

MIAMI BEACH

COMMISSION MEMORANDUM

TO: Honorable Mayor and Members of the City Commission
FROM: Vice-Mayor Ricky Arriola
DATE: September 11, 2019
SUBJECT: REFERRAL TO THE LAND USE AND DEVELOPMENT COMMITTEE TO DISCUSS TIGHT URBANISM.

ANALYSIS

KoDA, a Miami Beach-based architecture firm, submitted a proposal to our office that contemplates the exploration of Miami Beach's alleyways. The firm aims to examine ways we can adapt our alleys to be in line with the Urban Land Institute's recommendations for stormwater management while maximizing the value of alleys to better serve pedestrians and cyclists. KoDa's exploration would be guided by the tenets of "tight urbanism."

The now infamous Betsy Alleyway capitalized on an underutilized public right-of-way and transformed into an experiential destination. If Miami Beach were to develop a cohesive for all its alleyways, it could be recognized worldwide for its creative use for all public spaces. There is also a potential to partner with the University of Miami (UM) on this project since the principal of KoDA is a professor at the UM School of Architecture. Attached is KoDA's proposal with a preview of the research they've already conducted.

Applicable Area

Citywide

Is this a Resident Right to Know item?

Yes

Does this item utilize G.O. Bond Funds?

No

Legislative Tracking

Vice-Mayor Ricky Arriola

ATTACHMENTS:

Description

- ▢ The Space Between — Proposal

BETWEEN

THE SPACE

Adaptation of the Alleys in Miami Beach

KoDA

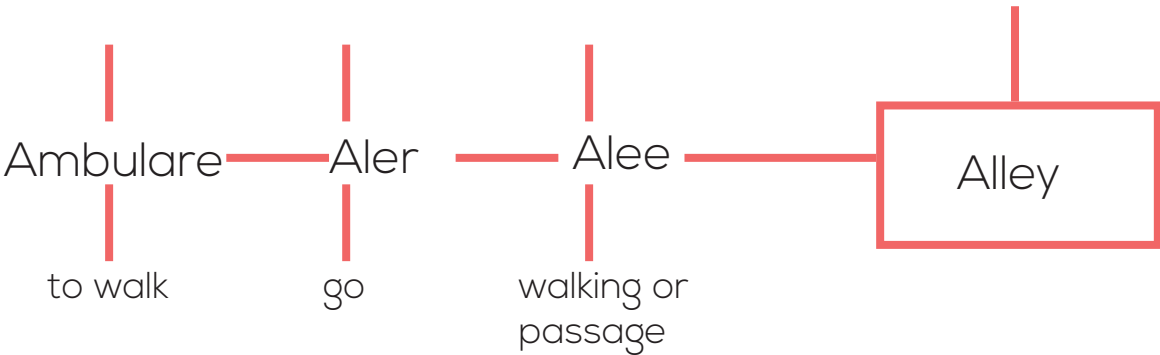
al-ley
/alē/

noun

A narrow passageway between or behind buildings.
- a path lined with trees, bushes or stones.

Origin

Latin — Old French — Late Middle English



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	Credits

Since the advent of the Industrial Revolution we have been emitting carbon into our environment at disturbing rates. In fact, the majority of carbon emitted into the environment has been over the last 30 years. This is since NASA's climate scientist, James Hansen, warned the US Congress of the human cause and effect of climate change, meaning that we've done more damage to the environment knowingly than we've ever done in ignorance. In addition to the complex challenges of climate change, our environment is in peril due to the continual expansion of the world's population. Based on the average of the United Nation's projection of global population of between 9.5 and 13 billion by 2100, the world will face a large deficit of land required for future urbanization, agriculture and the preservation of our natural ecosystems. The challenges of climate change and sea level rise come as no surprise to Miami Beach and its constituents. As one of the most recognizable and significant cultural destinations in the world, the efforts of Miami Beach to combat this challenge are ever-evolving. With recent discourse on the subject at the top of the agenda for the disciplines of architecture, urban design and planning, the Kean Office for Design + Architecture (KoDA) is proud to spearhead this research-based initiative that advances meaningful ecological, infrastructural and cultural strategies. As such, this proposal investigates the potential of adapting Miami Beach's network of alleys particularly in South Beach. Through an in-depth research and analysis initiative our ambition is to identify opportunities for green infrastructure to symbiotically restore ecology and enhance the cultural identity of Miami Beach.



Miami Beach has been bold in furthering its resiliency efforts with a majority of the investment directed toward elevating roadways and the deployment of larger hydrological engineering systems. In order to address the most immediate impacts of seasonal and “sunny day” flooding, the city has dedicated multi-million dollar upgrades to its drainage infrastructure, including a new pump station and elevating the control panels for three other existing pump stations. These stations discharge stormwater through an outfall structure into Biscayne Bay. In addition, the collection system was expanded and upsized to reduce the amount of time it takes to dry the streets after rain events. While these efforts have been immediately helpful, they do not address the larger impacts of a changing climate and the hardship it puts on the future of our city. Florida is no stranger to large hydrological engineering schemes. In the past, South Florida has seen failed hydrological ambitions such as former Governor Napoleon Bonaparte Broward’s campaign to drain the everglades for the sake of conquering nature and allowing new development. A century later, the transformation of Florida south of Lake Okeechobee has been found to be an environmental disaster created by man and requiring remediation through a comprehensive Everglades restoration plan. According to the Urban Land Institute, “Miami Beach has taken care to remove trash and sediments from the pump stations. However, with the introduction of more pumps and generators, a risk exists that the quest for peak-event preparedness eclipses the need for sustainability and respectful use of natural resources.”⁽¹⁾

In contrast to ubiquitous and costly hard engineering solutions, low impact development infrastructure (LID) offers soft engineering strategies that can remediate polluted runoff through a network of treatment landscapes. Pervious surfaces play an important role in the treatment, storage and conveyance of storm water. “Despite the city’s efforts to maintain pump stations and vacuum large trash and sedimentation at a regional landfill, the city often receives frequent expressions of concern and criticism from residents who believe that drainage pumps are contaminating the bay.”² If the city were to implement a LID initiative to maximize pervious surfaces throughout the city, plants and soils would act as natural water treatment facilities while also restoring Miami Beach’s fragile local ecology.



A Call to Action: Looking Through Alleyways

The interstitial spaces defined by buildings within city blocks, more commonly known as an alley, are primarily reserved for trash collection, service and utility distribution. However, these thoroughfares can offer much more to the urban, ecological and cultural aspects of the city. Low-to-mid rise buildings throughout the city make this network of alleyways more intimate and relatable on a human scale. Within a busy urban context, alleys have the potential to strengthen community and activate new uses in addition to their existing, functional contribution to the city. This proposal arises from a critical review of the underutilization of the alleyways in Miami Beach, reconsidering their use by prioritizing culture, community and environment.

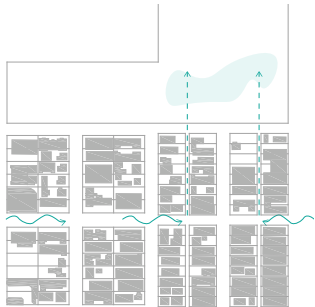
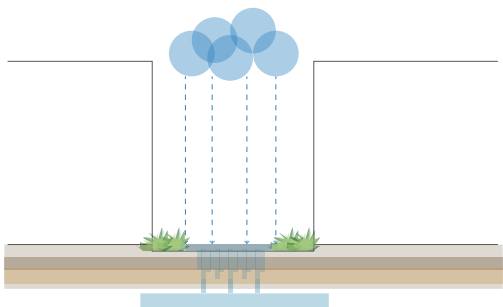
The resilient strategy set forth in the Urban Land Institute Advisory Services Panel Report analyzes the city’s proposed strategy through seven principles in which this case study is based: infrastructure, physical design and typology, creative placemaking, governance, regulations and communications. Another relevant study for this proposal is, “South Florida and Sea Level: The Case of Miami Beach, from the Office of Urbanization of the Harvard University Graduate School of Design,” where recommendations of how to manage climate change are proposed through the disciplines of architecture, urban and landscape design. Therefore, this proposal builds upon those recommendations in order to make the alleys a public asset that will enhance the city’s mobility network and proposes new ideas for how low impact development infrastructure can further botanize the city and improve stormwater management.

The city should be commended for their bold and swift action related to the complex issues it faces. As stated in the ULI report the city has been extremely process-oriented and has taken careful steps to understand the scientific data and implement solutions. Our objective is to further the city’s initiatives through the revitalization and reuse of the somewhat forgotten alley network.

