



ADAPTATIONS OF ALLEYS IN MIAMI BEACH

“THE SPACE BETWEEN”

JAKE CROCIATI
KoDA

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PAIR Program| Professor Wyn Bradley

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“PAIRed Office”

KoDA Miami

KEAN OFFICE FOR DESIGN + ARCHITECTURE, P.A.

KoDA (Kean Office for Design and Architecture) is a research – and creativity – based practice with a focus and dedication to architecture and design. KoDA architects and designers are experts in connecting architecture with nature and finding radical solutions to sea-level rise and other environmental concerns. Led by Principal and Founder Wesley Kean, the award-winning KoDA uses analysis and research to inform the design of highly distinctive buildings, landscapes, interiors and experiences. KoDA designs without pre-conceived notions of style, form or materiality, but rather a 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 belief that to practice architecture is to provide a service, in which their clients are the most important component of the process and for that, they invite them to become a part of it. KoDA designs with ambition for their clients and optimism for the world.

“A real-time research project”

The investigation into the alleyways had already begun by the time the Spring 2020 semester had started. What was interesting though, was the attention it was getting from city officials. With a goal of getting “The Space Between” on the city’s budget and a contract for design, one of my focus while at KoDA Miami will be to further develop this research and content.

This includes doing research, creating content, organizing submissions to city officials, coordinating meeting with commissioners, and looking at the future design potentials.

As this project is live and seeking funding, this booklet serves to document the research process as it occurred, changed and directed by new information and external consultation.

RESIDENTIAL

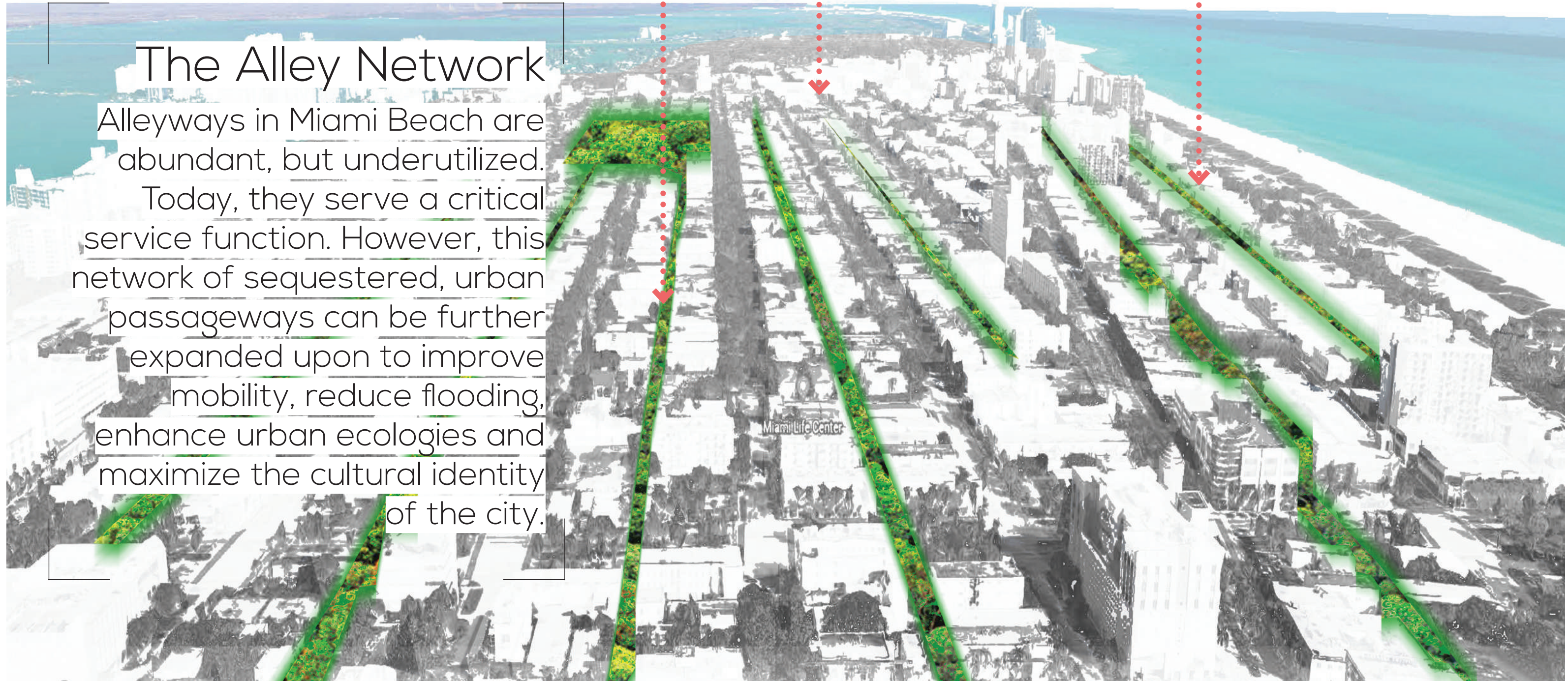
COMMERCIAL

CULTURAL

The Alley Network

Alleyways in Miami Beach are abundant, but underutilized.

Today, they serve a critical service function. However, this network of sequestered, urban passageways can be further expanded upon to improve mobility, reduce flooding, enhance urban ecologies and maximize the cultural identity of the city.



THE ALLEY NETWORK

THREE MAIN TYPOLOGIES

Miami Beach is well organized with an established grid of dense residential, commercial and hospitality blocks. Defined as the space between buildings, alleyways permeate many of the city's blocks. The opportunities presented by this network of sequestered urban passageways is what this proposal focuses on. The alleys amplify the identity and experience of the city's districts:

COMMERCIAL

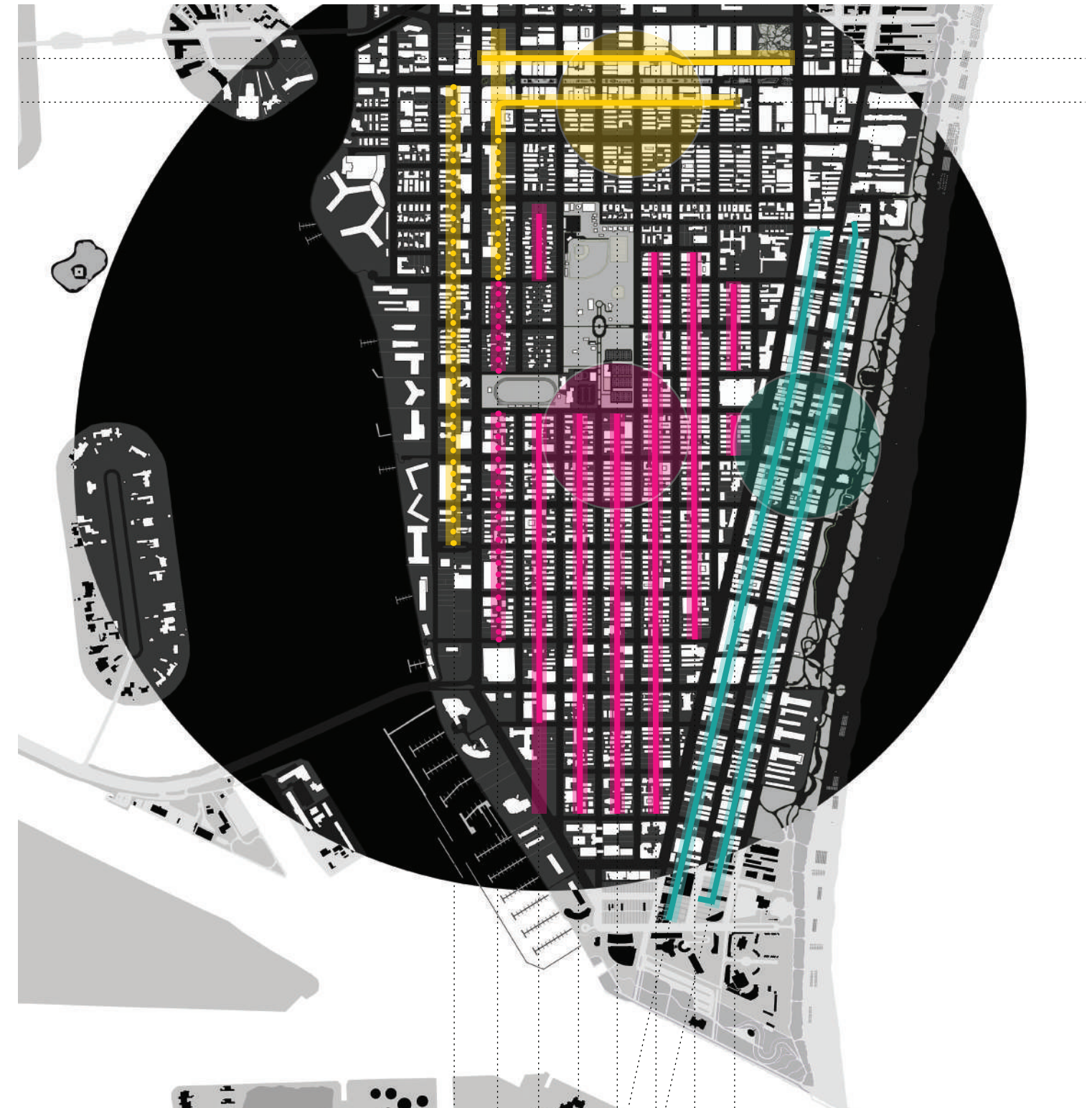
Alleys that serve the blocks where commercial activities exist. This includes retail, restaurants, coffee shops, art galleries, movie theaters, etc.

CULTURAL

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

RESIDENTIAL

Alleys that serve dense multi-family residential blocks. Each alley proposal is in dialogue with its district, enhancing engagement and restoring ecology.

