massing, etc., however, consensus on these items has not been reached. At the April 17th, Planning & Zoning Board Meeting, the Board requested clear direction from the Town Council to continue discussion on these options and perhaps others.

Enclosed are copies of a memorandum from the Planning & Zoning Board and supporting documents.

RECOMMENDED ACTION:

Council Discretion

FINANCIAL ANALYSIS:

BUDGET IMPACT:

Submitted By: Alba Chang, Deputy Town Clerk

ATTACHMENTS

1.	PZB Memo SFR Design Joint Workshop	PZB Memo SFR Design Joint Workshop.pdf
2.	BHI Architectural Guidelines Presentation Feb 2018	BHI Architectural Guidelines Presentation Feb 2018.pdf
3.	BHI SFR LDR Study Final Document	BHI SFR LDR Study Final Document.pdf
4.	Comments on Zoning Letter for Discussion from KODA	Comments on Zoning Letter for Discussion from KODA.pdf
5.	SF Comparison Chart 2016	SF Comparison Chart 2016.pdf

TOWN OF BAY HARBOR ISLANDS PLANNING AND ZONING BOARD MEMORANDUM

To: Mayor and Town Council Members
Town of Bay Harbor Islands

From: Steven Hurwitz, Chairperson
Planning and Zoning Board

Date: April 24th, 2018

Subject: Town of Bay Harbor Islands
Land Development Code Update
Single-Family Home Design Standards

ISSUE:

In recent months the Town Council expressed negative comments about a few of the new “contemporary / modern” home designs being built in the community. Some of the comments about the home designs included “over-building / too massive / too plain / too much plain exposed concrete / too much lot coverage / not enough front yard landscaping” and other comments. The Town Planner (MMPA) was requested to study the issue and prepare suggested ideas to address the concerns. These were presented to the Town Council at their February 12th, 2018 meeting, at which time the Town Council referred this matter to the Planning and Zoning Board for discussion / suggestions. These documents / studies, as well as board member studies, were presented to the Planning and Zoning Board, and several public discussions (4 meetings to date) have been held with many hours of discussions. The Board members have varying opinions as to the need for additional design criteria to guide architects / contractors. The Planning and Zoning Board general interpretation of the design issue is that mainly the second story of “contemporary / modern homes” sometimes have uninterrupted or unembellished expanses of plain concrete. The PZ Board recommended the Town Council proceed initially with two (2) suggested Code amendments (front yard open space / building articulation) while the Board continues to study the issue in more detail.

A joint meeting of the Town Council and Planning and Zoning Board has been set for Tuesday May 1st, 2018 to discuss this topic and other land development related issues.

HISTORY:

The Town has spent a great deal of time over the last 13+/- years studying its land development regulations and updating its Codes. In general, MMPA’s research found the Town’s regulations are similar to many other communities, comprehensive and fairly detailed, but are flexible enough to allow architects / builders some freedom to propose a wide variety of single-family house designs.

In previous years MMPA prepared a number of land development regulation analysis documents to assist the Town in its deliberations / Code amendments. MMPA recently

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prepared a PowerPoint presentation with photographs / comments to highlight the issues. Based on the Town Council's feedback possible Code amendments / administrative guidelines could be prepared. After the January 2018 Town Council meeting, MMPA prepared additional documents analyzing recent single-family home projects and comparing the current setbacks and open spaces / landscape regulation with neighboring communities. The document was part of a several discussions at recent Planning and Zoning Board meetings.

For Town Council on January 26th, 2018, MMPA prepared a white paper to help initiate the discussion of the issue with the design of modern houses. The white paper provided a summary of the current regulations, analysis, and recommendations. This was discussed at the February 12th, 2018 Town Council meeting, at which time the matter was referred to the PZ Board for discussion / study / suggestions.

The PZ Board discussed the issues at four (4) meetings to date (2/20/18 / 3/06/18 / 3/20/18 / 4/17/18). At the March 20th, 2018 PZB meeting the board agreed to recommend the Town Council move forward with a few Code revisions that consensus was reached on, while they continue to discuss other possible criteria. These ideas included (1) requiring at least 50% of a single-family lot front yard area to be open space, and (2) new provisions to guide designers on methods of articulating building elevations – to avoid large plain wall surfaces. The Town Council discussed these initial suggestions at their April 16th, 2018 meeting and approved draft Ordinances on 1st reading, subject to the modifications.

At the March 20th, 2018 PZB meeting the board suggested the following initial Code modifications for single-family open space requirements and building articulation:

(1) Open Space Requirements. Each plot shall provide for a minimum of fifty (50) percent landscaped "green" pervious open space at ground level in the front yard area. Consideration should be given for some credits for pervious pavers (not more than 50% credit). Within the front setback areas sufficient open space and landscaping materials shall be provided to break large expanses of hardscapes, screen parking areas and provide shade.

(2) Building Articulation. Architectural embellishments, including but not limited to, windows, eyebrows, material changes, reliefs, reveals, ornamentation, banding, canopies, copings, etc. must be incorporated into the design to avoid large flat uninterrupted wall surfaces for at least 50% of the length of all elevations of the main house and any accessory structures.

The Planning and Zoning Board has had heated debates about the need for architectural guidelines, second story setbacks, maximum ground coverage for single-family homes as well as all impervious surfaces, and several other ideas. The PZ Board asked the Town Council to be patient and allow for more discussion time on these important topics to guide future development activities.

SUMMARY OF PLANNING ZONING BOARD DISCUSSIONS:

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- Design freedom. The PZB does not recommend endorsing or legislating for or against any particular design. Most members prefer recommendations that challenge and lead to better design, of any kind.
- Landscaping and facades. The PZB feels that it has adequately addressed the concerns regarding landscaping and façade requirements.
- Size. There is no current PZB consensus on limiting the size of homes as an outright goal relative to both architectural and home value discussions. The PZB has debated additional measures geared towards specifically limiting the size of homes but would like confirmation from Town Council that this is their intention; because if Council wishes to limit the size of homes, as additional measures, the PZB has researched / debated the following options and is prepared to meet again to finalize recommendations:
 - o Lot coverage – describe for the group (simply)
 - o Building coverage – describe for the group (simply)
 - o Credits/flex nuances of each relative to amount of impervious areas, driveways, landscaping, etc. (i.e.: if you do this then you can do that).

Attached are copies of the MMPA data / studies to date, as well as ideas from some of the PZ Board members.

Architectural Guidelines For Single Family Homes

Bay Harbor Islands

MMPA March 2018

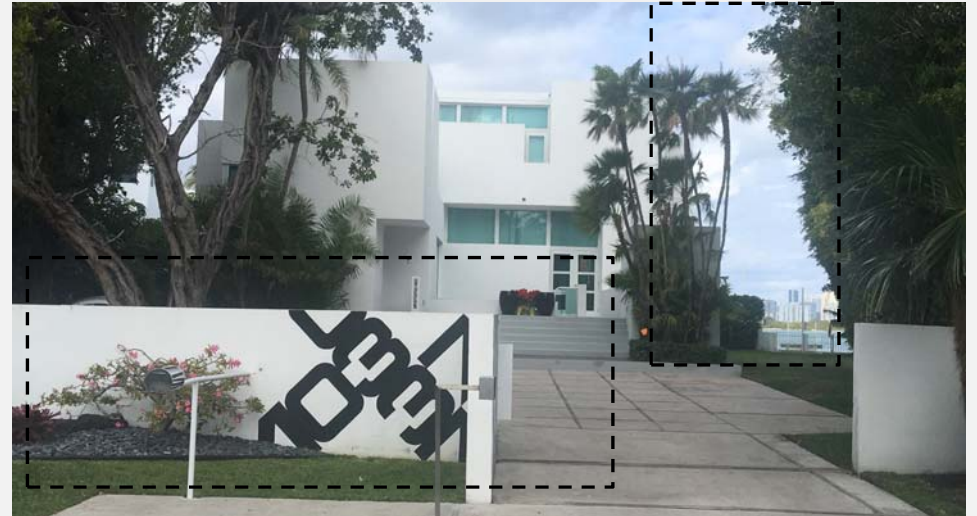


INTRODUCTION

The Town of Bay Harbor Islands is proud to be an innovative place where quality design is encouraged and different styles of architecture have been coexisting and complementing each other for the past five decades. Although, as a community the public realm must always be enhanced by the individual designs and the whole becomes an harmonious place to live.



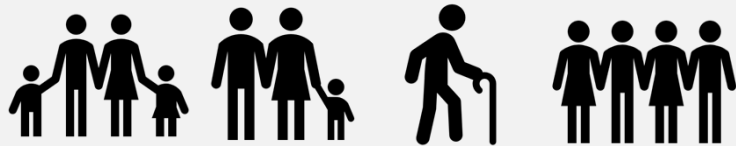
This architectural guideline attempts to coordinate the public realm with private developments to enhance the visual character of the community. It will address building composition, scale, and articulation to establish a measure of architectural harmony that accommodates diverse styles and uses. The guidelines are also intended to facilitate the Town's review process by making the architectural expectations of the community clear.



The size of a building is not the same as its scale.

Building scale can be affected by building articulation and facade design.

Building articulations may occur in elevation (building height) or in plan (building placement) or both. Building articulations should reflect a meaningful relationship with the urban condition.



Buildings should clearly reflect their use and respond to their unique location in the Town.

Challenging uses (parking, for example) that are difficult to incorporate into a superior pedestrian environment should be shielded by site design.

Houses should look residential and not commercial or institutional buildings.

The entrance should be clearly defined, the façade should have windows looking over the street and a diverse volume to create a richer experience for the pedestrian in the city. All facades (front, sides, back) should be coherent with the guidelines.



How to achieve that:

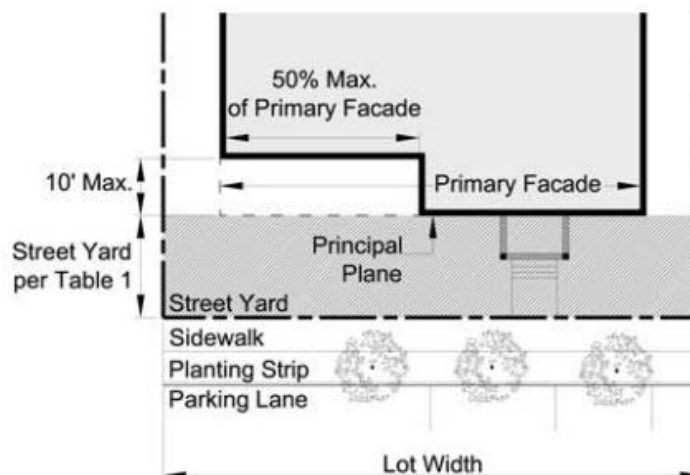
1. Require a certain minimum percentage of the front façade to have windows.
2. Implement a maximum percentage of allowable stucco blank wall (no windows or embellishments) in reference to the plot length size.
3. Limit the second floor area to a percentage of the first floor or require flex setbacks. This will enhance the visual interest of the Town while breaking up large building facades.