INFRASTRUCTURE

According to the Urban Land Institute, the necessity to have advances in infrastructure is urgent as Miami Beach is at significant risk. It is important to build a holistic strategy that will address the severe impacts to climate change. One of the recommendations is to implement blue and green infrastructure to prepare the city to live with water. Green Infrastructure manages water through natural processes, allowing water to be absorbed and filtered through a combination of vegetation and soils. (3) Blue infrastructure works with natural hydraulics of the aquifer and can refer to new canals, wetlands and retention areas on urban plazas and other public facilities. (3)

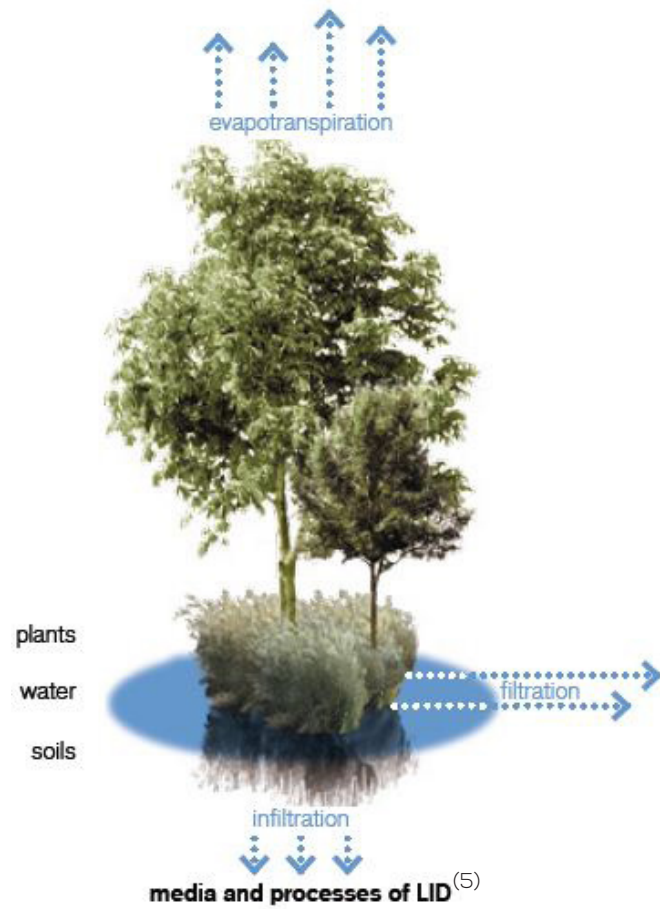
Alleyways present an opportunity to include both green and blue infrastructure where permeable surfaces could be maximized while adding to the cultural identity and livability of the city. New permeable surfaces allow stormwater infrastructure to deliver valuable ecological benefits to botanize the city. When properly graded, alleys can channel and re-direct flood water into retention areas within public spaces such as Flamingo Park to foster beauty, recreation and storm water collection. By analyzing the city through transportation, public infrastructure, it can be concluded that the primary transit routes are made up of county buses and local trolleys. The current network lacks the secondary and tertiary connecting points that fully integrate mobility throughout the city. Libraries, public schools, universities, worship spaces, etc. make up the social infrastructure of Miami Beach. However, like the public parks, these social assets are somewhat isolated and outside of the mobility network of the city. Alleyways are abundant, but underutilized. This network of sequestered, urban passageways can be further expanded upon to improve mobility, implement green and blue infrastructure and enhance urban ecologies while maximizing the cultural experience of the city.



INFRASTRUCTURE

Low Impact Development

Low Impact Development (LID) is an ecologically-based stormwater management approach favoring soft engineering to manage rainfall on site through a vegetated treatment network. The goal of LID is to sustain a site's pre-development hydrologic regime by using techniques that infiltrate, filter, store and evaporate stormwater runoff close to its source. Contrary to conventional "pipe-and-pond" conveyance infrastructure that channels runoff elsewhere through pipes, catchment basins, and curbs and gutters, LID remediates polluted runoff through a network of distributed treatment landscapes. (5)



PHYSICAL DESIGN AND TYPOLOGY

The physical landscape Miami Beach parallels to its identity. The main cultural and architectural district lines the top of the dune to the east fronting the Atlantic Ocean. Bayside, the city sees its largest residential density, while the middle of the island is low-scale and contains the somewhat expansive and recreational Flamingo Park. According to the Urban Land Institute the city should focus on creating innovative and cost-effective solutions for stormwater management, incorporating public spaces and renewable energy. Exchanging pavement for planting and maximizing permeable surfaces will improve Miami Beach’s resilience to flooding, while restoring ecology and activating new neighborhood greenspace.

“Green infrastructure and green streets should be designed with capacity to retain, purify and release water.” (6)

Alleyways provide an opportunity to create community in neighborhoods by fostering recreational activities that include green space, such as creating community gardens where locally sourced compost will be used to produce crops. This opportunity provides welfare, allows the community the opportunity to analyze how they treat their waste and generates eco-friendly public spaces and awareness. Through a new green alleyway network, new playgrounds can engage families and restored landscapes can encourage active learning through guided and unguided nature walks. As stated in the Harvard recommendations, “Alleys can be additional spaces as extensions of the public realm”. (7)

The north-south orientation of the alleys within the residential district of Flamingo Park and the cultural art deco district of Ocean Drive and Collins Avenue lends itself to create opportunities for renewable energy initiatives. Like the dappled light filtering through the tree lined street of Meridian Avenue, alleys can be shaded through solar canopies that can harness energy from the sun in order to increase preparedness for peak events and power failures. With the majority of the cities utilities already passing through the alley network, this would provide for a seamless transition from the city’s dependency on fossil fuel energy to energy generated by renewable sources. In combination with these solar canopies, new bridges and elevated walkways can connect a new public realm on the rooftops within the cultural district of Miami Beach.



CREATIVE PLACEMAKING

Miami Beach is known for its vibrant display of diverse culture, its collection of historic art deco structures and its connection to the arts. These elements are what generate interest to visitors from around the world. Though engaging with local artists and designers, public art can become well integrated and engrained into the urban fabric of Miami Beach's public space. This will allow people to feel more comfortable and adapt to the new ways of living with water.

This proposal complements the idea of preserving identity by promoting alleyways that would be part of the cultural activities by including art galleries, music, poetry, film, plastic arts and design (including architectural design). The ambition of the proposal is to use art as a communicator to create awareness of the stormwater management strategies and climate change risks through innovative and creative placemaking. This can have a positive impact on the local economy as Miami Beach will be a destination for ecotourism in addition to its already robust architecture and leisure tourism. As Daniel Toole said in an interview referring to alleys, "they offer exactly the kind of thing that everyone goes to Paris and Rome for: to walk through the little streets." Alleyways are the perfect way to intervene climate change and maintain neighborhoods, as each alley will be designed based on their neighborhood.

Rather than isolating art to one district in the city, art and culture will become part of the urban fabric, distributed through existing residential, commercial and cultural districts. As in the example of Shulman + Associates' Orb (10) which connects the historic Betsy and Carlton Hotels, alleyways will also aid in the restoration and rehabilitation of historic places throughout the city.



The Betsy-Carlton Orb, Shulman + Associates - 2016¹⁰

GOVERNANCE

To further the city’s bold and swift initiatives to overcome the challenges of flood mitigation and sea-level rise resilience, it will take complex governance. The issues associated with flooding have an effect on nearly all issues, be it property values, health, economy, housing, mobility or others. Therefore, the city needs to consider all creative ideas which discover opportunities beyond the most evident. This proposal aims to re-evaluate the use of the alleys to create opportunities which engage local stakeholders in the environmental discussion, create incentives for historic preservation and promote investments in resilience.

A fundamental success of cities is their ability to evolve and adapt to the challenges they face over time. This focus on implementing low-impact development within the alley network produces an opportunity to pilot the advantages of green and blue infrastructure as an alternative to pipe and pond engineering schemes.

This proposal presents an opportunity for Miami Beach to lead the world in an innovative case study that showcases how a city can become more resilient while also promoting an exciting urban lifestyle.

FINANCE

Most successful and meaningful projects face their greatest hardships when it comes to financing. After all, who’s going to pay for all of this? Our proposal aims to reveal the many possibilities for funding through different mechanisms including both private and public funding sources including bonds, grants, loan programs, tax increment financing, special assessment taxes, fines and other finance mechanisms. With the looming costs that the city will face based upon the existential threat of climate change, the city should also be looking into investments early that will not only help reduce the impacts of future mitigation costs, but also improve the economic and overall well-being of its constituents. As stated in the ULI report, “the city’s assessed property value totals \$37.4 billion, representing over 13 percent of the county’s property values on only 0.4 percent of the land.” While this clearly generates a large tax revenue base for the city, it also highlights the vulnerability and the necessity to focus on active and innovative solutions. Second to revenues generated from high property values, the city generates a significant amount of tax revenue from its tourism industry. Through our ambition to discover the maximum potential of the alley network, new opportunities for ecotourism will enhance this base.

REGULATIONS

Miami Beach has the opportunity to become a model and leader for resilient initiatives while advancing the urban quality of life. Issues faced by the city are varied and extensive: Urban heat island effect, which is caused by excessive paved and hard surfaces which emit heat into the environment, substantially raises temperatures throughout the city. King tides, sunny day flooding and sea-level rise create an existential threat to its constituents. Through our proposal to re-evaluate and revitalize the use of the alley network, new micro-zoning districts will provide opportunities for small businesses that can no longer afford high development costs along major retail corridors such as Lincoln Rd. In residential districts, alley facing apartments will have new value as they will no longer face a service corridor, and instead look out onto urban passages lined with trees, gardens and renewable energy canopies. Regulations which better control waste management would include mandating recycling and compost, thus significantly reducing landfill growth. As a result, the primary function of the alley is reinvigorated as green beltways throughout the city, sustained by the by-product of its inhabitants.

