3

Current Conditions

Is Venice a precious heritage site to be preserved at all costs, or is the ecosystem of the lagoon too fragile to be disrupted in the interest of preserving a gaudy tourist amusement park? (Venice, of course, has been both of those things for at least the last three centuries.) The same tension guided internal discussions about adapting, or not, to contemporary infrastructural needs or desires… Myth can blind us to reality, but it can also move us to shape reality – and it can do both at the same time.

Excerpted from Eglin, John foreword to Venice in Environmental Peril? Myth and Reality, Dominic Standish. Lanham, Maryland: University Press of America, 2015

Collins Waterfront Study Area | Catwalk typology | 1038 11th street Miaml Beach

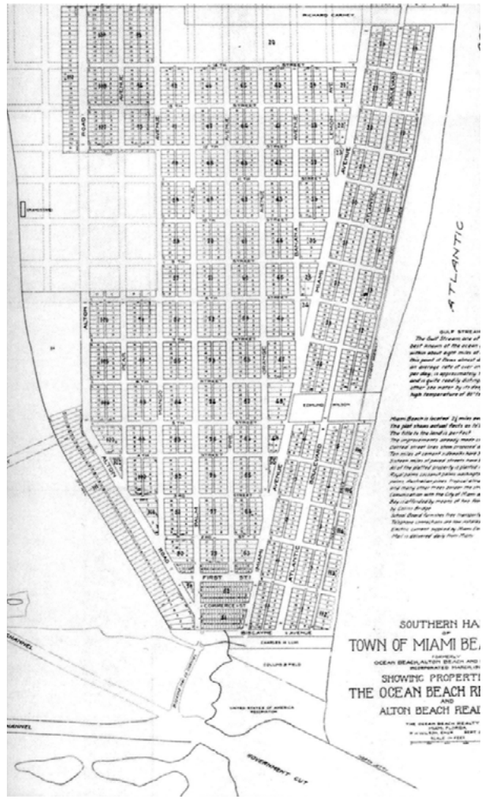
3.1 // MIAMI BEACH URBAN FRAMEWORK

A primary characteristic of Miami Beach is its dynamism, its easy susceptibility to change, its constant evolution in urban terms. As it has transitioned organically from its original identity as a leisure suburb to the layered city it is today, Miami Beach has adapted new building types and has redefined its urban spaces. This constant evolution is captured in the historic district designations that embed the layering of multiple iterations of the city, rather than any singular historical moment, as significant. This eclectic approach is also captured in urban patterns that should be considered in conceiving resiliency policy. The study areas comprises not only “the largest concentration of 1920s and 1930s era resort architecture in the United States,” but just as importantly human-scaled, urbanistically complex and coherent neighborhoods. The urban qualities of these neighborhoods, described below, should be preserved just as vigorously as the architecture.

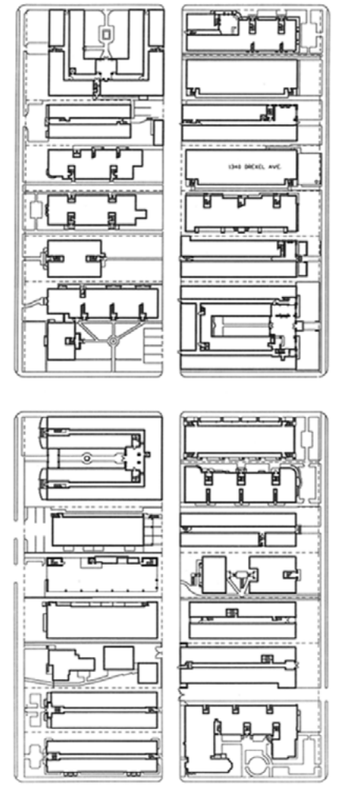
Background
Like many American new towns of the Progressive era, Miami Beach was colonized as a speculative venture, and like many Florida cities it was invested with romantic qualities and a special emphasis on health, relaxation, and leisure. Begun in 1912, the city was conceived as a leisure suburb extension to Greater Miami as well as a playground for wealthy northern industrialists. In order to build the city, its nearly aquatic terrain had to be cleared and elevated. Dredges and other specialized machinery were used in the first large-scale creation of fresh land in Florida. The mangrove jungles were shredded and filled in an industrial fashion, creating a man-made tabula rasa of bleached sand. Tropical flora and fauna extrinsic to South Florida were introduced onto the fresh land in a horticultural metamorphosis. The ‘idealist’ transformation of the native environment into a romantic leisure suburb and city of grand hotels made possible the ideation of what developer Carl Fisher described as “America’s Winter Playground.”

Miami Beach was soon influenced by the tremendous 20th-century expansion of wealth in America and advancements in transportation that made it a virtual resort satellite of industrial urban centers like New York City. By the 1930s the romance of a tropical vacation had been appropriated by the rising middle class. Between 1920 and 1942, hundreds of modest hotels and apartment buildings were built on the homesites of South Beach, an area of approximately one square mile at the southern tip of the peninsula of Miami Beach. Highly stylized and built in an intensely compact fashion, these ‘ordinary’ buildings produced coherent urban resort neighborhoods that replaced the once glamorous hotels as the symbol and icon of the city.

Many studies have highlighted the role of style in establishing a sense of place in South Beach, particularly the local streams of Art Deco, Modern, and Streamlining used extensively after 1935. Style was certainly significant to Miami Beach’s hoteliers, as it was used as a wrapper to identify the public faces of residential buildings (conversely, the service alleys and the non-public facades remained informal and undecorated). Style was also used to create scenography and vistas as the backdrop to the almost theatrical experience of the city’s tourists. Tourists were made actors in the public realm, whether sitting on dining porches, moving through lobby and patio spaces, or promenading in the street. The recurrence of stylistic themes in the streetscapes of Miami Beach, whether modern, or the earlier use of vernacular wood traditions and the Mediterranean Revival, was alternating and unsystematic, reflective of the city’s piecemeal development. Most buildings incorporated style for visual effect, while in fact the building forms remained inherently tradition bound. Thus one must affirm that the extraordinary urban cohesion of South Beach’s districts resulted from forces that transcended stylistic variations. In particular, this cohesion was **a** product of the configuration of its urban spaces, as determined by building typology and a clearly defined street hierarchy. Within the parameters of a zoning code that aimed at creating a suburban environment, apartment-hotels performed as infill buildings, responding to their restrictive context by using strategies that evolved empirically. These



Map, “Southern Half of the Town of Miami Beach,” from Ocean Beach Realty Map, 1915. Courtesy HistoryMiami



Excerpt from Miami Beach Nolli Map, (c) Shulman + Associates

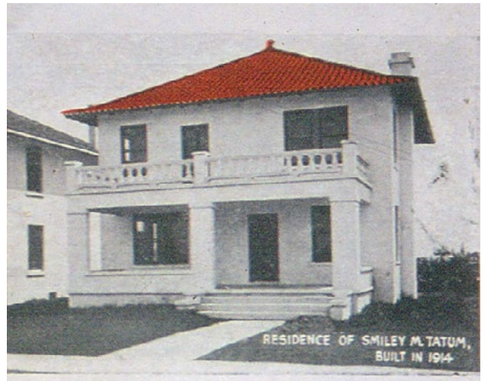
strategies comprised the articulation of building masses to form public spaces, and the relationship of buildings to spaces.

Miami Beach is an assemblage of distinct building types that define public and semi-public spaces in unique ways. Building placement is controlled by the reticular structure of the American grid, and modulated by the regularity of building forms—setbacks, height, width—which produced a unified streetscape of closely spaced buildings and tight urban spaces. The extremely tight proximity between buildings (typically 10 to 20 feet) makes well defined frontages along the avenues and streets of Miami beach, but also the development of significant spaces between each other. The regular rhythms and thematic harmonies of these masses and spaces contribute to a feeling of overall aesthetic cohesion, congruity, and accord.
This framework has allowed contingencies to develop naturally and chronologically. This landscape is inherently decentralized and flexible, allowing for multiplicities of meaning and form. The pattern of the street grid and the rules governing the relationship of buildings to the street are offset by the almost irrational, spontaneous, and organic secondary spaces which develop on corners, between buildings, and in courtyards. An informal network of semi-private spaces weaves through the district and around the buildings in a direction running from ocean to bay. The Miami Beach block is like a gridiron of passages permitting labyrinthine circulation. The proximity and horizontal continuity of facades integrates the whole.

Strategies of type usage reinforce the overall hierarchy of streets. Larger and more complex building types are found primarily on corner sites, while simpler bar-shaped types are more common on interior lots. Nevertheless, there is a random quality to the interrelationship of building types in South Beach. The combinations of type and the possibilities for complex urbanism are almost without limits. However, despite a lack of explicit coordination -- there were in fact few real controls in the first decades of its development – Flamingo Park and Collins Waterfront comprise some of the most typologically consistent districts in the United States.

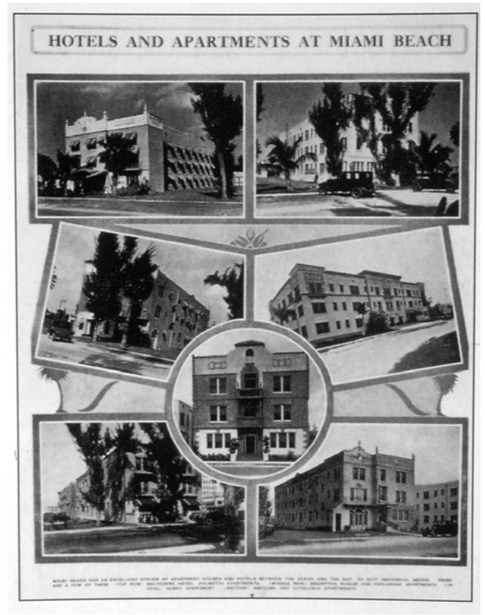
Urban Assemblage – a typological approach
As early as 1914, the enhanced landscape of Miami Beach was the suburban setting for many small homes. During the 1920s, the character of the southernmost section, South Beach, began to shift from houses to apartments, and a new culture of housing began to appear. Small apartment-hotel buildings were built among the scattered homes of the area. These early multi-unit dwellings, providing modest hotel amenities for middle class tourists in the informal lifestyle of an apartment, adapted to the site constraints of single house lots: they were generally simple linear structures bisected by a single corridor providing access to rooms, and occupied most of the lot. In spite of the higher density, these units maintain the city's prescriptive suburban front and side yards. As the Mediterranean Revival style arrived with the Great Florida Land Boom in the 1920s, the character of South Beach began to shift from houses to apartments, and a new culture of housing began to appear. Miami Beach assumed new urban forms and characteristic spaces, especially the courtyard patio. More complex building configurations developed, such as C-, L-, and O-shaped forms. Courtyard spaces supplemented, but did not replace, the importance of the avenue-facing front yard.

In the 1930s, modern building types emerged, with access to units provided through wall-up stairwells or exterior catwalks. Yet in terms of building form, most buildings adopted preexistent massing configurations like single-bars, U-, L-, C- and O-shaped courtyard buildings. Their thinner massing and reduced circulation spaces transformed those types by allowing more open space. The green zones between parallel rows of the older linear bars now expanded to form passage-like garden courts that



From Ocean Beach Realty Map, 1915. Courtesy HistoryMiami


559 Michigan Avenue. Photo by Walter Smalling, Jr., 1980. HABS



"Hotels and Apartments at Miami Beach," from brochure "The Lure of Miami Beach, Florida," 1928. Published by F.S. Benedict, official publication of the Miami Beach Chamber of Commerce. Courtesy HistoryMiami


Front yard of Miami Beach apartment building. Photo by Allan Shulman, 1998

bisected the traditional street structure of Miami Beach in a perpendicular fashion. The passageways formed an informal court toward which most units were oriented. This orientation improved the closeness and accessibility of each unit to open space. The quality of the passages emphasized their continuity with the street and their spatial qualities. In most locations the courts became virtual streets, continuous from the avenue to the alley.

They narrower building masses also allowed new types—such as J-shaped buildings, and double- or triple-bar buildings formed by the mirroring of single-bars, which maximized the potential to define the resulting passageways. Walk-up and catwalk types could thus be reorganized asymmetrically to face and activate one sideyard, providing a public entry frontage in the long direction. Modern building types most often generated primary and secondary sideyards, with the secondary sideyard devoted to services.

Tropical landscape was integrated carefully into the overall architectural expression. Planters were attached to the building, allowing the architecture to mold the landscape, or the landscape to serve as architectural ornament. Despite the emphasis on semi-private passageways and courtyards, the traditional front yard space and avenue-facing facade were strictly maintained and highly articulated with regard to the street. The front yard often included low walls or hedges that defined a small paved patio, providing screening and incremental privacy from the avenue.

Postwar continuation

The pattern of urban reinvention illustrated in the first 30 years of the city continued in patterns of boom and bust after World War II. Beginning in the late 1940s, modest motel-type apartment buildings using catwalk circulation systems evolved as an alternative to corridor and walk-up type apartment buildings. Unlike a true motel, these types included no parking, so they primarily emphasized the relationship with the garden. In effect, every unit opened to the sideyard garden or patio. Also, the recourse to pre-existing building forms – C, L, O, and J-shapes, reinforced a sense of continuity with previous building traditions. By the mid-1960s, architects developing buildings in Miami Beach had to contend with new parking requirements that were ill-suited to the small lots of the district. The resulting buildings, sometimes referred to as Dingbats, pushed building volumes up into the air over ground-floor parking lots; they nevertheless also maintained the intimate scale and syncopation of building masses along the streets, like previous building types. Like the motel-type catwalk building, these also assimilated the complex form-making strategies typical in the district, forming U's, C's, L's, and other shapes.

Postwar developments, including modest catwalk apartment buildings and dingbat-types, corresponded to the larger mid-century cultural trends (the ubiquity of the car and the related popularity of the motel-type, for instance), but also to the slowing and changing economy of the resort city. By the 1970s the district was in disrepair, and plans for its progressive demolition were well advanced. During this period, Miami Beach was functioning as a largely-low rent retirement city. The new, less glamorous use seems logical: the communal qualities of the buildings, especially the garden courts and passageways, were ideal for interdependent seniors; modest apartment sizes made agreeable retirement housing. Although this period saw little in the way of new development, it preserved the character of the districts intact. Moreover, it set the stage for historic preservation; even as early preservationists extolled the qualities of the districts' architecture and style, many admitted that the nascent movement was also about the preservation of its urbanism, and the way of life it embodied for its senior residents who admired its underlying design ideals. These years also illustrated the dynamic resilience of the districts in the face of demographic, economic and even environmental changes.
By the late 1970s, the unique architectural and urban significance of Miami Beach was brought to the

Sunrise Court Apartments, 720 Lenox Avenue, View showing entrance pylon and lighting pylons - Miami Beach Art Deco Historic District, Miami, Miami-Dade County, FL. Photo by Walter Smalling, Jr., 1980. HABS

701 Fourteenth Street - Miami Beach Art Deco Historic District, Miami, Miami-Dade County, FL. Photo by Walter Smalling, Jr., 1980. HABS

559 Michigan Avenue, unknown

Residents of Miami Beach, ca. 1978. Photo by Andy Sweet. Usage permission pending.

public's attention through advocacy efforts of its citizens. Led by preservationist Barbara Baer Capitman, this group, which became known as the Miami Design Preservation League, achieved the critical success of having the district placed on the National Register of Historic Places in 1979 – the National Register's first twentieth century district. The National Register Designation was soon followed by several local historic designations that covered Flamingo Park and eventually extended to broad areas of the city, covering most of its multi-family and commercial areas.

The district designations, and their widespread recognition by the public and scholars alike, have in the intervening decades attracted an enormous influx of new tourists and residents, reviving a declining economy and setting off a new wave of development. The correspondence between district preservation, identification of neighborhood identity and economic advancement is a meta-theme in the contemporary development of Miami Beach, rendering preservation more than just a cultural force.

In the past few decades, new waves of development have been focused on the rehabilitation and adaptive-use of historic properties, the development of empty lots and the replacement of non-contributing buildings within the city's multiple historic districts, which are carefully monitored by the City of Miami Beach Planning Department and the city's Historic Preservation Board. Most extant buildings are preserved, new additions are held to standards of appropriateness to the original architecture; heights are controlled and rooftop additions proscribed in certain neighborhoods. New construction, while not following historic building types, is carefully crafted to exhibit continuity with surrounding context. The effect has been to codify existing building fabric while allowing new, adaptive layers to complement the mix. In this way, the contemporary shape of the city has been shaped not only by past traditions, but also by innovative new layers. Thus a complementary narrative in contemporary Miami Beach is openness to innovation, creativity.

Miami Beach's distinct building types are the building blocks of the city and its urbanism. These bring together the logic of vernacular traditions, successive architectural traditions and complex urban morphologies that respect Miami Beach's unique landscape, climate and culture. It has been the recourse, both intentional and organic, to established models that has given the city its cohesion. In Miami Beach, the interfusion of building types is independent of any comprehensive plan, thus achieving great complexity and inventiveness in an informal manner. The continuity and elasticity of these traditions is the most important legacy of the city, and as the city confronts issues of resilience to sea level rise, it will be important that the dual values of continuity and innovation be honored.

Catwalk type apartment building, Miami Beach. Photo by Allan Shulman

701 Fourteenth Street, Entrance Detail - Miami Beach Art Deco Historic District, Miami, Miami-Dade County, FL. Photo by Walter Smalling, Jr., 1980. HABS

701 Fourteenth Street - Miami Beach Art Deco Historic District, Miami, Miami-Dade County, FL. Photo by Walter Smalling, Jr., 1980. HABS

Seventh Street and Lenox Avenue - Miami Beach Art Deco Historic District, Miami, Miami-Dade County, FL. Photo by Walter Smalling, Jr., 1980. HABS

3.2 // MIAMI BEACH HISTORIC PRESERVATION FRAMEWORK

Each historic property is unique. As such, there is no “one-size-fits-all” solution for adapting historic properties to sea level rise. There are, however, legal frameworks to support the maintenance of historic properties’ character. These laws often mandate historical review processes aimed at encouraging the protection of irreplaceable historic characteristics.

National

The National Historic Preservation Act (NHPA) of 1966 mandates a review process aimed at encouraging the protection of historic characteristics of historic properties. This review process is established in Section 106 of the law, which requires Federal agencies to account for the effects of their actions on historic properties. Any time a Federal agency carries out, funds, or approves an action (e.g., permitting, licensing, or other approval mechanism), the agency must go through the Section 106 historic preservation review process. The Advisory Council on Historic Preservation lists the following steps in Title 36 of the Code of Federal Regulations (CFR), Part 800 as the Section 106 review steps:

Initiate Section 106 Process – This step begins with the determination by a Federal agency of whether an action it is undertaking could impact historic properties. Historic properties can include properties on the National Register or can be properties that meet the criteria for the National Register. If an undertaking affects a property that falls into either of these categories, the appropriate State Historic Preservation Officer (SHPO) or Tribal Historic Preservation Officer (THPO) must be consulted by the Federal agency throughout the length of the process.

Assess Adverse Effects - An adverse effect is considered to exist if the proposed project may alter the characteristics that are integral to a property’s inclusion on the National Register in a manner that diminishes the integrity of the property. Adverse effects may include physical destruction or damage; alterations inconsistent with the Secretary of Interior’s Standards for the Treatment of Historic Properties; relocation of the property; change in the character of the property’s use or setting; introduction of incompatible visual, atmospheric, or audible elements; neglect and deterioration; or the transfer, lease, or sale of a historic property out of Federal control without adequate preservation restrictions.

The goal of the Section 106 review process is to encourage, but not mandate, preservation. If a project is proposed to adapt a historic property to the effects of sea level rise that involves any Federal engagement, then the Section 106 process will be initiated. During this process, the mandated consultations with the SHPO or THPO may help historic property owners identify ways to mitigate and minimize any adverse effects.

State of Florida

The State of Florida has its own historic resources Statute, Chapter 267, that mirrors the National Historic Preservation Act (NHPA), except that the Florida Statute requires review for State, as opposed to Federal, undertakings. The Statute mandates a similar review process to that outlined in Section 106 for any State agency project that may adversely impact either a resource listed on the National Register of Historic Places or a historic resource that may be eligible for listing on the Register that is on State lands, receives State funding, or requires a permit from a State agency (see § 267.061(2), Fla. Stat., (2014)). The State agency must also provide the Division of Historic Resources with a reasonable opportunity to comment on a proposed undertaking. Similar to the Section 106 process, if there is an adverse effect on the character, form, integrity, or other qualities which contribute to the historical, architectural, or archaeological value of a property, then other feasible actions must be considered, in addition to steps to avoid or mitigate the adverse effects (see § 267.061(2)(b), Fla. Stat., (2014)). If properties considered for adaptation to sea level rise are State-owned or if the project is even partially State-funded or requires a State-permit, then Chapter 267 will be triggered and the proposed actions will come under review by the Florida Division of Historic Resources.

As set forth Section 101b of the National Historic Preservation Act of 1966, a State Historic Preservation Officer (SHPO) is appointed to facilitate historic preservation in all US states and territories. The SHPO’s role comprises federal responsibilities, including: conducting a comprehensive survey of historic properties; maintaining an inventory of historic properties; administering state programs of Federal assistance; identifying and nominating eligible properties to the National Historic Register; advising and assisting Federal, State and local governments in matters of historic preservation; preparing and implementing a statewide historic preservation plan; providing public information, education, training and technical assistance; working with local governments in the development of local historic preservation programs and helping them become “certified local governments”; and provide consultation for Federal undertakings under the Section 106 provision of the National Historic Preservation Act. In addition the SHPO’s role comprises historic preservation efforts within state government, including: coordinating with tribal governments on historic preservation matters; maintaining and managing historic house museums and historic sites; coordinating state heritage tourism efforts; holding and enforcing historic preservation easements; managing State Rehabilitation Tax Credit programs; maintaining state granting programs; supporting Main Street communities and revitalization efforts; and providing consultation for State undertakings, similar to the Section 106 provision of the National Historic Preservation Act.

Miami Beach

In addition to Section 106 and Chapter 267, local preservation ordinances are also part of the legal framework that governs adaptation actions made to historic properties. Under the National Park Service (NPS) and Florida Division of Historic Resources Certified Local Government Program, Miami Beach is a Certified Local Government (CLG). All CLG’s are required to have a preservation ordinance to obtain Certified Local Governments status. As per Federal regulations, communities that participate in the Certified Local Government program are automatically prioritized for funding allocations annually from the Division. All adaptation project managers are encouraged to consult with the local planning board and/or building department and historic preservation officer to determine the extent and applicability of local ordinances to the project(s). As a CLG, Miami Beach is responsible for managing historic districts, and acting responsibly according to federal and state laws.