Examples of Codes that Provide a framework for buildings to have character but enhance the public realm:

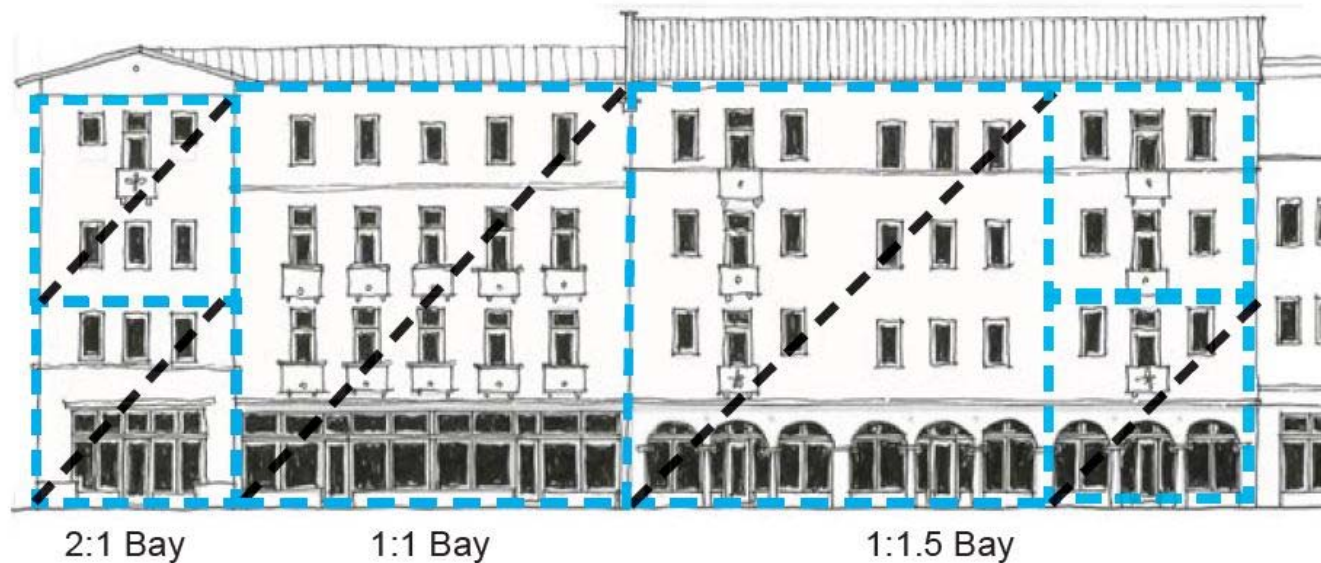
3. FRONTAGE PERCENTAGES: Frontage percentage is the percentage of the width of a lot that is required to be occupied by its building's primary facade. Table 1 provides minimum and maximum frontage percentages for each lot type.

- i. Up to 50% of the width of the primary facade may be counted as meeting the frontage percentage requirement even though it may be set back up to 10 feet further from the street than the primary facade's principal plane.
- ii. The location of the primary facade's principal plane is not changed by facade extensions such as bay windows, awnings, porches, balconies, stoops, colonnades, or arcades, or by upper stories that are closer to or further from the street.
- iii. The width of a porte cochere may be counted as part of the primary facade.



Sarasota Form Based Code

Examples of Codes that Provide a framework for buildings to have character but enhance the public realm:



DIAG. 1 FACADE PROPORTION. For all styles, facade compositions should be comprised of a series of bays. Even the Art Deco and Masonry Modern styles, which have streamlined, horizontal elements, should also meet the bay proportions.

Delray Beach Design Guidelines

Examples of Codes that Provide a framework for buildings to have character but enhance the public realm:

DRIVEWAYS AND WALKWAYS

Stone paver tiles, interlocking concrete unit pavers and special color and finish concrete are encouraged for driveway and walk material. Loose gravel or loose gravel products are discouraged.



Concrete unit pavers add texture and color to this driveway.

FENCES AND WALLS

If fences and walls are to be provided, they are encouraged to be integrated into the site and unit design. Fences and walls provide privacy screens for outdoor spaces, while maintaining the maximum amount of windows and door openings in the house. Creative placement and design of walls allows for vertical landscaping thus creating interior courtyards similar to European or Mediterranean designs. Fences and walls can be used effectively along roadways and courtyards.



Walls along the front property line are encouraged to maintain about half the wall surface in transparent materials.

Garden walls along street property lines are encouraged to maintain 50% of the wall surface in transparent materials (metal fences, plantings, lattice, etc.).

Masonry fences are encouraged to be in the style of the main house. Masonry walls function well for sound control.

Metal Picket fences are permitted. They are encouraged where views are an important consideration, as in rear yards along lakes, canals, and in front yards so as not to obstruct required open views for automobiles.

THE END

Presentation Prepared by Consultant Town Planner

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TOWN OF BAY HARBOR ISLANDS

SINGLE FAMILY RESIDENTIAL LDR STUDY

Michael Miller Planning Associates
March-2018

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Introduction

This additional Study is intended to analyze 7 recently approved Single Family homes in the Town of Bay Harbor Islands as part of the current conversations of the Planning and Zoning Board and Town Council regarding the zoning regulations that provide the framework for architects to create unique designs that meet the expectations of the citizens. Some of the latest observations was that some houses are not providing enough landscaping in the front yard between front of the house and abutting road, the facades are not visually engaging and the 2nd floor massing/ scale should be more regulated. This supplemental study will analyze and compare single family homes percentage of Building Coverage, percentage of Impervious lot coverage, percentage of the Second-Floor area in relation to the first-floor area, percentage of Landscaped area overall and percentage of Landscaped Area in the Front of the Lot, Height above BFE and if they are waterfront sites or not.

Part 1 – Single Family Home Study Examples

House 1- 10200 West Broadview Drive

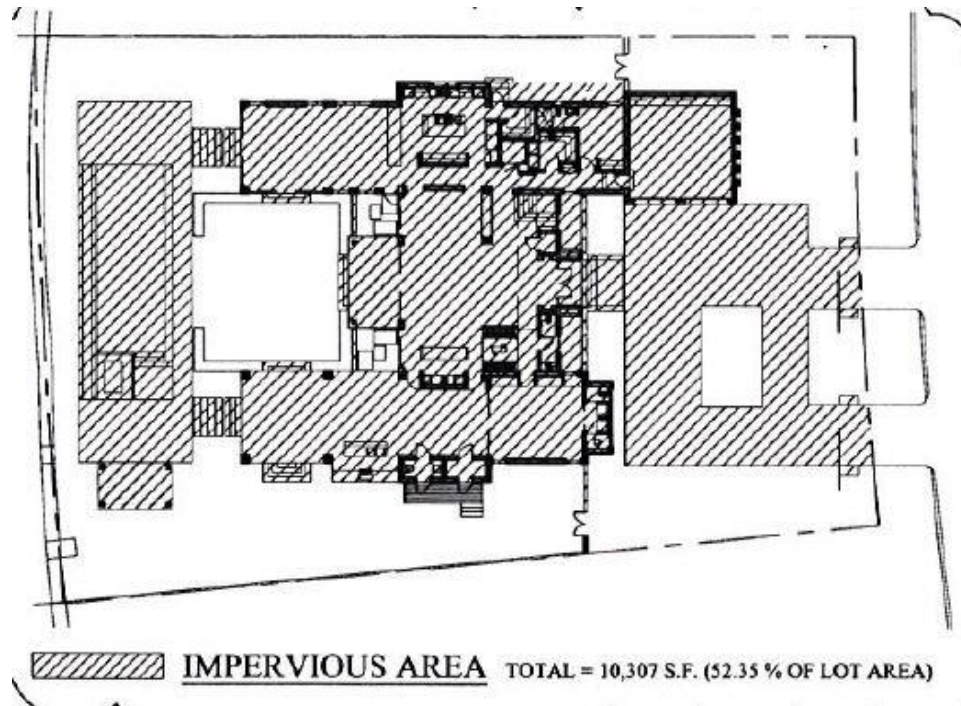


Figure 1-Source:Tabacinic Project Submission

ZONING LEGEND

SETBACKS:	REQUIRED	PROVIDED
FRONT SETBACK:	25'-0"	25'-0"
REAR SETBACK:	40'-0"	40'-7"
SIDE SETBACK:	10'-0"	10'-0"
SIDE SETBACK:	10'-0"	17'-2"

MINIMUM SIZE OF LIVING (EXCLUSIVE OF GARAGE, PORCHES & TERRACES)	2,000 S.F.	7,402 S.F.
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HEIGHT OF RESIDENCE: (MAX. 35'-0" ABOVE BASE FLOOD ELEV.) 30'-0"

PERVIOUS AREA:	47.65% OF LOT AREA	9,381 S.F.
IMPERVIOUS AREA:	52.35% OF LOT AREA	10,307 S.F.

AREAS PROPOSED

GROUND FLOOR AIR CONDITIONED AREA:	3,500 S.F.
GROUND FLOOR NON A/C AREAS (COVERED TERRACES):	1,307 S.F.
GARAGE AREA:	560 S.F.
SECOND FLOOR AIR CONDITIONED AREA:	3,902 S.F.
SECOND FLOOR NON A/C AREAS (COVERED TERRACES AND BALCONIES):	631 S.F.