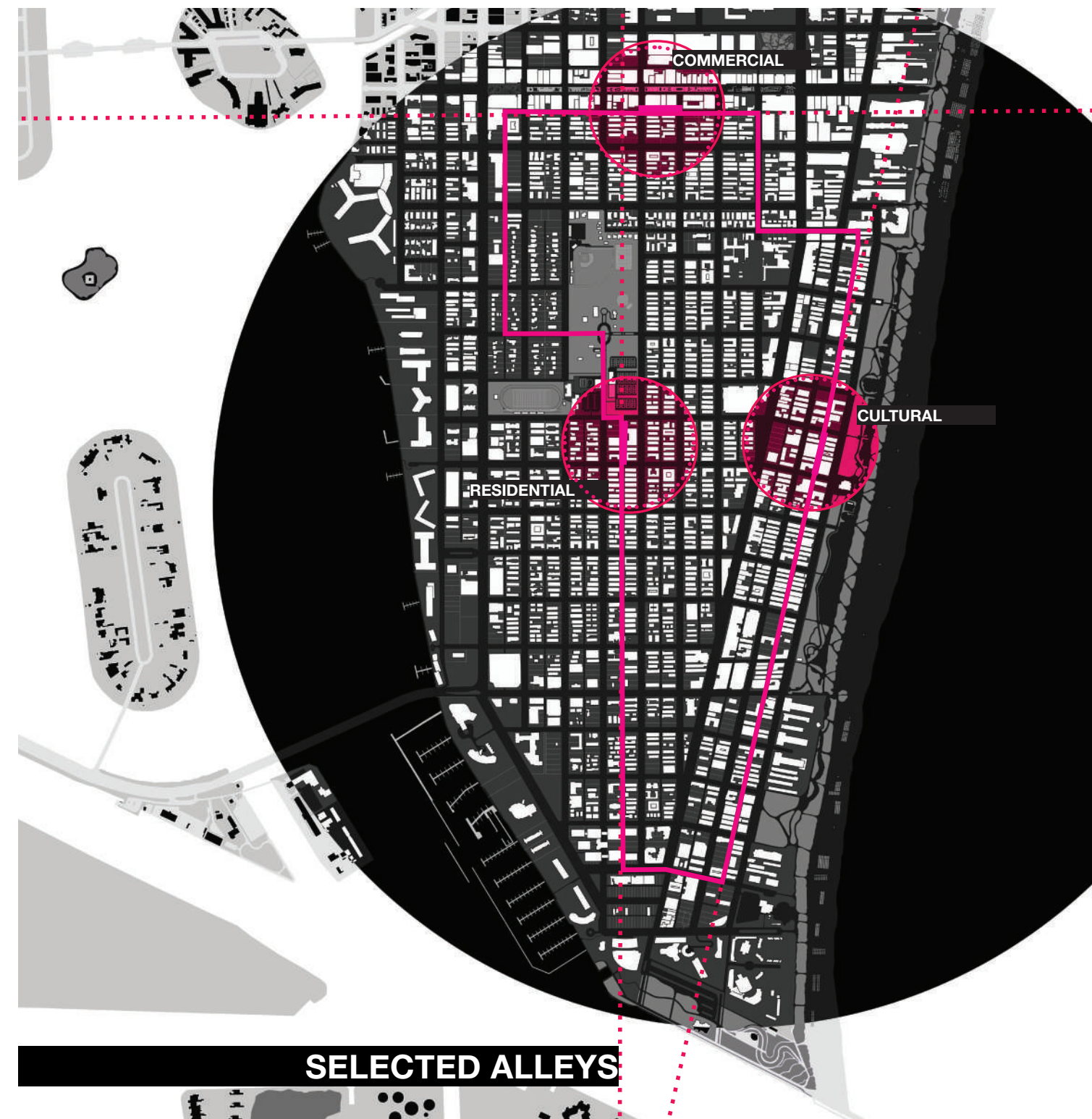


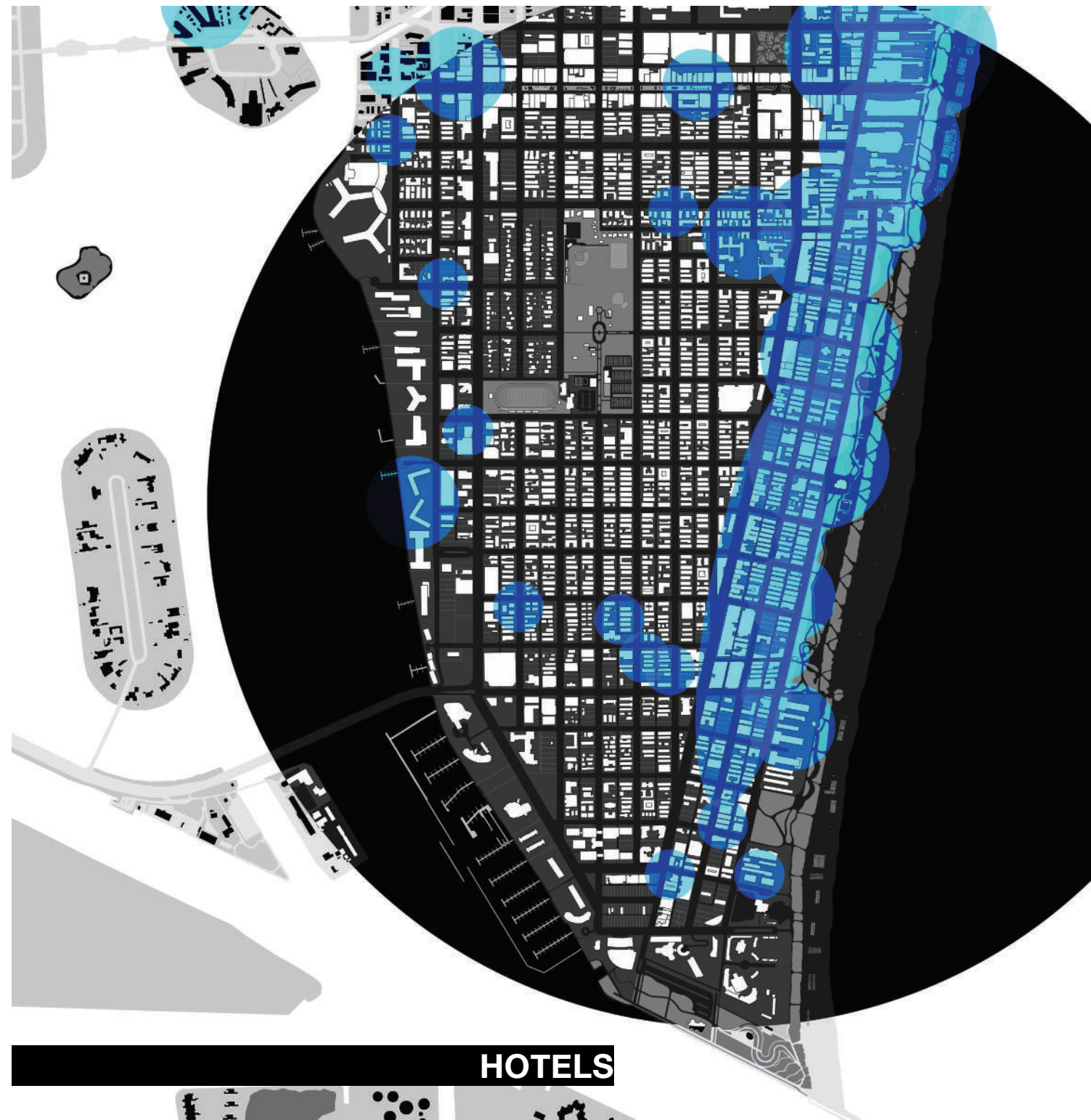
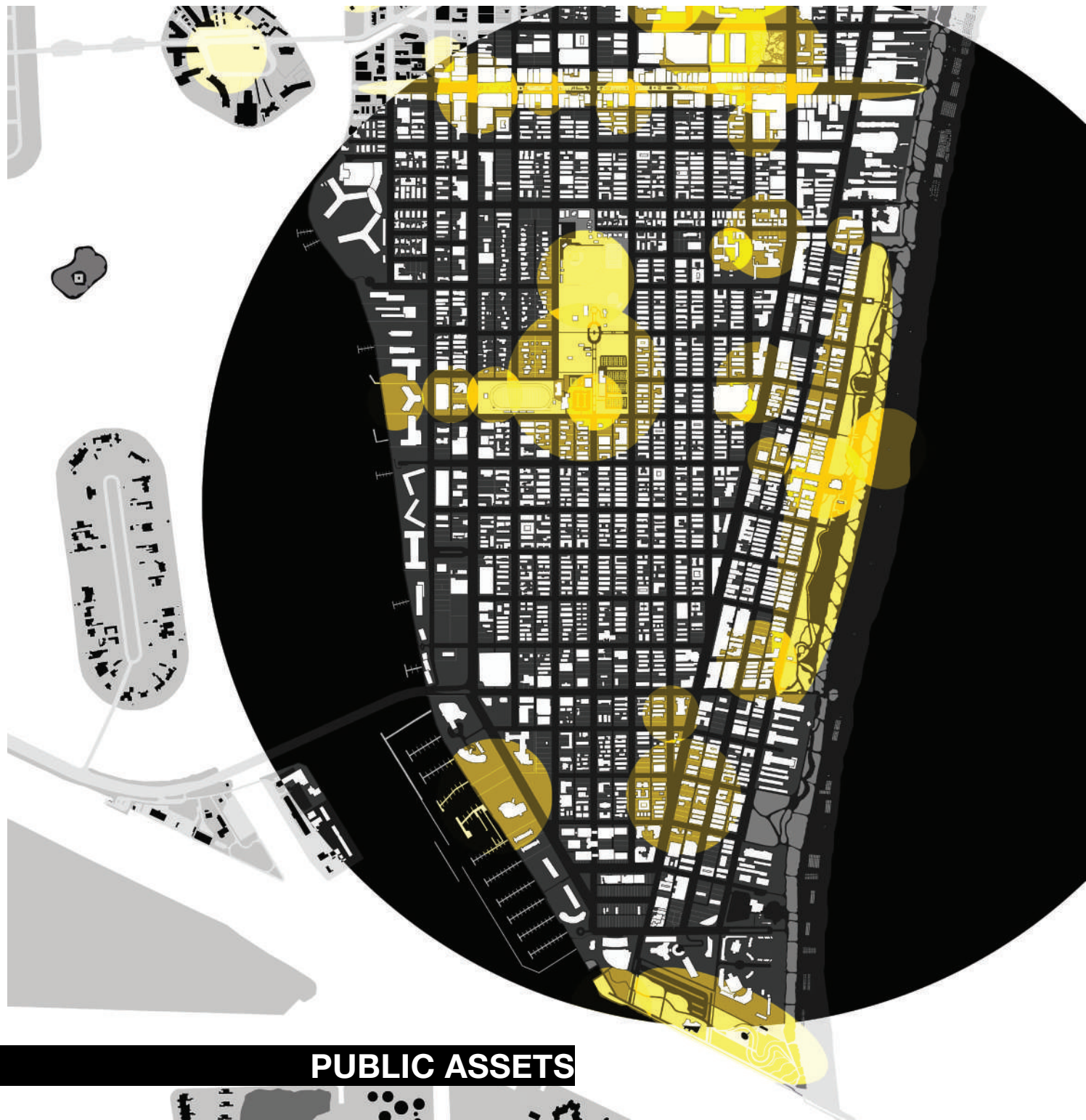
THE ALLEY NETWORK