Article X of the Miami Beach Code of Ordinances governs historic preservation practice in Miami Beach. Division 2, Sec. 118-531, of Article X establishes and governs the procedures for the Historic Preservation Board, which reviews “improvements upon public rights-of-way and easements located within a historic district and materially affecting any public right-of-way, public easement, building, structure, improvement, landscape feature, public interior or site individually designated”.[x] In order to proceed, an applicant must receive a Certificate of Appropriateness (COA) from the City’s Historic Preservation Board. As a standard in evaluating the compatibility of any physical alteration or improvement, the ordinance cites the Secretary of Interior’s Standards for Rehabilitation.

The City of Miami Beach Planning Department includes an Urban Design & Historic Preservation Section, which “examines all site and building plans to confirm that physical changes proposed to an existing site or building are consistent with the surrounding aesthetic character of the community.”

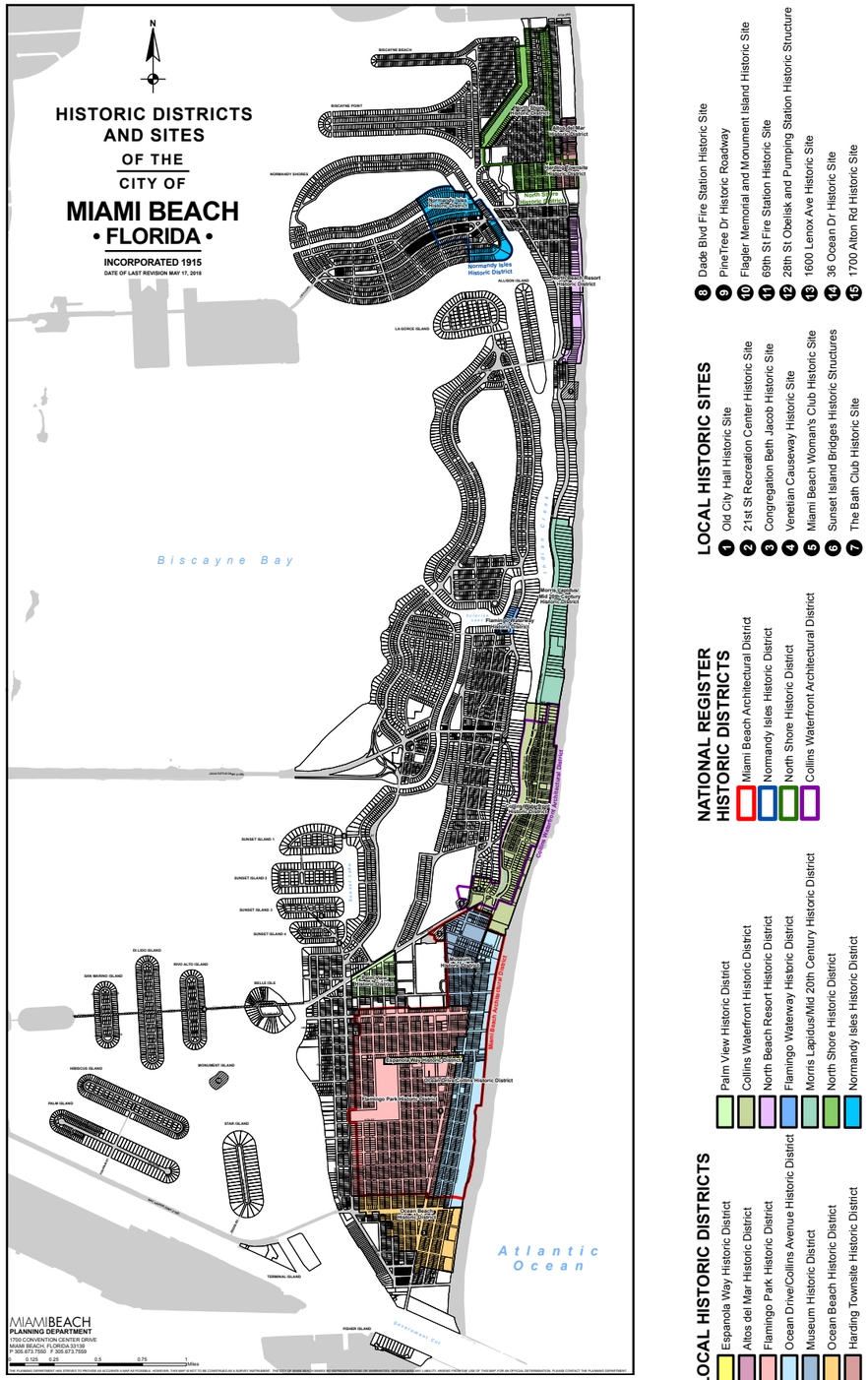
This Section also provides technical administrative support to the Design Review Board and the Historic Preservation Board. The Historic Preservation Section prepares reports on historically significant buildings and sites, and makes recommendations to the Historic Preservation Board on requests for Certificates of Appropriateness for demolition, rehabilitation, and Historic Designation."[FN]

The City maintains a historic properties database. The City of Miami Beach counts 14 locally designated historic districts and 4 National Register districts, in addition to a number of individually designated buildings and sites. About 30% of all buildings and 25% of all land area are under historic preservation regulation in Miami Beach. In fact the impact even greater, because the density of historic areas greater .

Single family homes that are located in a historic district, or individually designated, are eligible for an ad valorum tax exemption (regulated by Miami-Dade County). This is a local historic preservation tax incentive that can be combined with Historic Preservation Tax Credits (if eligible). All properties must be listed in the National Register of Historic Places, or a locally designated historic structure (designated by the County's historic preservation board or by a local municipality's preservation board) and must be about to undergo restoration and/or rehabilitation.[FN]

Article XI of the Miami Beach Code of Ordinances governs Neighborhood Conservation Districts (NCD). NCD's are "a protective land use tool that provides criteria and a mechanism to be implemented when desired for the maintenance of neighborhood characteristics. It is an umbrella land use designation overlay that will allow for the tailoring of a master plan and/or design guidelines for any specifically defined area." This could serve as a potential alternative preservation and resilience tool in the event that a historic district does not qualify for the National Register. The four major intents of the NCD tool that support their use for preservation and offer potential adaptation opportunities for resilience are:

1. A neighborhood conservation district (NCD) is a protective land use tool that provides criteria and a mechanism to be implemented when desired for the maintenance of neighborhood characteristics. It is an umbrella land use designation overlay that will allow for the tailoring of a master plan and/or design guidelines for any specifically defined area that meets the criteria listed in Section 118-704, Qualification.
2. The master plan and/or design guidelines can, among other things, include additional overlay zoning, site, architectural and landscape guidelines, conservation and preservation strategies, streamlining of development review processes, community development strategies, and incentive programs.
3. It is further intended that such districts and the regulations adopted for them shall be consistent with, and promote the policies set out in, the Miami Beach Comprehensive Plan and other officially adopted plans and regulations in accordance therewith.



Unified Sea Level Rise Projection, Southeast Florida Regional Climate Change Compact, 2015 annotated

3.3 // MIAMI BEACH RESILIENCE FRAMEWORK

The City of Miami Beach, perhaps more than any other city in the Southeastern US, has engaged planning and active initiatives to improve resilience. The city has joined global and regional networks and action groups; it has commissioned, and been the subject of, numerous reports and proposals; it has established committees; it has hired a Resiliency Coordinator; it has developed new means of sharing/ communicating information – in particular the Rising Above website; and more concretely, it has initiated its own strategic and master planning, passed new ordinances, and begun adapting infrastructure like roads and drainage systems.

Global and Regional Networks

Southeast Florida Regional Climate Change Compact (2010-)
In a desire to address resiliency issues regionally, in 2010 the South Florida Tri-County Region (Monroe, Miami Dade, Broward and Palm Beach) collaborated to form the Southeast Florida Regional Climate Change Compact ("the Compact"). This bipartisan collective allows for a coordinated exploration of funding and policy change on both the national and local level. The current study is based upon the Unified Sea Level Rise Projection numbers generated by the Compact in 2015 . To date, the Compact has not explicitly addressed Miami Beach's historic resources in relation to resiliency.

Greater Miami &the Beaches/100 Resilient Cities (2016-)
Comprising the City of Miami, the City of Miami Beach, and Miami-Dade County, the hybrid Greater Miami & the Beaches (GM&B) was similarly borne from a desire to address climate change threats collectively. In 2016, GM&B became part of the Rockefeller Foundation's global resilience-building network, 100 Resilient Cities (100RC) (2016-2019). 100RC focused on global urban resilience strategies. Developed by Arup, the City Resilience Framework (CRF) (2015) that underpinned the 100RC describes the essential systems of a city using four indicators: Health & Wellbeing; Economy & Society; Infrastructure & Environment; and Leadership & Strategy. A major component of 100RC was the mandate for the creation of Chief Resilience Officers (CROs), a position intended to spur change in city government operations. In Miami Beach, Susanne M. Torriente was named the CRO in 2016. As a result of the activities undertaken during RC100, GM&B published its comprehensive Resilient305 strategy in 2019 (see below).

Strategic Plans, Master Plans, Reports and Proposals

Resilient305 (2019-)
Resilient305 focuses on governance and how existing resiliency efforts will be implemented across metro Miami. The plan addresses key issues of urbanization, globalization and climate change with the goal of maintaining the economic vibrancy of the region. Conceptually, it also takes a broad look at challenges like the opioid epidemic and youth violence. The plan calls out 59 different actions across its key issues. Implementation will be led by a team called PIVOT (Progress, Innovation, and Vision for Our Tomorrow) comprising members from Miami-Dade County, the City of Miami, the City of Miami Beach and The Miami Foundation, as well as other local, county and national organizations like the Army Corps of Engineers, the Miami-Dade County Public School System, universities, nonprofit organizations and other public partners.

Rising Above (2018)
The City reinvented its 2005 Strategic Plan: Through the Lens of Resilience, calling the new plan Miami Beach Rising Above. Published in 2018 along with an eponymous website, Rising Above is a clearinghouse for information about the City's resiliency initiatives through the filters of Climate Science, Climate Adaptation and Climate Mitigation. The site is kept continually updated, making it a valuable resource.

Urban Land Institute Stormwater Management and Climate Adaptation Review (2018)
ULI Advisory Services was invited as part of 100 Resilient Cities to assess the City's current funded $600 million stormwater management strategy. ULI hosted a workshop, led by ULI members from both the local ULI Southeast Florida/Caribbean District Council and the national Urban Resilience program, culminating in a report that was complimentary of the City's proactive, process-oriented program. At the ULI's suggestion, the City hired Jacobs Engineering as a consultant in 2018 to reconfigure the plan "with an eye toward more nature-based infrastructure."[FN]

Miami Beach Stormwater Management Master Plan (2011, updated 2017)
Funded by Greater Miami & the Beaches as part of the Resilient305 strategy, the City of Miami Beach's million stormwater management master plan by CDMSmith is being implemented. The City has started to raise roads and retrofit existing, or install new pumps and treatment systems to address more frequent flooding and subsequent water quality issues. It is upgrading its stormwater infrastructure to improve drainage with the use of tidal control valves and numerous pump stations. The City has also created a stormwater drainage system, separate from its sanitary sewer system, that is designed to minimize the effects of flooding by draining water during high tide events as well as rainfall. In addition to elevating roads and installing pumps, the city also raised the standard seawall height to 5.7 feet NAVD with an interim condition of 4.0 feet NAVD in consideration of existing structures .

Preliminary Resilient Assessment (PRA) (2017).
This assessment by Greater Miami & the Beaches (GM&B) reached out to businesses, residents and community organizations to outline resilience priorities.

Regional Climate Action Plan (RCAP) (2011/2014) & Miami Beach Climate Action Plan (CAP)
The RCAP was developed by the Compact in 2011 as a direct outcome of the baseline greenhouse gas emissions inventory with the intention of supporting the climate legislation championed at the time by elected officials. The goal of the RCAP is to reduce citywide emissions while adapting to the effects of climate change. It was revised in 2014 based on updated numbers from NOAA, USACE and IPCC. In 2015 sea level rise projection data was released. The City of Miami Beach is developing its own Climate Action Plan (CAP) based on the organization of the RCAP.

Property Resiliency Assessment and Structural Resiliency Assessment (both 2018)
Commissioned by the City of Miami Beach, these twin studies by Miller Legg Engineers and Youssef Hachem Consulting Engineers preceded the Resiliency Guidelines study. They gathered elevational data in the study areas of Flamingo Park and Collins Waterfront and extrapolated that data into an assessment of structural resiliency of the surveyed properties.

Resolutions, Ordinances and Policy Changes

The City of Miami Beach has translated resiliency thinking and planning into resolutions, ordinances and policy changes in a number of critical areas. These areas include its Comprehensive Plan and Land Use Ordinances.

Comprehensive Plan changes

AAA: The Miami Beach Comprehensive Plan designates the entire City as an Adaptation Action Area (AAA) containing one or more areas that experience coastal flooding due to extreme high tides and storm surge, and that are vulnerable to the related impacts of rising sea levels.

Future Land Use Element Policy 3.6 requires that the City " Maximize unpaved landscape to allow for more stormwater infiltration. Encourage planting of vegetation that is highly water absorbent, can withstand the marine environment, and the impacts of tropical storm winds. Encourage development measures that include innovative climate adaption and mitigation designs with creative co- benefits where possible.

Conservation/Coastal Zone Management Element Policy 2. 12 provides that "Salt tolerant landscaping and highly water-absorbent, native or Florida friendly plants shall continue to be given preference over other planting materials in the plant materials list used in the administration of the landscape section of the Land Development Regulations and the design review process; and

Conservation/ Coastal Zone Management Element Objective 13 provides policies to "Increase the City' s resiliency to the impacts of climate change and rising sea levels by developing and implementing adaptation strategies and measures in order to protect human life, natural systems and resources and adapt public infrastructure, services, and public and private property."

Ordinances:

Ordinance No. 2017-4123 - SEA LEVEL RISE AND RESILIENCY REVIEW CRITERIA instructs the City's land use boards to incorporate new resilience-focused criteria. As the City is facing an increase in flooding due to sea level rise, it is important that Land Use Boards incorporate criteria to address and plan for the effects of sea level rise and climate change. The ordinance amendment establishes Sea Level Rise and Resiliency Review Criteria within Chapter 133, entitled "Sustainability and Resiliency," of the Land Development Regulations. This criteria will facilitate the climate adaptation and mitigation discussion between the applicant and staff during the review process, and subsequently at land use board review.

Ordinance No. 2016-3993 - SUSTAINABILITY AND RESILIENCY/GREEN BUILDING provides sustainability requirements for new construction over a certain square footage. High performance sustainable building and development is a means of balancing economic development with the preservation of quality of life. This ordinance requires all new construction over 7,000 square feet or ground floor additions to existing buildings over 10,000 square feet to be LEED Gold Certified or Future Living Institute Living Building Challenge or Petals Certified. In order to achieve green building standards, the proposed ordinance requires the payment of a Sustainability Fee for eligible buildings prior to obtaining a Temporary Certificate of Occupancy TCO), Certificate of Occupancy (CO), or Certificate of Completion (CC). This fee is set at five percent (5%) of the construction valuation. The proposed fee is based on research that indicates that this is the average cost of achieving LEED Gold Certification. The proposed ordinance then provides for refunds of the fee based upon the level of green building certification achieved.

Ordinance No. 2016-4009 – FREEBOARD amends definitions of base flood elevation, Crown of Road and Freeboard. The ordinance amended Chapter 54," Floods", by establishing a minimum and maximum freeboard above base flood elevation for all properties. It requires the ground floor of new buildings to be located a minimum of 1 foot and up to 5 feet above the FEMA base flood elevation or have enough headroom to raise the floor in the future without affecting the maximum permissible height of the building.

Ordinance No. 2016-4027 – PERIL OF FLOOD ensures that local CAPs regulate flood risk mitigation. In 2015, the Florida Legislature adopted Senate Bill 1094, entitled "Peril of Flood," which requires the Coastal Management elements of local government Comprehensive Plans to include regulations related to the mitigation and reduction of flood risks in coastal areas. Additionally, in 2011 the Florida Legislature passed the Community Planning Act (CPA), which amended Section 163.3177, Florida Statutes, which allows local governments the option of planning for coastal hazards and the potential impacts of sea level rise within the Comprehensive Plan. This provided local governments with the option of designating Adaptation Action Areas (AAA). The designation is for areas that experience coastal flooding and that are vulnerable to the related impacts of rising sea levels, with the purpose of prioritizing funding for infrastructure and adaptation planning. In order to improve the city's ability to mitigate the impacts of sea level rise and comply with Senate Bill 1094, the proposed amendment would affect future land use, infrastructure, conservation/coastal zone management, and intergovernmental coordination.

Ordinance No. 2017-4102 – SUSTAINABLE ROOFING allows for the use of various sustainable roofing systems. The ordinance amendment allows for the use of sustainable roofing systems for roof replacement such as solar roofs, blue roofs, cool roofs, green roofs, and other roofing systems that will reduce the heat island effect, allow reuse or retention of stormwater or reduce greenhouse gases to be used in the City. Additionally, it expands the use of energy efficient roofing systems, such as standing seam metal, and prohibits the use of asphalt shingles which typically absorb heat and increase the urban heat island effect and surrounding temperatures.

Ordinance No. 2017-4121 – RM-1 & RM-2 DEVELOPMENT REGULATIONS permits non-air-conditioned understory space located below minimum flood elevation, plus freeboard.

Ordinance No. 2017-4124 COMMERCIAL HEIGHT STANDARDS allows commercial buildings up to 5 feet of additional height where using maximum freeboard and allowing a minimum 12 foot floor-to-floor height. This ordinance amendment would allow for buildings in commercial districts to be developed up to an additional five (5) feet of height, provided that the first floor has a minimum of 12 feet from the base flood elevation (BFE) plus maximum freeboard, to the top of the second floor slab. This would provide for the ability of the ground floor to be placed at a lower level, while providing sufficient ceiling high for the ground floor to be raised when roadways or sidewalks are raised.

Ordinance No. 2017-4138 ALTERNATIVE PARKING REQUIREMENTS reduces parking requirements with an eye toward reducing both traffic and emissions. The city desires to further reduce the use of private vehicles for commuting in order to reduce congestion and greenhouse gas emissions. The

Transportation Master Plan and Comprehensive Plan incorporate a 2035 mode share vision which seeks to reduce commuting through private vehicles to 42 percent and increase the share of other modes respectively. The ordinance helps reduce vehicle parking requirements, provided tangible forms of alternative transportation, including bicycle facilities, are provided.

Ordinance No. 2016-4010 – GRADE ELEVATIONS AND HEIGHT establishes For this reason, the Base Flood Elevation (BFE) was established at 8.0 ft. NGVD (6.44 ft. NAVD) throughout the City.

Ordinance No. 2017-4118 – NON-CONFORMING BUILDINGS SUSTAINABILITY requires that certain buildings undergoing a substantial renovation, in excess of 50% of the value of the structure, be subject to the Sustainability and Resiliency Requirements of Chapter 133 of the City Code, including requiring a minimum of LEED Gold Certification, or the payment of a fee of five percent 5%) of construction value.

Committees and Panels

- Flood Task Force
  In 2013, in recognition of rising waters, the Miami Beach City Commission created the Flood Task Force Ad-Hoc Committee.

- Blue Ribbon Panel on Flooding and Sea Level Rise.
  In 2014, then-Mayor Philip Levine and the City Commission created the Blue Ribbon Panel on Flooding and Sea Level Rise. One initiative of the panel was the development of proposed code modifications as part of a project undertaken with AECOM: Enhancing Resiliency: Sea Level Rise Adaptation Strategies in 2016.

- Resiliency Communications Committee
  The Resiliency Communications Committee was formed in 2017 to educate the public about the NFIP.

- Sustainability Committee
  The Sustainability Committee guides and educates the public related to the City's sustainable initiatives.

- City Commission committees include the Sustainability and Resilience Committee (renamed from the Flood Mitigation Committee in 2015)

Flooded courtyard in Miami Beach. By B137 - Own work, CC0, https://commons.wikimedia.org/w/index.php?curid=52231418

3.4 // MIAMI BEACH BUILDING TYPOLOGY

Flamingo Park & Collins Waterfront Districts

The two historic districts from which the City designated the study areas comprise different building types. Flamingo Park is largely low-scale, including many single family homes of the Cottage or Urban Villa type. Collins Waterfront comprises both residential and commercial buildings, and includes larger-scaled buildings.