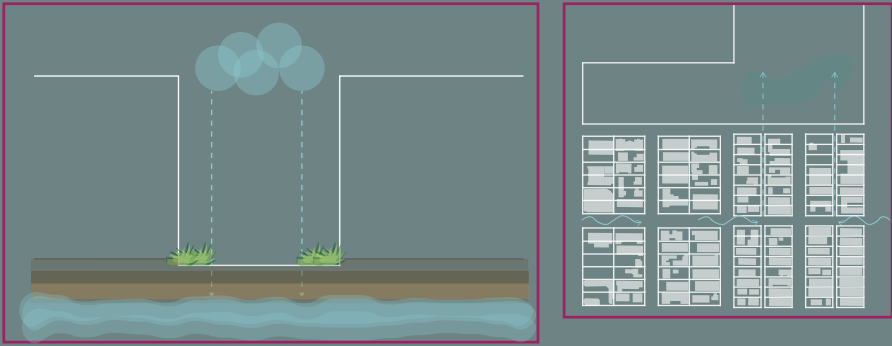
COMMUNICATIONS

The city has done an excellent job strengthening their communication efforts through both printed and social media as well as the Rise Up website and other community engagement efforts. However, our proposal focuses on how public infrastructure can become a city-wide communicator. In the case of renewable energy for example, solar panel canopies can showcase the energy collected from the sun by illuminating the revitalized green thoroughfares between buildings. Storm water management can be communicated through an increased engagement of local stakeholders in new alleyway activations. Life can be energized throughout the city through the release of oxygen within planted greenways to help offset and sequester carbon generated from cars and large service vehicles. Ecotourism will be generated by new storefronts and cultural and artistic installations can be shared throughout social media to display to the world Miami Beach’s leadership in climate resilience, while also contributing to the local economy by providing a multitude of jobs for local residents.

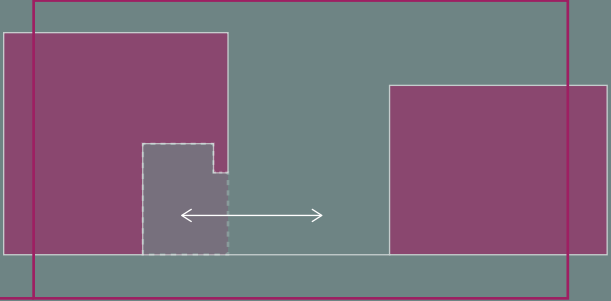
SUMMARY

Based upon the initial research and analysis summarized in this proposal, it is evident that all aspects of the city require creative exploration in order to further expand its climate resilience. This multi-disciplinary approach of addressing storm water management through landscape urbanism or incremental implementation of renewable energy sources through placemaking is the kind of bold initiative that stems from the recommendations within the white paper of the ULI Panel Report. However, this is really just touching the surface of the immense opportunities contained within the city’s alley network. Through rigorous governance, community engagement and innovative ideas, our ambition is to discover a new urbanism which will strengthen the city’s identity, soften its surfaces and increase the quality of life for residents and visitors alike.

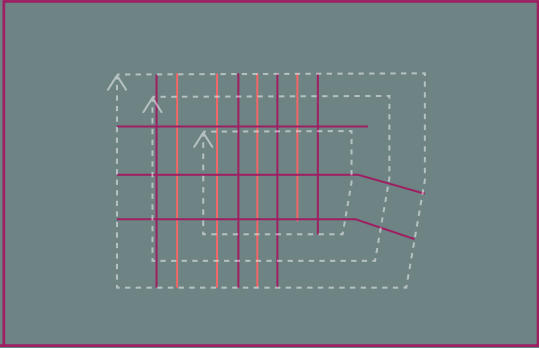
Implement blue and green infrastructure and restore ecology



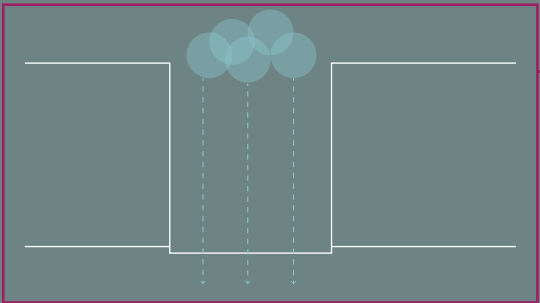
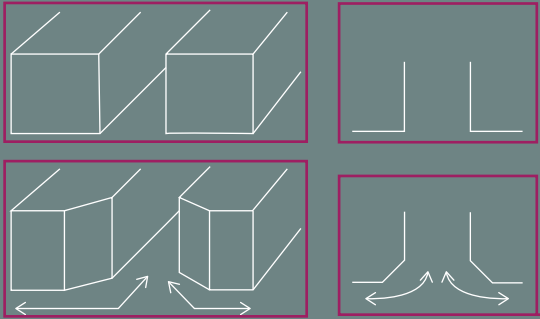
Strengthen the relationship between public and private spaces



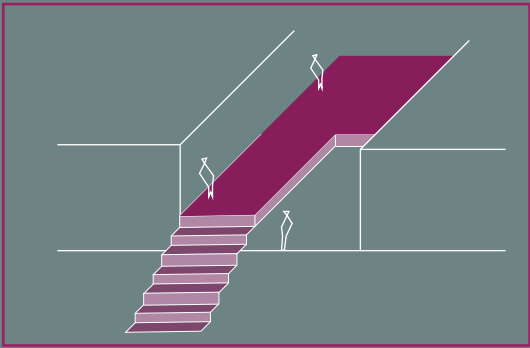
Create continuous loops of public transit while prioritizing pedestrians



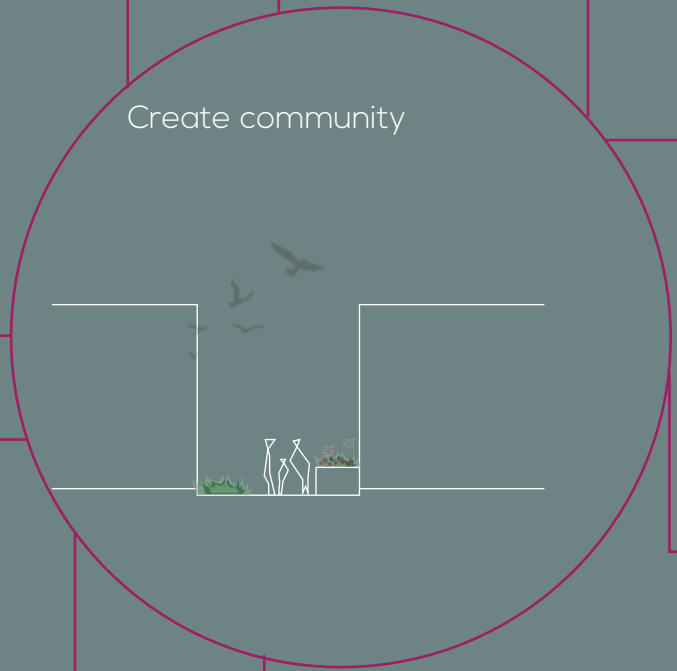
Enhance permeability: visual and drainage



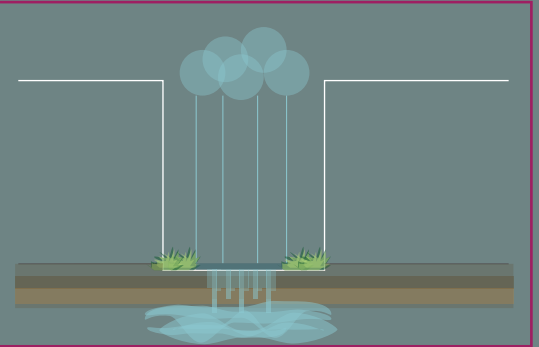
Elevated walkways allow for an uninterrupted service and connect new public realms



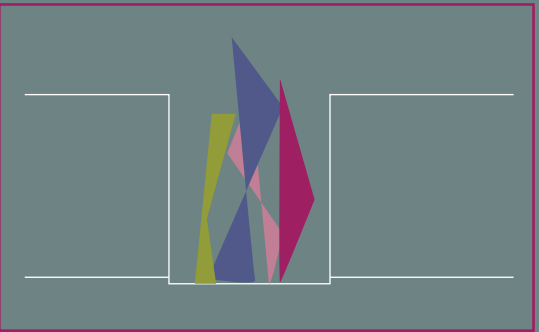
Create community



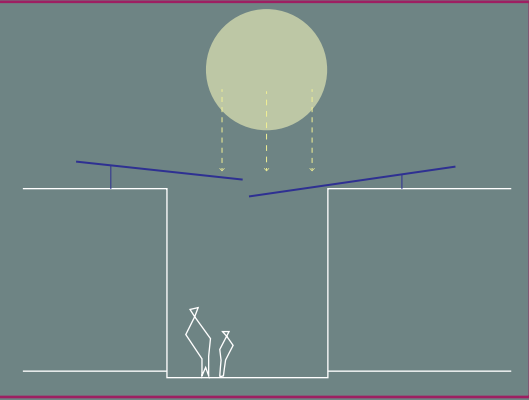
Treat runoff water through natural bioswales



Integrate art in public places in collaboration with local artists



Creating shades through solar and renewable energy canopies



CASE STUDIES

Miami Beach is well organized with an established grid of dense residential, commercial and hospitality blocks. Defined as the space between buildings within these dense blocks are alleys, which permeate through the city like the limestone base it's built upon. The opportunities presented by this network of sequestered urban passageways is what this proposal focuses on. The alleys are characterized by the different experiences that each zone creates:

Commercial- alleys that serve the blocks where commercial activities exist. This includes retail, restaurants, coffee shops, art galleries, movie theaters, etc.