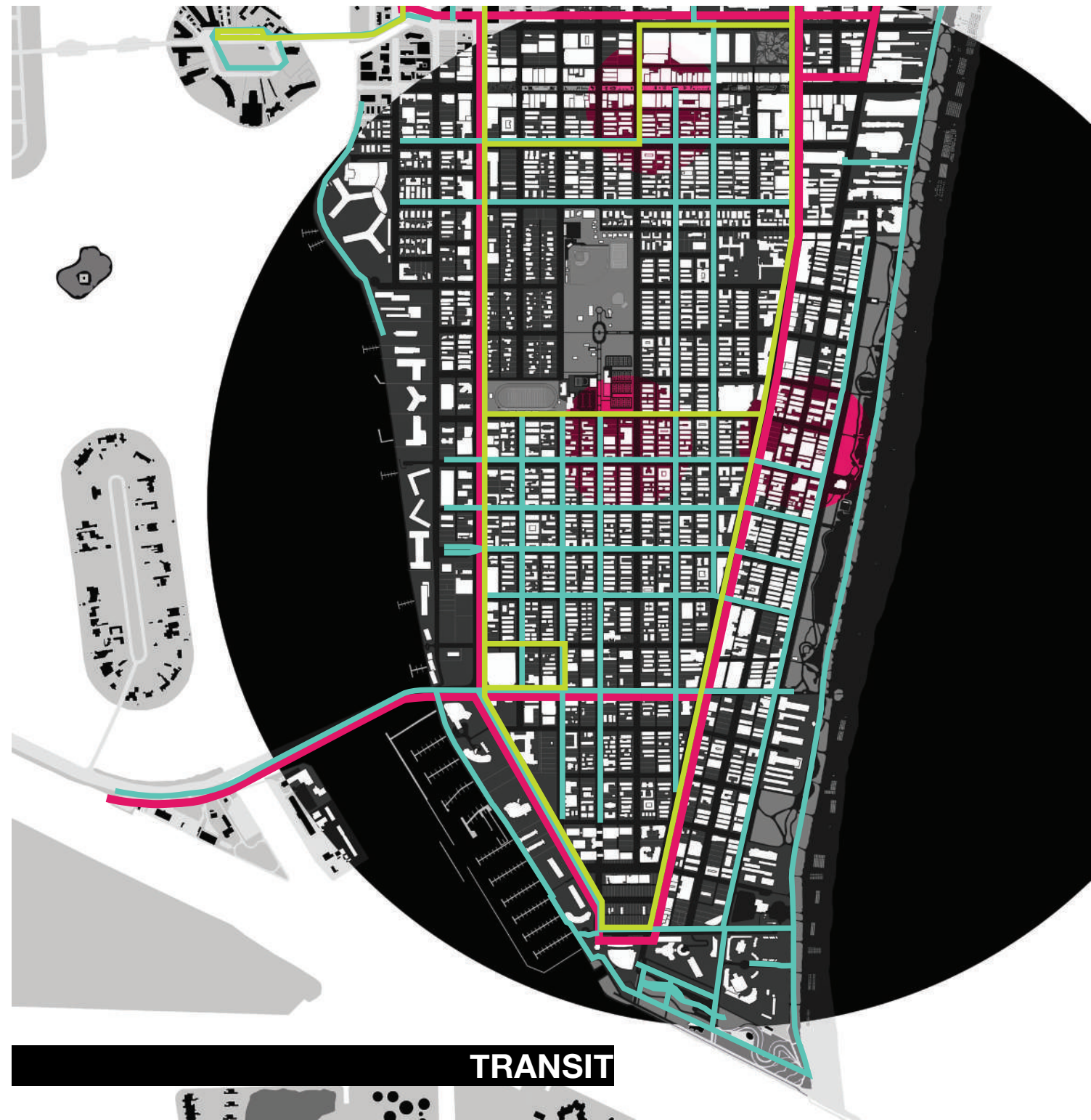
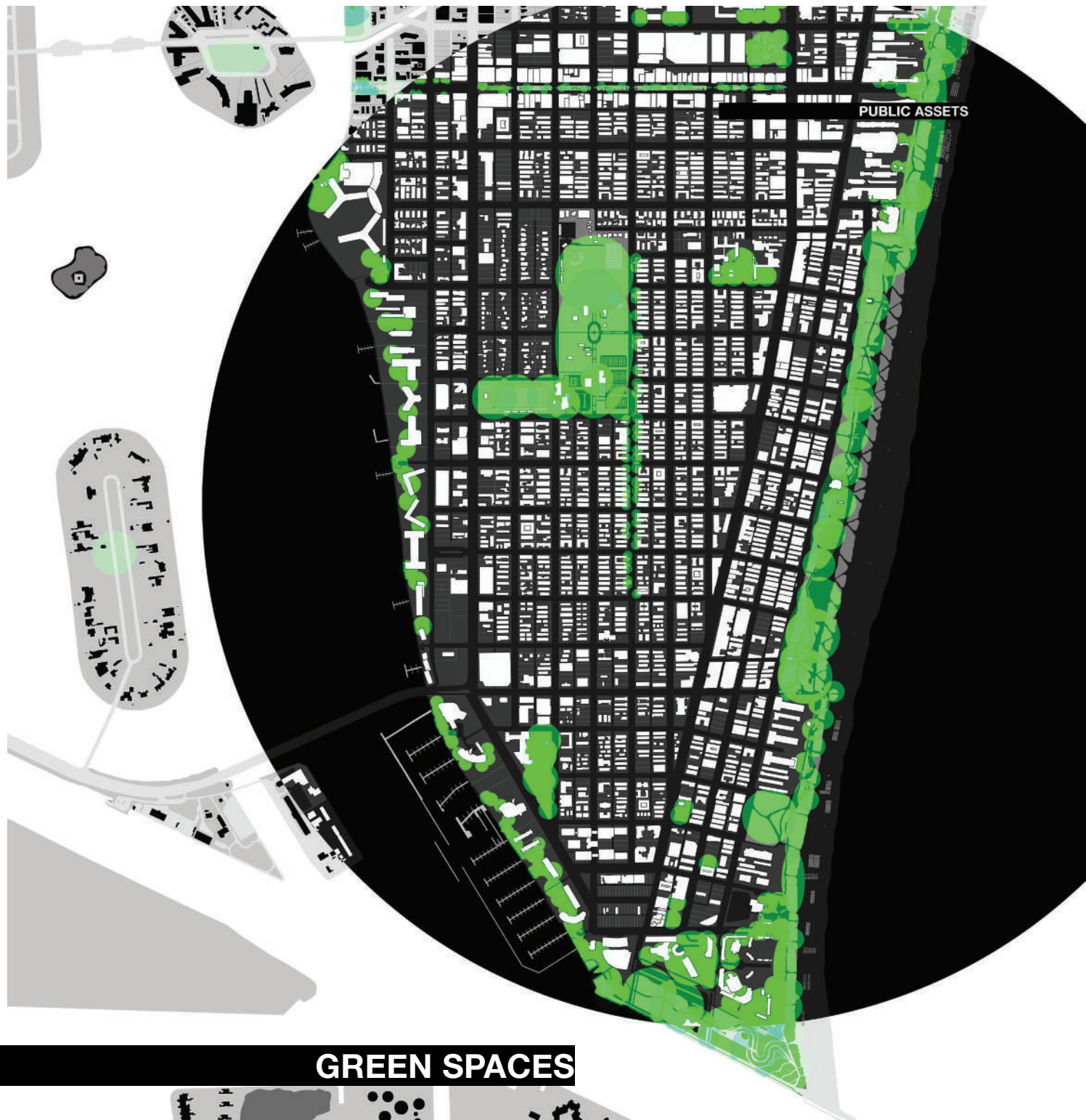
The Opportunities...

“They alley ways can stitch together all the city’s most important places - becoming a pedestrian connector throughout the entire island”

We began to map out the city’s public assets, hotels, green spaces, transit lines, and heat island effect. This allows us to see how the alleys serve to connect and provide solutions to all of these.

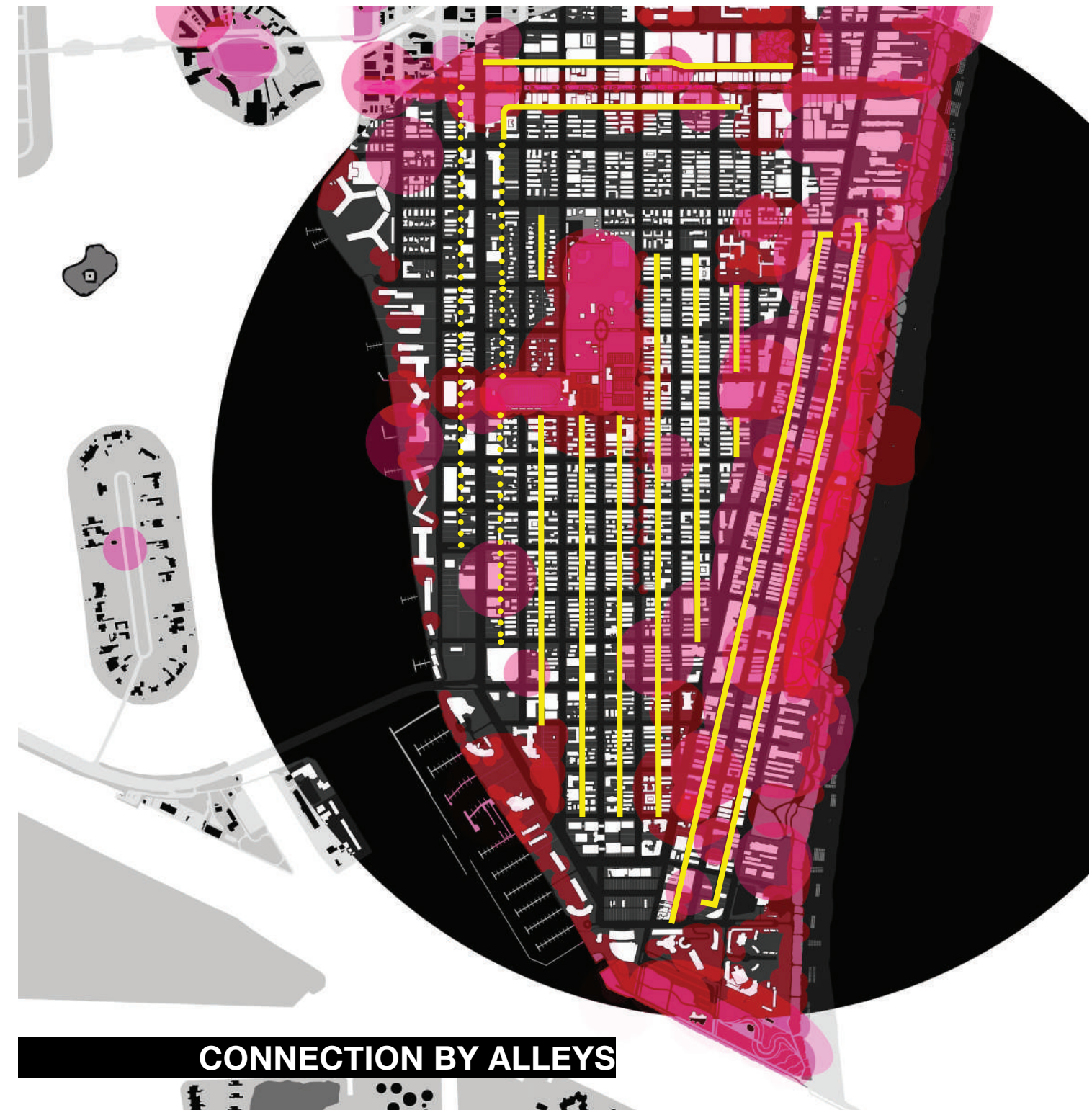
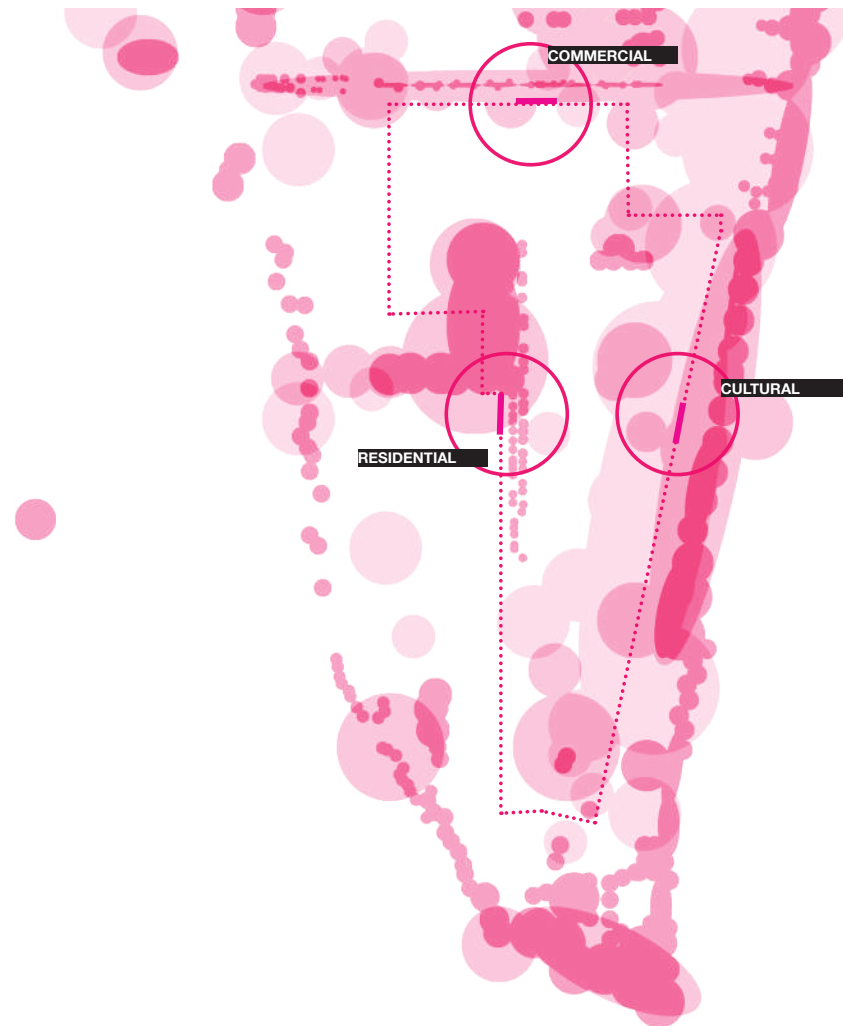






THE ALLEY NETWORK

A LOOK AT HOW OUR SELECTED ALLEYS FORM AN
“**ALLEY LOOP**” - CONNECTING SOME OF THE CITY’S
HOT SPOTS.