CH COTTAGES & HOMES

UV URBAN VILLA

R RAMBLER

IC INTERIOR CORRIDOR

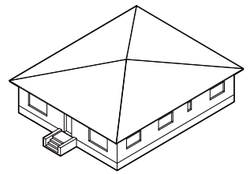
WU WALK-UP

C CATWALK

LR LOW-RISE HOTEL

HR HIGH-RISE HOTEL

D DINGBAT



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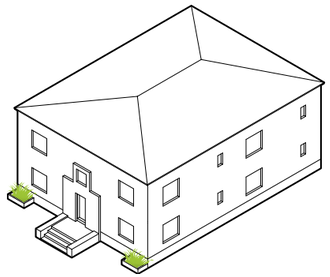

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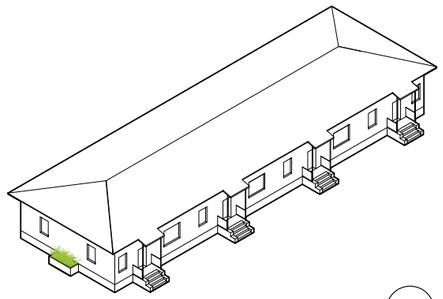

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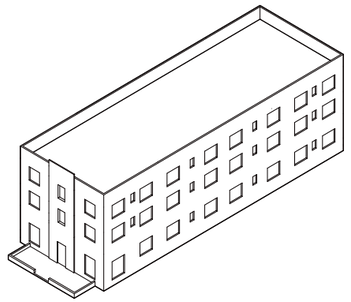

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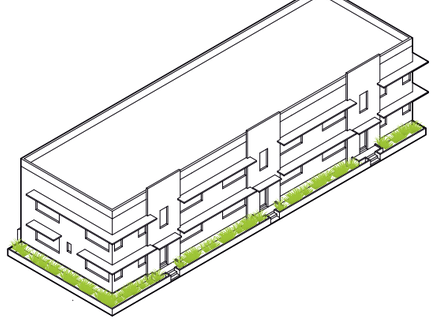

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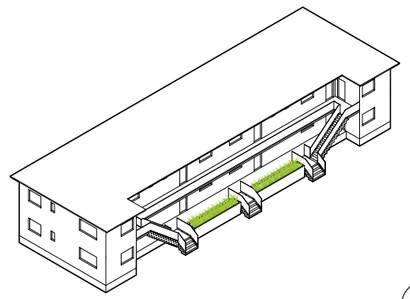

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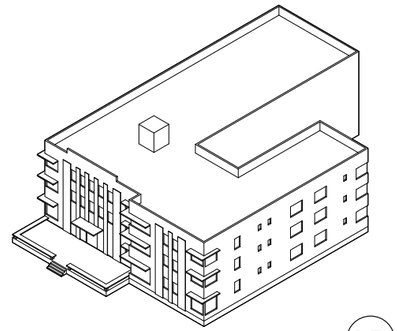

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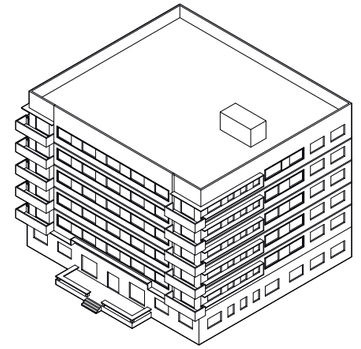

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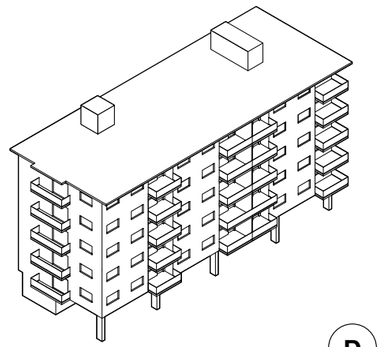


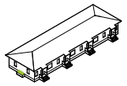
D

A. Distribution of Building Type

CH COTTAGES & HOMES

UV URBAN VILLA

R RAMBLER



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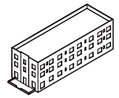
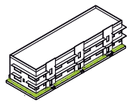
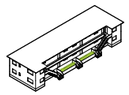


WU WALK-UP

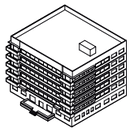


C CATWALK

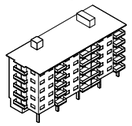


LR LOW-RISE HOTEL

HR HIGH-RISE HOTEL



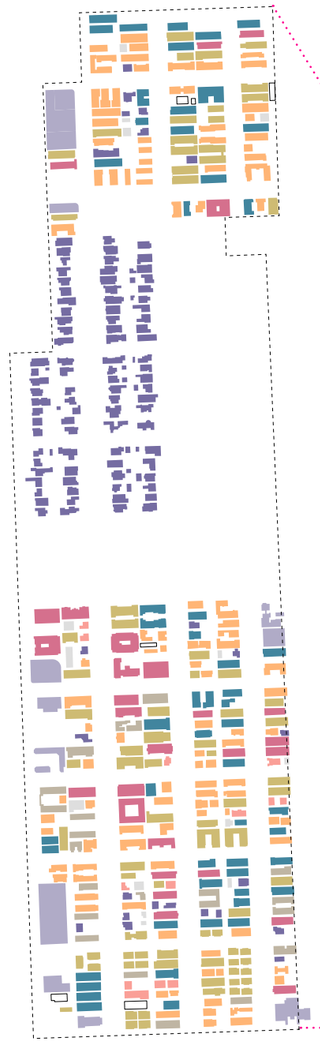
D DINGBAT



INSTITUTIONAL / COMMERCIAL / PARKING GARAGE

BACK BUILDING

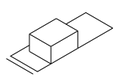
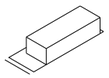
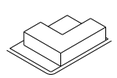
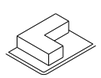
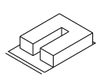
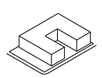
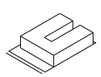
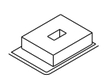
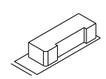
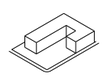
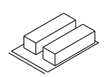
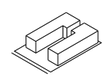
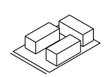
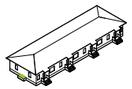
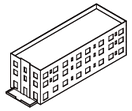
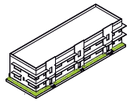
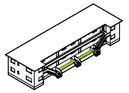
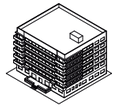
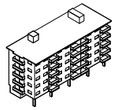
N / A



Flamingo Park

Collins Waterfront

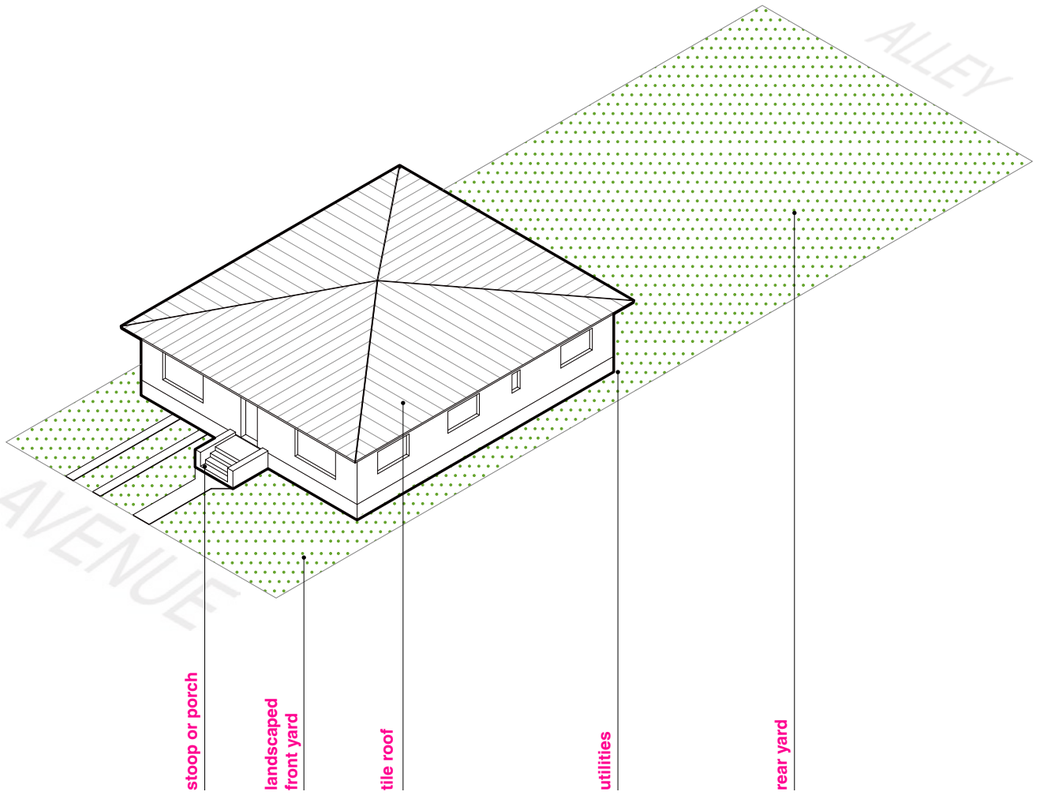
B. Building Morphology Matrix

TYPOLOGY	MORPHOLOGY	COTTAGE	SINGLE BAR	L-BAR 2	L-BAR 3	C-BAR 1	C-BAR 2	U-BAR	O-BAR	I-BAR	J-BAR	DOUBLE BAR	DOUBLE L-BAR 1	HYBRID
														
CH COTTAGE / HOUSE		●	○	○	○	○	○	○	○	○	○	○	○	○
UV URBAN VILLA		●	○	○	○	○	○	○	○	○	○	○	○	●
R RAMBLER		○	●	○	○	●	○	○	○	○	●	●	○	●
IC INTERIOR CORRIDOR		○	●	○	○	○	○	●	○	○	○	○	○	○
WU WALK-UP		○	●	●	●	●	●	○	○	●	●	●	●	●
C CATWALK		○	●	○	○	●	●	○	○	●	○	●	○	●
LR LOW-RISE HOTEL		○	●	●	●	○	●	●	○	○	●	○	○	○
HR HIGH-RISE HOTEL		○	●	●	●	○	●	●	●	○	●	○	○	○
D DINGBAT		○	●	○	○	○	●	○	●	●	○	○	○	○

C. Individual type description

CH Cottage / House

Cottages are generally single-family homes, but in some cases have been adapted as apartment buildings or commercial structures (along Alton Road). In Miami Beach, cottages are generally based on bungalow plan types common in the early 20th century. In the higher-density historic districts of Miami Beach (including most parts of the two districts being studied here, Flamingo Park and Collins Waterfront neighborhood), Cottages persist as a memory of the first layer of the city's foundation as a suburban enclave. On the west side of the Flamingo Park district, an intact pocket of Cottages, mostly still single-family homes, remains. Most Cottages date from early years of the city's development, 1910s-30s, although some postwar examples also are found. They are styled eclectically from Vernacular, Mission and Mediterranean Revival styles to Art Deco and other modernist languages. Similar to the surrounding district, stoops, pronounced door surrounds, built-in planters, and complex massing reflected in multiple stucco planes are common. They are also distinguished by their varied massing, porches and sunrooms, expressed chimneys, and features like wrought iron window grills and projecting eaves on wood brackets. Cottages generally require open circulation from the front and back of the building.



Collins Waterfront

Flamingo Park

1

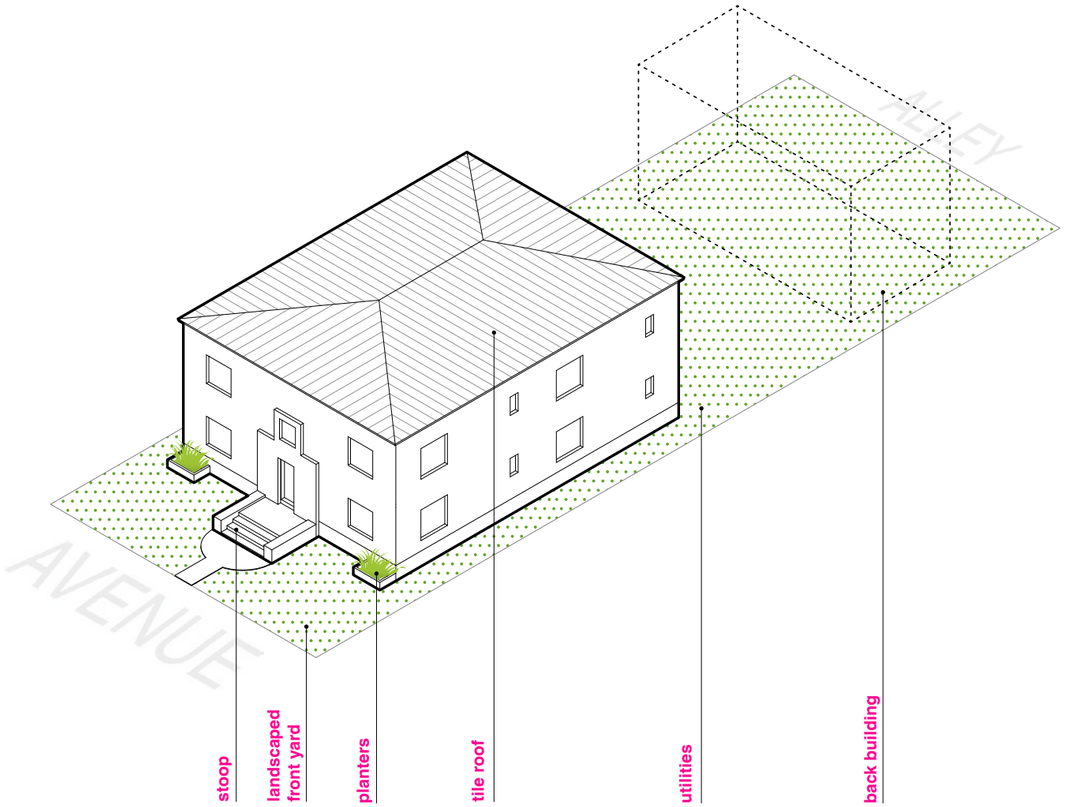
2

3

1. 1430 Michigan Ave; Architect: Henry Hohauser, 1939 | 2. 1330 Michigan Ave; Architect: Harold McNeil, 1940 | 3. 1426 Lenox Ave; Architect: David T. Ellis, 1940.

UV Urban Villa

Urban Villas are a type of low-density urban housing, reminiscent of early 20th century European urban models of Garden City heritage (popular in Rome, for instance). Configured to look like large homes, or villas, this type comprises a small number of apartment units (generally 2-4 units), either flats or 2-story maisonettes. These detached blocks may occupy the full buildable width of the lot, although some include a driveway, and they generally benefit from more green space, and/or parking than other typologies. The term may also refer to single-family cottages that have been adapted for multifamily housing purposes. Stylistically, Urban Villas follow a residential architectural vocabulary, including tile roofs, elaborated stoops and door surrounds, and often feature a more complex, asymmetrical massing. Urban villa type buildings generally require open circulation from the front and back of the building.



Collins Waterfront

Flamingo Park

1

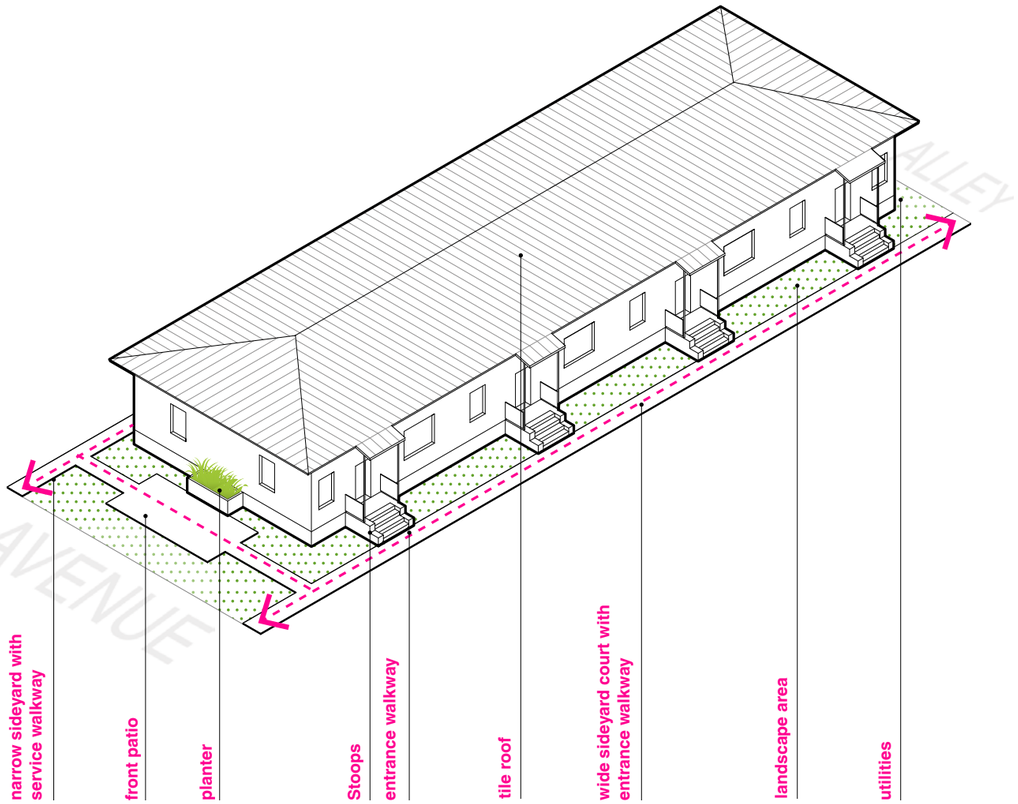
2

3

1. 1550 Michigan Ave; Architect: W. F. Brown, 1931 | 2. 1524 Euclid Ave; Architect: L. Avery, 1934 | 3. 222 36th St; Architect: A. Zink, 1929

(R) Rambler

Although the term “Rambler” is typically applied to ranch homes in the U.S. in the postwar period, in Miami Beach it is used to describe long and low one-story apartment buildings of the same vintage. These Ramblers, which are elaborated horizontally, generally face the side lot line, and they are often used at end-block conditions, where they open to E-W streets. They are balanced between the expression of a home and an apartment building, and exhibit characteristics common to both. Units are generally identified by private stoops and door surrounds. Rambler type buildings generally require open circulation along both (long) sides of the building.



Collins Waterfront

Flamingo Park

1

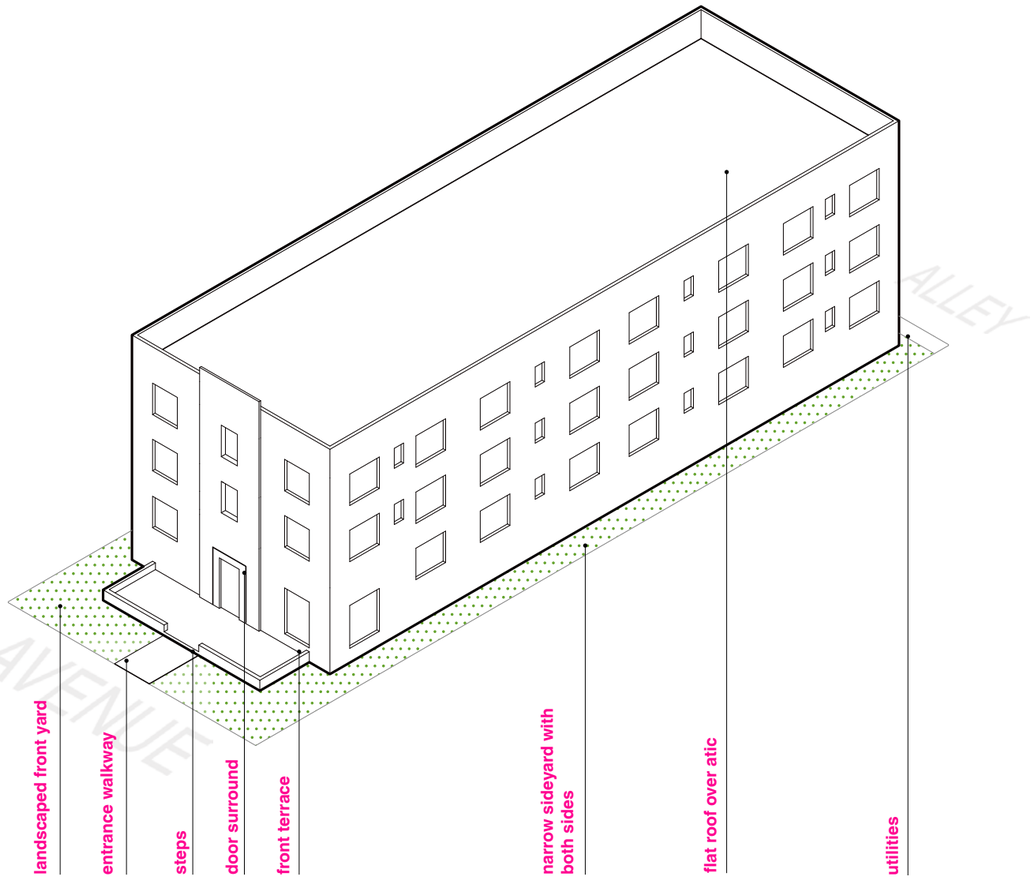
2

3

1. 1121 8th Street; Architect: Henry Hohauser, 1941 | 2. 1605 Michigan Ave; Architect: Gerard Pitt, 1953 | 3. 700 Lenox Ave; Architect: V. H. Nellenbogen, 1936

IC Interior Corridor

Interior Corridor buildings are urban housing that was first introduced into Miami Beach in the 1910s, and most commonly built in the 1920s-30s. Part of the original urbanization of the beach, they are the archetype for housing in South Beach; they introduced high unit densities and a more urban architectural paradigm that included tall stuccoed frontages and elaborated balconies. In its simplest form, the deep rectangular bar-shaped structure features a central-corridor organization with apartments arrayed into the depth of the lot, facing sideways, and occupies the full buildable depth of a single 50-foot lot. Mostly three stories tall and featuring flat roofs, they are maintained freestanding by the provision of five-foot side setbacks. Larger buildings of this type are configured to frame courtyards, following the trend of the Garden Apartment movement. The front yard, observing the suburban setback requirement formerly applied to homes, is the main public focus of the building and maintains the primacy of the avenue as an urban space. In the Flamingo Park and Collins Waterfront districts, most are styled Masonry Vernacular or Mediterranean Revival, and characterized by stuccoed wall surfaces, flat or low-pitched terracotta and tile roofs, arches, scrolled or tile-capped parapet walls, articulated elaborate door surrounds, decorative grillwork. Interior corridor type buildings generally require open circulation from the front and back of the building.