Cultural- alleys that serve the blocks between historic art-deco hotels, bars, restaurants, museums, etc.

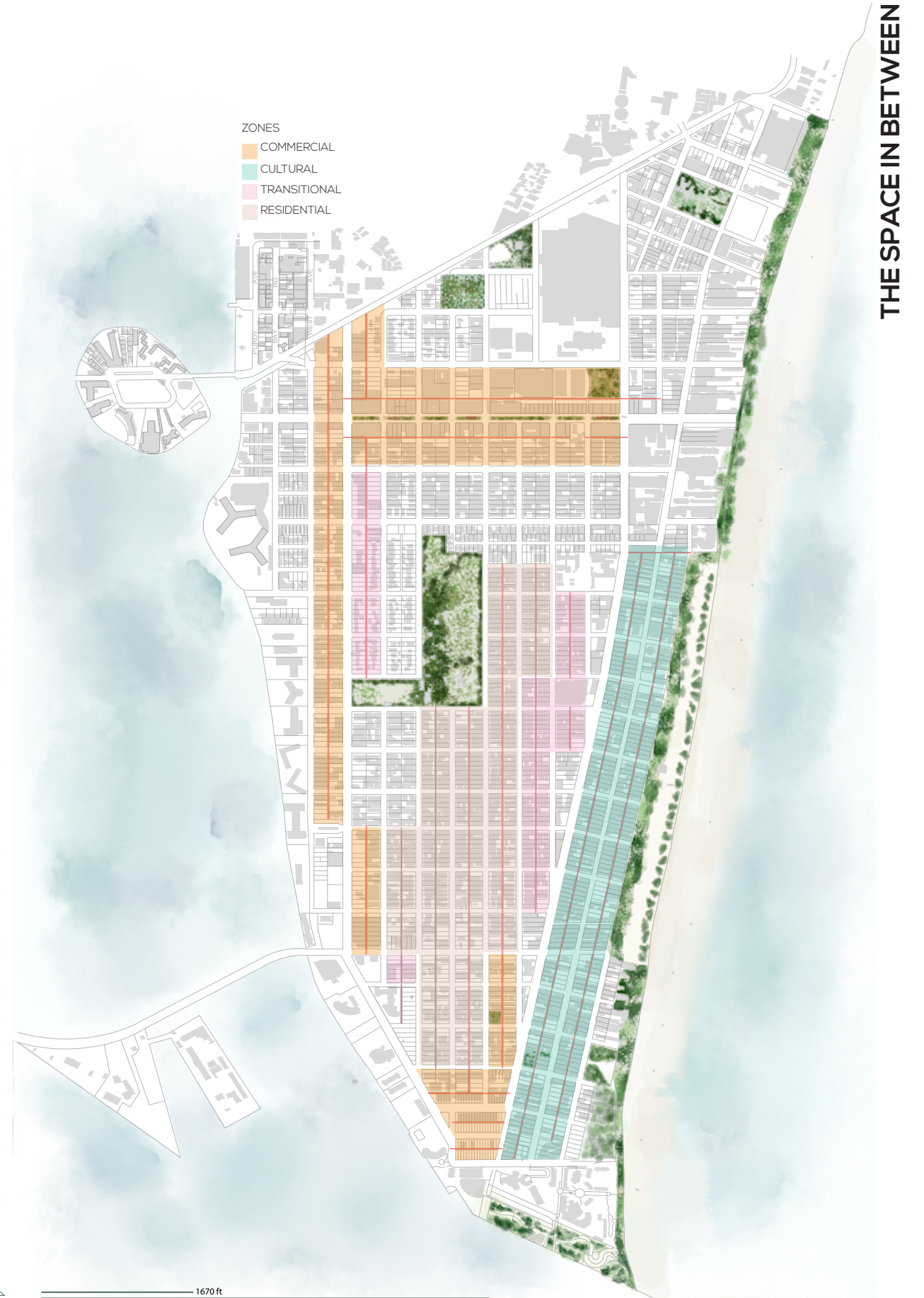
Residential- Alleys that serve dense multi-family residential blocks.

Transitional- Alleys that divide blocks between commercial and residential uses.

Each alley proposal will respond to the uses in which it associates with, enhancing engagement and restoring ecology, as it is essential to maintain the identity of each district.



ZONES
 COMMERCIAL
 CULTURAL
 TRANSITIONAL
 RESIDENTIAL

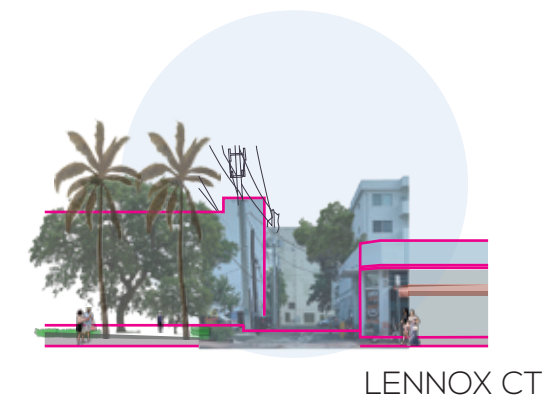
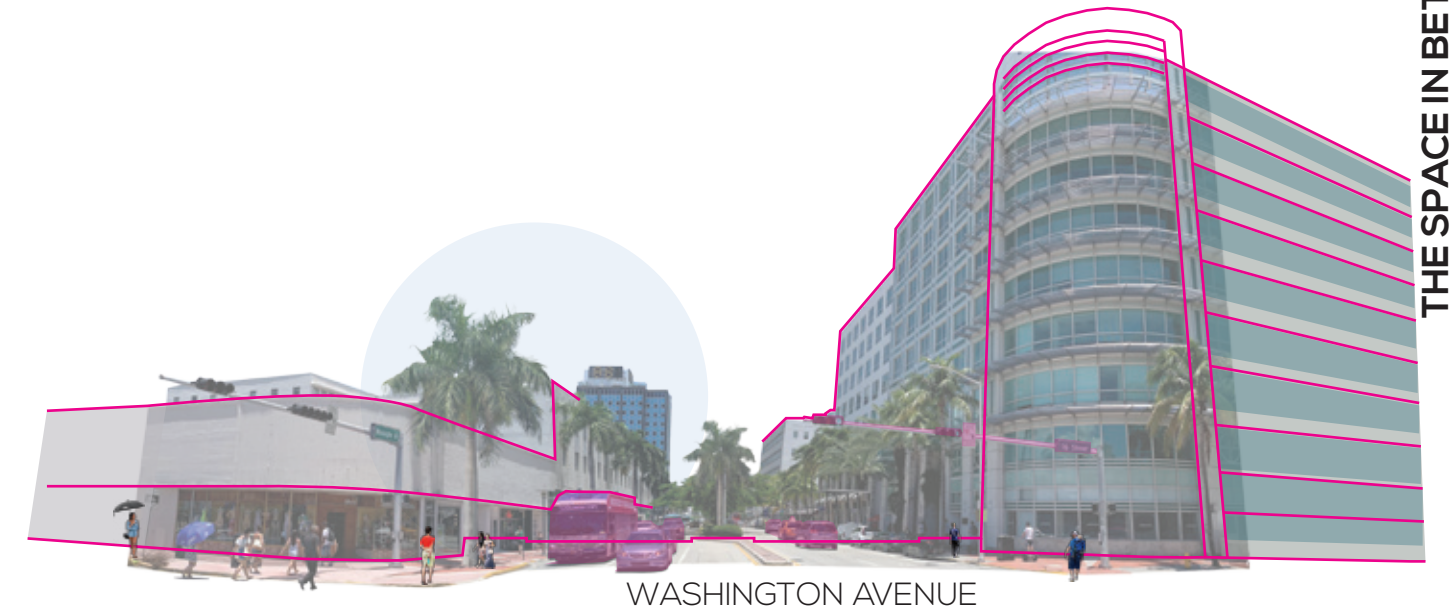