Figure 2-Source:Tabacinic Project Submission



Figure 3-Source: Tabacinic Project Submission

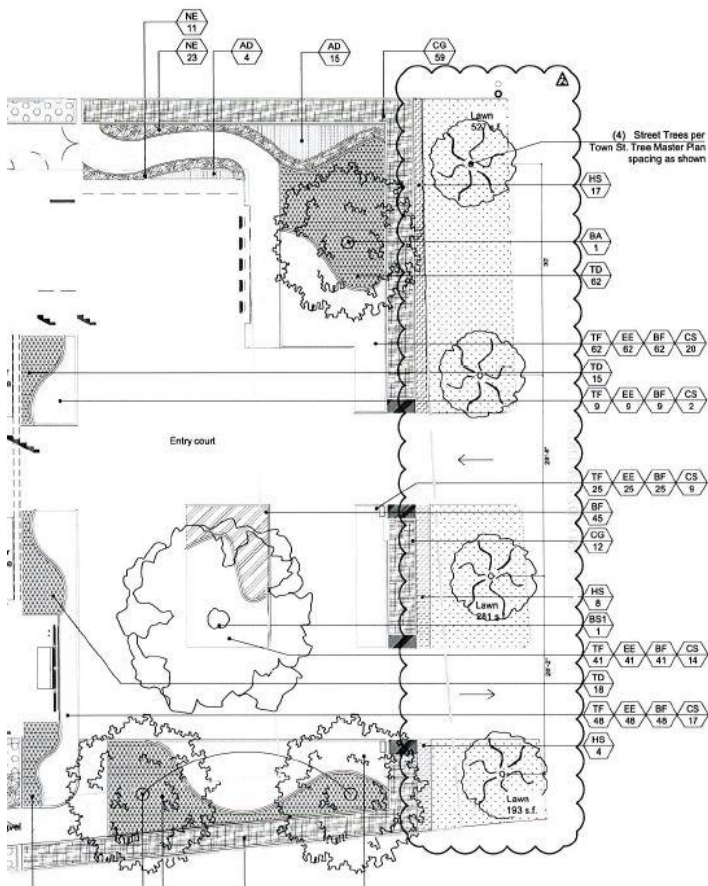


Figure 4- Source: Tabacinic Project Submission

House 2 - 1330 97th Street

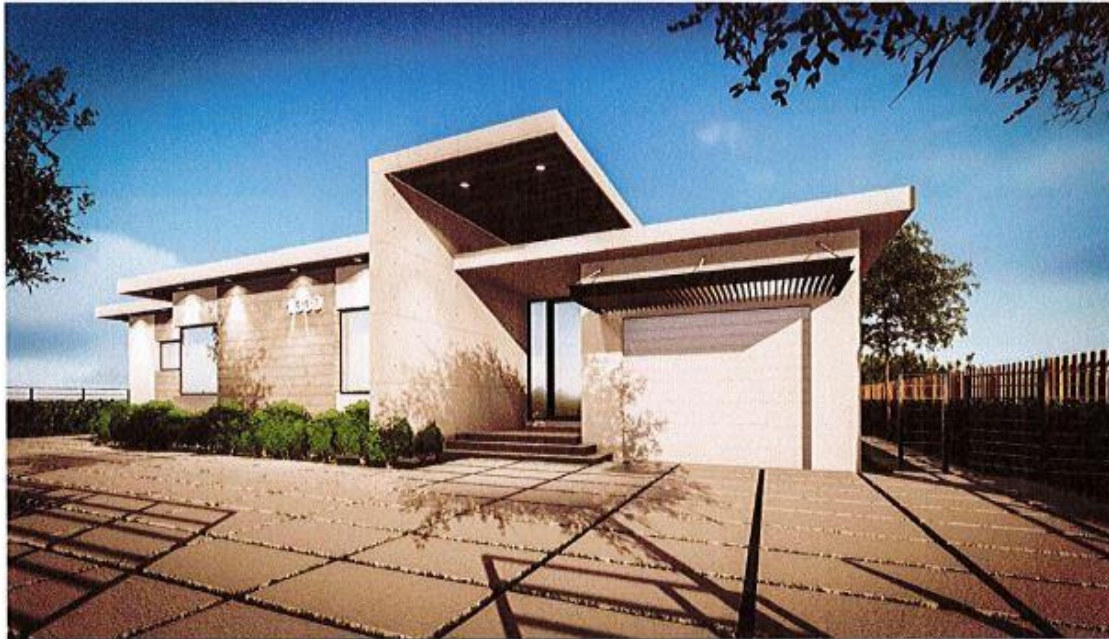


Figure 5- Source: Project Submission to the Town

SET BACKS:	REQUIRED	PROVIDED
NORTH (FRONT):	25'-0"	25'-0"
SOUTH (REAR):	15'-0"	25'-0"
EAST (SIDE):	10'-0"	10'-13/16"
WEST (SIDE):	10'-0"	10'-1"

SITE CALCULATION		
	S.F	%
TOTAL SITE AREA	10,625.0	
PROPOSED ENCLOSED AREA UNDER A/C	3,710.0	
EXTERIOR CONCRETE TERRACE, STEPS & CONCRETE PAVERS	1,780.2	
FRONT WALLS, FENCE BASE & DRIVEWAY ASPHALT	681	
POOL	348	
TOTAL IMPERVIOUS AREA	6,201.2	58.3
LANDSCAPE	4,423.8	41.6
TOTAL PERVIOUS AREA	4,423.8	41.6
PROPOSED ENCLOSED UNDER A/C	3,710.0	S.F
EXISTING ENCLOSED UNDER A/C	2,809.0	S.F
ENCLOSED ADDITION	901.0	S.F

BUILDING INFORMATION	
MAXIMUM BUILDING HEIGHT:	
TWO AND ONE HALF STORIES OR 25' IN HEIGHT	
ABOVE THE BFE: 8'-0"NGVD	
TOTAL BUILDING HEIGHT: 15'-0" ABOVE BFE	

Figure 6 Source: Project Submission to the Town

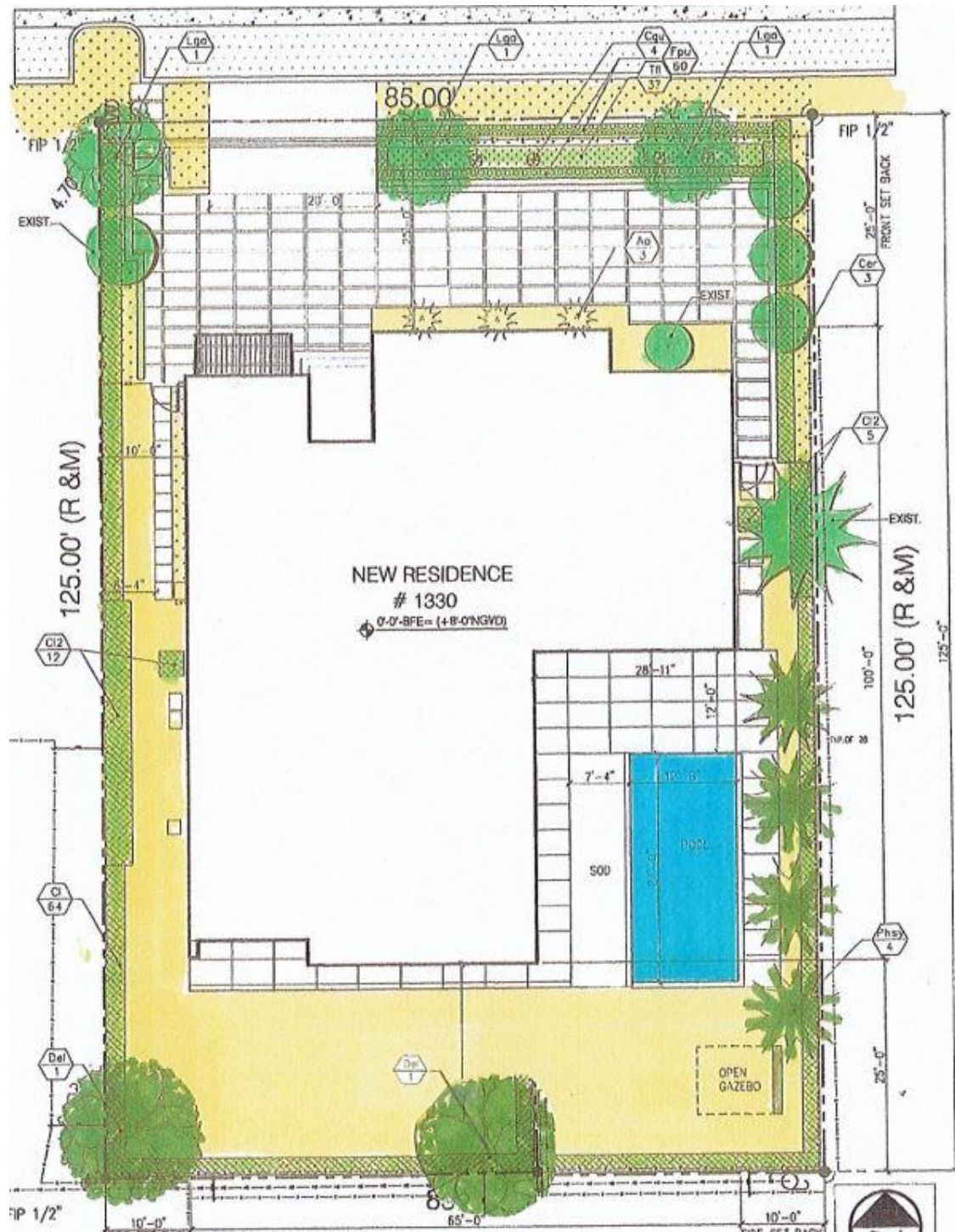


Figure 7- Source: Project Submission to the Town

House 3 - 9424 West Broadview Dr.