Collins Waterfront

Flamingo Park

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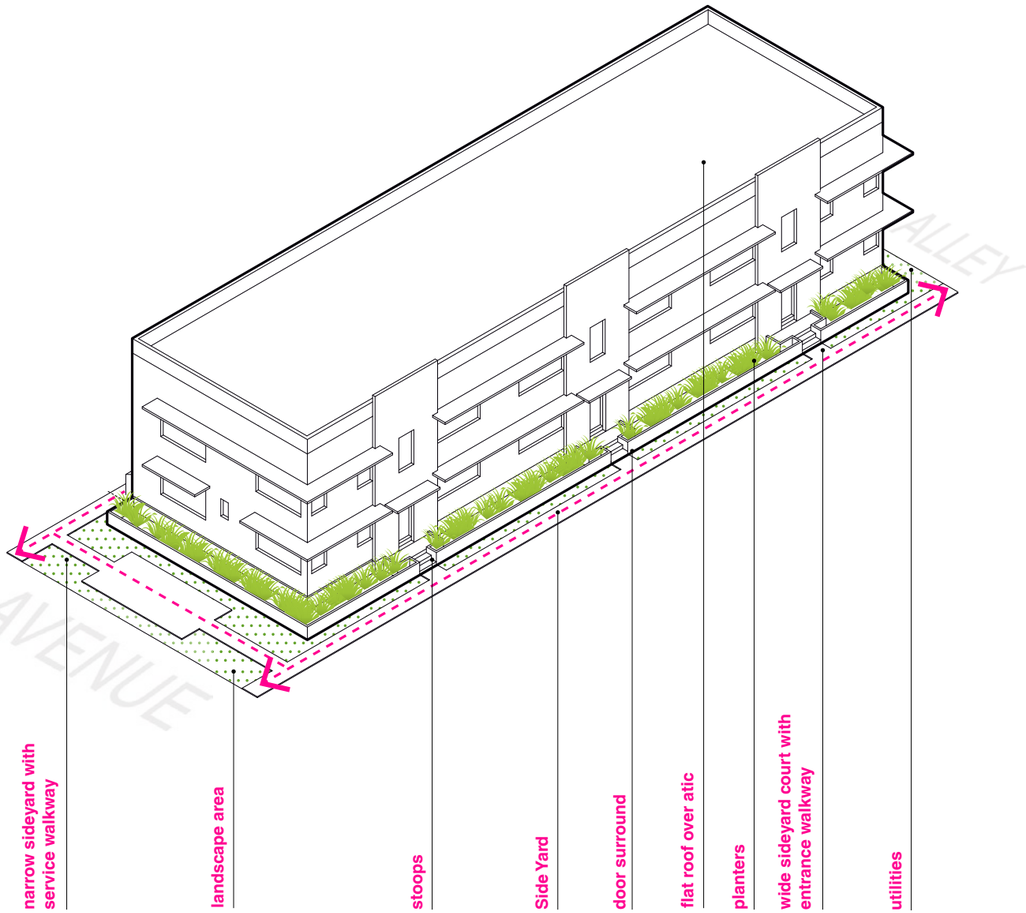
1. 1502 Jefferson Ave; Builder: L. S. Parks, 1926| 2. 1619 Lenox Ave; Architect: L. L. Wade, 1925| 3. 230 31st St; Architect: Gordon E. Mayer, 1937

WU Walk-Up

Walk-up type apartments are low-density residential buildings based on the housing elements of the Zeilenbau (interwar German worker housing estates). They were introduced to the U.S. and Miami through the active interwar discussion of urban housing issues in American architectural periodicals (writers and architects such as Catherine Bauer and Henry Wright), ignited by a national housing shortage and Roosevelt's reform programs. In Miami Beach, these mainly two-story buildings with flat roofs feature space-saving arrangements that eliminate lobbies and corridors. Instead, a limited number of units are served by a common entry stair; they feature two-room-deep units with multiple exposures. Most importantly, the transverse building thickness is reduced from forty feet to about thirty five feet, allowing enough space on a single lot for a side yard garden court in which each stair hall is identified by a stoop and articulated door surround. The formal articulation of the building mass in relationship to both the front and side yards defines an expanded public realm, made even more rich on double lots where more complex courtyards are developed. Many were built originally as 'apartment-hotels' to accommodate seasonal modest-income tourists. Walk-up type buildings generally require open circulation along both (long) sides of the building.



Collins Waterfront

Flamingo Park

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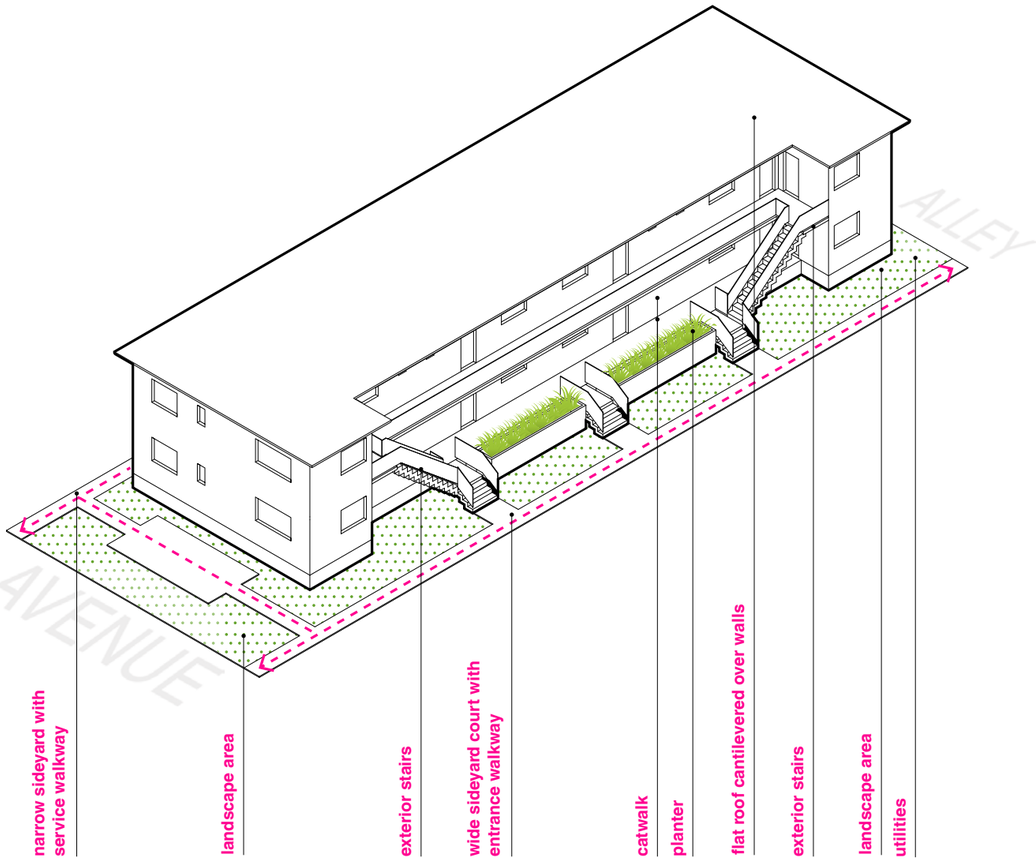
1. 950 9th St; Architect N/A, 1940 | 2. 505 15th St; Architect: Anton Skislewicz, 1940 | 3. 1005 Meridian Ave; Architect: Gene E. Baylis, 1939

CA Catwalk

Catwalk, or gallery access, buildings are postwar Garden Apartment types that feature a continuous exterior terrace or catwalk linking all units. Drawing connections with the contemporary and highly popular ‘motel’, they are based on interwar German Laubengang models, such as at Dammerstock Colony in Karlsruhe, Germany by architect Walter Gropius. The mainly flat-roofed two stories buildings have floor-through apartment units that promote cross ventilation. On single lots, they are generally rectangular with the primary open galleries or catwalk facing a side yard court, offering a strong sense of community while providing ample space for greenery. Often, in lieu of the catwalk, ground floor units are equipped with their own stoop, planter or semi-private garden space. Part of the extraordinary artifice of these simple apartment buildings was their highly efficient, almost laconic decorative program that, although individualized, followed predictable norms. Exterior open stairs, treated decoratively with ornamental railings, are usually the most significant design feature, but most include stylizing devices relied on the subtle extenuation of the façade’s inherent features, like projecting roof planes and balconies, window surrounds, supporting pylons. Ornamental concrete or metal screens, such as perforated breeze block, temper a sense of transparency promoted by the exterior galleries and open stairways. Catwalk type buildings generally require open circulation along both (long) sides of the building.



Collins Waterfront

Flamingo Park

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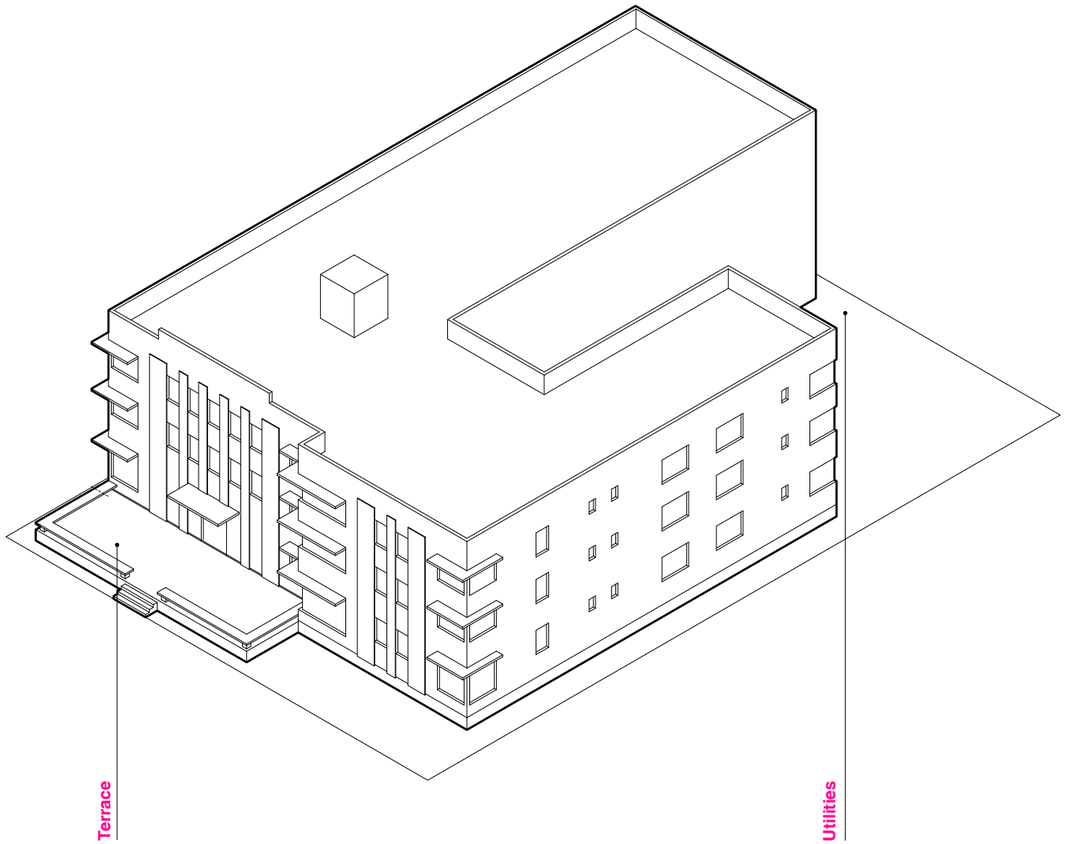
1. 1038 11th St; Architect: Samuel M. Puder, 1957 | 2. 1330 Michigan Ave; Architect: Harold McNeil, 1940 | 3. 4001 Indian Creek Dr; Lester Avery, 1954

LR Low-Rise Hotel

Low-rise hotels are a type of low or medium density resort accommodation found throughout Miami Beach. Generally three floors with a flat roof, they form rectangular blocks, sometimes configured around an internal patio, and feature a type of interior corridor arrangement of hotel rooms. The street-facing portion of the building includes a front terrace framed by railings and balusters, a modest lobby, and decorative treatment of the façade. Other semi-public rooms occupy the ground floor, and many buildings of this type also include a basement comprising support and service areas. Stylistically more complex than residential apartment models, most low-rise hotels follow Moderne or Art Deco styling, with smooth hard surfaced materials, rounded corners, corner windows, glass wall blocks, mirrored panels, ribbon or band windows with metal frames, signage, and string courses along the coping of the wall. Other characteristic building elements include projecting concrete eyebrows, porthole windows, and the spare use of decorative glass and metalwork that are motifs of the city itself. Low-rise hotels generally require open circulation from the front and rear of the building.



Collins Waterfront

Flamingo Park

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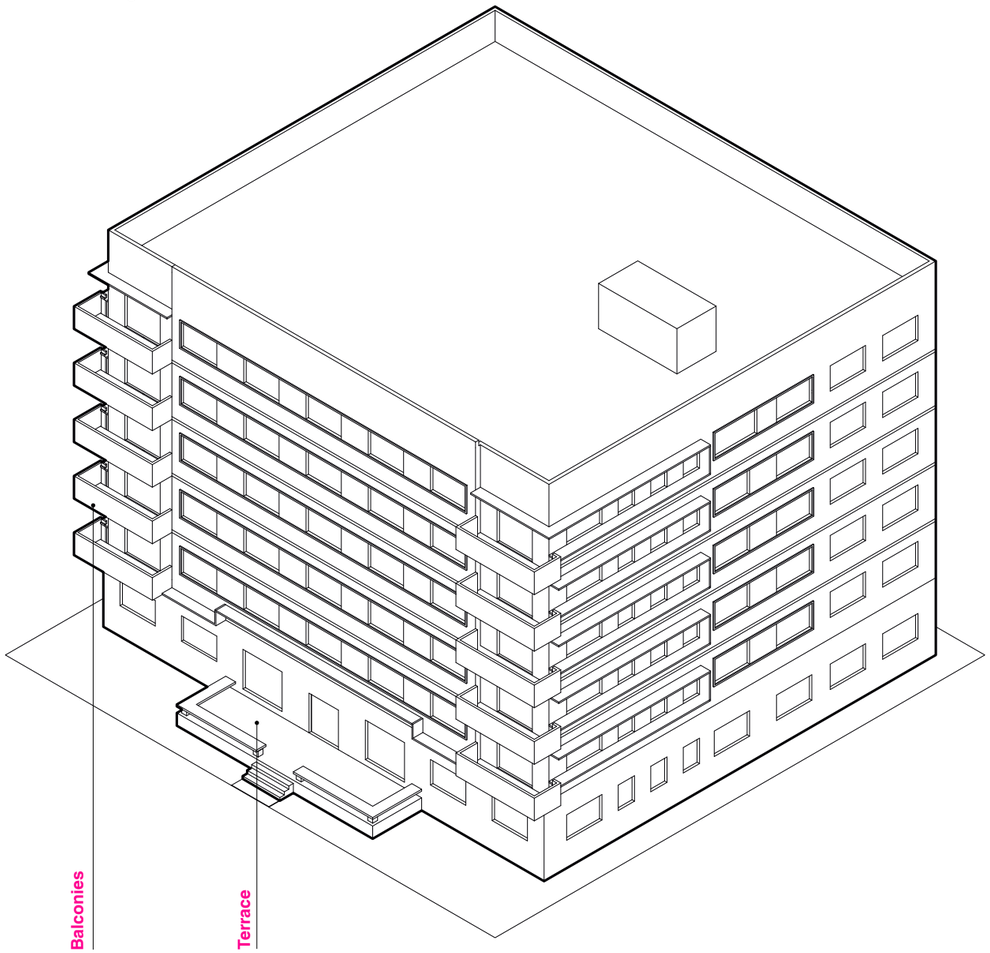
1. 3500 Collins Ave; Architect: Martin L. Hampton, 1928 | 2. 3900 Collins Ave; Architect: Albert Anis, 1939 | 3. 2925 Indian Creek Dr; Architect: Nadel and Nordin, 1936

HR High-Rise Hotel

High-rise hotels located west of Collins Avenue in the Collins Waterfront district generally comprise cubic volumes, poised in scale between the higher skyscraper-type hotels on the east side of Collins and low-rise hotels and residential buildings to the west. They include upper floors of hotel rooms over a raised ground floor dedicated mainly to public areas, like the lobby. As hotel amenities were historically related to room count, these larger hotels offer a larger suite of amenities. Fronting the street are raised terraces surrounded by decorative balusters or railings. In the Collins Waterfront district, most high-rise hotels feature Moderne and Art Deco styling; their broad facades are animated vertically, horizontally, or in some combination. Vertical accentuation is often provided by continuous pylons or pilasters that rise to the parapet, interwoven with recessed spandrel panels and windows. The vertical emphasis of such buildings sometimes surrounds a central totemic pylon, rising to signage, a cubic glass block lantern or abstracted heraldry at the building's top. Other buildings feature a more horizontal design, with flat planes offset by continuous eyebrows. High-rise hotels generally require open circulation from the front and rear of the building.



Collins Waterfront

Flamingo Park

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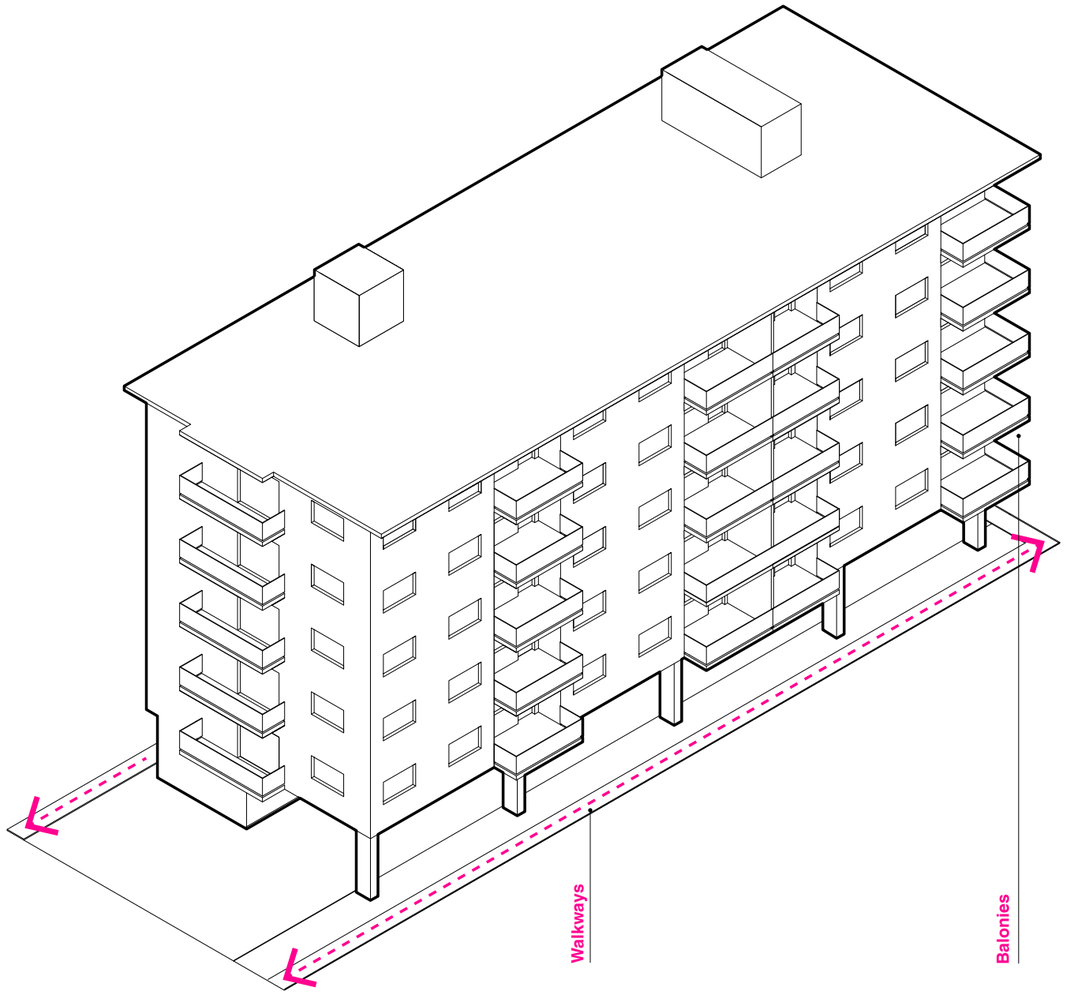
1. 3720 Collins Ave; Architect: Dean Parmalee, 1937 | 2. 4100 Collins Ave; Architect: Albert Anis, 1947 | 3. 4130 Collins Ave; Architect: Martin L. Hampton, 1936

(D) Dingbat

The Dingbat is a type of residential building featuring ground floor parking spaces below upper residential floors that flourished in Miami Beach in the mid-1960s. The genesis of this type in locally is generally attributed to zoning changes at that time that introduced a parking requirement for new residential units, however the type if found throughout the sunbelt, and was celebrated as a Los Angeles type by author Reyner Banham in Los Angeles: The Architecture of Four Ecologies. The ground floor parking area, featuring columns that support the building above, may also feature a modest lobby or community meeting space. In Miami Beach, Dingbats mainly rise 4-5 stories, and generally observe austere mid-century architectural styling. The sparse decoration found on this type is articulated by the railing systems that define balconies and catwalks.



Collins Waterfront

Flamingo Park

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1. 1575 Euclid Ave; Architect: Raul V. Gonzalez, 1968 | 2. 910 Jefferson Ave; Architect: Eugene R. Fortune, 1968 | 3. 910 Jefferson Ave; Architect: Eugene R. Fortune, 1968

3.5 // TYPICAL BUILDING & LANDSCAPE ELEMENTS

Stoops

Stoops are raised platforms typical of residential architecture in Miami Beach. Functionally, they help transition from the raised first floor height of units to the ground level. Aesthetically they help define individual entranceways, and are part of the stylistic articulation of the entrance, which may also include decorative door surrounds, planters and metal railings and quarry tile paving. Stoops are character-defining elements of historic buildings and should be maintained, both in relation to the building entrances and in relation to ground-level walkways.

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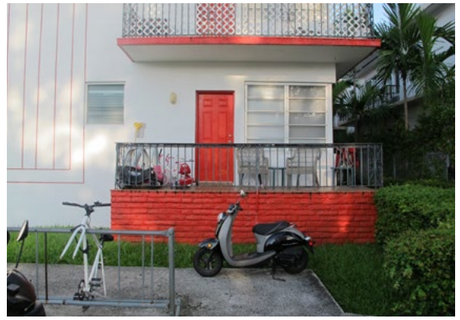
1. 950 9th Street | 2. 1605 Michigan Avenue | 3. 1601 Euclid Avenue | 4. 1060 Pennsylvania Avenue | 5. 641 10th Street | 6. 1560 Michigan Avenue

Terraces & Balconies

Terraces and balconies are projections from the simple volumetric enclosure of residential buildings, and are part of the building's engagement of the lot/landscape.. They serve an aesthetic as well as functional purpose, softening the box-like character of some residential buildings, while providing direct access from units to enjoy outdoor space. Articulation of terraces and balconies ranges from solid masonry and stucco, to breezeblock, brick or metal railing systems. Integrated into architectural treatment, they are character-defining elements of historic buildings and should be maintained, both in relation to the building opening and in relation to the ground.



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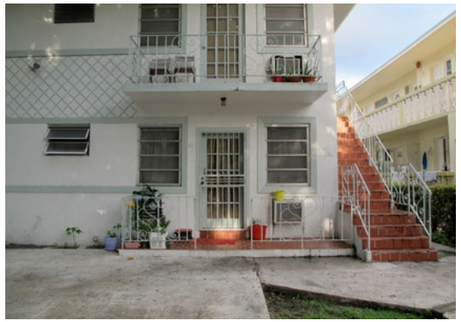

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1. 1300 Euclid Ave | 2. 1044 Pennsylvania Ave | 3. 1000 Meridian Ave | 4. 1220 Pennsylvania Ave | 5. 934 Meridian Ave | 6. 911 7th St Jefferson Ave

Front Yards

Front yards, which line the avenue frontages of the Flamingo Park district and parts of the Collins Waterfront district, are a remnant of the original role of the area as a suburban home district. They have persisted and evolved, often working in combination with semi-public passageways and courtyards. Many or most front yards were adapted long ago into urbanized social patios; some are paved in terrazzo, others in concrete. The front yard often includes low walls or hedges that provide screening and incremental privacy from the avenue. The provision of the front yard is a character-defining feature of Miami Beach, and these areas should either be maintained or reinterpreted.