THREE MAIN TYPOLOGIES

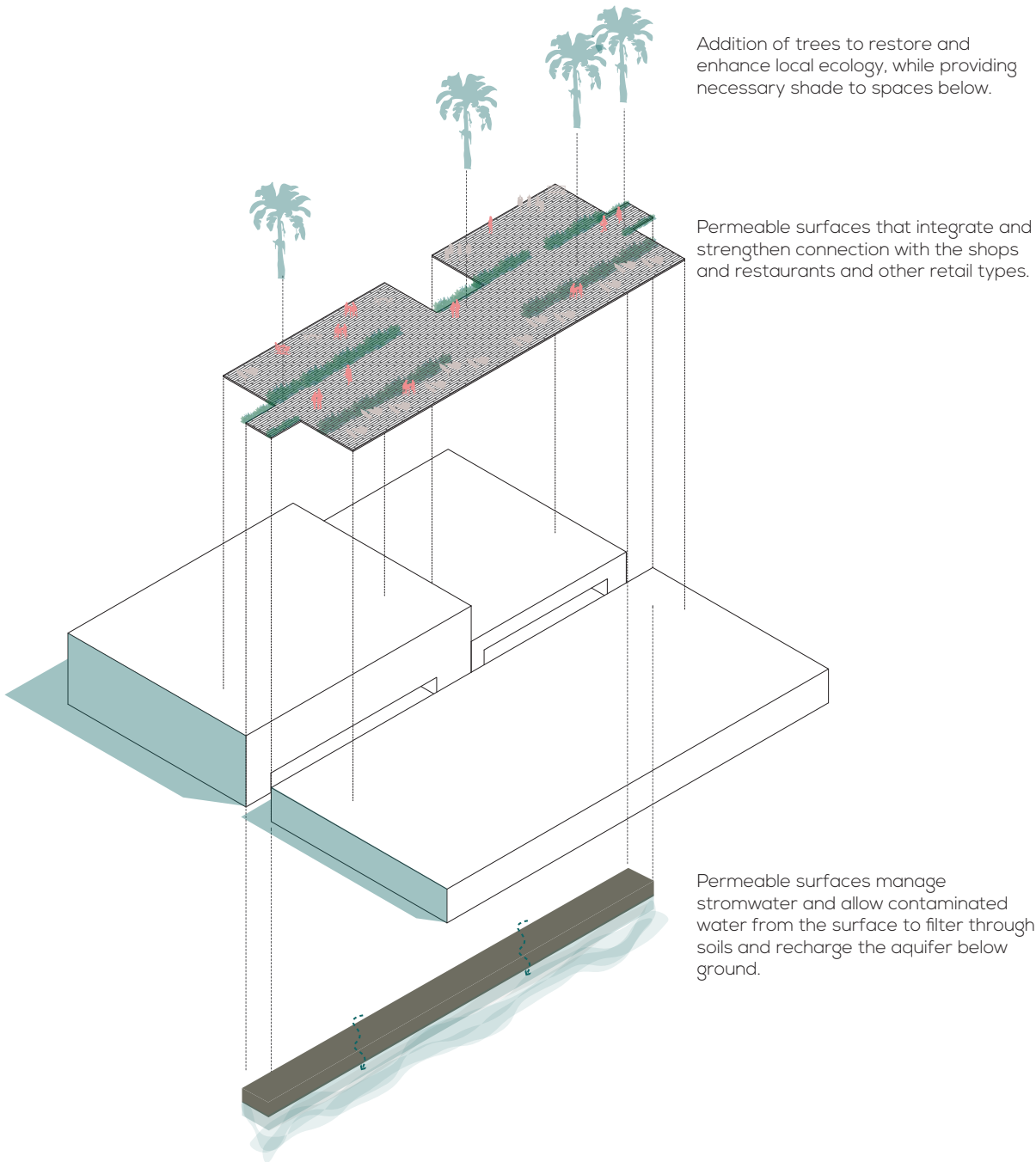
Commercial/Cultural: One of Miami Beach's main commercial & transit corridors with north and south roadways consisting of 2 drive lanes is Washington Avenue. A main route for buses, trolley's and other service vehicles, trees are generally tall and narrow thus, limiting shade and making for an uncomfortable pedestrian experience beyond a few blocks. The network of Alleyways within Miami Beach's commercial districts can be utilized not only for service, but for micro-retail opportunities and to enhance the cultural experience throughout the city.

Residential: The main residential corridor for Miami Beach, this Calophyllum inophyllum-lined street can be pleasant for pedestrians because of the dappled light and substantial shade provided by these trees. While incredibly beautiful, the tree falls on the UF/IFAS invasive plant species list under category I, as it now invades mangrove forests and other coastal areas. The network of alley's within the residential district can be used to restore the ecological habitat of the former, more natural Miami Beach.

Transitional: Mainly utilized for trash collection, service and utility distribution throughout the city we argue that the network of alleyways can be a much more productive asset to the city. Because of their scale, alleys have limited traffic and a substantial amount of shade throughout the day. Currently, contaminated run-off water sits in puddles along our alleyways. This provides for a unique opportunity for low-impact development through an initiative to botanize the alleyways. Our next phase of research will develop specific proposals for each alleyway type throughout the city.