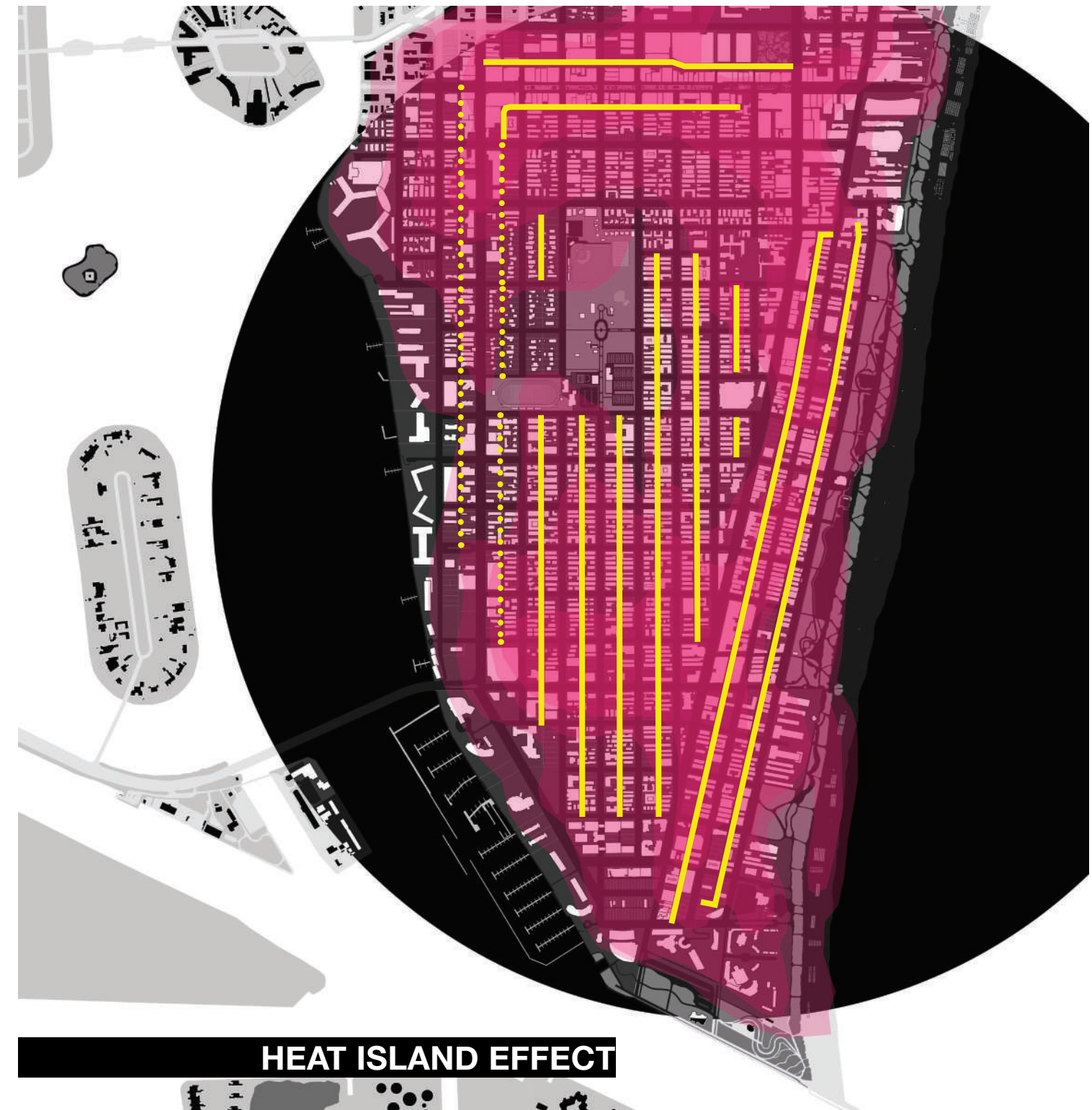
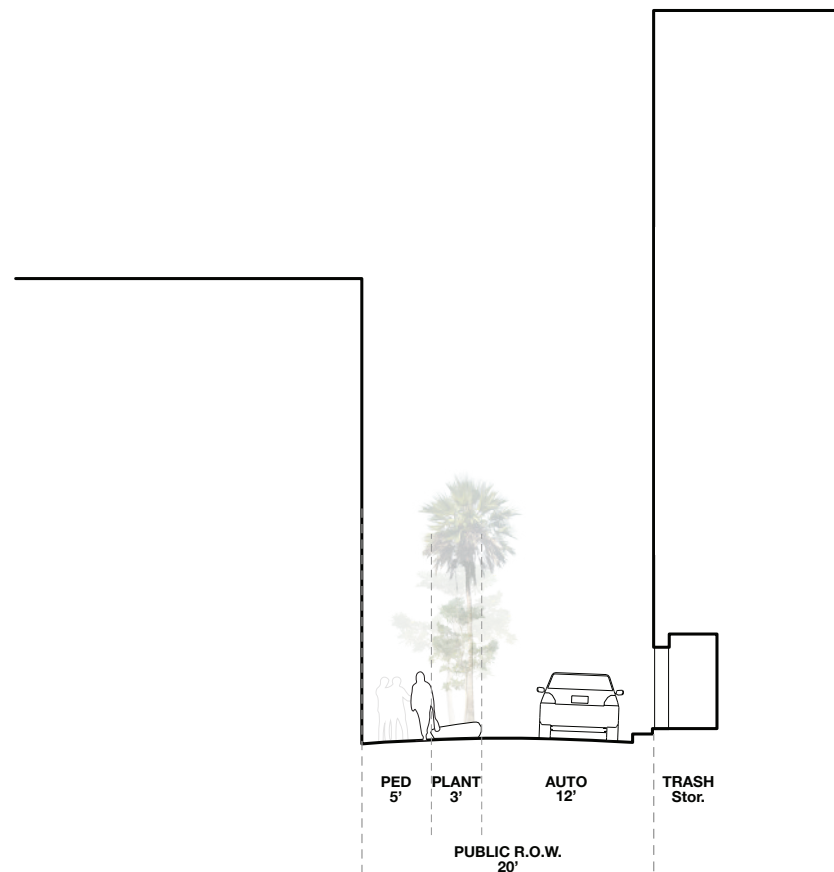
CONNECTION BY ALLEYS

THE ALLEY NETWORK

The Opportunities...

With most alleys running through areas with higher level of the **“heat island effect”** there is the opportunity to implement (LID) strategies to help reduce ground heat. These include, planting, trees, lighter pavers, alternate paving, shading devices, etc.

- RAIN GARDEN
- AROMATIC FLOWERS
- PLANTERS
- BENCH SEATING
- ART INSTALLATION
- RAISED PEDESTRIAN CROSSING
- SMALLER DUMPSTERS
- CANOPY
- LIGHTING
- DUMPSTER STORAGE
- IN-GROUND LED LIGHTING
- CONCRETE PAVEMENT
- PERMEABLE PAVERS



Research Development

MIAMI BEACH HISTORY RESEARCH

History of Miami Beach

Original Land Use
Development Spur
Early Economic Drivers
Open Space [Planned vs. Unplanned]

History of MB Ecology

Original Species:

Insects

Carpenter Ants
Termites
Am. Cockroach
Blue Butterfly
Americanized Bee
Grizzled Mantis

Animals

Rabbits
Sea Turtles
Manatees
Dolphins
Sea Birds
Armadillos
Opossum
Gopher Tortoise
Rattlesnakes
American Flamingo
White Ibis
Brown Pelicans
Cranes
Osprey

Original land use by Collins was for a **coconut plantation** with coconut palms imported from Trinidad and Cuba. Due to native rabbits eating crop - planting efforts stopped. Later - Collins started planting avocados and mango brought over from Miami to develop business. Production did well and the movement of crops lead to the construction of the **Collins Wooden Bridge in 1912.**

Originally farming by Collins, first of coconuts then of avocados/mangoes. Then after the potential of Miami Beach as a resort was realized, the **first hotel was built in 1915** along with a golf course. As development started it quickly became a sought after destination for both wealthy snowbirds and tourists. The **“Florida Boom” continued from 1917 to 1926, ended by the Great Miami Hurricane.**

The 1930s continued to see a tourist boom - developers began to construct small stucco hotels and rooming houses for seasonal travelers - these formed the famous **Art Deco** Historical District still prominent today.

INTERVIEWS/ MEETINGS

STAKEHOLDERS: MB Population: **92,307**
Residents ——— Flamingo Park Association / So. Of 5th?
City Staff ——— Planning
Visitors ——— 16.5 Million Annually
Commercial ——— Lincoln Rd. Bid / Ocean Dr. Bid
Mayor + City Commission ———

Set up meetings with City
Commissioners:

Micky Steinberg
Michael Góngora
Mark Samuelian*
Steven Weiner
Ricky Arriola
David Richardson

MAPPING/ DATA

General:

Hotels
Bus stops
City Bikes
Bike lanes
Cultural Points
Entertainment*
Heat map
Flood Map
Elevation
Parking Garage
Green Space

DPW:

Trash routes
Sewer
Storm water
Water

Demographics (City of MB)

Population: **94,300**
Elevation: **4 feet**
Land area: **7.03 square miles.**
Population density: **13,124 people per square mile** (very high).
Est. Median household income (2017): **\$50,152** (it was \$27,322 in 2000)
Est. Median house/condo value (2017): **\$458,800** (it was \$138,700 in 2000)
Median resident age: **42.8 yrs**
Median gross rent in 2017: **\$1,306.**