Figure 8- Source: Project Submission to the Town

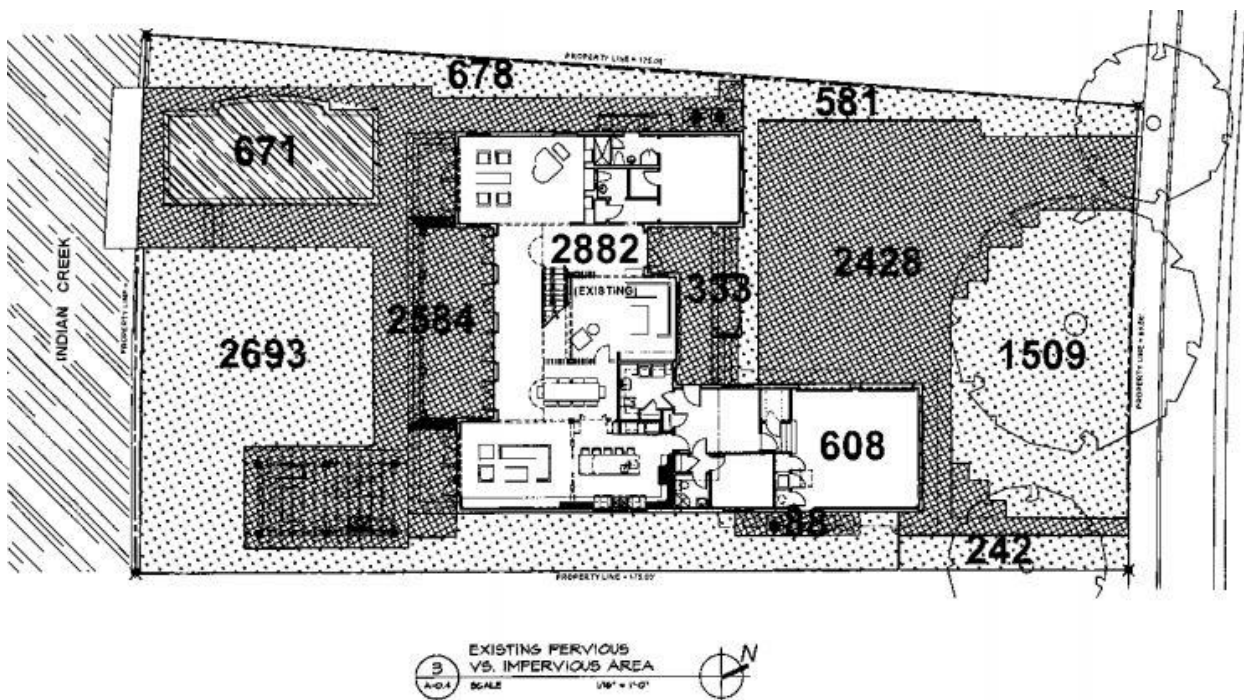


Figure 9- Source: Project Submission to the Town

LEGEND :



EXISTING BUILDING DATA			EXISTING SITE DATA	
MAIN HOUSE:			EXISTING LOT SIZE:	10,297 S. F. (100%)
FIRST FLOOR (AG)	2,882 S. F.		PERVIOUS AREA:	
SECOND FLOOR (AG)	2,338 S. F.		POOL	671 S. F.
TOTAL (AG):	5,215 S. F.	(UNIT SIZE VS. LOT SIZE)	LANDSCAPING	5,108 S. F.
	(51.04%)		TOTAL PERVIOUS AREA:	6,374 S. F. (41.67%)
GARAGE (NON AG)	608 S. F.		IMPERVIOUS AREA:	
TOTAL (NON AG):	608 S. F.		DECK PATHS	3,008 S. F.
	(5.93%)		DRIVEWAY	2,428 S. F.
TOTAL BUILDING AREA (AG + NON AG):	5,823 S. F.	(UNIT SIZE VS. LOT SIZE)	BUILDING	3,440 S. F.
	(56.66%)		TOTAL IMPERVIOUS AREA:	8,923 S. F. (86.33%)

Figure 10- Source: Project Submission to the Town

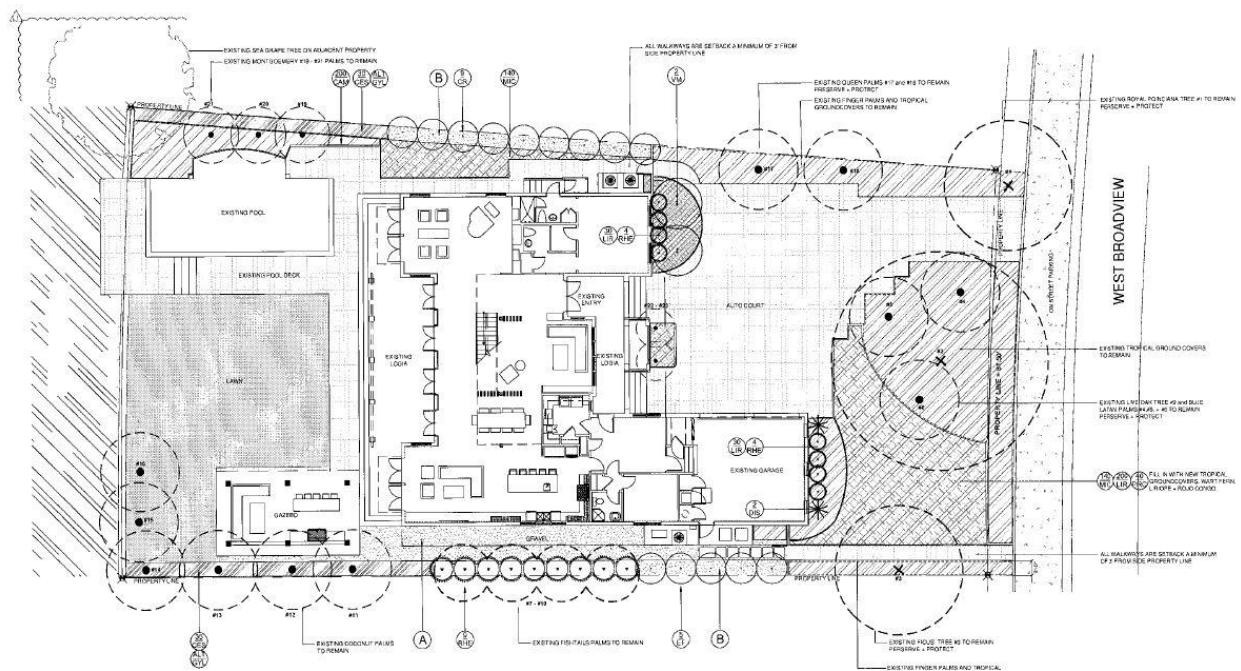


Figure 11- Source: Project Submission to the Town

House 4 - 1301 99th St



SOUTH-EAST VIEW

Figure 12- Source: Project Submission to the Town

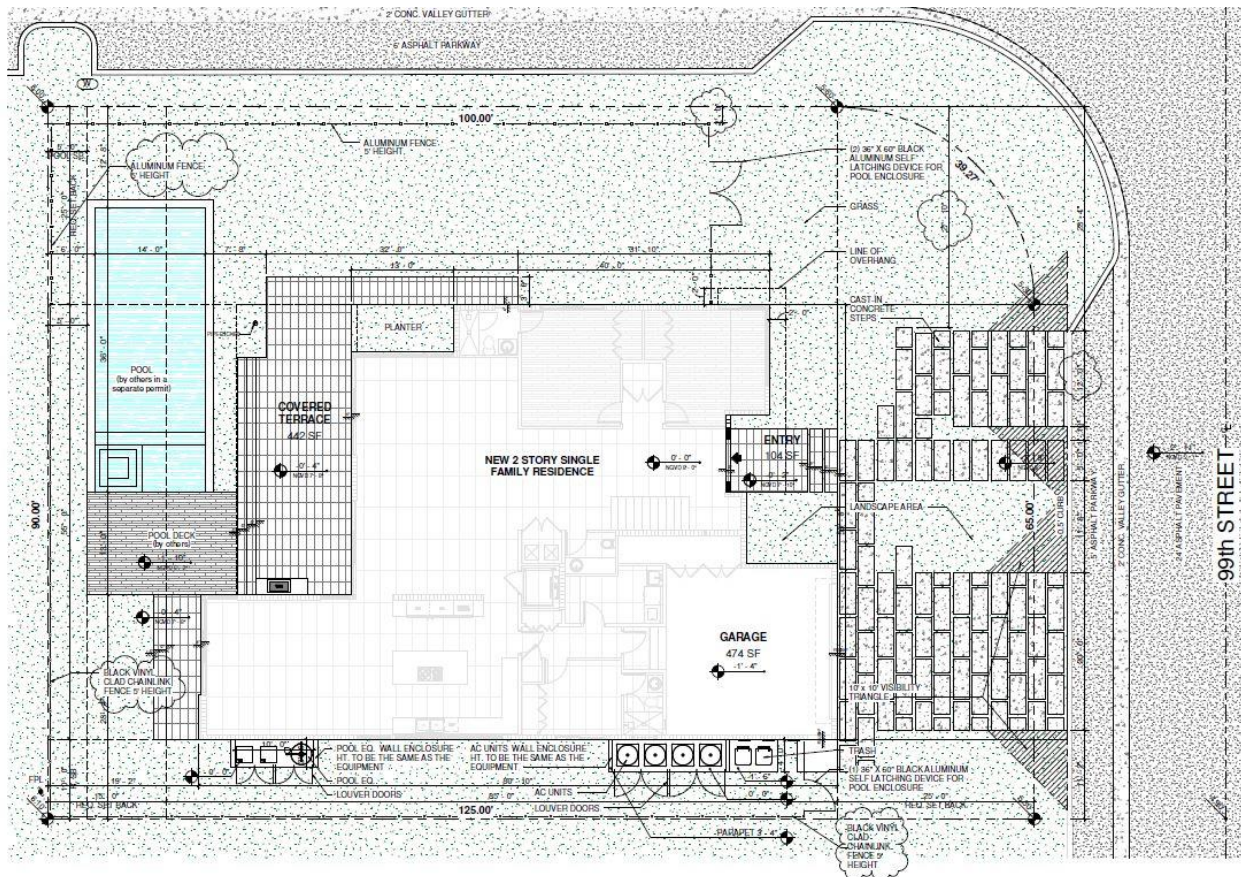


Figure 13- Source: Project Submission to the Town

AREA TALLY		ZONING INFORMATION		
		CITY OF BAY HARBOR ISLAND CHAPTER 23 - ZONING DISTRICT REQUIREMENTS SECTION 23-11 ZONING DISTRICT - RD		
LOT AREA	11,116.04 SF	BUILDING SET BACK	REQUIRED	PROVIDED
A/C GROUND FL	2,789 SF	FRONT SETBACK	25'-0"	25'-0"
A/C SECOND FL	2,373 SF	REAR SETBACK	15'-0"	15'-0"
A/C TOTAL	5,162 SF	SIDES SETBACK	10'	10'
ENTRY	109 SF	POOL SETBACK	10' SIDE & 5' REAR	15'-8" FROM SIDE & 5'-0" REAR
TERRACES	510 SF	HEIGHT LIMITATION	25' FROM BFE (8' NGVD)	24' 6" FROM BFE (8' NGVD)
GARAGE	466 SF			
BALCONIES	590 SF	PERVIOUS LOT AREA	-	5,035.56 SF = 45.3%
POOL - POOL DECK	384 SF - 264 SF	INPERVIOUS LOT AREA	-	6,080.48 SF = 54.7%
WALKWAY	132 SQF			
DRIVEWAY	1,195 SQF			