COMMERCIAL ALLEYS

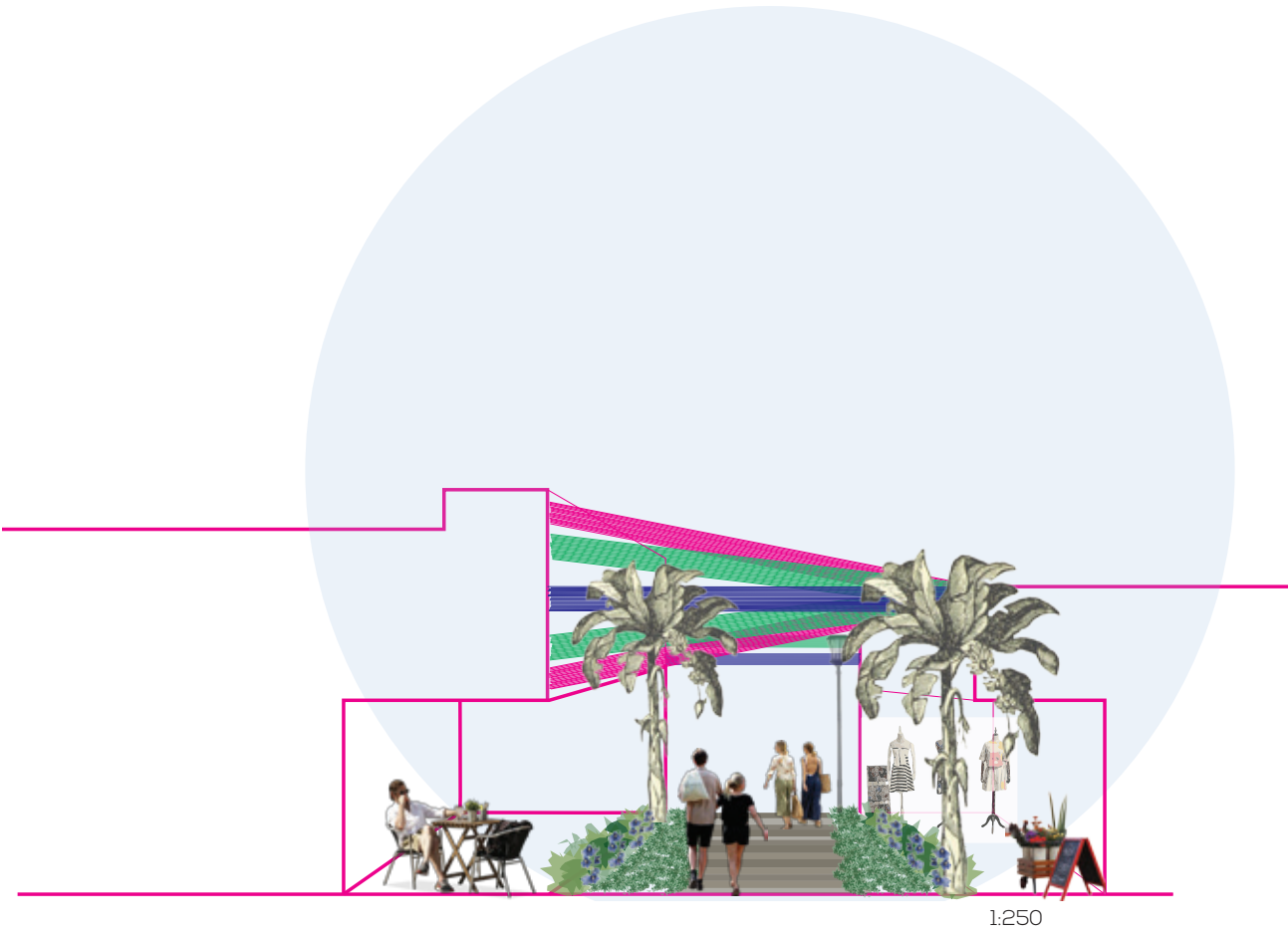


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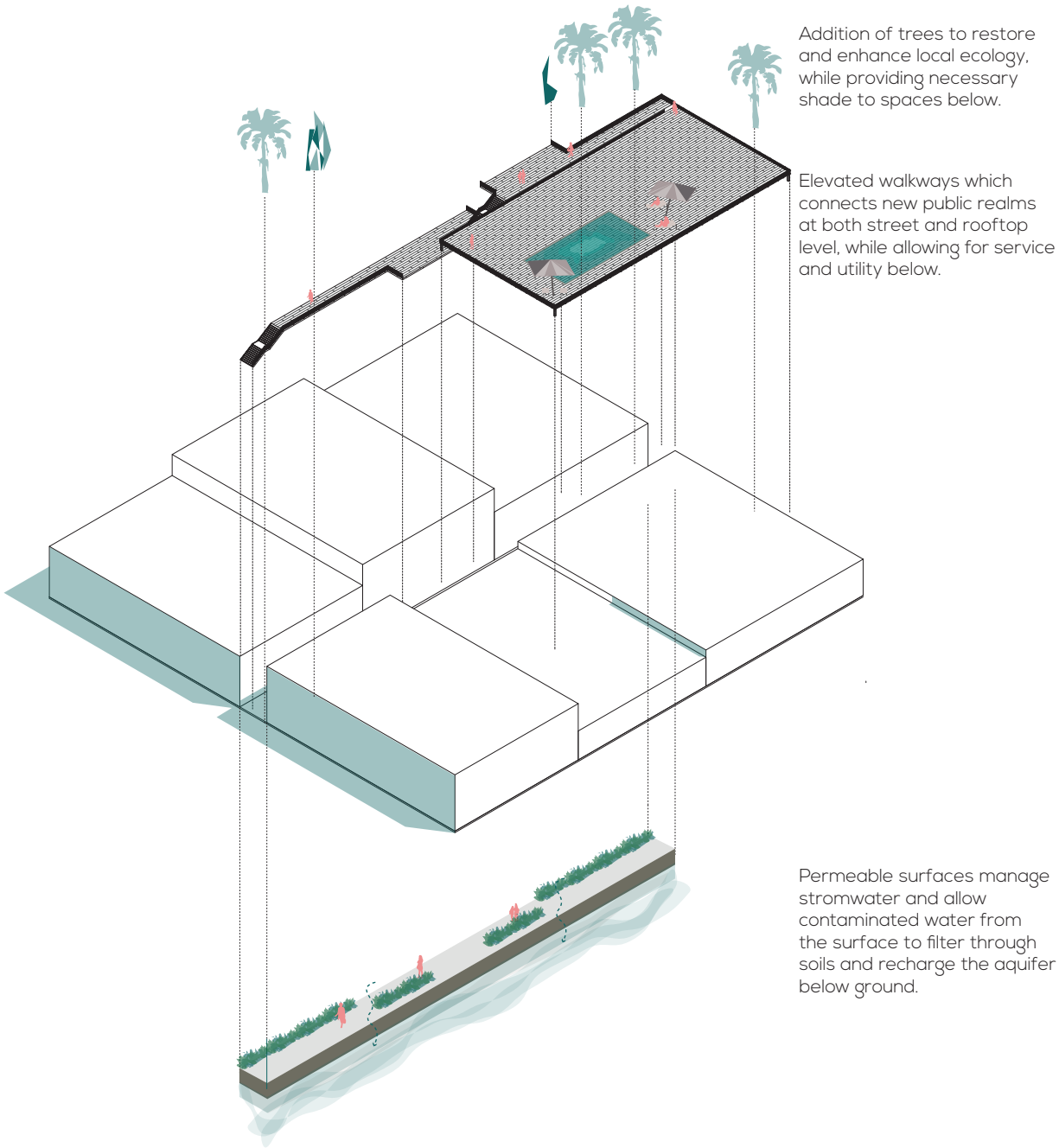


Lincoln Road North would be a compliment to Lincoln Road. Projects to revive this alley have already begun, however their impact is low. The intention of this case study is to have an alley highly activated, where the stores from Lincoln Road would open up to the alley creating a more dynamic network. The alley expands from Alton Road until Washington Ave, ending up in Soundscape Park. It would be an expansion of the park, integrating with the commercial retail area. Through an abundance of native planting and permeable surfaces, stormwater management can also enhance well-being for retail patrons.