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1. 920 Meridian Ave | 2. 1228 Euclid Ave | 3. 1520 Meridian Ave | 4. 1000 Meridian Ave | 5. 1502 Jefferson Ave | 6. 1510 Jefferson Ave

Side Yards

Sideyards were prescribed by the first zoning ordinances of Miami Beach, and conceived to protect its original suburban character. These narrow spaces have evolved with the urbanization of the city, often expanding to form passage-like garden courts that bisect the traditional street structure, especially in the Flamingo Park district. Continuous from the avenue to the alley, most units and building entrances/ stoops are oriented towards these passageways. Often, continuity between street and sideyard court is emphasized by curving walls, steps in the building massing and wrap-around windows. The side yard forms an authentic local tradition that should be retained or re-interpreted.

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1. 1606 Jefferson Ave | 2. 1520 Meridian Ave | 3. 720 Jefferson Ave | 4. 628 Jefferson Ave & 634 Jefferson Ave | 5.750 Lenox Ave | 6. 920 Meridian Ave & 934 Meridian Ave

Planters

Planters are built in or attached components of buildings that contain landscape features – generally tropical plants. Integrated into the overall expression of buildings, planters allow the architecture to mold the landscape, or the landscape to serve as architectural ornament. The integration is carefully organized with regard to spatial constraints, especially in side yard walkways. Planters are character-defining elements of historic buildings and should be maintained in relation to the building and the ground.

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1. 750 Lenox Ave | 2. 750 Lenox Ave | 3. 761 Jefferson Ave | 4. 833 15th St | 5. 720 Jefferson Ave | 6. 1511 Michigan Ave

Utilities

As the primary connection point for water, sewer, gas and electrical service, as well as for trash collection and for deliveries, the utility façade of buildings in Miami Beach is an operative machine, a life support system for the building. As these facades do not contribute to the main public frontages in historic districts, and are utilitarian in function, they should be optimized for adaptation.

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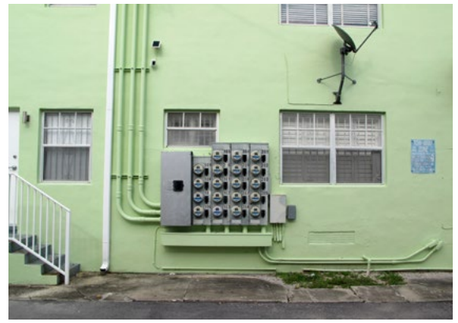

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1. 844 Jefferson Ave | 2. 609 Lenox Ave | 3. 808 Jefferson Ave | 4. 1008 Jefferson Ave | 5. 752 Meridian Ave | 6. 750 Lenox Ave

Interior Corridor

Interior corridor buildings are urban housing that was first introduced into Miami Beach in the 1910s, and most commonly built in the 1920s-30s. Part of the original urbanization of the beach, they introduced high unit densities and a more urban architectural paradigm that included tall stuccoed frontages and elaborated balconies. In its simplest form, the deep rectangular bar-shaped structure features a central-corridor organization with apartments arrayed into the depth of the lot, facing sideways, and occupying the full buildable depth of a single 50-foot lot. Mostly 3 stories tall and featuring flat roofs, they are maintained freestanding by 5-foot side setbacks. Larger buildings of this type are configured to frame courtyards, following the trend of the Garden Apartment movement.

1 1205 Meridian Ave | 2. 3624 Collins Ave | 3. 760 Meridian Ave - Image Credit: www.realtor.com

Alley Frontages | Flamingo Park District

Combined with avenues and streets, alleys are tertiary but important roads that form the foundational urban network of Miami Beach. Alleys are generally used for utility connections, including water, sanitary sewer, gas and electric. Alleys are also used for trash collection and for deliveries. Their utilitarian function allows avenues and streets to remain largely unencumbered. However, alleys can be seen as narrow streets, with good urban qualities. Life along Miami Beach alleys is also supported by ancillary building functions, like laundry machines and ad hoc parking. In order to maintain the functionality of buildings, alleys should be maintained, but may acquire new meanings and qualities.

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1.1439 Lenox Ave | 2. 750 Lenox Ave | 3.1050 Jefferson Ave | 4. 750 Lenox Ave| 5. 750 Lenox ave | 6. 1008 Jefferson ave

Front Hedge & Fence

The hedge is a ubiquitous feature across Miami Beach landscapes, notably for private single and multi-family residents and small hotels. Hedges tend to define the property lines, sometimes in association with boundary fencing.

The plantings used for the hedges vary, but common types include Pitch-Apple (Clusia rosea), Eugenia (Eugenia sp.), Cocoplum (Chrysobalanus icaco), Sea grape (Coccoloba uvifera), and button mangrove (Conocarpus erectus).


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1. 2925 Indian Creek Dr | 2. Alley next to 915 8th St | 3. 1540 Pennsylvania Ave | 4. 600 15th St | 5. 1568 Pennsylvania Ave | 6. 1443 Lenox Ave

Tropical plantings

Tropical plants are any vegetation in tropical climate, which is a frost-free climate with only two seasons: a wet summer season and a relatively dry winter season. Miami Beach is located in a tropical monsoon climate, which is primarily classified by the temperature and the amount of rainfall. Average rainfall for Miami Beach is 66.5 inches per year.

Common tropical plants in Miami Beach include sea grape, banana trees, cycads, ficus, small palm trees, date palms and palm-like plantings, and epiphytes such as ferns, orchids and bromeliads.


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1. 1040 Jefferson Ave | 2. 2727 Indian Creek Dr | 3. 27th St and Indian Creek Drive | 4. 737 11th St | 5. Miami Beach Boardwalk at 27th St |
6. Palm tree on Alton Road

Palm trees

Miami Beach's palm trees are located along the major boulevards such as Washington Avenue and along the east-west streets throughout the Flamingo Park and Collins Waterfront Historic Districts.

Although not native to Florida, the coconut palms were the original iconic Miami Beach palm tree but have been subject to lethal yellowing disease. The Royal palm (Roystonea sp.) is the more current iconic Miami Beach palm tree. Other palm trees include the Montgomery Palm, Parotis Palm, and Alexander Palm, among others.

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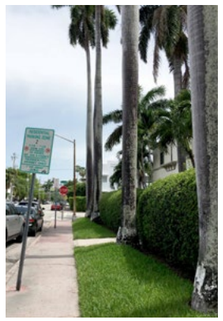

7

1. 901 7th St | 2. 1043 8th St | 3. Espanola Way & Euclid Ave | 4. Flamingo Park | 5. 279 16th St | 6. 836 10th St | 7. 1508 Pennsylvania Ave

Canopy shade trees

Miami Beach has a distinct pattern for street tree organization, with the palm trees along the east-west streets and larger canopy shade trees along the north-south avenues, notably within the Flamingo Park Historic District. The Calophyllum trees along Meridian Ave are notably beautiful but sensitive to cold weather.

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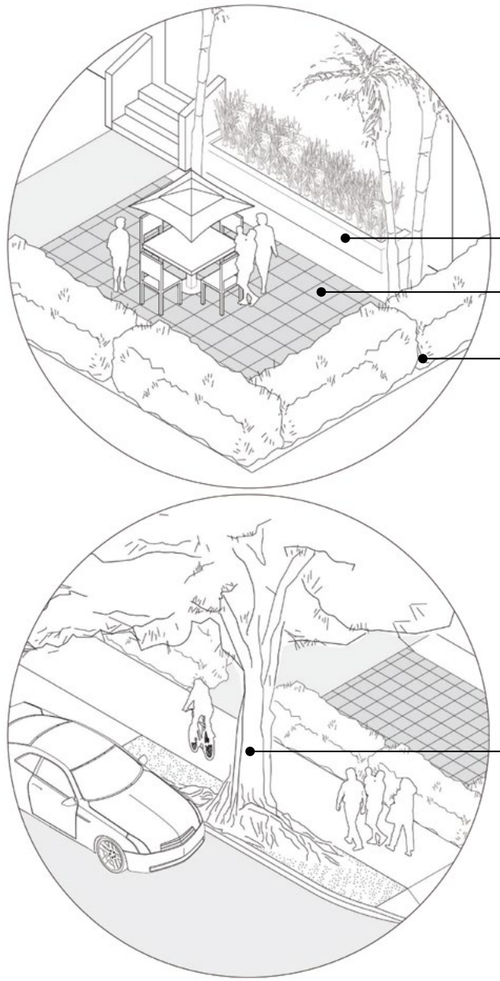
1. 1005 Meridian Ave | 2. 1325 Meridian Ave | 3. 829 15th St | 4. 1017 Meridian Ave | 5. 1415 Meridian Ave | 6. 11th St & Michigan Ave

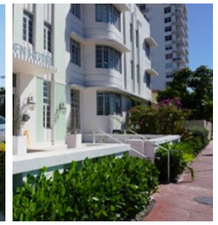
Consistent Characteristics | Existing



A. Planters

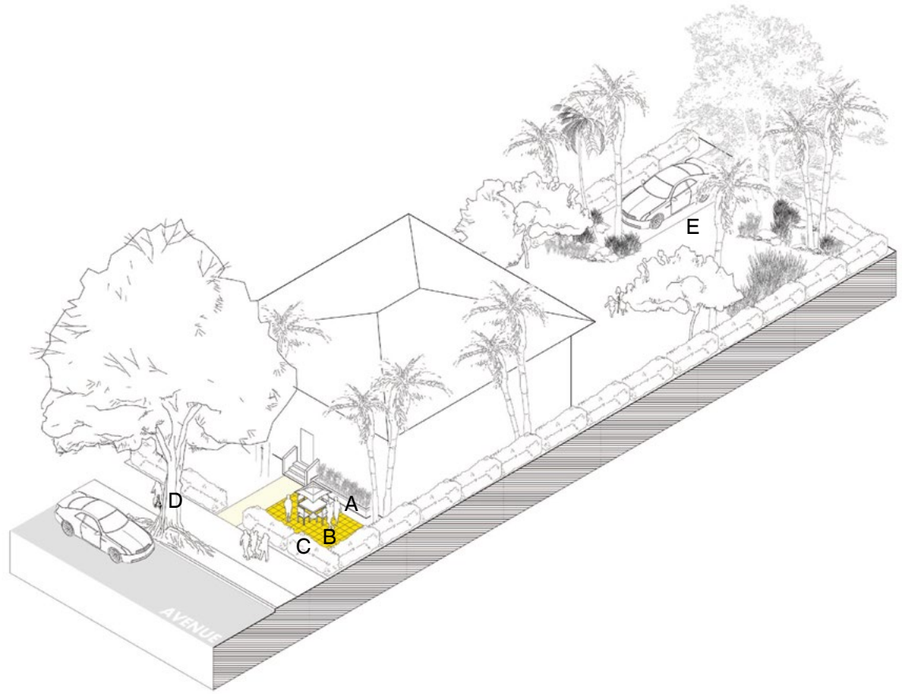
B. Private paved patio

C. Hedges



D. Canopy shade trees

Existing Condition | Small building footprint



A
Planters

B
Private paved patio

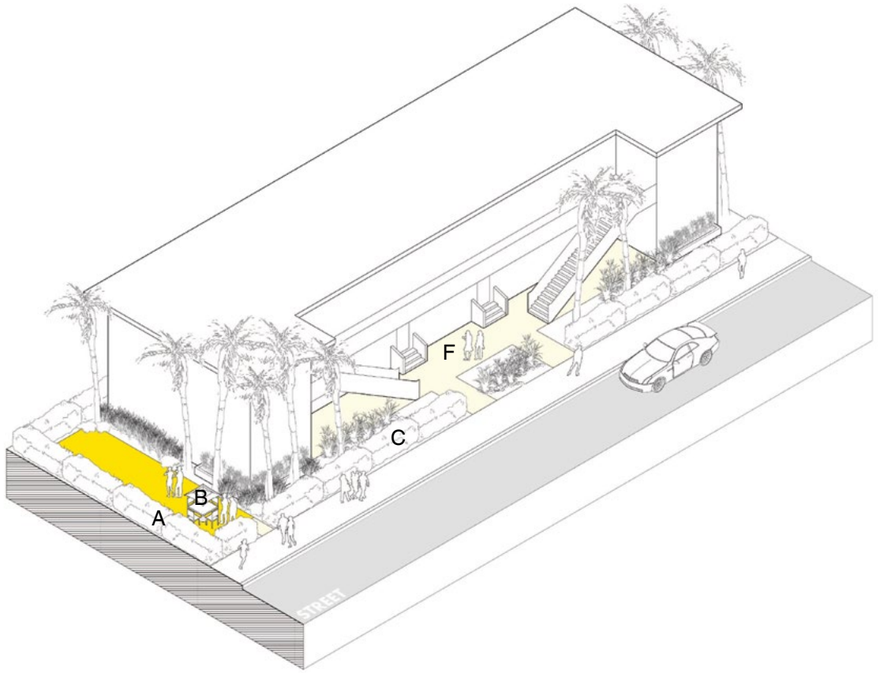
C
Hedges

D
Canopy shade trees

E
Parking

Examples:

Existing Condition | Large Building Footprint

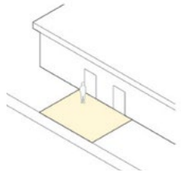


A
Planters

B
Private paved patio

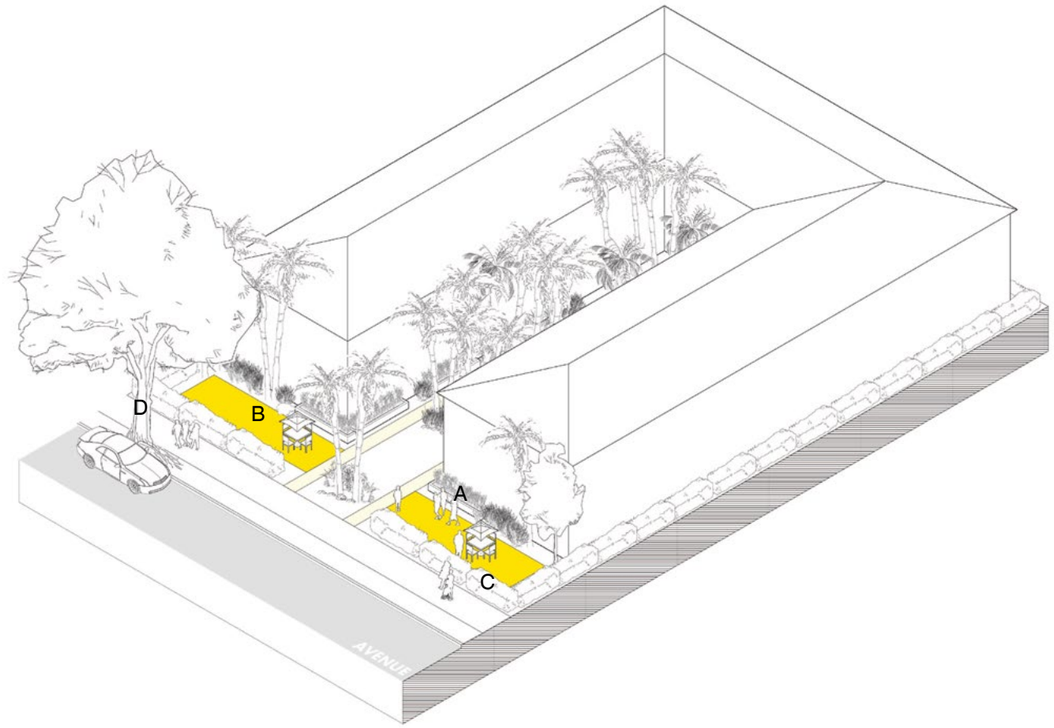
C
Hedges

F
Entry path

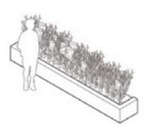


Examples:

Existing Condition | Courtyard building footprint



A
Planters

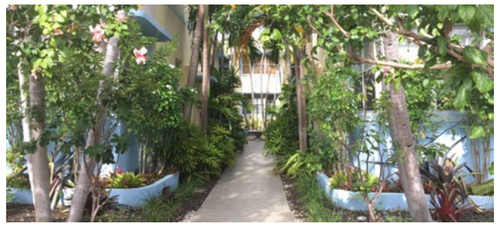


B
Private paved patio

C
Hedges

D
Canopy shade trees

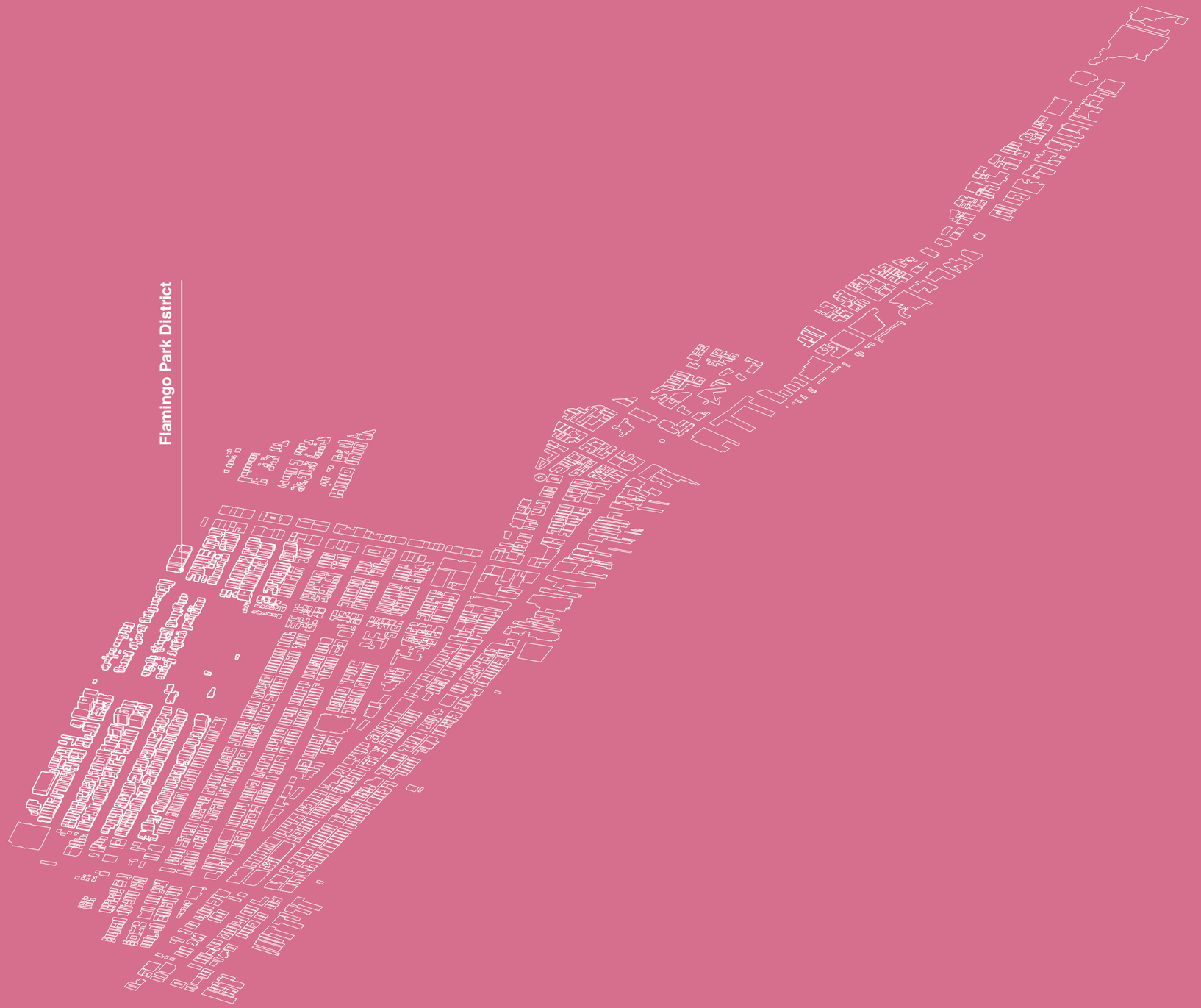
Examples:



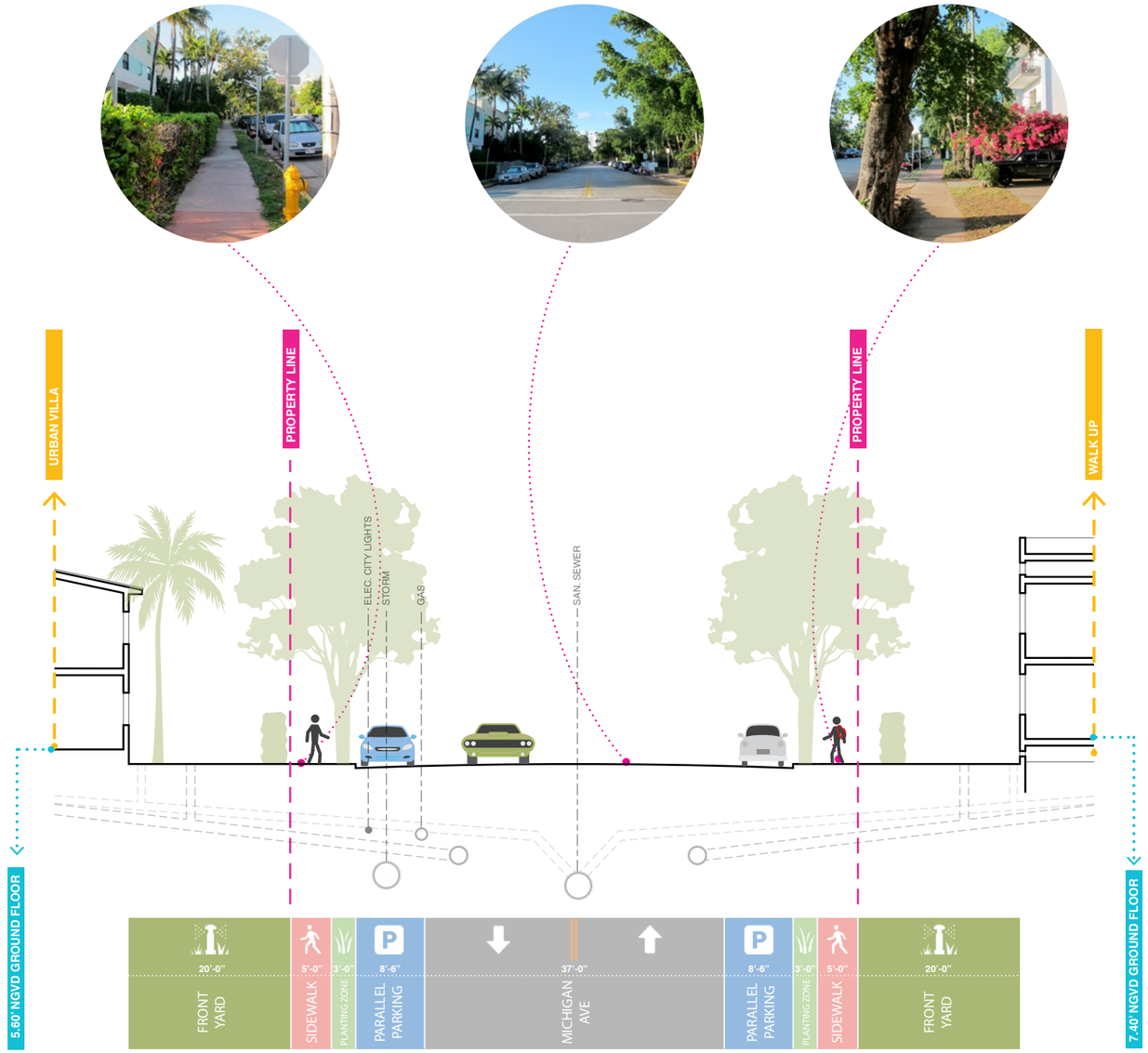
3.6 // NEIGHBORHOOD CONTEXTS

A. FLAMINGO PARK STUDY AREA

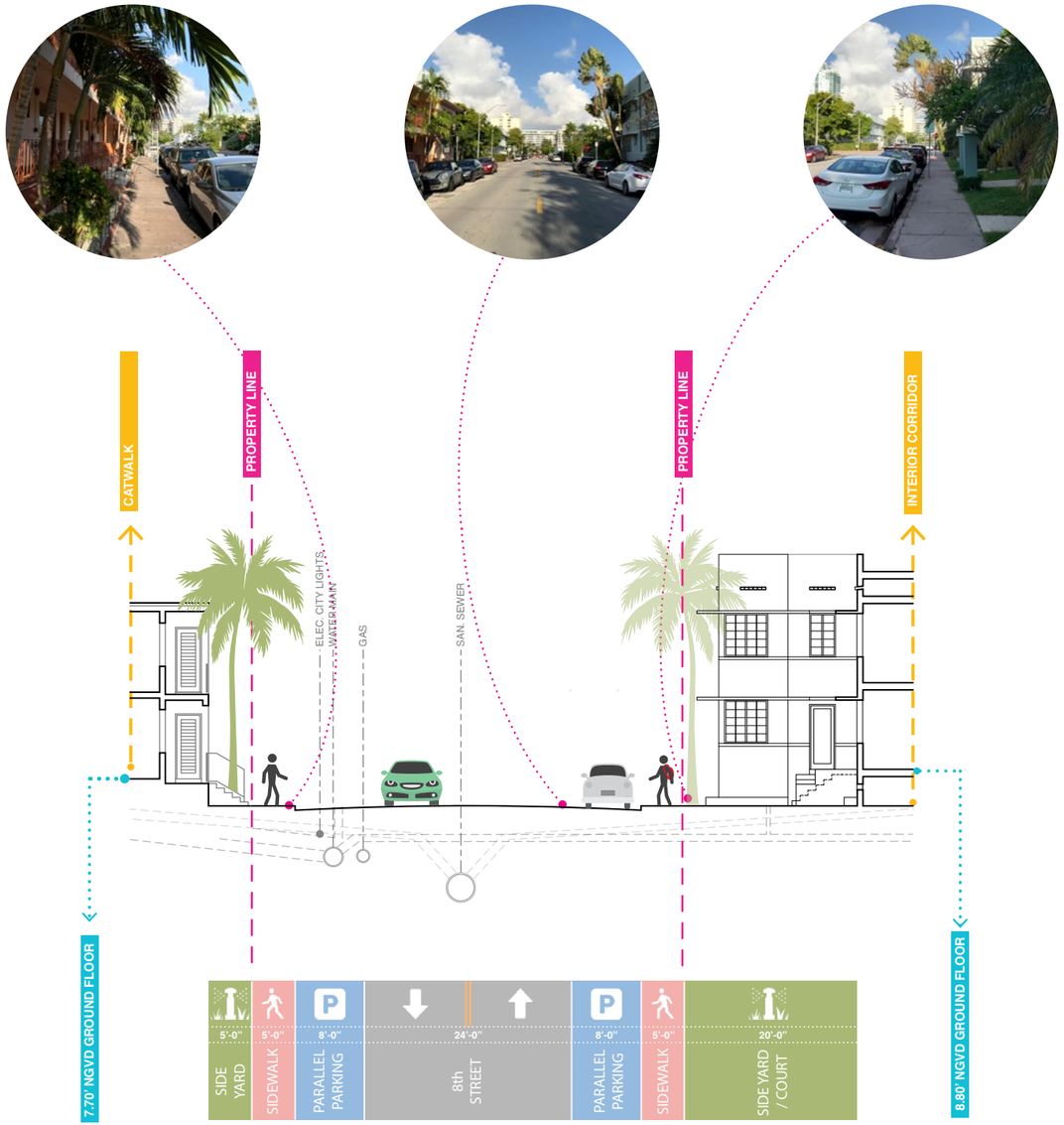
Flamingo Park is located in Miami Beach from Lincoln Lane S to 6th Street between Alton Road and Meridian Avenue. Primarily a residential district, it is broken largely into two zoning areas: RM-1 and RS-4, although there are also small areas of CD-1, CD-2, and RO. The RS-4 zone is made up entirely of single family cottages/houses, although some of these (facing Alton Road) have been adaptively used as commercial buildings. The RM-1 zone contains a variety of multi-family residential typologies — including cottages/houses, urban villas, ramblers, walk-ups, catwalks, interior corridors, and dingbats. The initial suburban character of Flamingo Park as a district of cottages and homes is preserved in the continuous height and setbacks that make this an extremely coherent district. The aggregation of mainly 2-3 story structures, closely spaced, yields a garden-city type, low-rise yet urban fabric. The variation of mass and void on each lot creates unexpected pockets of space between adjacent typologies. The Flamingo Park district generally slopes from east to west, and the current project area occupies its lower, western flank.



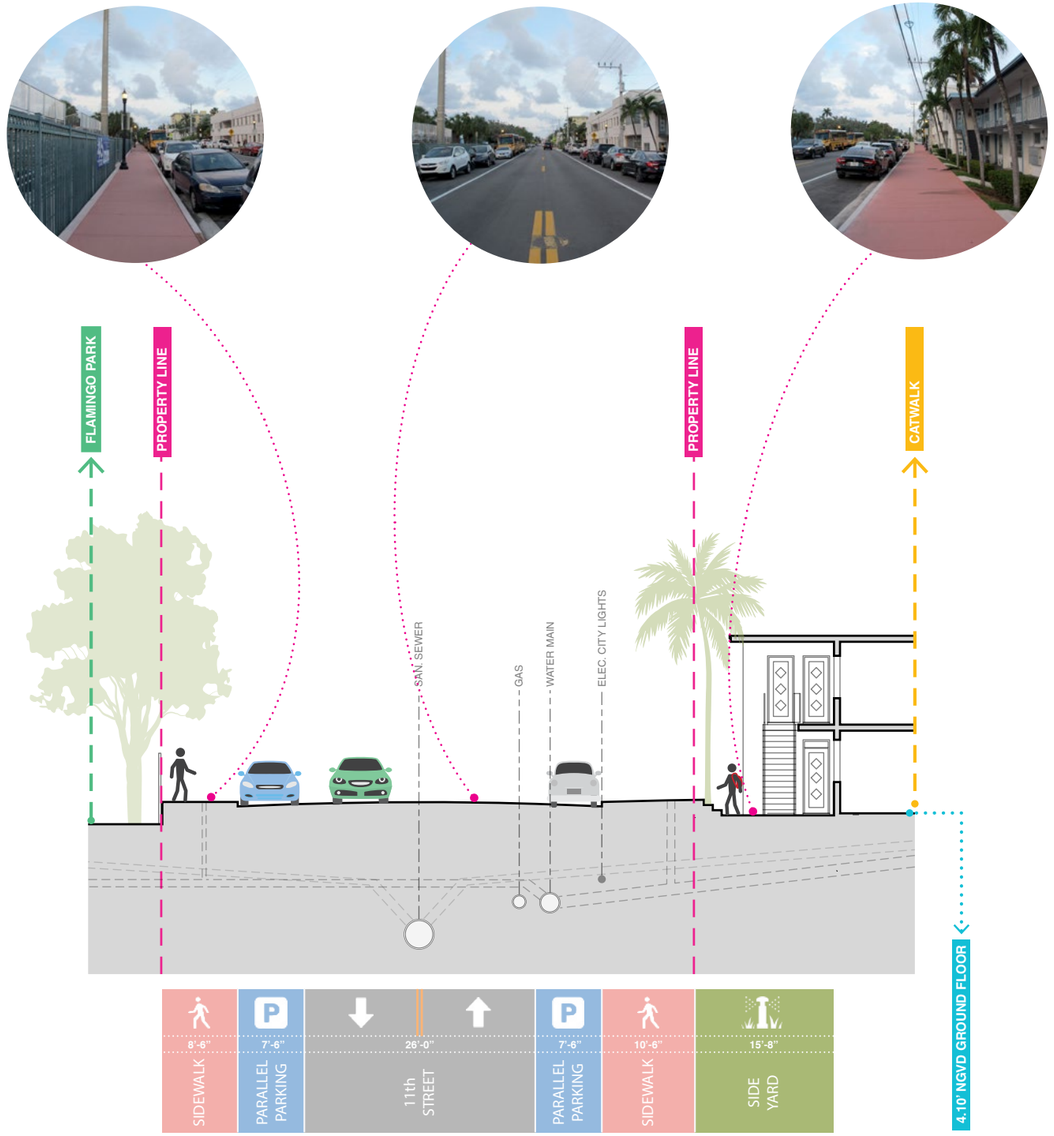
Typical avenue section | Michigan Avenue



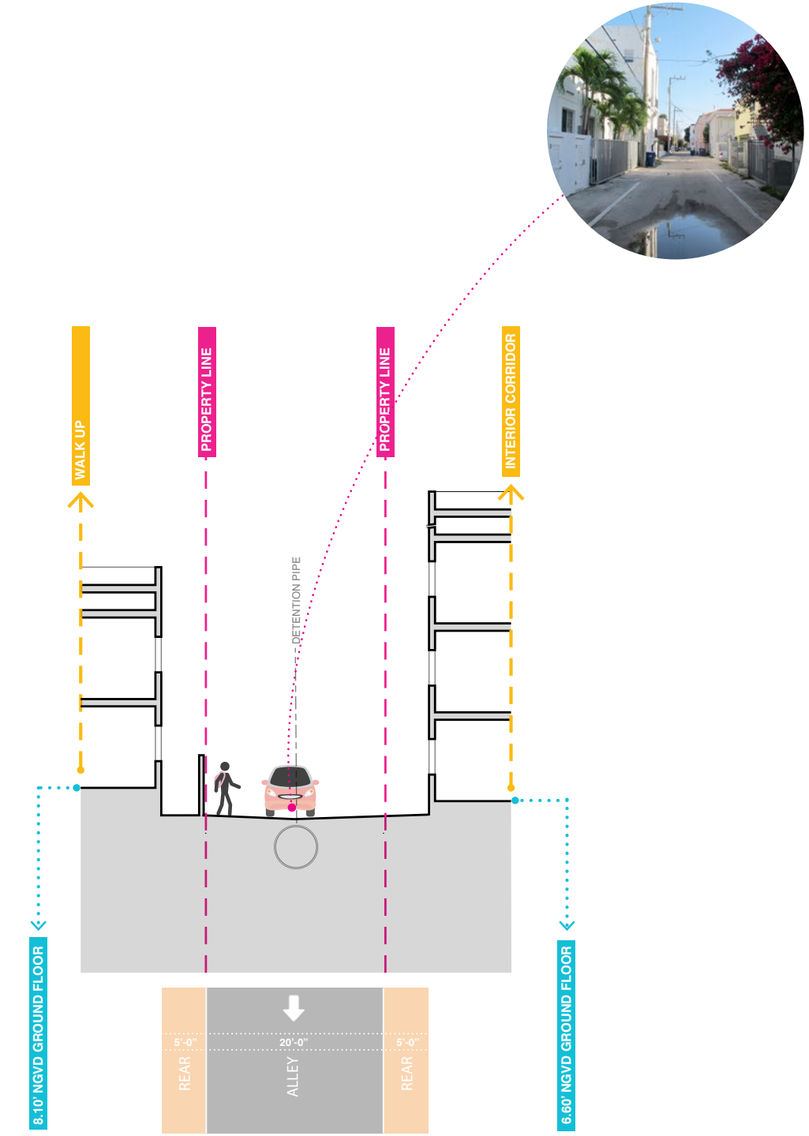
Typical street Section | 8th street



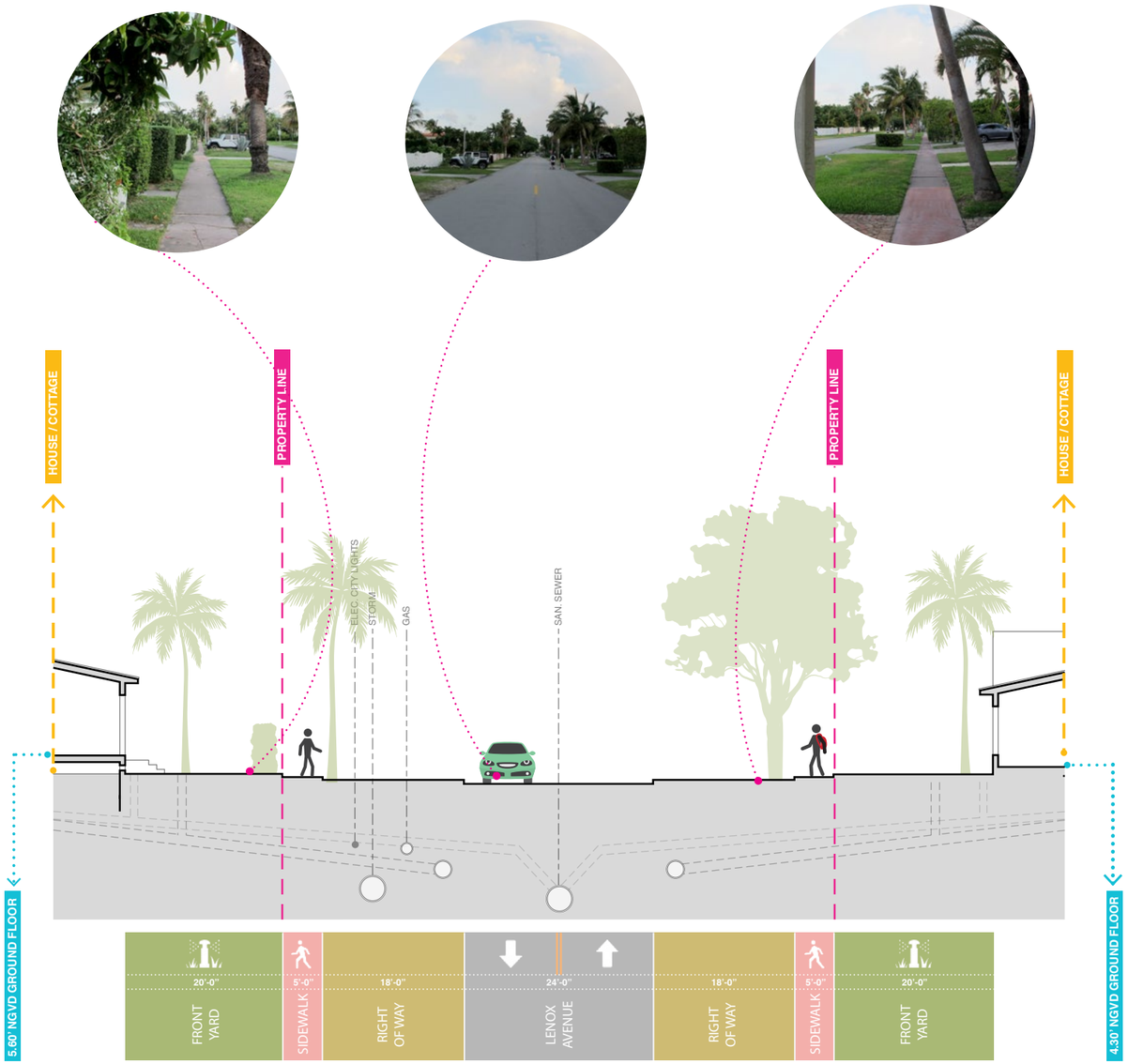
Typical street section | 11th Street



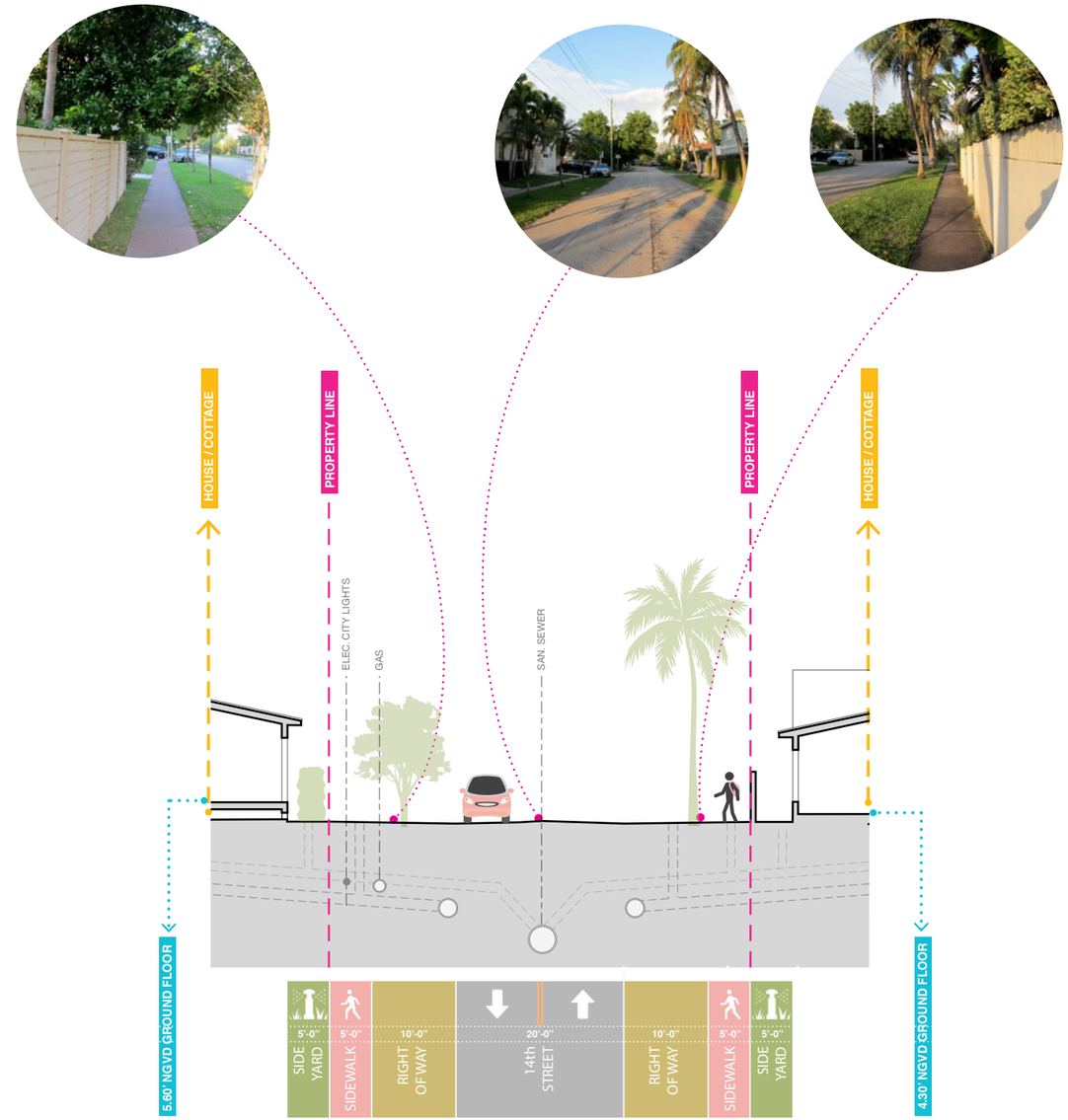
Typical alley section



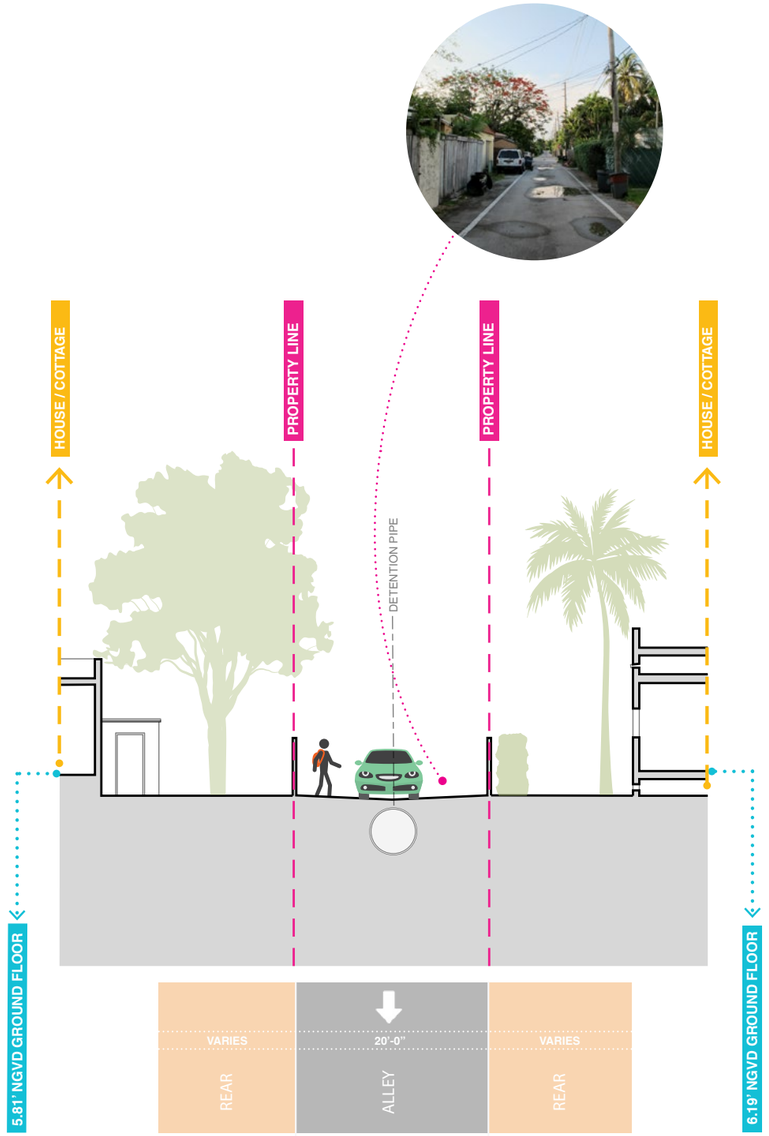
Typical avenue section | Single family area | Lenox Avenue



Typical street section | Single family area | 14th Street

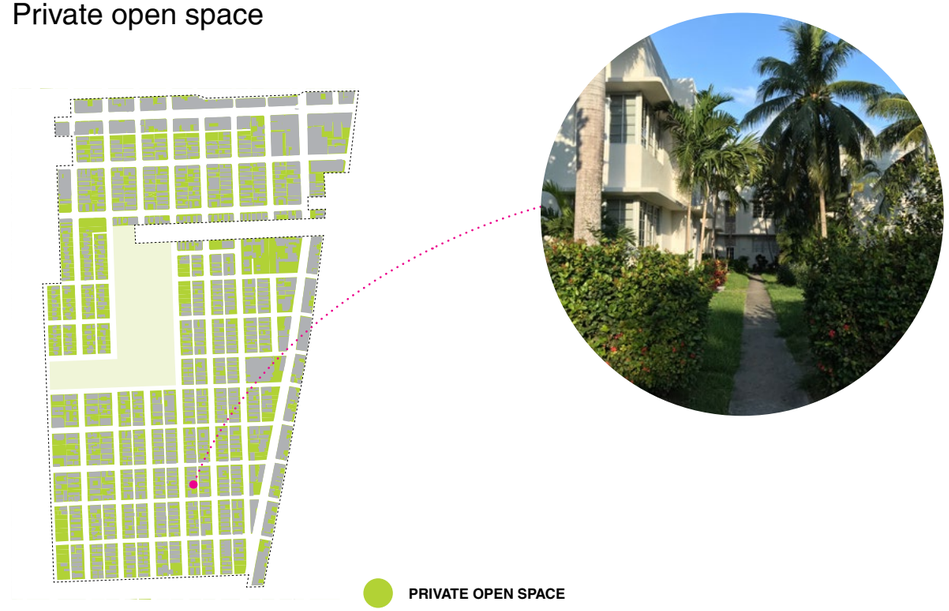


Typical alley section | Single family area



Public space

Private open space



Flamingo Park District | Study Area Analytics

Contributing/Non-Contributing
Buildings in Miami Beach historic districts are generally qualified as 'contributing' to the district's sense of time and place and historic development, or 'non-contributing'. 70.6% of buildings in the Flamingo Park Study Area are contributing.