Figure 14- Source: Project Submission to the Town

Figure 15- Source: Project Submission to the Town

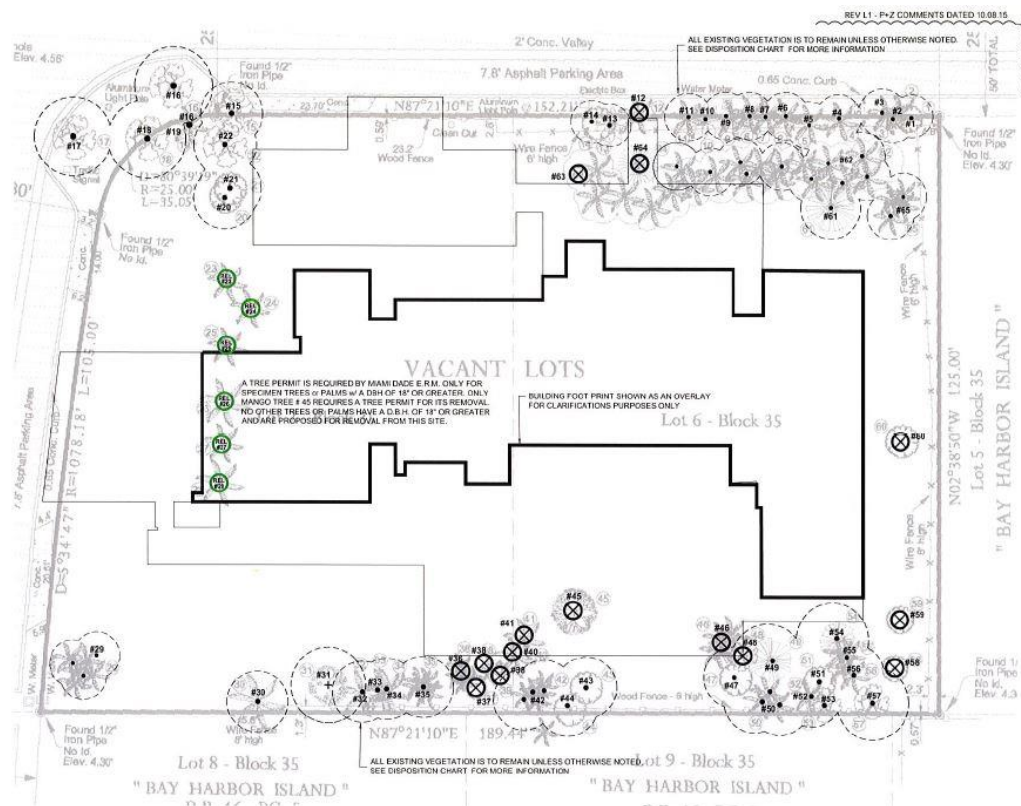


Figure 16- Source: Project Submission to Town

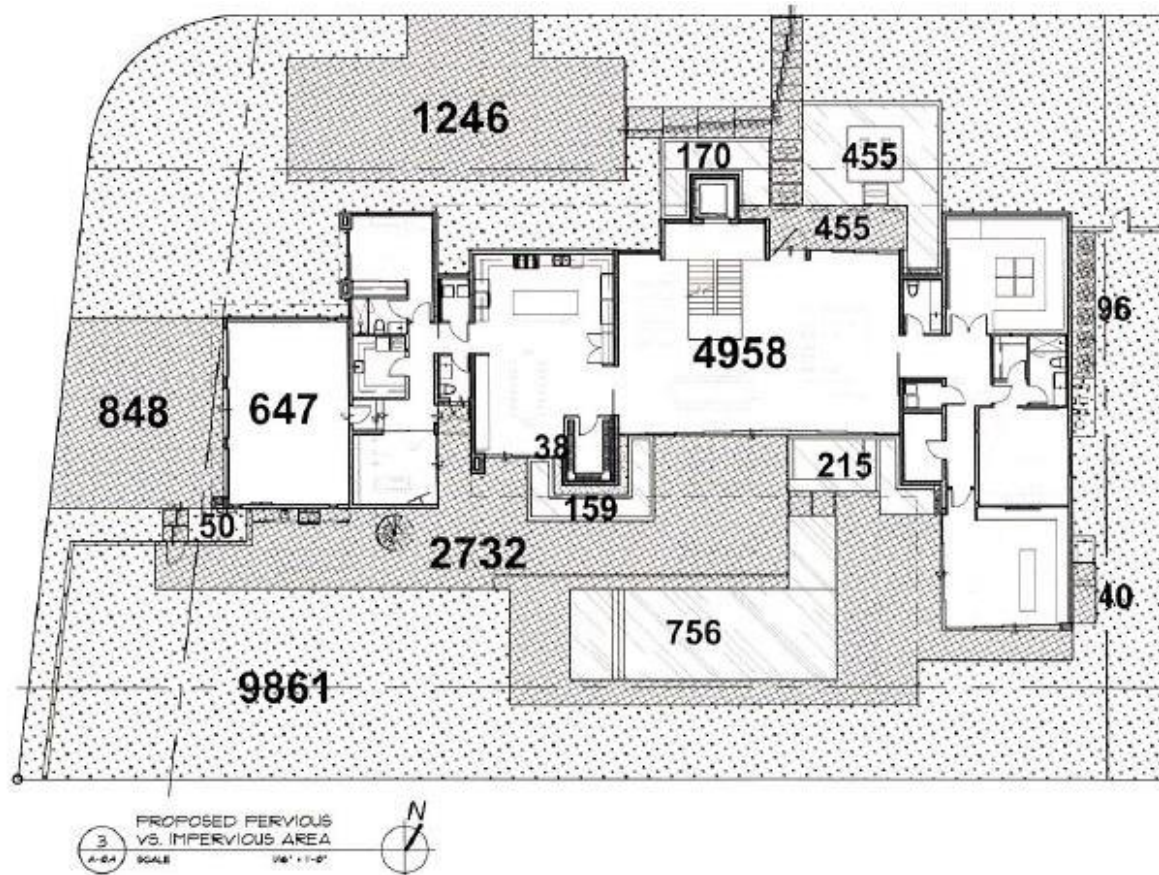


Figure 17- Source: Project Submission to Town

PROPOSED BUILDING DATA			
MAIN HOUSE:			
FIRST FLOOR (AC)		4958 S. F.	
SECOND FLOOR (AC)		3215 S. F.	
TOTAL (AC):		8173 S. F.	(36.0%)
GARAGE (NON AC)			
		647 S. F.	
TOTAL (NON AC):		647 S. F.	(2.9%)
TOTAL BUILDING AREA (AC + NON AC):		8820 S. F.	(38.9%)
PROPOSED SITE DATA		ZONING DATA	
EXISTING LOT SIZE:	22,726 S. F. (100%)	CLASSIFICATION:	RD
PERVIOUS AREA:		FLOOD ZONE:	AE
POOL & REFLECTING PONDS	1755 S. F.	MIN. FLOOD ELEVATION:	+8.00' NGVD. +8.00' NGVD.
LANDSCAPING	9949 S. F.	LOT AREA:	22,726 S. F. 22,726 S. F. (100%) (100%)
TOTAL PERVIOUS AREA:	11,704 S. F. (51.5%)	MAX. BUILDING HEIGHT:	25'-0" ABOVE BFE. 25'-0" ABOVE BFE.
IMPERVIOUS AREA:		FRONT SETBACK:	25'-0" 25'-0"
DECK & PAVERS	3323 S. F.	REAR SETBACK:	15'-0" 24'-6"
DRIVEWAY PAVERS	2034 S. F.	SIDE SETBACKS:	10'-0" 15'-11"
BUILDING	5605 S. F.		
TOTAL IMPERVIOUS AREA:	11,022 S. F. (48.5%)		

Figure 18- Source: Project Submission to Town

House 6 – 1360 98th St



Figure 19- Source: Project Submission to Town

<u>ZONING RD REQUIREMENTS</u> <u>(PER LDR SECTION 23-11)</u>		
	REQUIRED	PROPOSED
LOT SIZE	10,000 S.F. (MINIMUM)	11,250 S.F.
FLOOR AREA	1,500 S.F. (MINIMUM)	3,549 S.F. (A/C)
PERVIOUS/IMPERVIOUS		7220 SQFT. IMPERVIOUS = 64.1% 4030 SQFT. PERVIOUS = 35.9%
FRONT SETBACK	25'-0" (MINIMUM)	25'-0"
SIDE SETBACK	10'-0" (MINIMUM)	10'-0"
REAR SETBACK	15'-0" (MINIMUM)	25'-8"
STRUCTURE HEIGHT	25'-0" TO MEAN ROOF	18'-10 1/4" 25'-4" TO PEAK