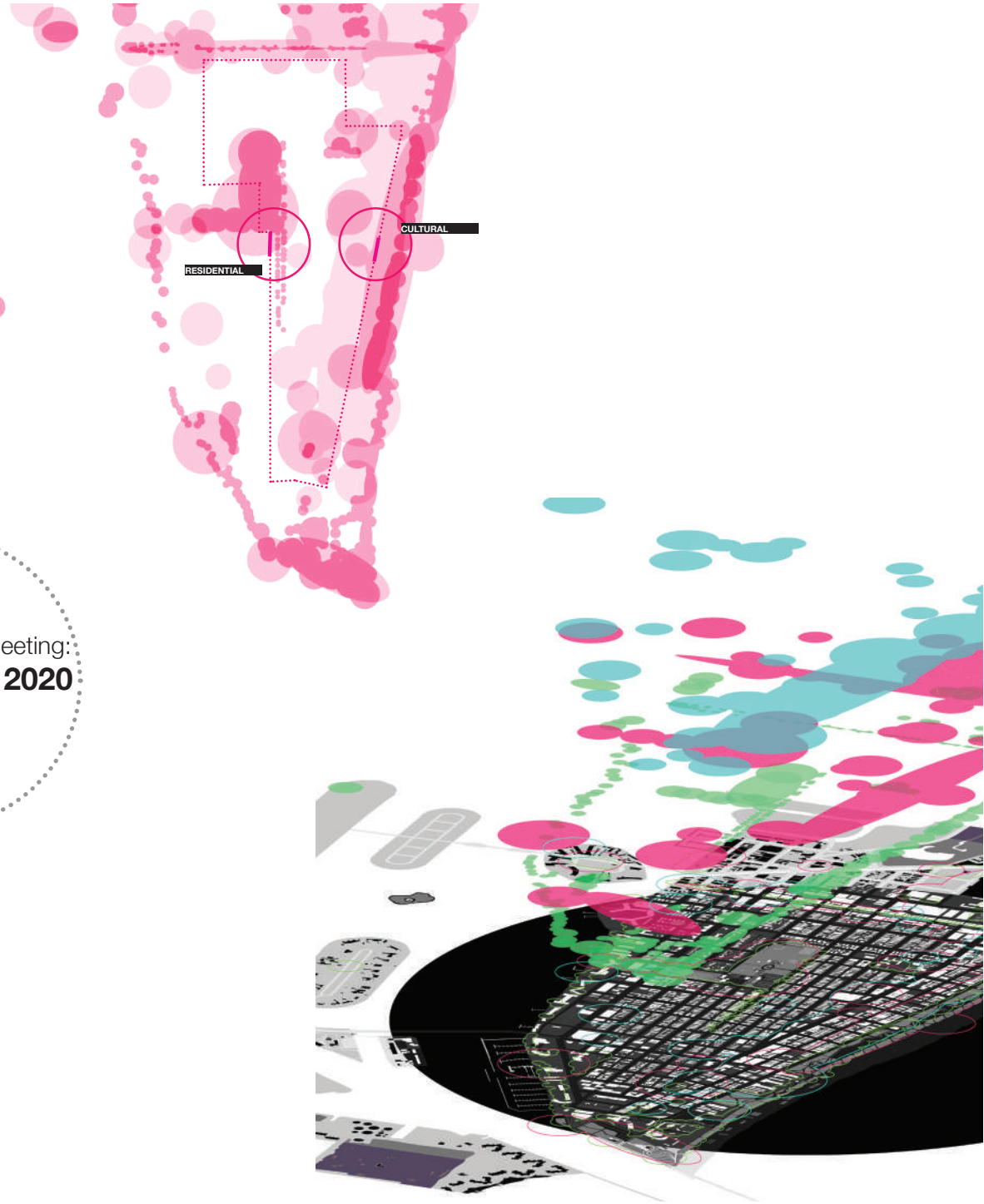
RESEARCH

PRECEDENT

Lincoln Road
High-Line
Salty Urbanism
Jacobs Engineering

Treatment of alleyways on secondary roads in the district. Specifically ones with existing retail and retail opportunity.

LID interventions to existing urban conditions.



Research Development

RESEARCH

Flora + Fauna

Native Species
Non-Native Species
Species for LID+

Approx. **40%** of Miami Beach is **Impervious**.
Alleyways make up approx. **972,720 sqft**.

By making all alleyways PERVIOUS (LID)
- The Impervious % could be brought to...

Low Impact
Development
(LID)

LID Implimentations:

Bioswales
Sun Exposure
Urban Agriculture
Shading
Planting
Gardens
Rain Garden
Grass
Shrubs

Flowers
Palms
Trees
Rain Water Collection
Low Maintenance Planting
Xeriscape Lawn / Landscape
Water Run-Off Filtration
Alternative Pavers
Pervious Pavers

**36% Impervious
with Alleways**

**Alleyways make up
approx. 10% of all
Miami Beach**

Waste Managment
Waste Connection



What are the trash pick-up
schedules?
How long does each stop take?
How can stops be streamlined?

Contracts
Schedules
Timing

Volumes
Routes

How much (volume) trash is
collected on-Miami Beach?
What are the truck routes?
Where do they stop?

At **18%**, Miami-Dade
county has the **lowest
recycling rate** in the
state.

A case by case
reviews needed for
each alley on
conditions involving
sanitation, drainage
& traffic (one-way or
2 - way).

When are deliveries
allowed in the
alleys?
Commercial
Loading Zones.

7am - 8pm **ONLY**
20 min. delivery time.
"AL" Permit Required.

Types of Meters in
Alleyways.
Locations?

Meet with DPW to answer **questions + get data**.
Set up meeting with Public Works + (Private) trash removal
service - for direct information regarding waste data.

Received: City Atlas GIS
Water
Sanitation
Storm Water.

“Wish-cycling”

Place a public
emphasis on
“**Reuse**” rather
than “~~Recycle~~”

Implementing
public **recycling
education** +
sorting bins at
specific locations
in alleys.

“Having designated trash pick up
points at the ends of blocks. All
trash (in sorted bags) would end
up in dumpsters at access
points for each blocks making it
more efficient for garbage truck
to access and take away” ---
**Leaving space in the alley for
designed intervention.**
D. Toole

**How can the trash pick-up process
be streamlined to reduce the
impact on alley ways?**

- Dumpsters per block?
- Dumpsters per alley?
- Weekly trash pick ups?
- Gallons of trash can a typical dumpster hold?
- Pick up locations per block?

Solutions?

Composting
What can be composted...

- Leaves
- Grass clippings
- Brush trimmings
- Manure (preferably organic)
- **Any non-animal food scraps:**
Fruits, vegetables, peelings, bread,
cereal, coffee grounds and filters, tea
leaves and tea bags. (Minus the staples)
- Old wine.
- Pet bedding from herbivores ONLY
- Dry cat or dog food
- Dust from sweeping and vacuuming
- Dryer lint
- Old herbs and spices

With prep / extra time...

- Shredded newspaper, receipts, paper
bags, etc (any non-glossy paper)
- Tissues, paper toweling, and cotton balls
— unless soaked with bacon fat, kerosene,
makeup, or other stuff that doesn't belong in
the pile!
- Cardboard, egg cartons, toilet rolls
- Used clothes, towels, and sheets made
from natural fabrics — cotton, linen, silk,
wool, bamboo
- Old string & twine made of natural fabrics
- Pine needles
 - Hair
- Pine cones
 - Old, dry pasta
- Saw dust
 - Nut shells
- Wood chips
 - Corn cobs
- Nut shell
 - Pits from fruit
- Twigs
 - Toothpicks, wine corks

Defining Traits

- Provides Shade
- Attracts Butterflies
- Flowering
- Berries/Fruits that Attract Wildlife
- Attracts Birds
- Water Absorption
- Attracts Hummingbirds
- Holistic Qualities

- N** Native Species
- S** Salt Tolerance
- W** Water Mitigation
- D** Drought Tolerant
- AF** Aromatic Flower

DPW meeting occurred on:

February 5, 2020

PUBLIC WORKS DEPARTMENT
1700 CONVENTION CENTER DRIVE,
MIAMI BEACH, FL 33139

Received:

City of Miami Beach
DPW GIS Atlas to
map utilities.

Waste
Contracts

Native Species

- Gumbo Limbo** - Bursera simaruba **D, N, S**
- Dahoon Holly** - Ilex cassine **D, N, W, S**
- Marlberry** - Ardisia escallonioides **D, AF, N, W, S**
- Silver Palm** - Coccothrinax argentata **D, N, W, S**
- Wax Myrtle** - Myrica cerifera **D, AF, N, W, S**
- Wild Coffee** - Psychotria nervosa **D, N, S**
- Saw Palmetto** - Serenoa repens **D, N, S**
- Firebush** - Hamelia patens **D, N, W**
- Seagrape** - Coccoloba uvifera patens **AF, D, N, S**
- Sweet Acacia** - Acacia farnesiana **AF, D, N, S**
- Fiddlewood** - Citharezyllum fruticosum **AF, D, N, S**
- Spicebush** - Lindera benzoin **AF, D, W, N**
- Coontie** - Zamia floridana **D, S, W, N**
- Gallberry** - Ilex glabra **D, S, W, N**
- Elderberry** - Sambucus **D, S, W, N**
- Black Mangrove** - Avicennia germinans **S, W, N**
- Pond Cypress** - Taxodium ascendens **D, S, W, N**
- Yaupon Holly** - Ilex vomitoria **D, S, W, N**
- Leather Fern** - Acrostichum danaeifolium **S, W, N**
- Silver Buttonwood** - Conocarpus erectus **S, N, D**
- Red Bay** - Persea borbonia **S, N, D, W**
- Groundsel Tree** - Baccharis halimifolia **S, N, D, W**
- Simpson's Stopper** - Myrcianthes fragrans **S, AF, N, D, W**
- Red Maple** - Acer rubrum **N, D, W**
- Red Mulberry** - Morus rubra **W, N, AF, D**
- Bay Cedar** - Suriana maritima **N, S, D**
- Beach Bean**- Canavalia rosea **N, S, D**
- Gulfcoast Spikerush** - Eleocharis cellulosa **W, N, S, D**
- Mangrove Spiderlilly** - Hymenocallis latifolia **W, N, S, D, AF**
- Fl. Thatch Palm** - Thrinax radiata **W, N, S, D**
- Saltmeadow Cordgrass** - Spartina bakeri **W, S, D, N**
- Sea Lavender** - Heliotropium gnaphalodes **AF, S, D, N**
- Sea Oxeye Daisy** - Borrichia frutescens **AF, S, W, D, N**

Non-Native Species

- Slender Lady Palm** - Phapis humilis **S, D, W**
- Alexander Palm** - Ptychosperma elegans **D, W**
- Coconut Palm** - Cocos nuciferd **W, S, D**
- Date Palm** - Phoenix spp. Except P. reclinata **W, S, D**
- Gardenia** - Gardenia jasminoides **AF**
- Arabian Jasmine** - Jasminum sambac **AF**
- Sweet Olive** - Osmanthus fragrans **AF, D, S**
- Mango** - Mangifera indica **D, S**
- Frangipani** - Plumeria rubra **AF, D, S**



KoDA

“Plant Species Fact Sheet”

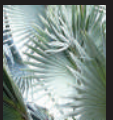
Research Development

PLANTING PALETTE


palms




cabbage palm
sabal palmetto



silver palm
bismarckia nobilis




coconut palm
cocos nuciferd





royal palm
roystonea regia

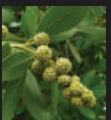

trees



gumbo limbo
bursera simaruba





jacarabda
jacaranda mimosifolia





green buttonwood
conocarpus erectus

shrubs




saw palmetto
serenoa repens



seagrape
coccoloba uvifera

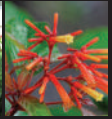



red mulberry
morus rubra

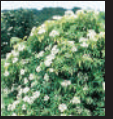



wax myrtle
myrica cerifera



flowering




firebush
hamelia patens



elderberry
sambucus



sea oxeye daisy
borrichia frutescens





gallberry
llex glabra


ground cover



beach bean
canavalia rosea

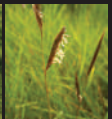



sea purslane
jacaranda mimosifolia




bay cedar
suriana maritima

grasses



saltmeadow / sand cordgrass
spartina bakeri



gulfcoast spikerush
eleocharis cellulosa

“A palette one can simply
select species from for design
implementation + optimization”



wild coffee
psychotria nervosa



marlberry
ardisia escallonioides



sea lavender
heliotropium gnaphalodes



mangrove spiderlilly
hymenocallis latifolia

Research Development

ALLEY

Current perceptions of Alleys?

Dangerous
Dark
Smelly
Uninviting
Hot
Loud
Unused
Parking
Service
Unwelcoming


Solutions?

Start by hosting Alley parties or movie screenings - to bring back public awareness and all residents to begin to take back the idea of the residential alley.

Car Access

 Limit vehicle access
Examine parking in Alley

Bike / Scooter

 Coordinate isolated bike and scooter rental in alleys.