(Based on City of Miami Beach GIS information (transmitted 01/31/19, 03/22/19 and 04/22/19)

Year of Construction
Year of Construction generally refers to the year the building permit was issued. Building construction in Miami Beach follows cycles of boom and bust, and boom cycles often corelate to architectural style. The largest boom cycle in the Flamingo Park Study Area was the period between 1933-42, when 44.2% of buildings there were constructed.

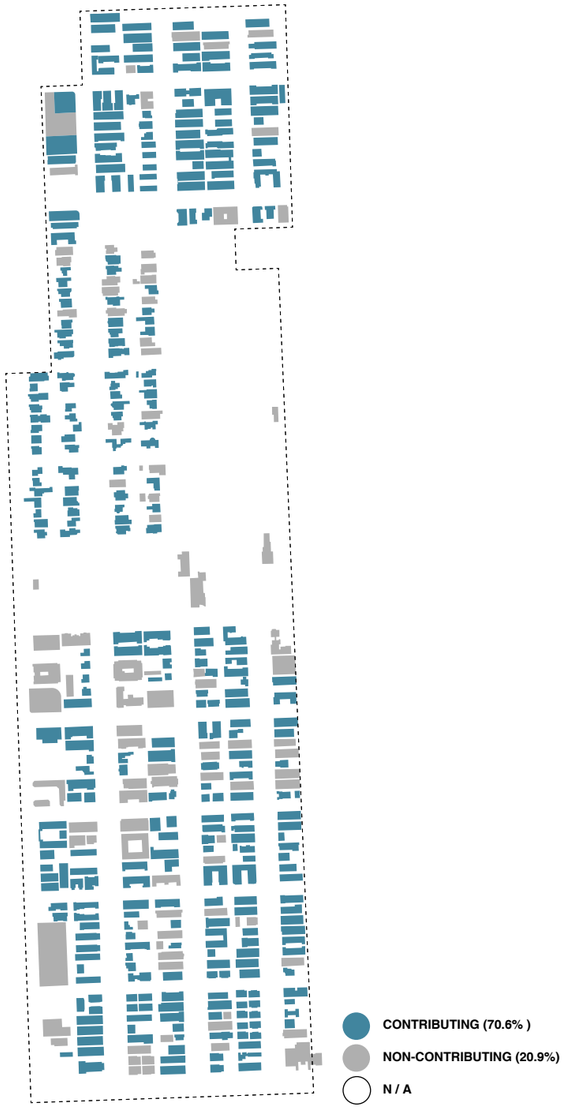
Based on City of Miami Beach GIS information (transmitted 01/31/19, 03/22/19 and 04/22/19)

Finished Floor Elevation
Finished Floor Elevation (FFE) refers to the top of the structural floor deck, or concrete floor slab. Finished Floor Elevations vary from 3.6' to 16.1' NGVD, and average 6.5' NGVD in the Flamingo Park Study Area.

Based on Miller Legg Property Resiliency Assessment (2018). Elevational data incomplete; projections based on extrapolation of existing data.

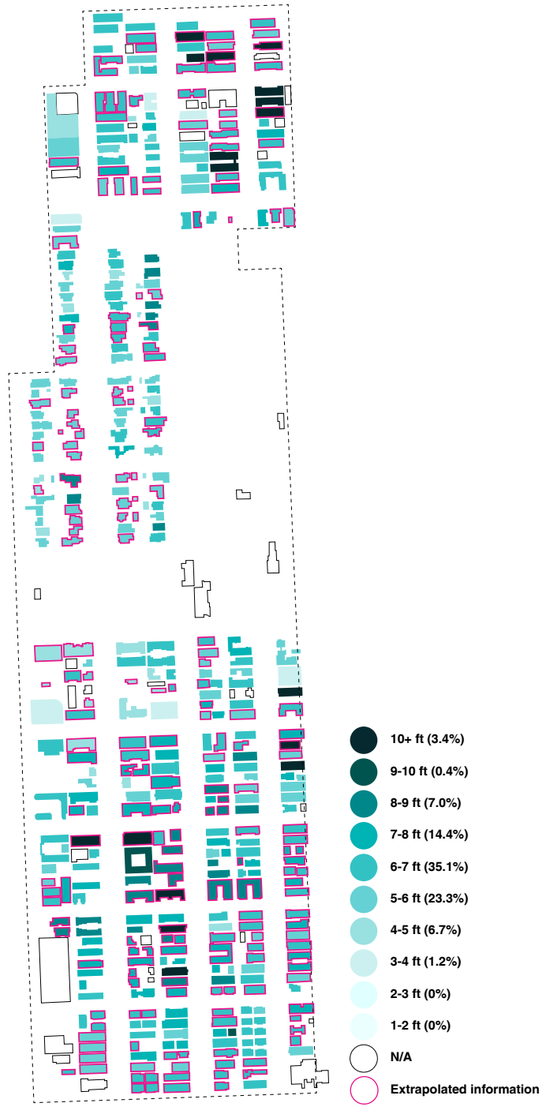
CYA

Source: S+A



Contributing | Non Contributing

Date of Construction
(*From Year 1920 to Year 2018)



Finished Floor Elevation | Ground floor
(*From FFE 3.60ft to FFE 16.10ft)

Foundation Type
Foundation systems, the lowest part of any construction, support a building by transferring loads to the earth. In Miami Beach, shallow foundations are typically continuous spread footers below the ground floor construction. Pile foundations transfer loads deeply through long cylindrical piles drilled or pounded into the earth. 74.6% of buildings in the Flamingo Park Study Area are supported on shallow foundations. Current code requirements typically require pile foundations for most Miami Beach building types.

Based on YHCE Structural Resiliency Assessment 2018.

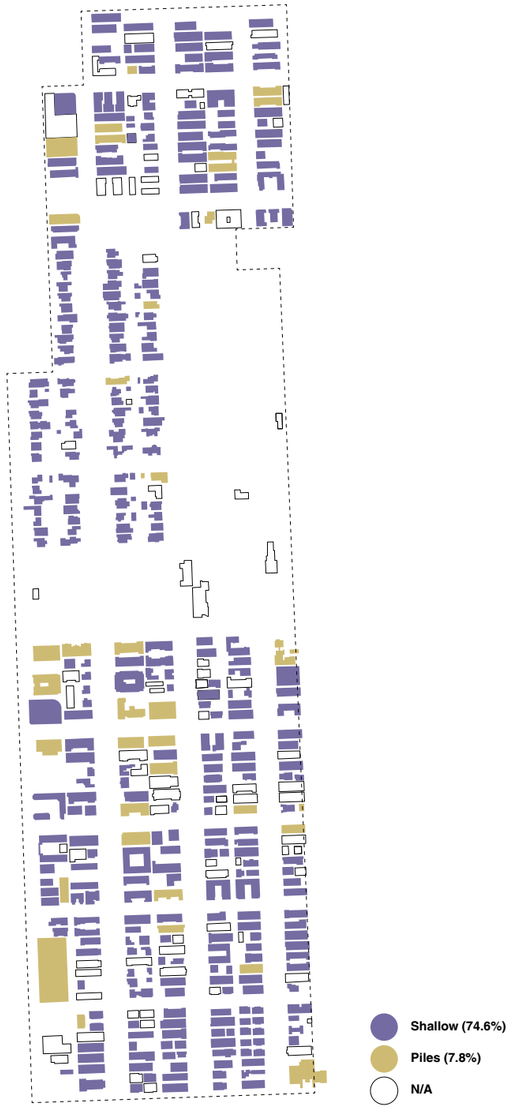
First Floor Construction
First floor construction in Miami Beach is generally wood or concrete framed, or may in some cases comprise a concrete slab on grade. Concrete is generally more resilient to flooding. 60.9% of buildings in the Flamingo Park Study Area are built using wood first floor construction.

Based on YHCE Structural Resiliency Assessment 2018.

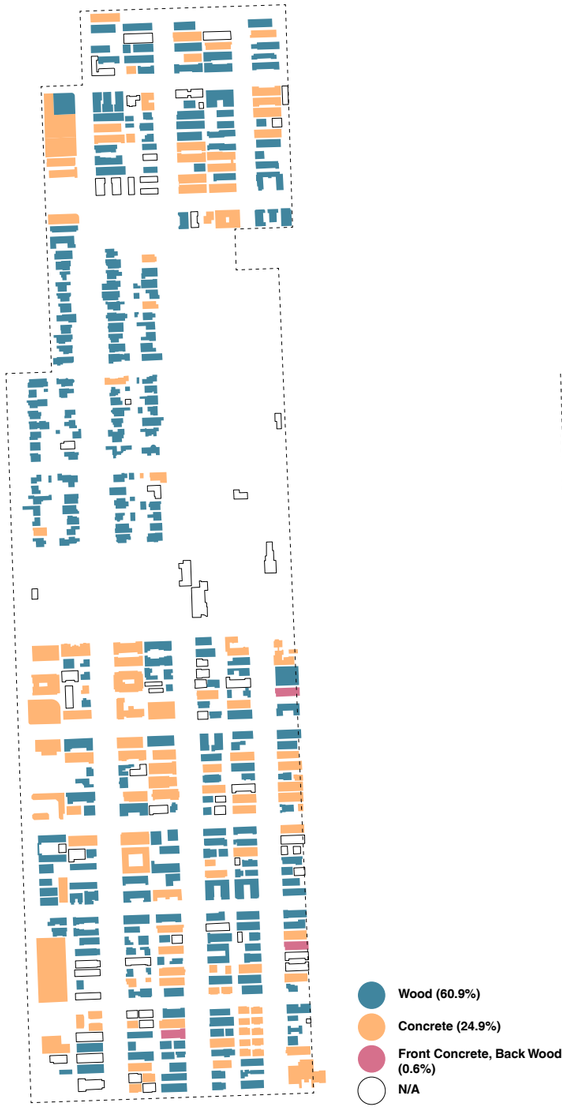
Raisability
Raisability predicts the ability of a building to be successfully raised. 66.4% of buildings in the Flamingo Park Study Area have been projected to have a good possibility to be raised.

Based on YHCE Structural Resiliency Assessment 2018.

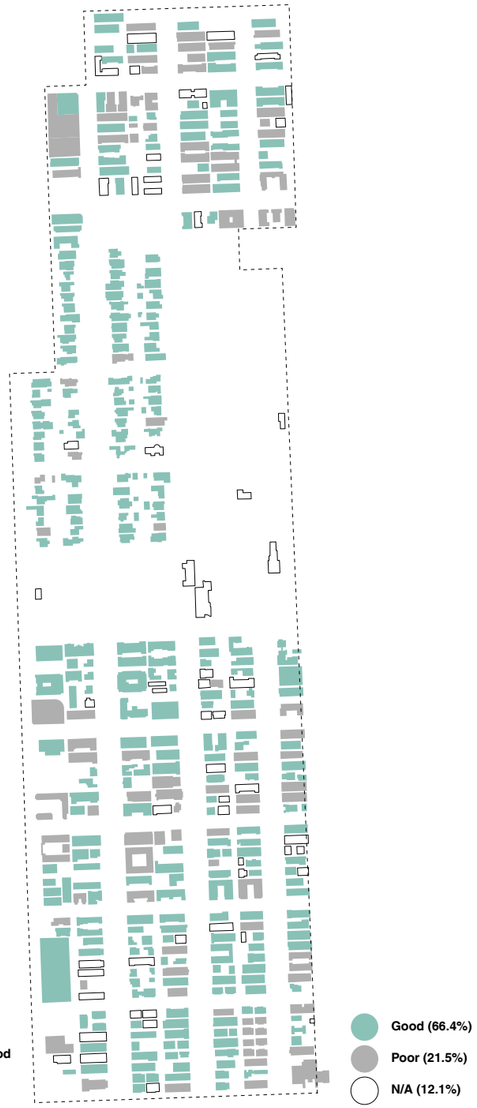
CYA



Foundation



First Floor Construction



Raisability

Lowest Adjacent Grade (LAG)
is the lowest point of the ground level immediately next to a building (FEMA). Lowest Adjacent Grade in the Flamingo Park Study Area varies from 2.8' to 6.2' NGVD.

Based on Miller Legg Property Resiliency Assessment (2018)

Building Height
Height of the building in floors. Most buildings in the Flamingo Park Study Area are between two and three stories high.

Based on City of Miami Beach GIS information (transmitted 01/31/19, 03/22/19 and 04/22/19)

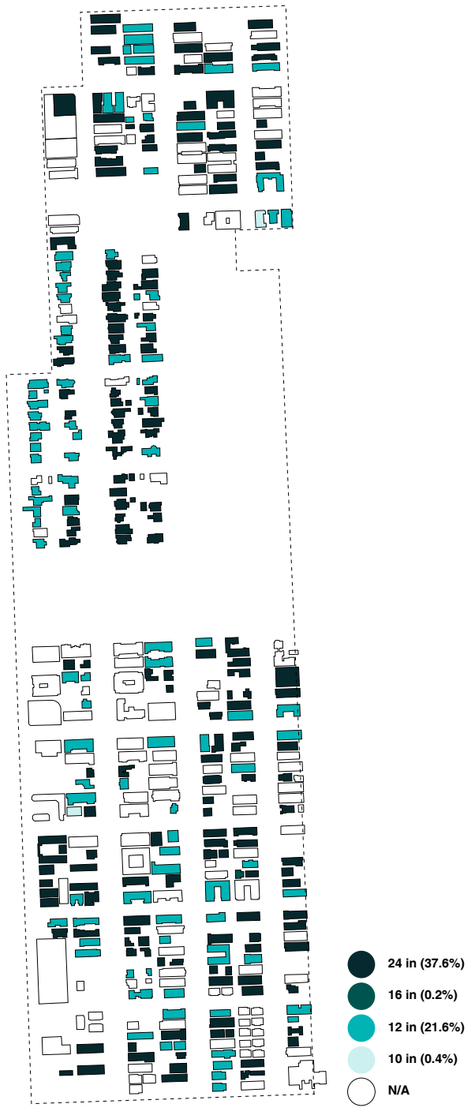
Crawl Space Height
Crawl spaces are the open areas between the earth and the first-floor structure.

Based on YHCE Structural Resiliency Assessment 2018.

CYA

Lowest Adjacent Grade | NGVD
(*From NGVD 2.80ft to NGVD 6.20ft)

Builing Heights | In stories



Crawl Space Height
(*From 10in to 24in)

3.6 // NEIGHBORHOOD CONTEXTS

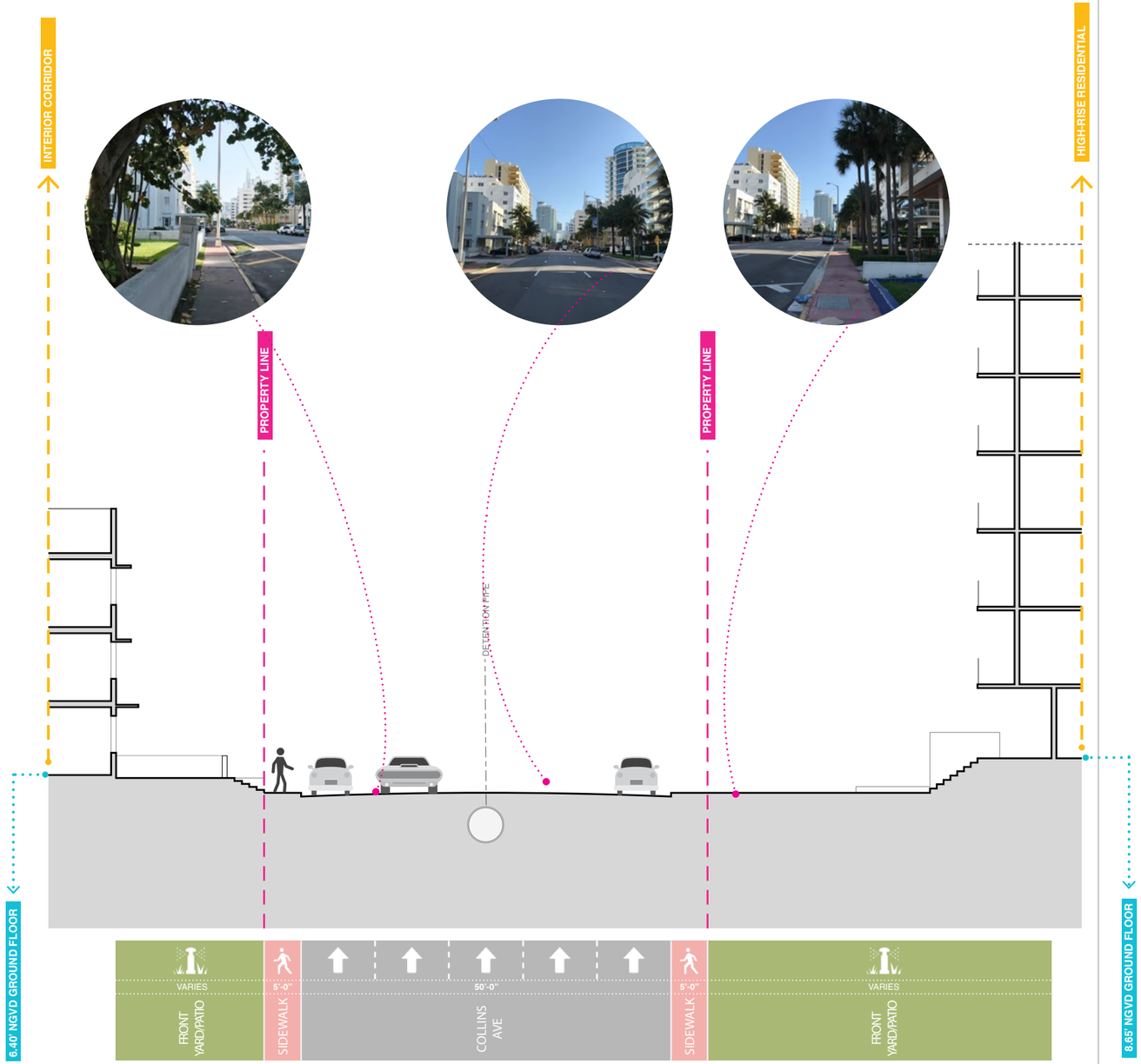
B. COLLINS WATERFRONT STUDY AREA

Collins Waterfront is located in Miami Beach from A1A to 26th Street between Indian Creek Drive and Collins Avenue. It is encompassed entirely with the RM-2 zoning district and is a more varied district comprising a mix of commercial, residential, and hotel typologies. Developed as a resort district occupying a one block-wide isthmus between the Atlantic Ocean and Indian Creek, it comprises a mix of scales and intensities, including a number of more recent buildings.