Figure 20- Source: Project Submission to Town

House 7 – 1261 99th St



Figure 23- Source: Project Submission to Town

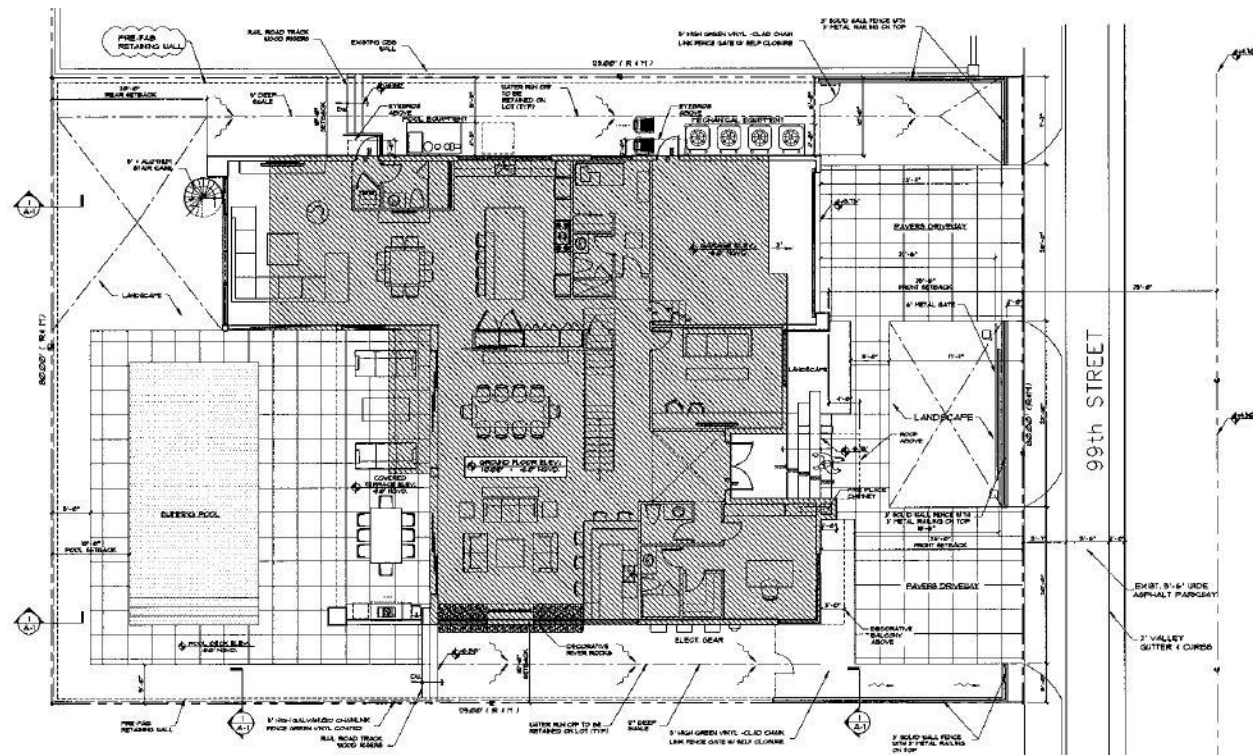


Figure 24- Source: Project Submission to Town

ZONING DATA			BUILDING AREAS UNDER A/C	
ZONING: RD-SINGLE FAMILY DISTRICT			GROUND FLOOR A/C AREA	2,985 SF
LOT AREA: 10,000 SF			SECOND FLOOR A/C AREA	3,205 SF
LOT FRONTAGE: 80'-0"			TOTAL A/C AREA	6,194 SF
SETBACKS:	REQUIRED	PROVIDED	GENERAL AREAS	
FRONT (SOUTH)	25'	25'-0"	GARAGE	477 SF
REAR (NORTH)	15'	20'-0"	COVERED ENTRANCE	60 SF
SIDE (EAST)	10'	10'-0"	GROUND FL. TERRACES	425 SF
SIDE (WEST)	10'	10'-0"	SECOND FL. TERRACE & BALCONY	140 SF
BUILDING HEIGHT	25' MAX ABOVE BFF.	25'-0"	POOL DECK	823 SF
AREA CALCULATIONS:			DRIVEWAY	125 SF
LOT AREA: 10,000 SF			SWIMMING POOL	561 SF
MINIMUM FLOOR AREA 1500 SF				
PERVIOUS				
IMPERVIOUS				
		34.5% = 3,450 SF.		
		65.5% = 6,550 SF.		

Figure 25-Source: Project Submission to Town



Figure 26-Source: Project Submission to Town

Table 1 – Comparing the Projects

	% of Building Coverage	% Impervious Area	% of Second Floor	Landscaped area Overall	Height Above BFE	waterfront
House 1	27.3%	52.35%	84.4%	47.65%	30'	Y
House 2	34.9%	83.1%	N/A	16.9%* (+24.8% art.turf)	15'	N
House 3	31.5%	58.33%	100%	37.3%	27'	Y
House 4	25%	54.7%	85%	45.3%	24'6"	N / corner
House 5	24.6%	48.5%	57.35%	51.5%	25'	N / corner
House 6	31.5%	64.1%	N/A	35.9%	25'4"	N
House 7	35.2%	65.5%	91%	34.5%	25'	N

Produced by Ana Carolina Rocha - MMPA

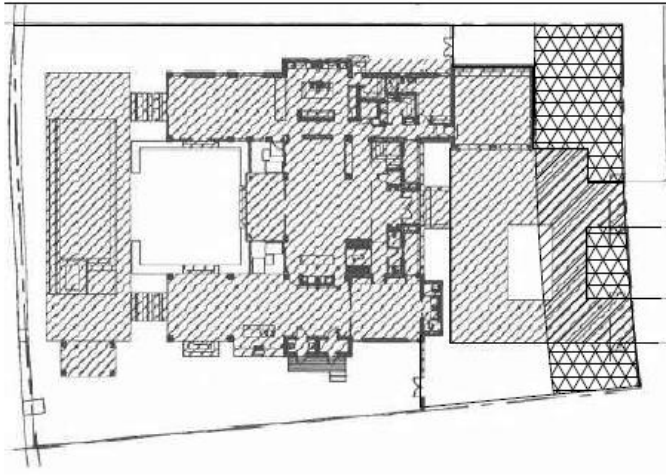
*Just landscaping. Artificial turf doesn't count as landscaping as it is not fully pervious. This project as approved had 42% pervious open space.

Table 2 - Front Yard Landscape

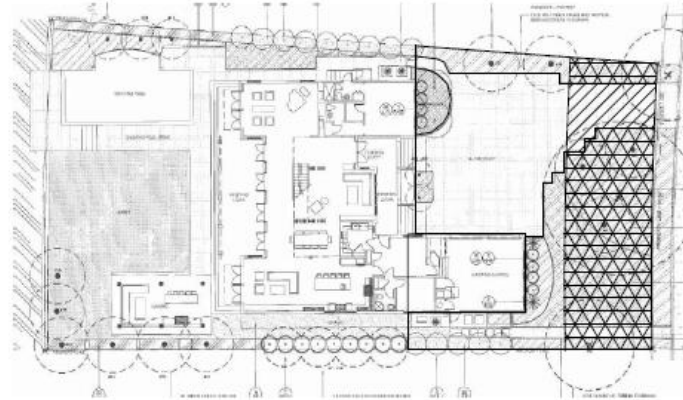
	House 1	House 2	House 3	House 4*	House 5*	House 6	House 7
Pervious (sqft)	1561.6	782	1711.2	1172.7	2546.6	960.3	914.5
Impervious (sqft)	1065.1	1343	367.3	945	1762	1054.5	1149.6
Total (sqft)	2626.7	2125	2078.5	2117.7	4308.6	2014.8	2064
Pervious Percentage	59.4%	36.8%	82.3%	55.3%	59.1%	47.6%	44.3%

Produced by Ana Carolina Rocha - MMPA

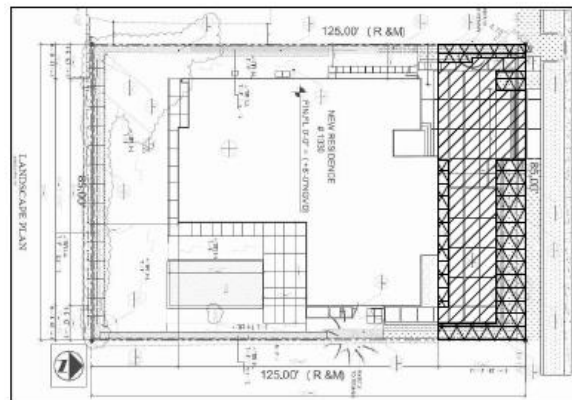
*Corner Lots: Only the “front” Street was considered.



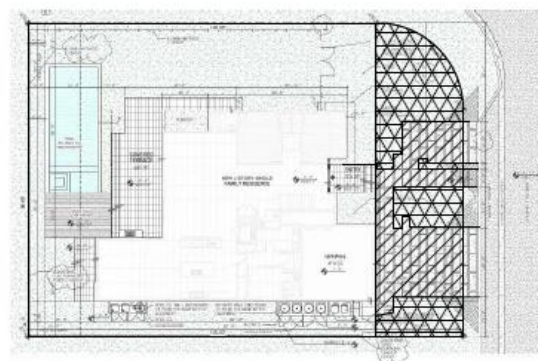
House 1



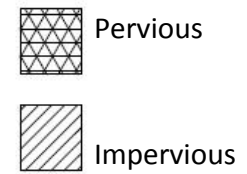
House 3

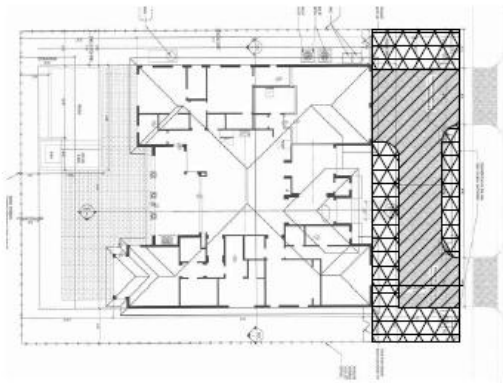


House 2

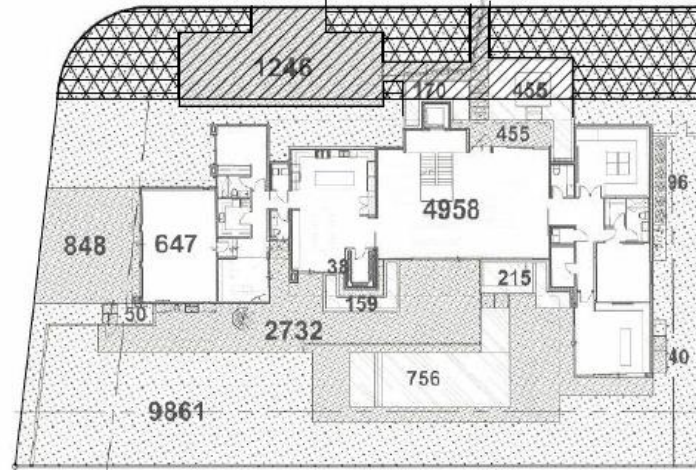


House 4

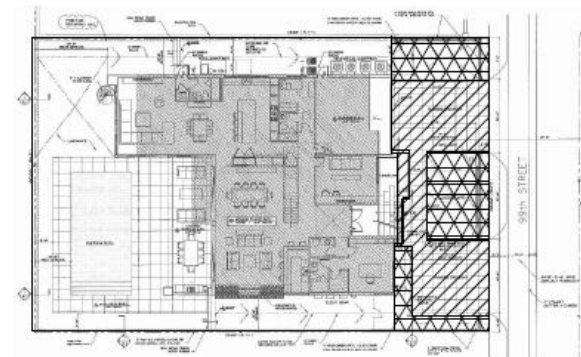




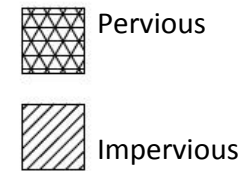
House 6



House 5



House 7



The existing Zoning Code already regulates the minimum setbacks, height of the building and the minimum required landscaping (Trees/ shrubs). The percentage of building coverage for the interior lots are consistently between 30 – 35%, the corner lots require a bigger setback on one of the sides, hence the building coverage is smaller, ranging around 25% of the total lot area. The waterfront lots also require a bigger setback in the rear of the lots and the lots are bigger than the interior lots, for that reason houses on the water front will have a smaller foot print.