Create bike /scooter lanes/areas.

Current Regulations on Bikes / Scooters?

Solutions?

Unsafe

Adding street lighting to remove the “dark” idea of an alley. Lighting should be more thought out and inviting rather than typical street lamps.

Trash + Odor

Implement localized trash holding units that have ample space to avoid overflows. Liquid run-off from trash will be collected and filtered through LID implementations. **Adding potent aromatic plants to alleys.**

Crime

Start with ample light - crime is attracted to places with low viability. Adding cameras and blue-phones for a sense of safety and connection to authorities. (An alley can feel long and confined when one feels nervous).

Tagging

Allow street art and tagging in specific areas. Hold art events to bring awareness back to alleys and inspire local artists and youth.

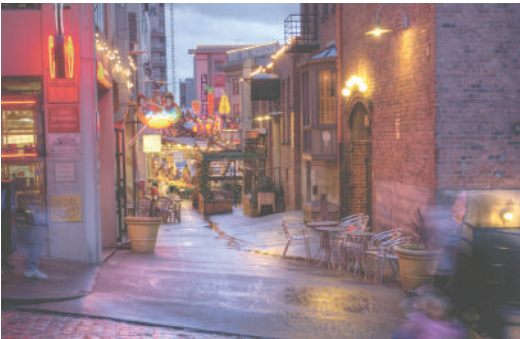
Organized street art instalations have proved..

PRECEDENT

Chicago
Los Angeles
San Francisco
Austin
Denver
Baltimore
Seattle
Melbourne
Kyoto
Tokyo
Hong Kong

KoDA

Seattle, WA



Melbourne, AUS





















Tokyo, Japan


















Research Development

ALLEY IMPLEMENTATION STRATEGIES






Low Impact Development (LID)

	Bioswales		Rain Water Collection
	Sun Exposure		Low Maintenance Planting
	Urban Agriculture		Xeriscape Lawn / Landscape
	Shading		Water Run-Off Filtration
	Planting		Alternative Pavers
	Gardens		Pervious Pavers
	Rain Garden		
	Grass		
	Shrubs		
	Flowers		
	Palms		
	Trees		

Alley Opporotunities

	Shading		Evaportransportation
	Public Enhancement		Placemaking
	Dinning		
	Retail		
	Lighting		
	Planting		
	Pedestian Access		
	Urban Agriculture		
	Elevated Walkways		
	Art Activation		
	Refresh Spaces		
	Scooters		
	Solar Energy		

Existing Conditions

	Parking
	Cars
	Trash Collection
	High Flood Probability
	Utilities

RESEARCH + DEVELOPMENT

As a part of our research process we knew that we would need to lobby and meet with City of Miami Beach Commissioners. Not only to raise awareness and get support but learn what they would like to see and how to go about presenting our ideas.

Our first meeting occurred on:
February 14, 2020

Commissioner Samuelian's Office, Miami Beach City Hall

Meeting with **COMMISSIONER SAMUELIAN**

“Select 3 Alleys for a ***‘Pilot Program’***”

“No more **pretty pictures**”

“We need **real cost estimates (design + Construction)**”

COMMISSION / STAFF FEEDBACK

2020.02.14

6 key Points:

Research points to focus on for the next city meeting with the goal of getting the project in the CMB budget.

- 1.** Looking at Jacobs Engineering Scope for overlap.
- 2.** Looking at precedent in the city/around the world.
- 3.** Before and after photos of the alleys.
- 4.** Design Budget.
- 5.** Construction Budget.
- 6.** Timing - How long will this take?

1. JACOBS + FIELD OPS. PRECEDENT

Principles + Objectives:

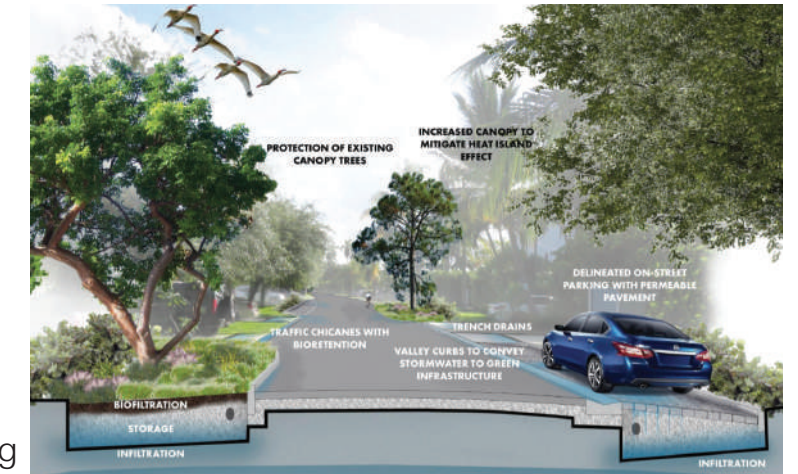
Jacobs Engineering

- Bioretention/Bioswales/Rain Gardens
- Blue and Green Roofs
- Constructed Wetlands/Floating Wetland Islands
- Detention Basins/Surface Storage
- Enhanced Tree Pits/Trenches
- Injection Wells (Pumped)
- Permeable Pavement
- Rainwater Harvesting (Cisterns, Rain Barrels)
- Stormwater Planters
- Subsurface Infiltration and Storage
- Tree Canopy
- Wet Ponds

James Corner Field Operations

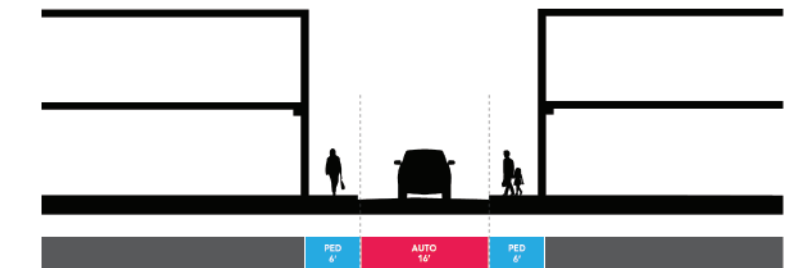
- Transform from mall to district
- Showcase historic Lapidus work
- Enhance the shopping and dining experience
- Reorganize to prioritize public space and program
- Integrate access streets
- Create a connected bike network & loop
- Urbanize Lincoln Lane North / South
- Leverage under-utilized lots
- Emphasize gateways
- Organize the line
- Create civic anchors
- Develop a cohesive design vocabulary.

KODA



Jacobs Engineering

EXISTING: DREXEL AVENUE NORTH OF LINCOLN ROAD



PROPOSED: DREXEL AVENUE NORTH OF LINCOLN ROAD



James Corner Field Ops

Principles + Objectives:

Jacobs Engineering

Bio-retention/Bioswales/Rain Gardens

Blue and Green Roofs

Constructed Wetlands/Floating Wetland Islands

Detention Basins/Surface Storage

Enhanced Tree Pits/Trenches

Injection Wells (Pumped)

Permeable Pavement

Rainwater Harvesting (Cisterns, Rain Barrels)

Storm water Planters

Subsurface Infiltration and Storage

Tree Canopy

Wet Ponds

James Corner Field Operations

Transform from mall to district

Showcase historic Lapidus work

Enhance the shopping and dinning experience

Reorganize to prioritize public space and program

Integrate access streets

Create a connected bike network & loop

Urbanize Lincoln Lane North / South

Leverage under-utilized lots

Emphasize gateways

Organize the line

Create civic anchors

Develop a cohesive design vocabulary.

KoDA

Bioretention/Bioswales/Rain Gardens

Permeable Pavement

Tree Canopy

Enhance the shopping and dinning experience

Detention Basins/Surface Storage

Reorganize to prioritize public space + program

Create a connected bike network & loop

Urban Agriculture

Rainwater Harvesting (Cisterns, Rain Barrels)

Stormwater Planters

Create civic anchors

Solar Activation

New Retail Opportunity

Urbanize Lincoln Lane North / South

Community Garden

Benches

Aromatic Planting

Develop a cohesive design vocabulary

Native Planting

Elevated Walkways

Art Activation

Lighting

Leverage under-utilized lots

Placemaking

2. ALLEYWAY PRECEDENT

Seattle, WA

Activating alleys could offer **50%** more public space across the city.

Seattle decided to **clear its alleys of dumpsters**, moving instead to a **trash-bag collection** model of waste management.

Seattle's downtown has approximately **217,500 square ft** of **public-space alleys**, of which **85% were underutilized**.

Austin, TX

The City of Austin Cultural Arts Division provided a **grant of \$5,000** for the **visual art installed overhead**.

Baltimore, MD

Seeking "small, cheap improvements that reset people's expectations of what an alleyway can be"

Through a **\$30,000** grant from the Rauch Foundation, **20 alleyways** in six neighborhoods are now **covered in murals and artwork**; they're filled with **block parties and cleared of trash**.

Kyoto, Japan

"The **alleys and canal edges of Gion**, the old entertainment district of Kyoto, where **retail has compacted the storefront into a four-foot deep experience** that would typically require twelve in the west. **Shades, screening, gardens, drainage, and displays are integrated in a tight unison**" - Daniel Toole

Los Angeles, CA

Green alleyways will help the city meet its goal of increasing stormwater capture to 50 billion gallons by 2035; currently, the city **saves 8.8 billion gallons annually**.

Of the roughly 300,000 acres in the city of Los Angeles, more than 2,000 are alleyways that cut through city blocks.

An alley, between East 51st and 52nd Streets of South Avalon Boulevard, is expected to **capture** more than **700,000** gallons of water a year.

EaCa Alley, Hollywood: **a crime-ridden area, transformed into a pedestrian thoroughfare + dining space** in 2012. The transformation was made possible through a collaboration of the **City Council**, the local redevelopment association, and the **support of the surrounding business owners**, who formed an **alley association** after seeing the **value in attracting pedestrians into the alley** and using the alley for dining space.

The **transformation cost \$800,000** and included **repaving** with red bricks, **storm water and drainage improvements**, **lighting**, and **elimination of trash bins**.

Chicago, IL

Chicago Green Alley Program, among the first in the United States **adapted over 100** of the city's alleys with permeable surfaces that redirect stormwater into the ground and away from Chicago's "overtaxed" sewer system, **reducing flooding and recharging the surrounding soil**.

13,000 alleys = 3,500 acres were paved with **impermeable** material, leading to flooding. If all of the **alleys became permeable** - Up to **80%** of the **rainwater** falling on these surfaces per year could **filtered** into the soil or **harvested** - **reducing flooding, filtering groundwater** and **saving taxpayer money** that would otherwise be spent treating stormwater.

Green Alley Pilot Approach #2: Full Alley Infiltration Using Permeable Pavement" - Permeable paving allows rainwater to penetrate through the surface filter into the soil below. **Typical cost: \$3-\$15** per sq ft.

2. ALLEYWAY PRECEDENT

San Francisco, CA

Annie Alley - temporarily closing the alley to cars. The alley hosts on-going **weekly programming**, such as picnics, film screenings and dance/music performances. The alley was designed to include **trellises** with **hanging plants, benches**, and **cafe tables**. The **cost of capital and construction** for the temporary improvements was roughly **\$128,000**.

Jack Kerouac Alley: a short, 18' wide, one-way alley in Chinatown was a **common** place for **illegal dumping** and as a **short cut for vehicles**. Completed in 2007, hard costs were approximately **\$350,000**. Creating a **pedestrian only right-of-way with unit pavers, pedestrian scale lighting**, and bronze cast plaques inscribed with poetry. The City also negotiated a "Quit Claim" with property owners, which forfeit vehicular access to their property in exchange for making the right-of-way pedestrian only.

Alleys are open for **services** in the **early morning hours** - then **close vehicular traffic during the day**.