TOTAL LINEAR FEET: 5988'-0"
TOTAL AREA: 59480 Ft²



CULTURAL ALLEYS

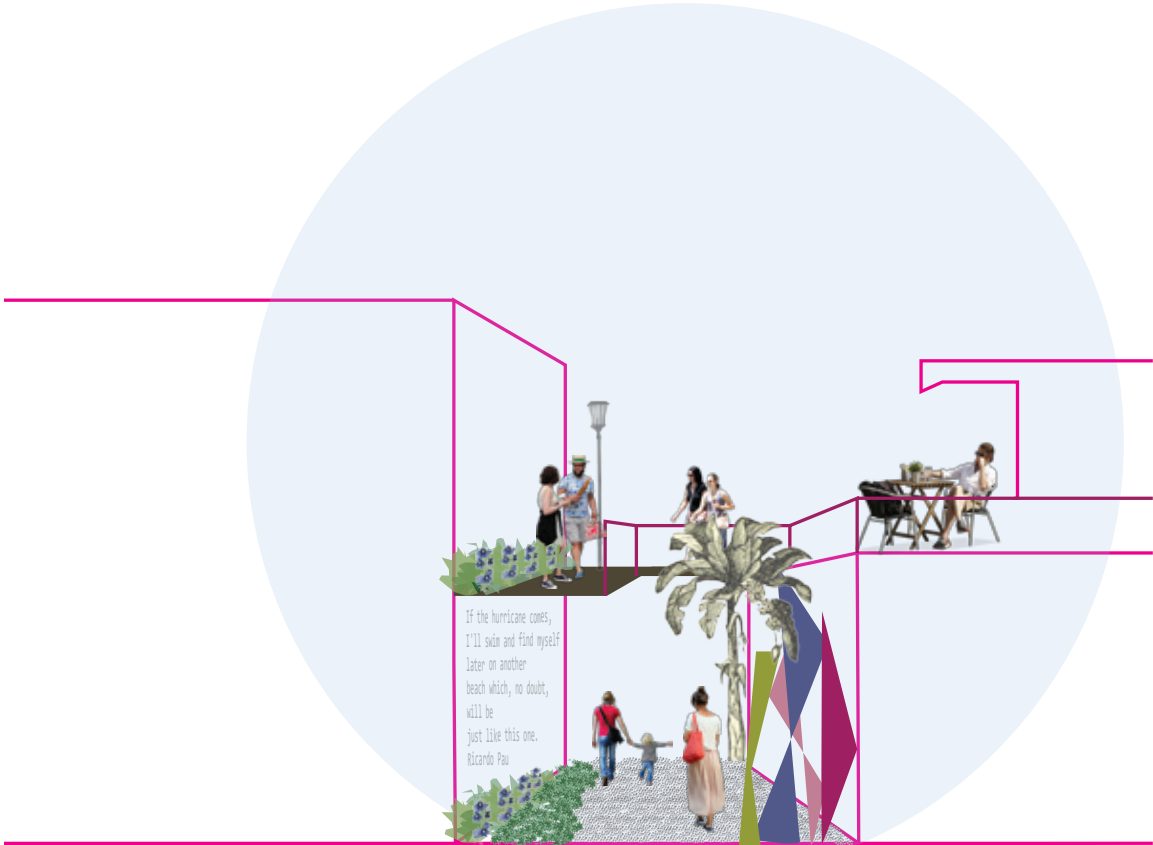


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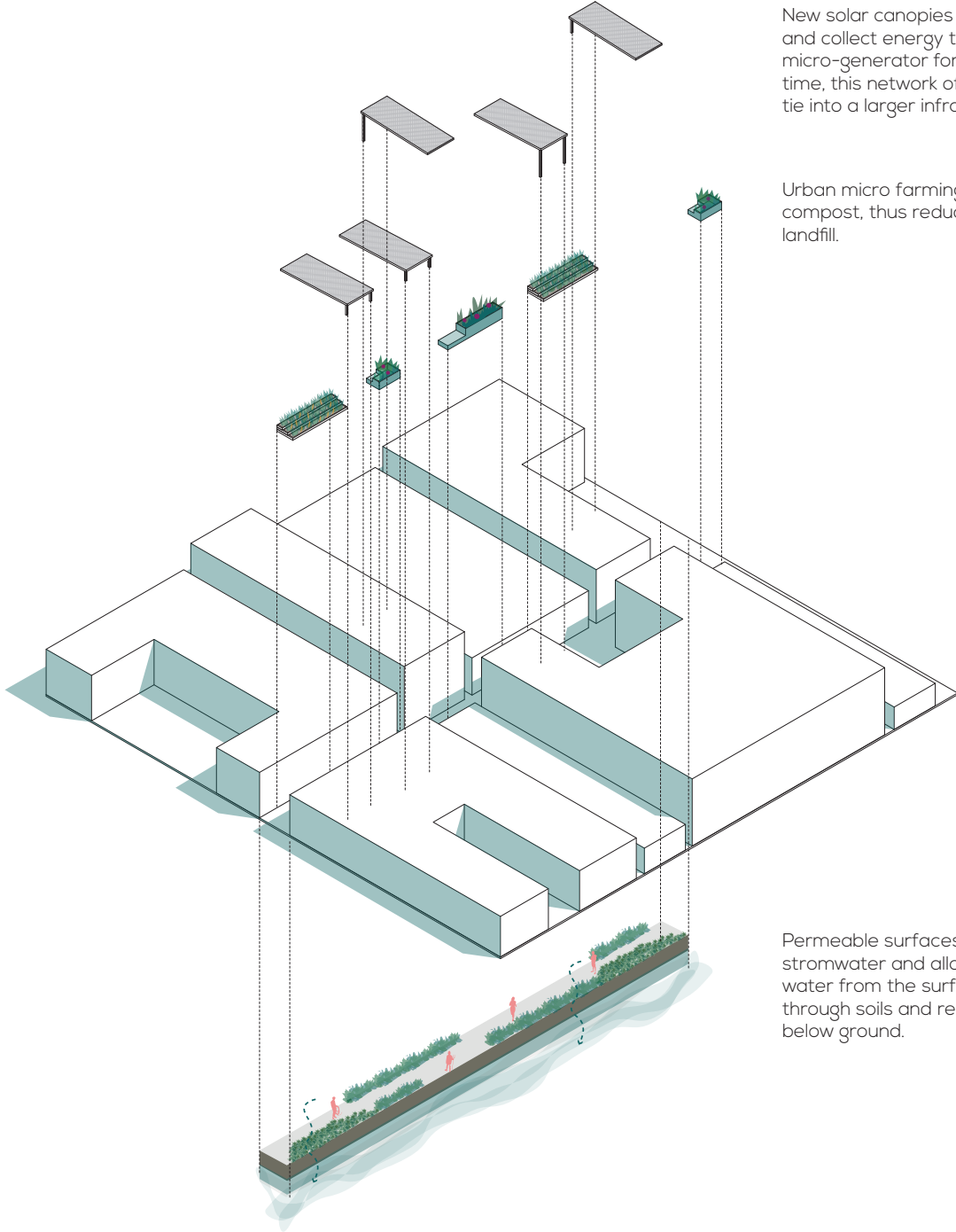
Collins Avenue is highly known for its dynamic experience including iconic art deco buildings and the vibrant hotel lobby's which become extensions of the public realm. Alleys provide a new urbanism which amplifies the cultural experience extending from nearby hotels. Sequestered from the busy, traffic-lined streets, the lanes are an escape, allowing for the integration of landscape and art. New storefronts further activate this space and celebrate local artists. Proposed elevated walkways connect public spaces at both ground and rooftop levels creating a myriad of experiences between the public and semi-public spaces.

TOTAL LINEAR FEET: 5280'-0"
TOTAL AREA: 52000 Ft²



1:250

RESIDENTIAL ALLEYS



New solar canopies provide shade and collect energy to function as a micro-generator for the blocks. Over time, this network of renewable can tie into a larger infrastructure system.

Urban micro farming supplied by local compost, thus reducing waste for landfill.

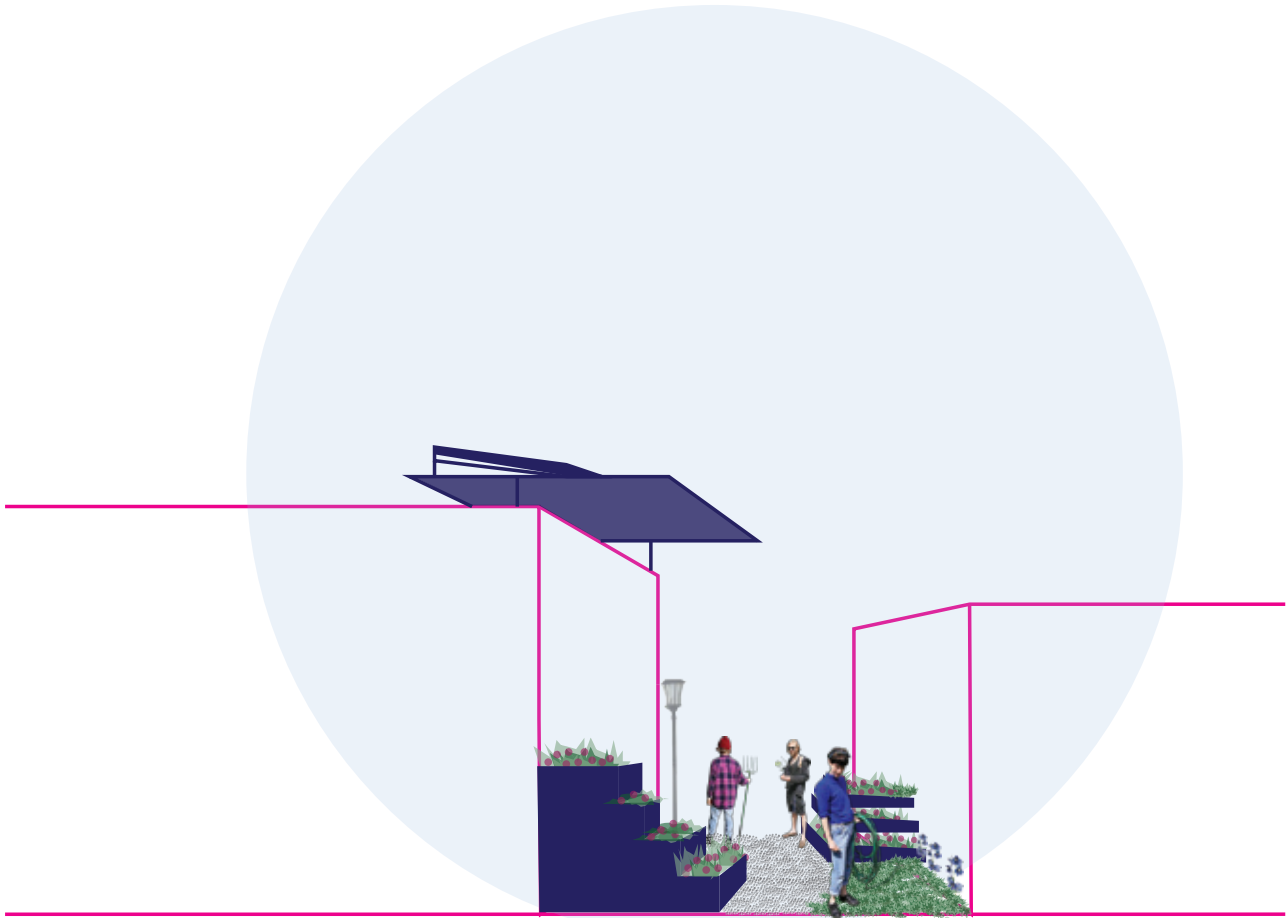
Permeable surfaces manage stormwater and allow contaminated water from the surface to filter through soils and recharge the aquifer below ground.