The percentage for impervious areas includes the building coverage, the walkways, the driveway, the pool and the patio. The average impervious area of the houses analyzed is 61%. As a comparison, in Bal Harbor Village, there is a regulation where the maximum building coverage is 40% and the maximum impervious area is 50% of the total lot, which allows for a better water absorption and appearance, lots are slightly larger as well. In Bay Harbor Islands the amount of pervious area is regulated only by the required landscaping areas in setbacks and the pool setback. Some houses, such as House 2, applied artificial turf after the construction was approved since this material has an easier maintenance than real turf. The Town Code is silent on the use of artificial turf and MMPA considered the artificial turf as an impervious material such as a deck and allowed the use of it. The artificial turf can be a very sustainable material as it doesn't require any energy or water for its maintenance, although it doesn't allow as much water absorption into the soil as the natural grass. *"Synthetic grass is installed over soil, which becomes compacted and unhealthy from a lack of sunlight and air. When rain or water runs through the grass and hits the soil, some of it is absorbed, but far more of it simply runs off the soil -- under the grass -- and out to the streets, storm drains, gullies and eventually, into the ocean. Rain runs off of natural grass too, although more of it is absorbed because the soil is healthy. The difference is that the beneficial microbes and thick root system of natural grass filter water as it passes through, removing harmful bacteria and other contaminants before it makes its way to the ocean. This does not happen when rain passes through synthetic grass."* (<http://homequides.sfgate.com/synthetic-grass-rain-absorption-98449.htm>).

The use of artificial grass is only one topic of a much larger discussion, the one about Sea Level Rise and how to build a Resilient Town. The cities around the Town of Bay Harbor Islands have regulations in place to avoid the overcharge of the public drainage system with the water runoff from private properties. Golden Beach and Bal Harbour Village require all renovations and new construction to have swales that can absorb up to a 10-year/ 24 hour storm and French drains between the driveways and the public right of way, furthermore they are also asking for the new single-family homes to install retention walls around its perimeter to avoid any type of water runoff from one property to the other. This can be a very good solution for the continuous rise of the base flood elevation by FEMA. The Town does not regularly review single family homes for drainage despite Code requirements.

2nd Floor Massing

The percentage of the second-floor area was measured by dividing the area of the second floor by the area of the first floor, counting the garage and any covered entrance to the house. Most of the analyzed houses do not reach 100%, except House 3 that was a renovation of a pre-existing house with the addition of a room on top of the pre-existing garage. Currently, there is no regulation addressing the house geometry and relation between the negative and positive space in the structure. Some cities have regulations that require the second floor to have a maximum percentage of area in relation to the first. Golden Beach has the following regulation: *“Section 66.69 c. All residences designed as two-story structures shall be required to increase the side Setbacks along two-thirds of the length of the second story by one foot for each one foot (1:1) of building height above the first 18 feet.”* Bal Harbor Village has similar provision. This regulation allows designers to create within a volume where they have the freedom to play with the positive and negative spaces and at the same time the developers pressure of always build to the maximum allowable is refrained. Some cities have percentages for the 2nd Floor, usually around 70%.

Part 2 – Recommendations

1- Second Floor Massing

MMPA recommends Flex- setbacks for second floors be instituted. The percentage criteria work too but all massing could be on one side – so a long flat façade could still exist. This section shows examples of both options with volumetric studies produced based on a typical interior plot of land with eighty-five feet wide and one hundred and five feet deep. The houses placement and height comply with current regulation.

1.1 Percentage Study

The percentage regulation will require that the second-floor massing be a certain percentage of the first-floor area. Another option would be to allow the second-floor massing to have a certain percentage of the maximum allowable building area. Each of the illustrations (Figures 27, 28, and 29) shows three volumes, the first one is the current allowable volume, the second shows the second floor complying with the designated percentage by having the second floor volume on one side of the house – which would create a tall flat wall in one of the sides – and the third example shows the volume complying with the percentage requirement by distributing the second floor volume in a different way. The designer would have the freedom to place the designated volume as desired.

If the objective is to avoid flat walls in the street façade or the side façade, the regulation could require that a certain percentage of the front and side walls on the second floor be open (windows, terraces, volumetric setbacks etc)

1.1.A - 60%

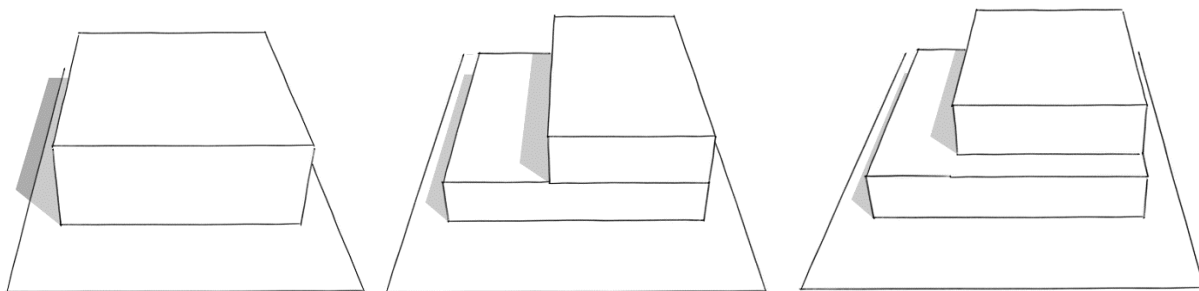


Figure 27- Produced by ACR

1.1.B - 70%

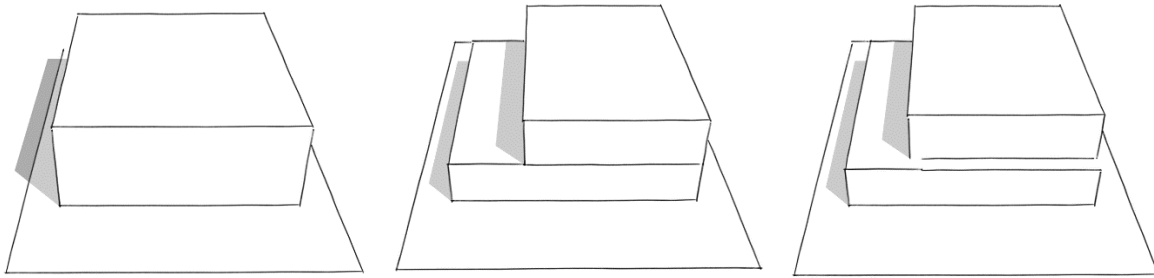


Figure 28- Produced by ACR

1.1.C - 80%

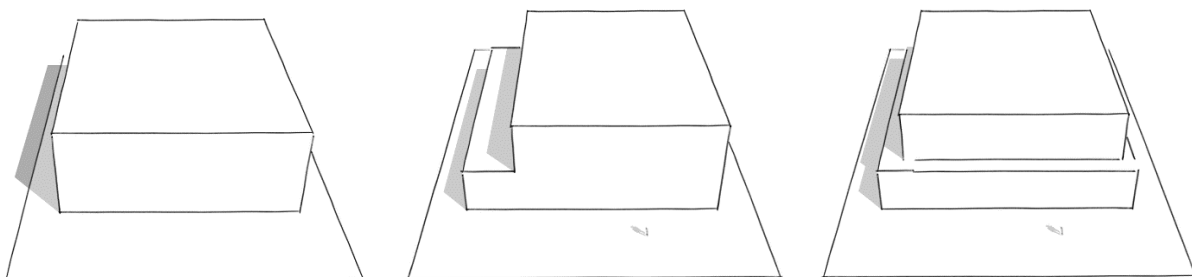


Figure 29- Produced by ACR

1.2 Flex Setback Study

The Flex Setback option regulates the second-floor massing but allows the designer to play with the height and the extra setback. MMPA is familiar with two types of flex setbacks: the first one requires that after 18' height the building steps back in the scale to 1:1, the second type requires that after 12' height the building steps back in the order of 1:3. Some communities feel after one story a second story should step back – one story can be twelve to eighteen feet. The step back ratio can vary.

1.2.A – 33% and 1:1 after 18' height

Below is an illustration (figure 30) of a two-story single-family home that complies with having one third of the side facades stepping back one foot every foot higher than eighteen feet height. This option, as it can be seen in the sections below, allows the architect to play with the height to achieve the desired result. In the first section the building goes twenty-five feet height and for that reason has to step back seven feet after eighteen feet tall. In the second section the building does not go to the maximum allowable height, hence must step back less.

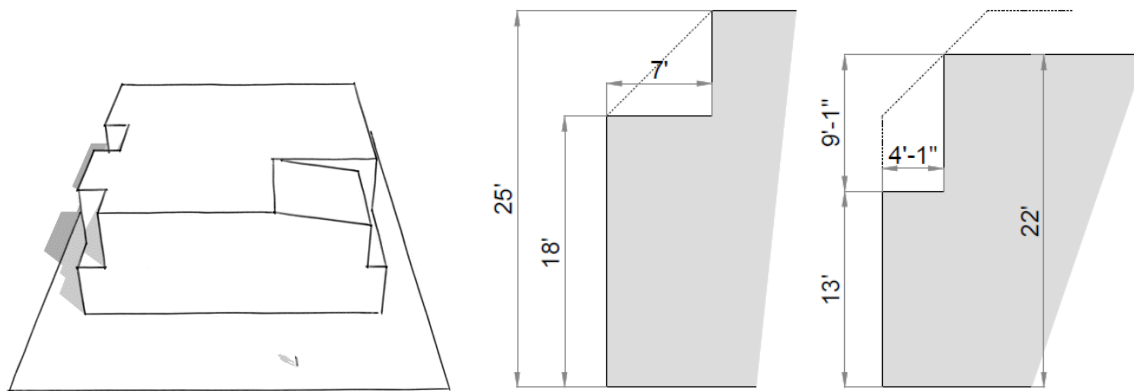


Figure 30- Produced by ACR

1.2.B – 40% and 1:1 after 18' height

The same rule can be applied for a higher percentage requirement to step back. As it can be seen on Figure 31, forty percent of the side facades complies with the rule that after eighteen feet height the building steps back one foot for every foot above eighteen.