Pedestrian-scale lighting improves **walkability** and **safety** for pedestrians, and can provide **exposure to businesses** by lighting up signage. Typical lighting **costs** for SF alleys range from **\$2,000 - \$20,000**.

Linden Alley: Became a **pedestrian-friendly, "green" street** that creates an intimate social space for people to walk and relax. The new, raised roadway slows traffic and puts people on the same footing as cars. The **pedestrian and vehicle areas are defined by above-ground planters and changing pavers**. A **coffee shop** and several **stores** brings **people and life to the alley**. The surrounding property owners pool together **\$5,000** annually for **maintenance costs**.

Belden Place, one of the city's most famous alleys, has **multiple restaurants w/ outdoor seating** — the alley has **become a magnet for residents and visitors**.

Melbourne, AUS

Since the 1980s as a part of the **Melbourne City Plan**, alleyways have been transformed / activated as a way to **improve livability in downtown through engagement of public spaces**.

Since then, **dozens of alleys** in the city have been **revitalized into an urban network** of alleys with **art installations, small cafes, residences, and retail**.

Now, these alleys, **covering 3.5 (2.2 miles)**, are a **vital** part of the **city's urban landscape** and **attract hundreds of thousands of visitors each year**.

To **support the alley transformation**, the City operates a **"Love your Laneway"** project, which **partners with local stakeholders to improve and revitalize alleys** through **waste management, amenities and access, public lighting and road surfacing**, and **artistic and cultural uses**. The City has adopted a number of planning policies to support the transformation of the alleys.

Miami Beach, FL

The Betsy-Carlton Orb, Shulman + Associates - 2016: This **revitalization and reuse** of the alley became an example of **placemaking** within the city. Conceived as a bridge connecting the historic Carlton and Betsy boutique hotels, the space has **taken on new cultural life within the alley**, including expanding the Betsy's poetry program from inside their Writer's Room to the public thoroughfare of the alley.

Miami Beach has about **22.3 Acres** of **alleyways**. To compare...**Flamingo Park: 36.53 acres** & **Lummus Park: 26.34 acres**.

Miami Beach alleyways make up about **10%** of roadways, spanning **9.17 miles**.

3. BEFORE + AFTER EXAMPLES



Commercial Alley

3. BEFORE + AFTER EXAMPLES



Commercial Alley

3. BEFORE + AFTER EXAMPLES



Cultural Alley

3. BEFORE + AFTER EXAMPLES



Cultural Alley

3. BEFORE + AFTER EXAMPLES



Residential Alley

3. BEFORE + AFTER EXAMPLES



Residential Alley

4. DESIGN BUDGET

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 (waste management, composting, recycling, existing uses, public works infrastructure, etc.)

Documentation of existing conditions.

Community outreach including meeting with the Flamingo Park Association, Lincoln Rd. BID and Ocean Dr. BID in order to receive input on design direction.

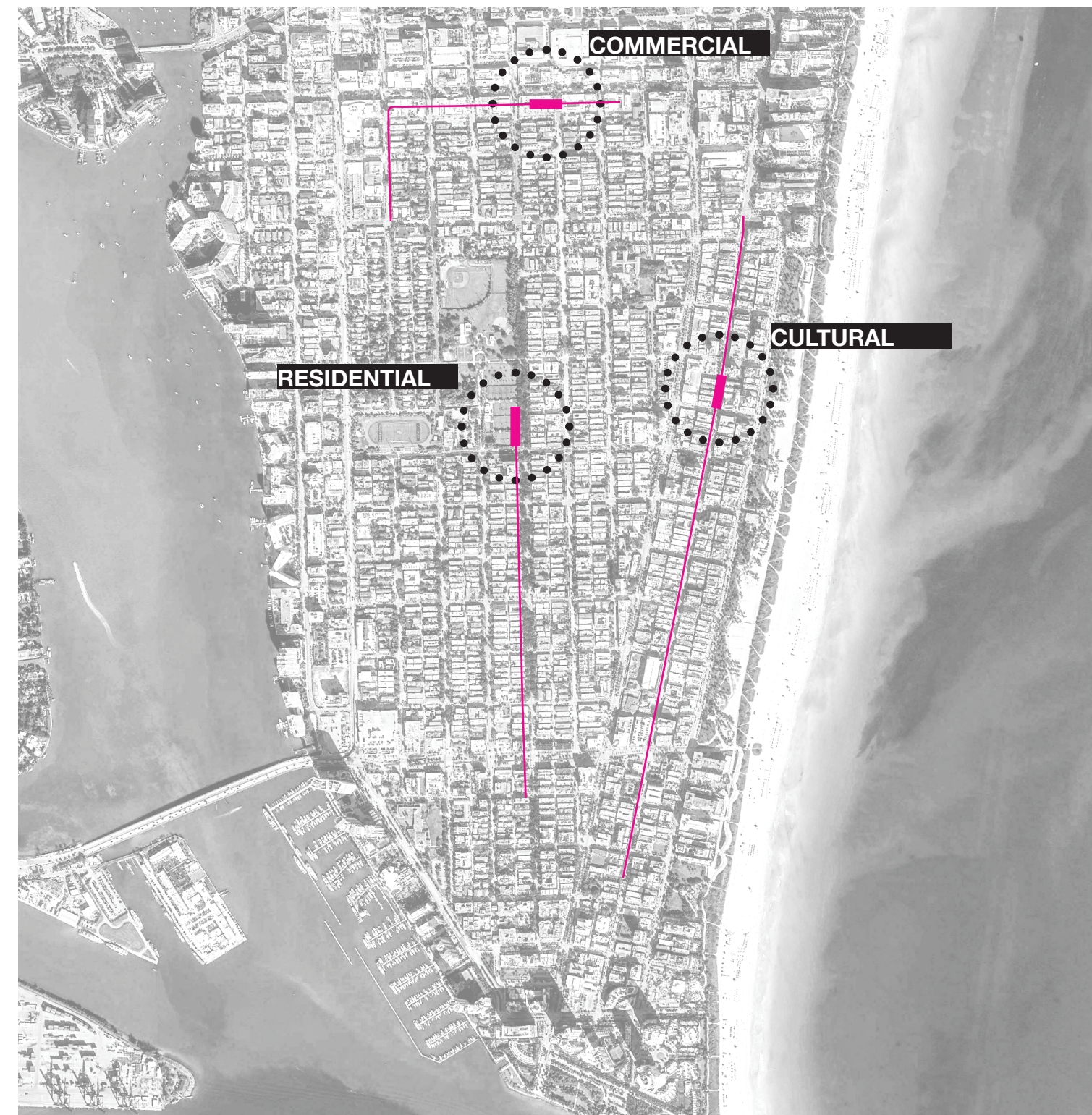
Proposed designs for three specific case studies (listed below) including plan drawings, section drawings, renderings and other presentation materials.

Landscape architect/Arborist recommendations on planting.

Civil engineering.

Construction Budget based on proposed design.

KoDA



4. DESIGN BUDGET

THE SITE / PILOT LOCATIONS

The scope of work enumerated above will be applied to 3 specific locations, noted below. Each specific site was selected as a part of 3 unique alley typologies; Commercial, Cultural and Residential.

Commercial Alley: **Lincoln Lane South**

(Between Meridian Avenue and Euclid Avenue)

Approximate Dimensions: 300' x 20' [+/- 6,000sf]

Crossing Approximate Dimensions: (2x) 70' x 30' [+/- 4,050sf]

Cultural Alley: **Ocean Ct.**

(Between 10th Street and 11th Street)

Approximate Dimensions: 400' x 20' [+/- 8,000sf]

Crossing Approximate Dimensions: (2x) 50' x 50' [+/- 5,000sf]

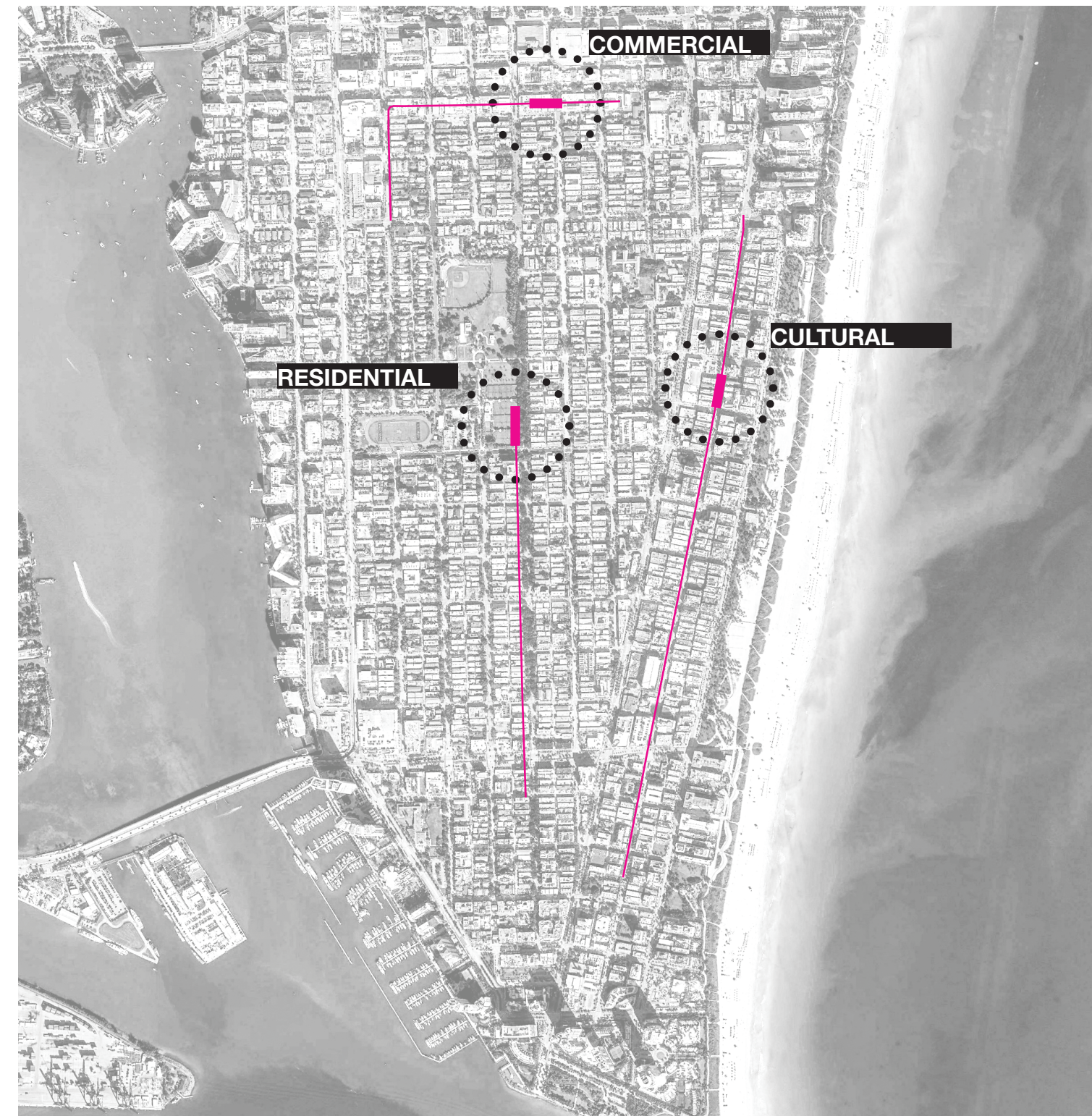
Residential Alley: **Meridian Ct.**

(Between 10th Street and 11th Street)

Approximate Dimensions: 400' x 20' [+/- 8,000sf]

Crossing Approximate Dimensions: (2x) 50' x 50' [+/- 5,000sf]

KoDA



COMMERCIAL ALLEY

Lincoln Lane South

Lincoln Lane South would be a compliment to Lincoln Road. Projects to revive the “Lincoln District” have already begun, however their impact thus far has been 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.