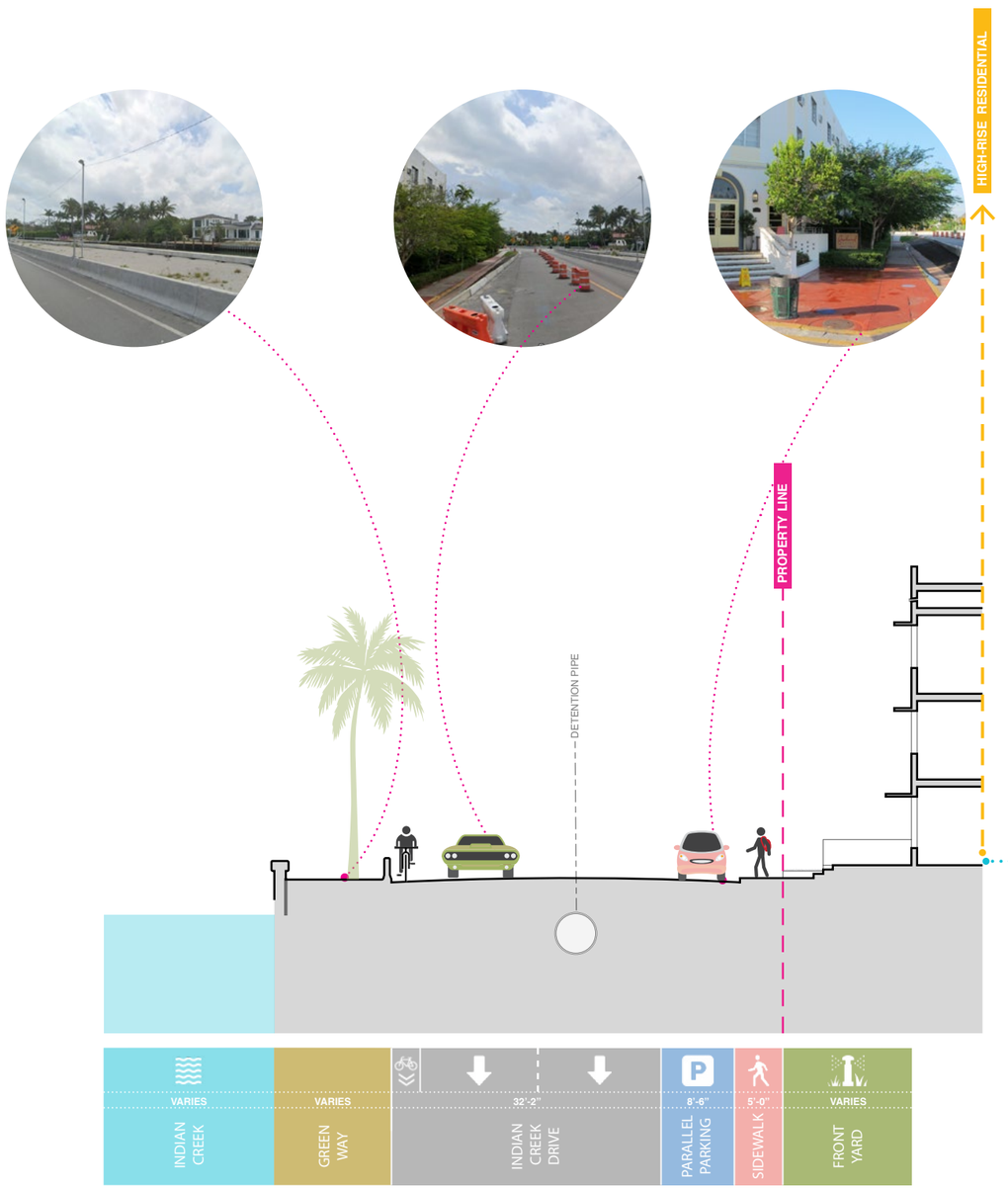
The district's local historic designation is based on three categories: Association with events that have made a significant contribution to the history of Miami Beach, the county, state or nation; Association with the lives of Persons significant in our past history; Embody the distinctive characteristics of an historical period.

Architectural or design style or method of construction; Possesses high artistic values; and Represent the work of a master; serve as an outstanding representative work of a master designer, architect or builder who contributed to our historical, aesthetic or architectural heritage; and Consist of a geographically definable area that possesses a significant concentration of Sites, Buildings or Structures united by historically significant past events or aesthetically by plan or physical development, whose components may lack individual distinction.

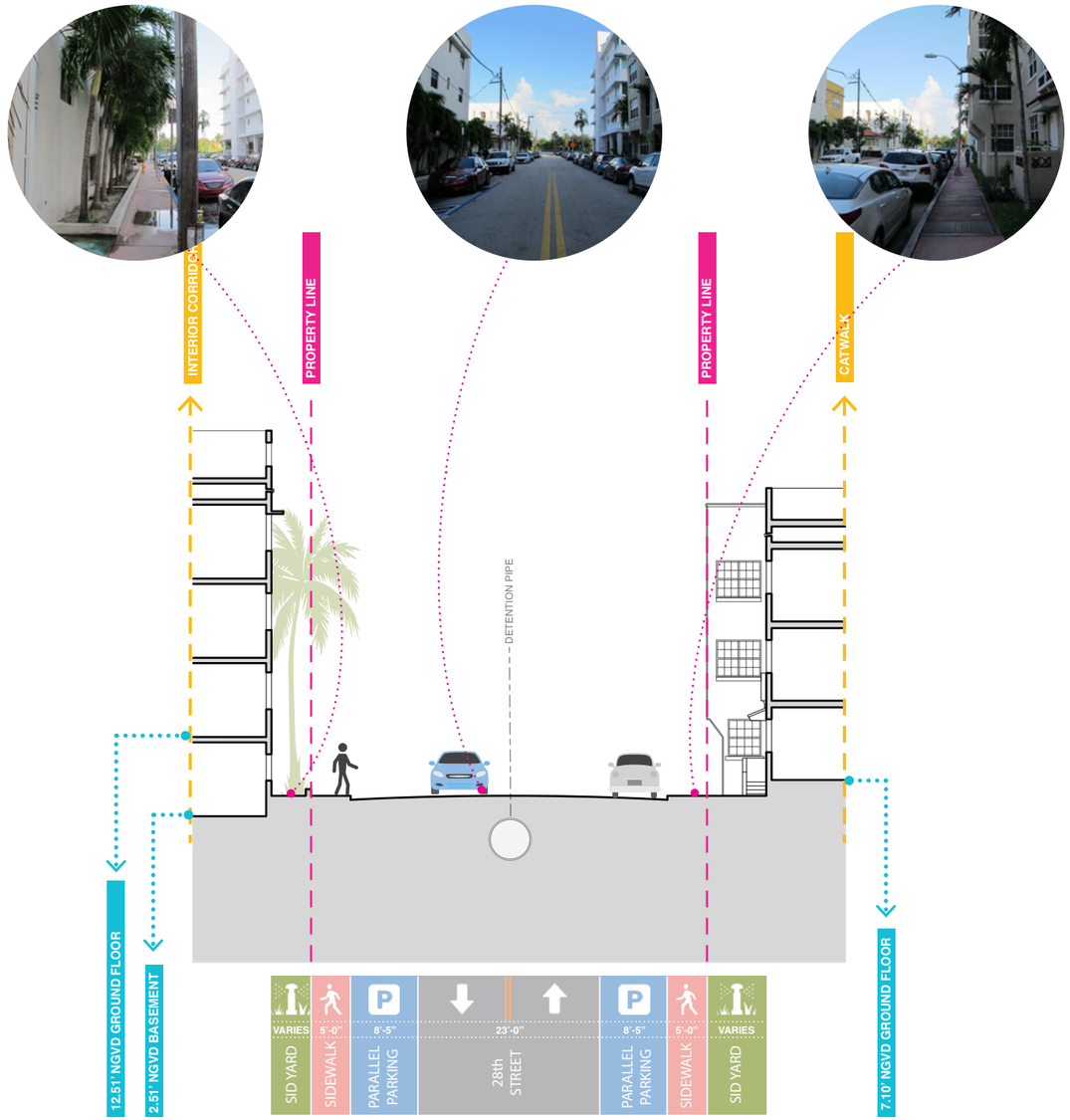
Avenue section | Collins Avenue



Drive section | As renovated | Collins Avenue

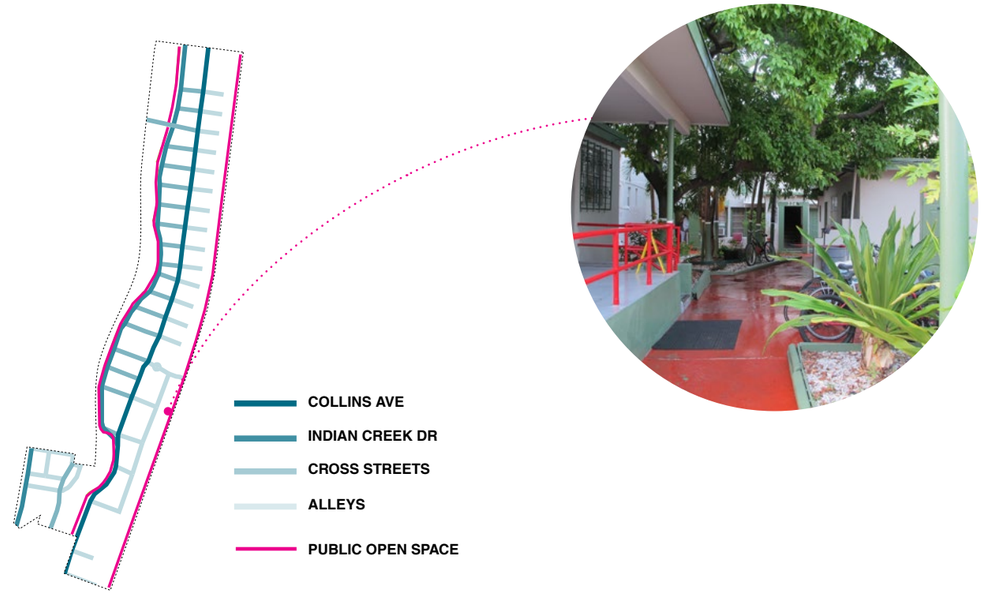


Typical street | 28th street



Public space

Private open space



Contributing/Non-Contributing
Buildings in Miami Beach historic districts are generally qualified as ‘contributing’ to the district’s sense of time and place and historic development, or ‘non-contributing’. 67.4% of buildings in the Collins Waterfront Study Area are contributing.

Based on City of Miami Beach GIS information (transmitted 01/31/19, 03/22/19 and 04/22/19)

Year of Construction
Year of Construction generally refers to the year the building permit was issued. Building construction in Miami Beach follows cycles of boom and bust, and boom cycles often corelate to architectural style. The largest boom cycle in the Collins Waterfront Study Area was the period between 1933-42, when 32.6.2% of buildings there were constructed.

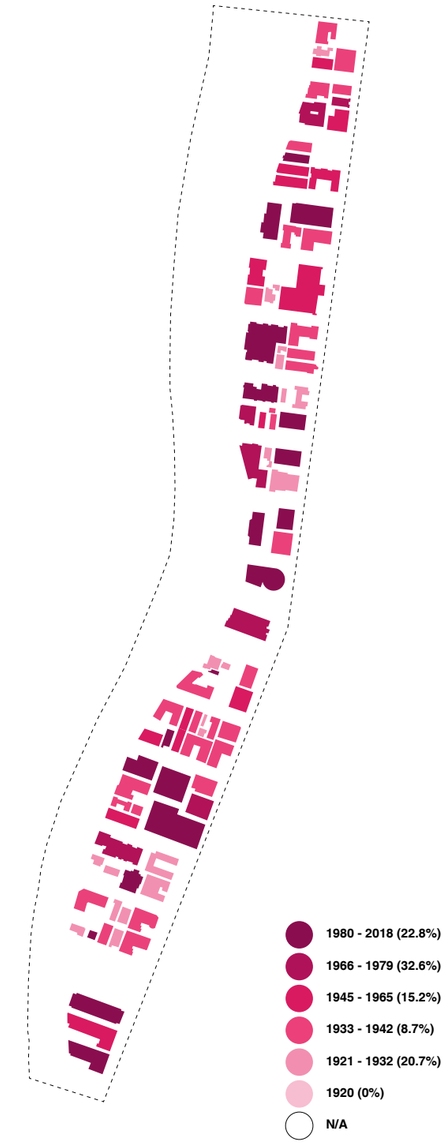
Based on City of Miami Beach GIS information (transmitted 01/31/19, 03/22/19 and 04/22/19)

Finished Floor Elevation
Finished Floor Elevation (FFE) refers to the top of the structural floor deck, or concrete floor slab. Finished Floor Elevations vary from 1.7’ to 8.9’ NGVD, and average 5.5’ NGVD in the Collins Waterfront Study Area.

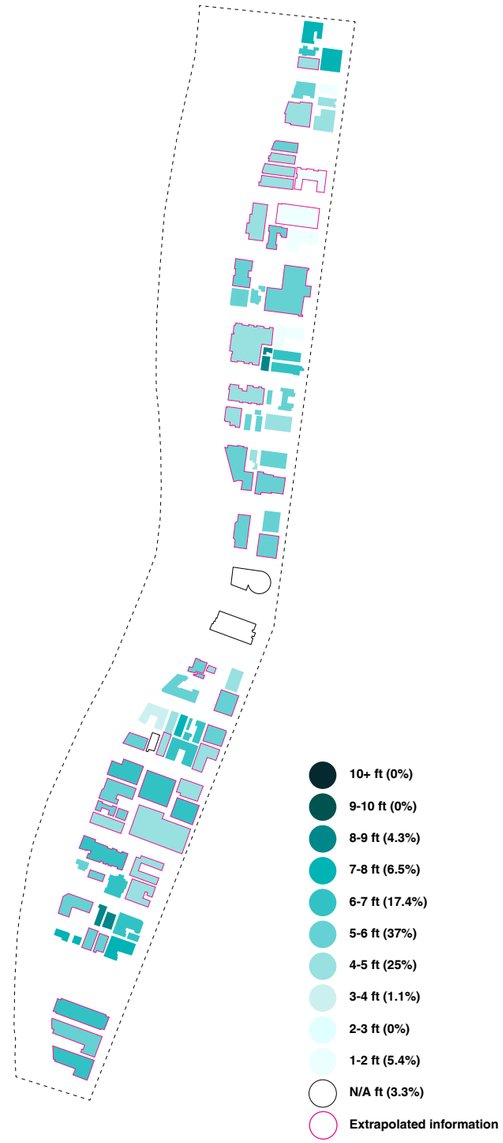
Based on Miller Legg Property Resiliency Assessment (2018). Elevational data incomplete; projections based on extrapolation of existing data.

CYA

Contributing | Non Contributing



Date of Construction
(*From Year 1922 to Year 2018)



Finished Floor Elevation | Ground floor
(*From FFE 1.70ft to FFE 8.90ft)

Foundation Type
Foundation systems, the lowest part of any construction, support a building by transferring loads to the earth. In Miami Beach, shallow foundations are typically continuous spread footers below the ground floor construction. Pile foundations transfer loads deeply through long cylindrical piles drilled or pounded into the earth. 67.4% of buildings in the Collins Waterfront Study Area are supported on pile foundations. Current code requirements typically require pile foundations for most Miami Beach building types.

Based on YHCE Structural Resiliency Assessment 2018.

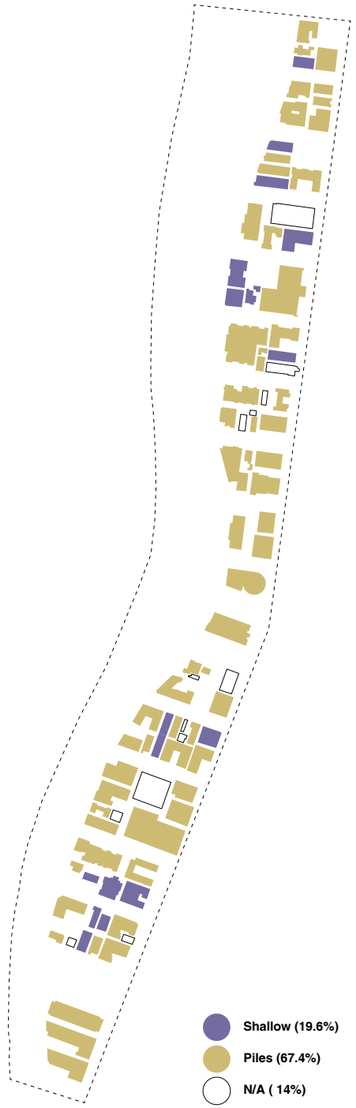
First Floor Construction
First floor construction in Miami Beach is generally wood or concrete framed, or may in some cases comprise a concrete slab on grade. Concrete is generally more resilient to flooding. 68.5% of buildings in the Collins Waterfront Study Area comprise concrete first floor construction.

Based on YHCE Structural Resiliency Assessment 2018.

Raisability
Raisability predicts the ability of a building to be successfully raised. 57.6% of buildings in the Collins Waterfront Study Area have been projected to have a good possibility to be raised.

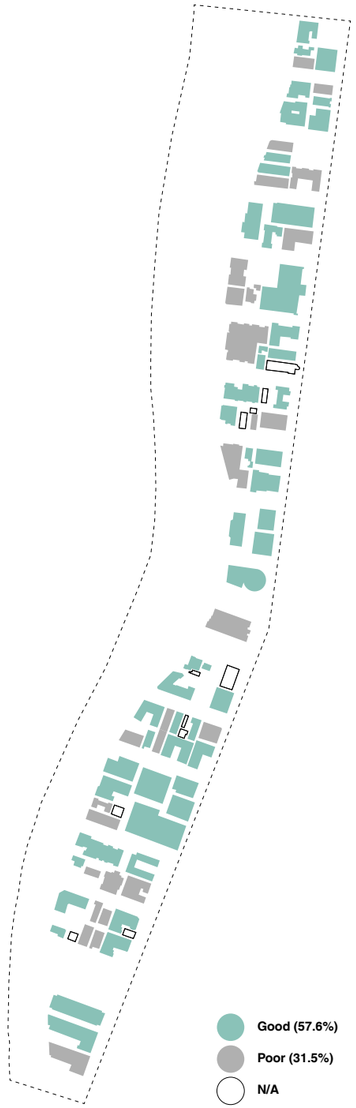
Based on YHCE Structural Resiliency Assessment 2018.

CYA



Foundation

First Floor Construction



Raisability

Lowest Adjacent Grade
Lowest Adjacent Grade (LAG) is the lowest point of the ground level immediately next to a building (FEMA). Lowest Adjacent Grade varies from 2.9' NGVD. to 5.5' NGVD in the Collins Waterfront Study Area.

Based on Miller Legg Property Resiliency Assessment (2018)

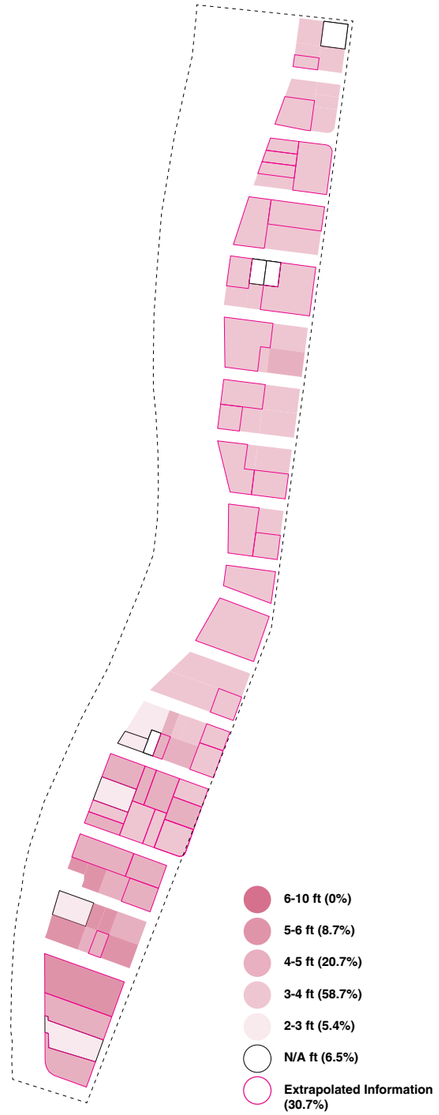
Building Height
Height of the building in floors. Most buildings in the Collins Park Study Area are between two and five stories high.

Based on City of Miami Beach GIS information (transmitted 01/31/19, 03/22/19 and 04/22/19)

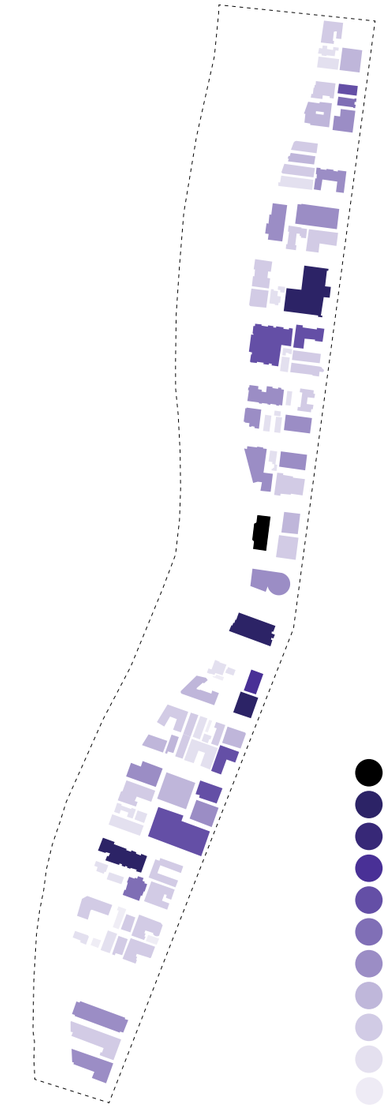
Building Height
Height of the building in floors. Most buildings in the Collins Park Study Area are between two and five stories high.

Based on City of Miami Beach GIS information (transmitted 01/31/19, 03/22/19 and 04/22/19)

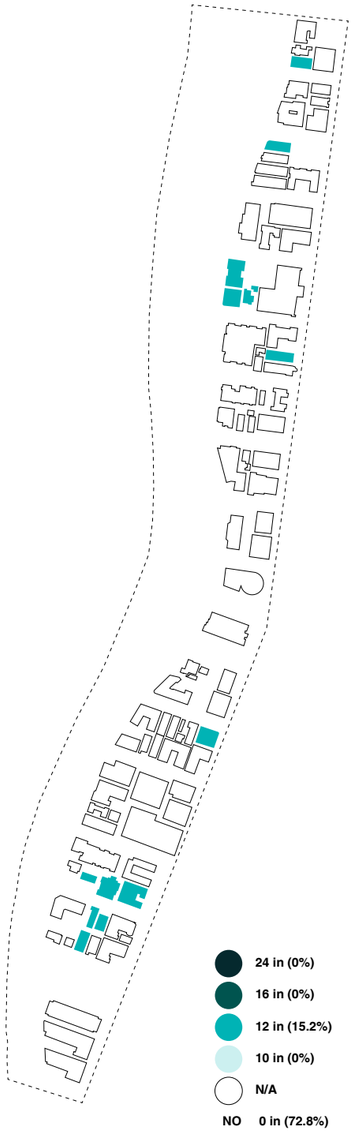
CYA



Lowest Adjacent Grade | NGVD
(*From NGVD 2.90ft to NGVD 5.50ft)



Builing Heights | In stories



Crawl Space Height
(*12in)