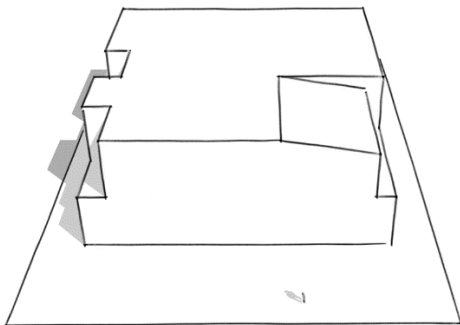


Figure 31- Produced by ACR

1.2.C – 33% and 1:3 after 12' height

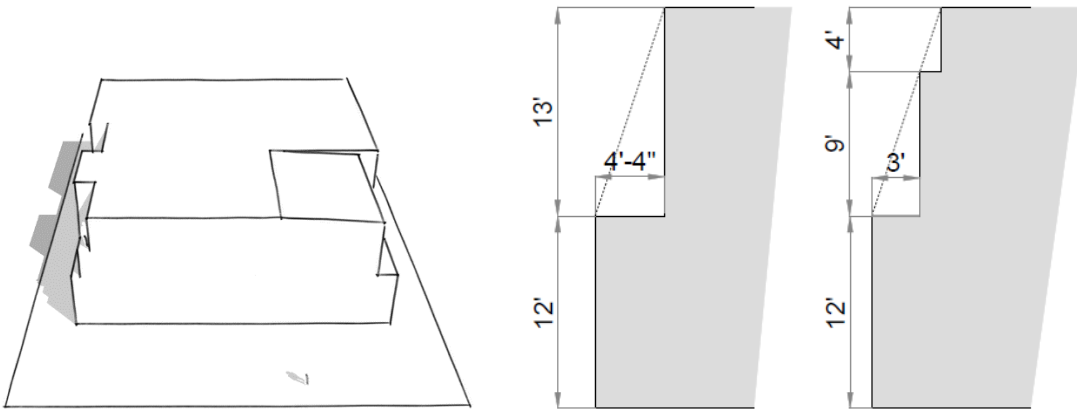


Figure 32- Produced by ACR

2- Façade Detailing

MMPA recommends that text be added to require detailing to break up the façades (bands/ reveals/ eyebrows/ material changes/ etc)

Ideas/ Examples:



3- Landscape Requirements

MMPA recommends the Town adopts a minimum lot pervious area ranging between 30-35% and a minimum front yard Landscaping of 40%. Since the Town requires at least two parking spaces per DU but no garage is required, this forces the front yard to have large paved areas. A recent reviewed house had four parking spaces in the front yard. Since the roadway swales are paved, extra parking is available outside the private property (usually two spaces per lot). MMPA feels that the existing landscape code provisions are adequate (5 trees per lot / 2 minimum in front yard plus shrubs). It is a matter of placement.

4- Drainage

MMPA recommends the Town to institute drainage reviews for single family homes like is done for Multifamily Complexes. This helps create open areas too. As it can be seen in figure 33 the current requirements for pervious area are derived from the required landscaped setbacks by the lot lines and the 2' between the driveway and the house. Even though, the current setbacks leave a considerable amount of open space they do not regulate if a soil must drain the rain water or not. Pervious pavers could be partially considered as pervious areas.

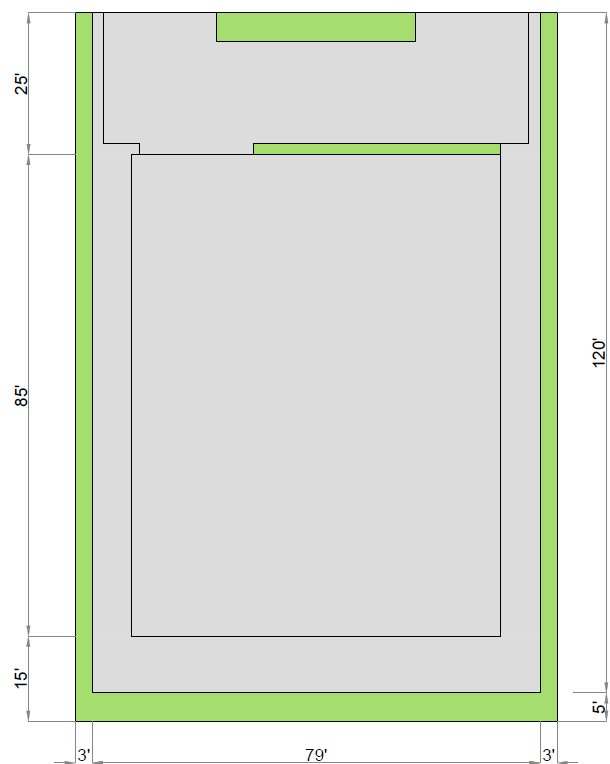


Figure 33- Produced by ACR

Comments on Zoning Letter for Discussion from KODA (Board Member, Wesley Kean)

LIMITING THE VOLUME OF THE SECOND FLOOR

- The zoning code should be Concise, objective and provide creative design solutions to enhance the public experience and maintain the overall scale of the community.
- Things you may be able to get a waiver from: lot coverage up to a certain amount, second floor volume requirements.
- Things you may NOT get a waiver from: setbacks, height restrictions, mech, equipment screening.

LOT COVERAGE + BUILDING COVERAGE

- These are Different concepts
- Waivers could be granted to exceed Lot coverage, up to a maximum of 55%, for examples, in specific scenarios where there is a green roof proposed, pervious paver driveway system, or similar ecological solution.

SETBACKS

- The architect believes the current setbacks are ok but proposes an option that would reduce the ground level setbacks and increases the second-floor setbacks. This would allow for a more creative solution as

SEA-LEVEL RISE

- Must be addressed.
- MMPA believes that this is a pressing issue and it should be addressed as soon as possible. One of the ways to do so is to reinforce the regulation that all water that falls into the private property is responsibility of the owner. Meaning that driveways must have a French drain at the plot line to avoid water runoff into the public right of way.
Furthermore, the updated Florida Building code is requiring all new constructions to be 1' above BFE NAVD, which should address the flooding of private property. If the city wishes to start prevention programs we suggest a workshop with specialized engineers to create a priority list of actions to control the sea-level rise.

AESTHETICS

- Please see attached document.

TOWN OF BAY HARBOR ISLANDS

ANALYSIS OF SINGLE-FAMILY RESIDENTIAL LAND DEVELOPMENT REGULATIONS

MUNICIPALITY	DISTRICT	LOT SIZE	LOT WIDTH	BLDG HEIGHT	FRONT SETBACK	SIDE SETBACK	REAR SETBACK	MINIMUM FLOOR AREA	MAXIMUM FLOOR AREA	LOT COVERAGE MAXIMUM	LANDSCAPING "GREEN" %
Bal Harbour Village	R-1	15,350 - 28,500	95'-100'	35' / 2 stories	15'	10'-27'	40'	2,500	None	50% Total 40% Bldg	None
	R-2	10,340 - 21,400	80'-100'	30' / 2 stories	30'	10'-22'	15'-27'	1,800	None	50% Total 40% Bldg	None
Bay Harbor Islands	RD (waterfront)	13,000 - 14,000	75'-80'	25'-35' / 2.5 stories	25'	10'	25'-40'	2,000	None	None	None
	RD (interior)	10,000 - 11,250	80'-90'	25'-30' / 2.5 stories	25'	10'	15'	1,500	None	None	None
	RD (96 th St)	10,000	80'	25'-30' / 2.5 stories	40'	10'	10'	1,500	None	None	None
Miami Beach	RS-1	30,000 min	100' min	28'-31' / 2 stories	20'	10% lot width per side 25% lot width total	20'-50'	1,800	45% lot area	25%	50% front yard 70% rear yard
	RS-2	18,000 min	75' min	28'-31' / 2 stories	20'	10% lot width per side 25% lot width total	20'-50'	1,800	45% lot area	25%	50% front yard 70% rear yard
	RS-3	10,000 min	50'-60' min	24'-31' / 2 stories	20'	10% lot width per side 25% lot width total	20'-50'	1,800	45% lot area	25%	50% front yard 70% rear yard
	RS-4	6,000 min	50' min	24'-27' / 2 stories	20'	10% lot width per side 25% lot width total	20'-50'	1,800	45% lot area	25%	50% front yard 70% rear yard
North Miami	R-1	9,200 min	80' min	35'	25'	7.5' or 10%	25'	1,500	None	None	None
	R-2	6,000 min	60' min	35'	25'	7.5' or 10%	25'	1,000	None	None	None
North Miami Beach	RS-1	8,000 min	80' min	30' / 2 stories	25'	8'	25'	2,500	None	40%	35% total 25% of front yard
	RS-2	7,000 min	70' min	30' / 2 stories	25'	7.5'	15'-25'	1,400	None	40%	35% total 25% of front yard
	RS-3	6,000 min	60' min	30' / 2 stories	25'	7.5'	15'-25'	1,200	None	40%	30% total 25% of front yard
	RS-4	5,000 min	50' min	30' / 2 stories	25'	5'	15'-25'	1,100	None	40%	30% total 25% of front yard
	RS-5	1,200 min	30' min	15' / 1 story 24' / 2 stories if 2 combined lots	3'	3'-7.5'	3'	500 / 1 lot through 2,000 / 4 lots	None	None	None
Surfside	H30A	8,000 min	50' min	30'	20'-30'	5' / 10%	20'	None	None	40%	35%
	H30B	5,600 min	50' min	30'	20'-30'	5' / 10%	20'	None	None	40%	35%
	H30C	No minimum	50' min	30'	20'	5'	10'	None	None	None	20%
	H40	No minimum	50' min	40'	20'	5'-7'	10'	None	None	None	20%
	H120	No minimum	50' min	120'	40'	10' / 10%	30'	None	None	None	20%