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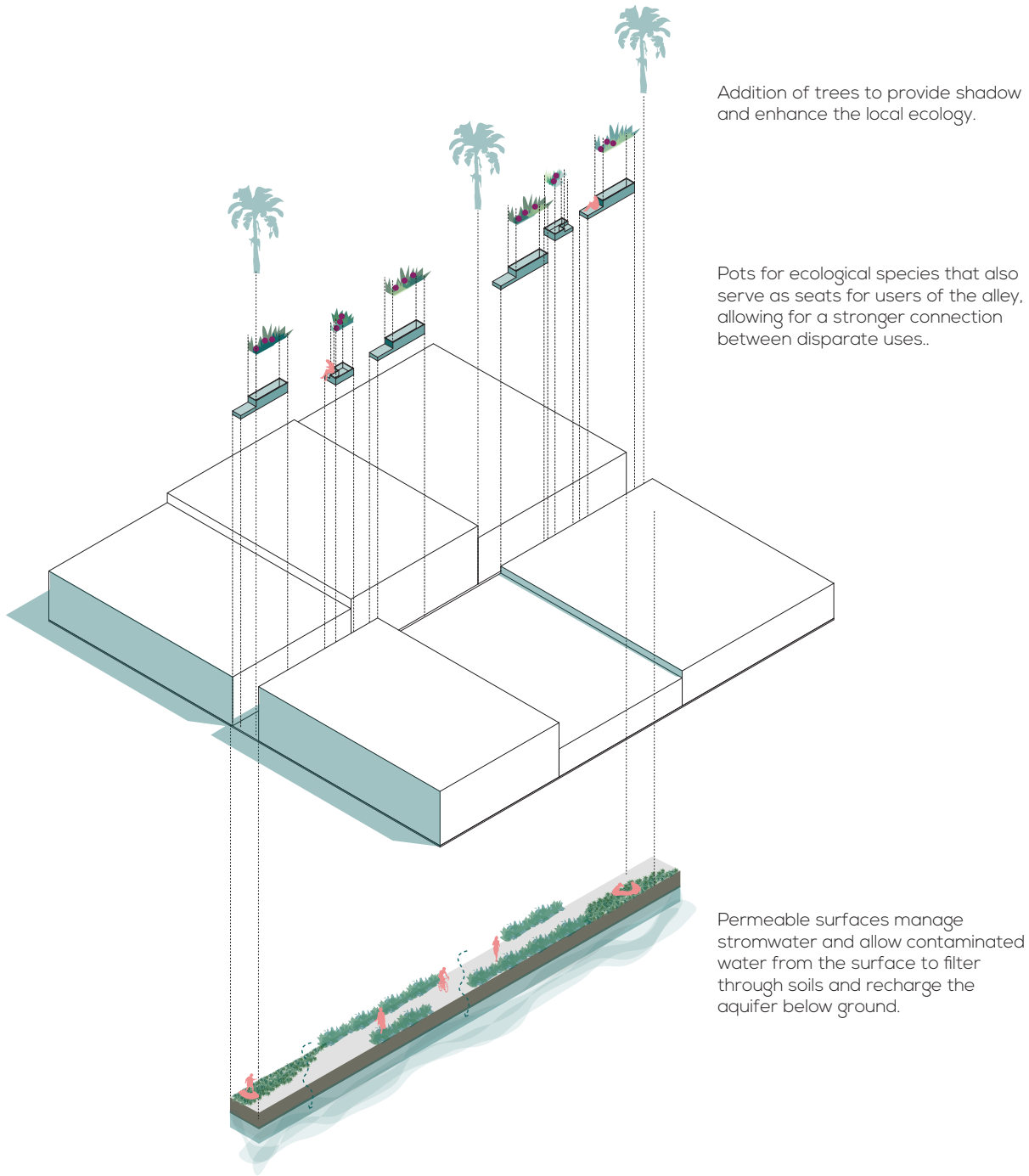
The residential zone would be defined by a collection of community gardens and activities. Alleys would support micro urban farming, playgrounds and ecological trails. This would allow neighbors to unify and take responsibility for their neighborhood. The alleys would also incorporate solar panels, which would serve to give light to illuminate the space below. This is an opportunity to generate educational activities for storm management awareness as well as climate change adaptation strategies.

TOTAL LINEAR FEET: 51000'-0"
TOTAL AREA: 5220 Ft²



1:250

TRANSITIONAL ALLEYS





This alley is just below Lincoln Road and parallel to Alton Road. Commercial retail in this area is lower and it is an alley that connects to residential zone, allowing people to experience the transition between both. This alley would be a small park in between the buildings, where people can sit and enjoy this space, as well as taking it to walk to a specific place.

TOTAL LINEAR FEET: 4423'-8"
TOTAL AREA: 43837 Ft²



1:250

SCOPE OF WORK

The scope of design services described herein includes the services to be provided by Kean Office for Design + Architecture, P.A. (KoDA) and its affiliated offices.

- Research (Expanded- Waste management, composting, densities, uses, etc.)
- Mapping
- Drawing, modeling, renderings and other presentation materials
- Environmental analysis (expanded, solar, wind, rainfall, etc.)
- Community charrettes
- Outlined recommendations including detailed case study projects for implementation
- Civil Engineering analysis
- Anonymous interviews of local stakeholders including residents, business owners and mayor and city commission
- Opinion of Cost

Conceptual Design

The Conceptual Design (ConcD) phase of work carries forward the initial ideas generated from this brief, focusing in on three specific alleys –

Design Development

The Design Development (DD) phase of work carries forward the initial ideas evolved from the previous phase, including more specific details including initial consultation with a civil engineer –

Exclusions

- Surveying
- Geo-Technical Soil Reports
- Structural Engineering of any kind
- Fees associated with permitting of any kind

Fees

- Base Fee - \$48,000.00

Reimbursable Expenses

The fee includes postage, express mail, messenger, facsimile transmission, telephone, shipping, local travel, photography and copies of drawings and calculations.

Hourly Rates of staff

Principal \$200/hr
Project Architect/Designer \$150/hr
Design Staff \$100/hr
Administrative \$75

Payment Plan

Monthly progress billing. Payment due within 30 days after invoicing.

Project Schedule

Concept Design can commence upon a 1-week mobilization period upon acceptance of this proposal. The proposal remains valid for acceptance for 90 days from the date of submission.

KoDA (Kean Office for Design and Architecture) is a Miami Beach-based, award-winning practice focused on innovating ambitious solutions to challenging design issues. KoDA architects and designers are experts in cultural place-making and progressive architecture. Led by Principal and Founder Wesley Kean, KoDA uses analysis and research to inform the design of buildings, spaces, and environments, both public and private. KoDA designs without preconceived notions of style, form or materiality, pursuing instead the careful evolution of a particular idea. The firm thinks critically and examines the environmental, cultural, and social context of each site. KoDA stands behind the fundamental beliefs that to practice architecture is to provide a service and that clients are the most important component of the process, and so invites them to become a part of it.

Wesley Kean, is the Principal & Founder of KoDA. Kean leads the on-going research of the firm, which informs the work of the practice. He views architecture as a mechanism to improve the social, cultural, and environmental issues facing cities. His writings on the subject of how metabolist ideas can potentially solve sea-level rise vulnerability have been published in AIA's Florida/Caribbean Architect magazine, and he has lectured on the topic at the University of Miami.

As an architect and an urbanist, Kean feels a particular responsibility to serve his community. He sits on the planning and zoning board of his historic neighborhood and was appointed to the City of Miami Beach Next Generation Council, which provides recommendations to the Mayor and City Commissioners on city-related issues affecting millennials. An active member of the American Institute of Architects and a visiting critic at the University of Miami, Florida International University, and Miami-Dade College, Kean is also a champion of the Make-A-Wish Foundation and a member of the Miami Music Project soundboard, a charity focused on social transformation through musical education. Kean earned a Bachelor of Architecture from the University of Miami, which included an Urban Design, Architectural Theory, and History of Architecture program in Rome, Italy.

Chance Stillman is an artist and Project Manager at KoDA. With the office, Chance has collaborated on the design and development of art installations, contemporary residential homes, and office spaces, and has also contributed research to speculative urban theory re-thinking the future of Miami's built environment in the face of rising seas. Chance's background on this issue dates back to his education and prior work experience at Florida Atlantic University, where he played a key role in the development of "Salty Urbanism," a nationally recognized project that reconciles sea level rise with innovative urban design in Fort Lauderdale. The project earned AIA (American Institute of Architecture) Design Awards at the city, state, and national levels for unbuilt work and/or urban design.

While at FAU, Chance obtained Bachelors in both Architecture (B. Arch.) and Studio Art (BFA). After FAU, and prior to KoDA, Chance developed various projects at the Tamara Peacock Company, including renovations for the School Board of Broward County, historic preservation, and interior architecture.

Daniel Fragata is a multidisciplinary architectural designer at KoDA with Bachelor of Interior Design and Master of Architecture degrees. Daniel is captivated by the evolution of architecture as it grows parallel to technology, and the inherent implications that has on the design process. He believes the advancement of technology has allowed for complexity to no longer be a constraint on architecture, but an opportunity. Correspondingly, Daniel has focused his efforts in parametric design and digital fabrication, and has been able to implement his skill set in a wide variety of KoDA's projects at various scales, including large civic structures, high-end residences, art installations, and product design.

Maria Paula Romero is a junior at the University Iberoamericana in Mexico City. She is an intern at KoDA for summer 2019. Originally from Quito, Ecuador, Maria has grown around painters, which woke up her artistic side creating an interest in architecture. Throughout her time at Ibero, she has been able to explore many areas of design and architecture taught by numerous faculty members. Maria Paula has been able to work across many different scales to design for various communities and cultures.

CITATIONS

1. "Miami Beach, Florida: Stormwater Management and Climate Adaptation Review," Urban Land Institute, April 16-19, 2018. pg. 16
2. "Miami Beach, Florida: Stormwater Management and Climate Adaptation Review," Urban Land Institute, April 16-19, 2018. pg. 23
3. "Miami Beach, Florida: Stormwater Management and Climate Adaptation Review," Urban Land Institute, April 16-19, 2018. pg. 31
4. "Miami Beach, Florida: Stormwater Management and Climate Adaptation Review," Urban Land Institute, April 16-19, 2018. pg. 31
5. "Low Impact Development. A Design Manual for Urban Areas" UACDC
6. "Miami Beach, Florida: Stormwater Management and Climate Adaptation Review," Urban Land Institute, April 16-19, 2018. pg. 44
7. "South Florida and Sea Level: The Case of Miami Beach," Office for Urbanization, Harvard University Graduate School of Design, 2017. pg. 60
8. "Miami Beach, Florida: Stormwater Management and Climate Adaptation Review," Urban Land Institute, April 16-19, 2018. pg. 48
9. Daniel Toole, as cited in Joann Greco, "Why Alleys Deserve More Attention," CityLab, February 16, 2012.
10. The Betsy-Carlton Orb, Shulman + Associates - 2016