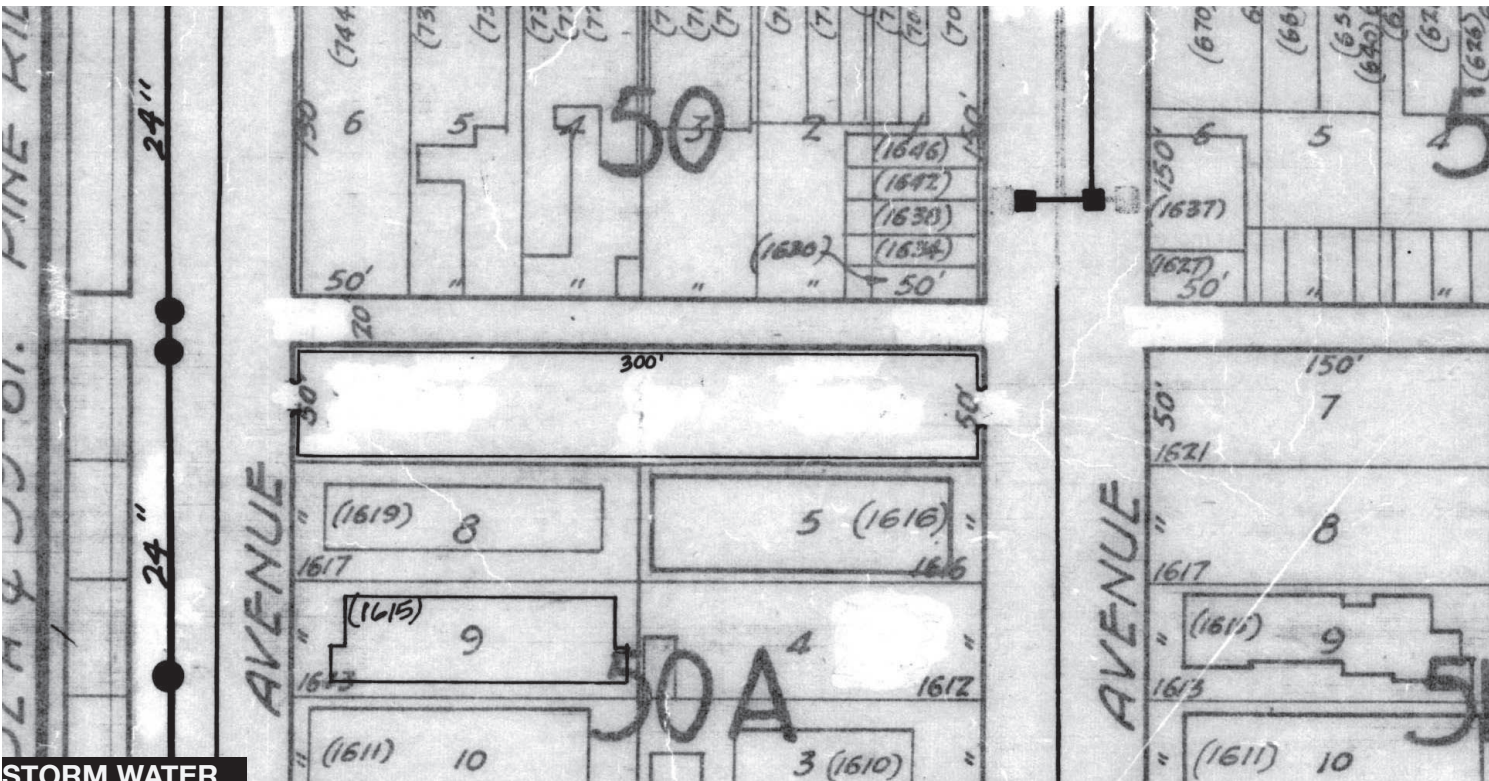
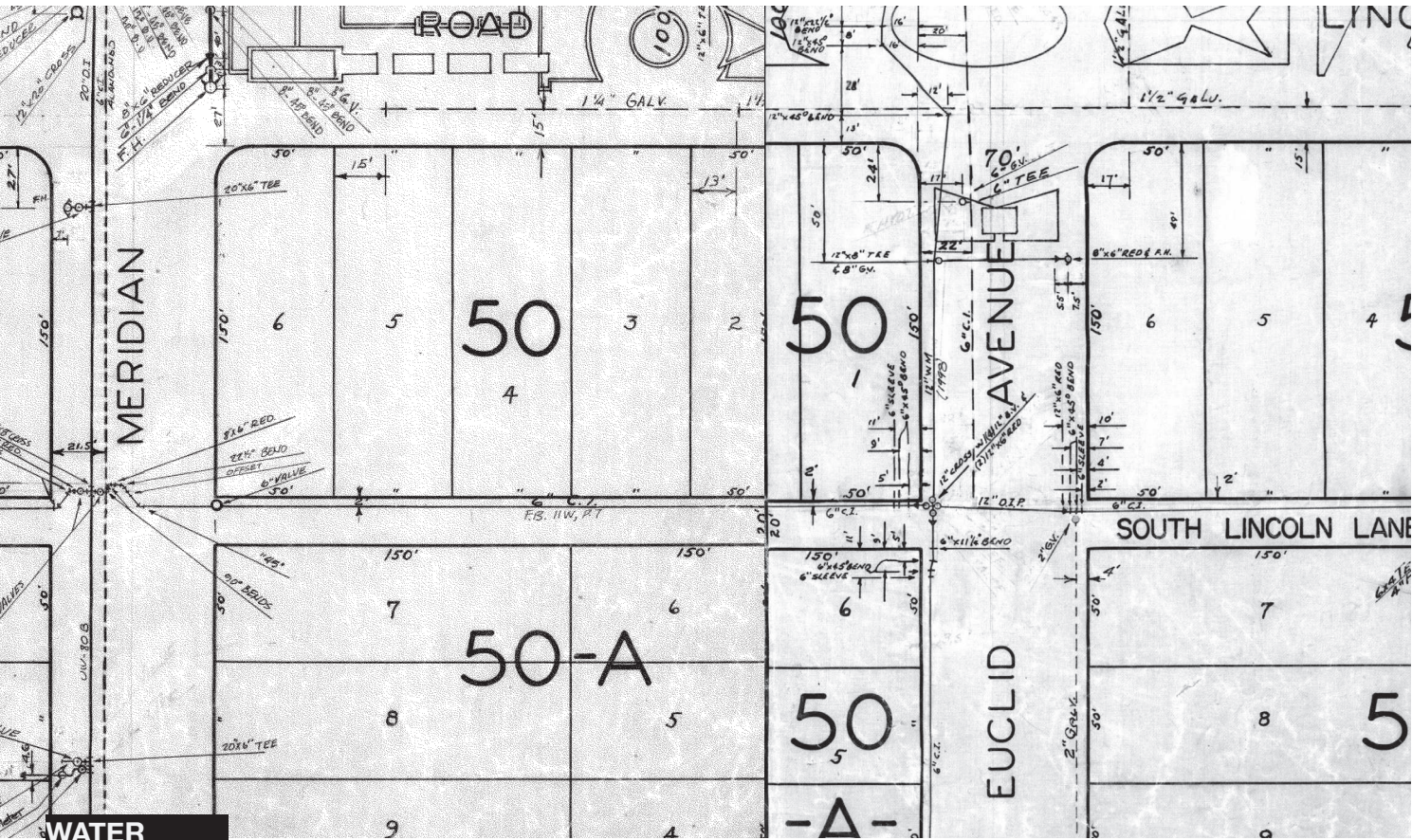
The alley connects Drexel to Alton Road, terminating at the Miami Beach Community Church. We determined that the block between Euclid and Pennsylvania is best situated to capitalize on alley improvements. This location has a unique opportunity to tie directly into Lincoln Road given the mall’s southern extension. In terms of mobility, the alley has a direct connection to Euclid Ave, a road with a well-established bicycle thoroughfare. This block also presents a variety of challenges and opportunities: Retail, office, residential and empty parking lot all have frontage on the alley within this small area. Through an abundance of native planting and permeable surfaces, stormwater management can also enhance well-being for retail patrons.



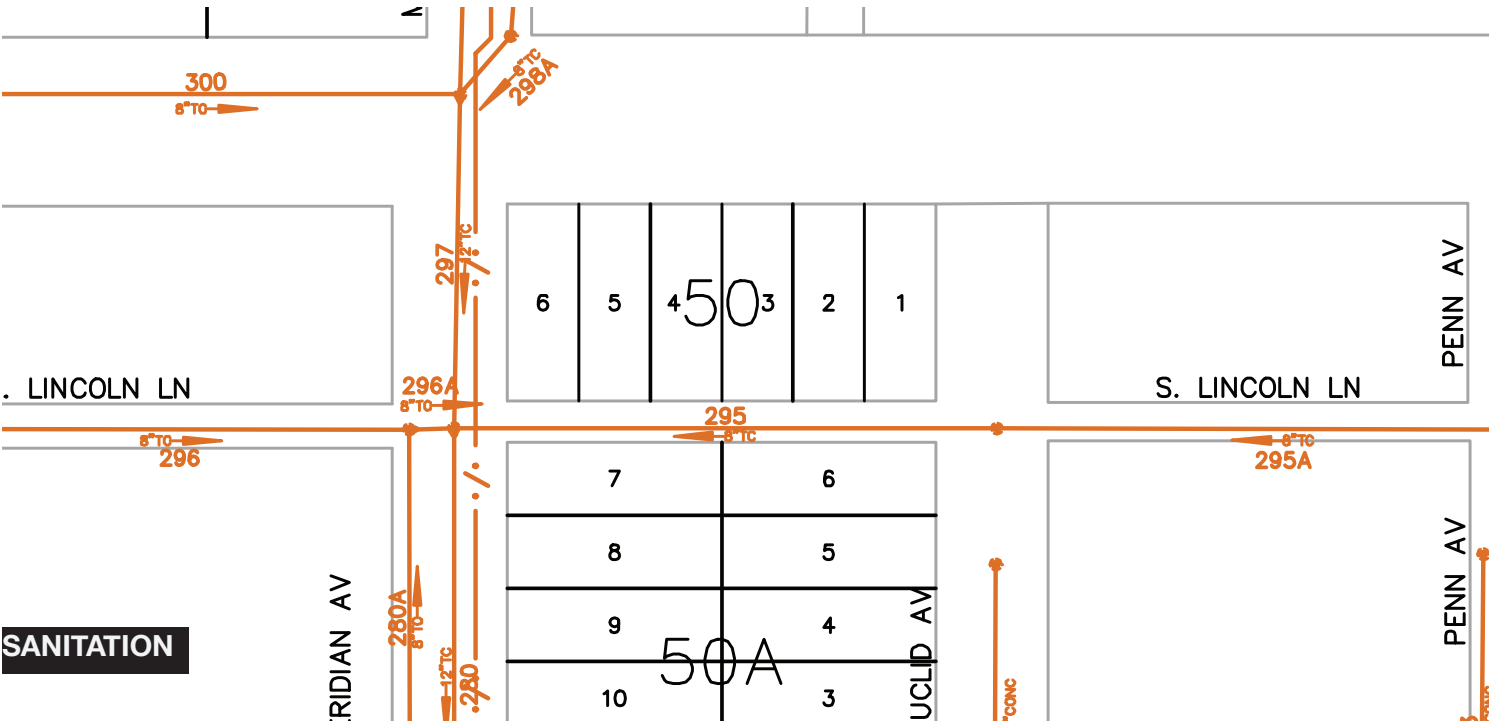
COMMERCIAL ALLEY



COMMERCIAL ALLEY



STORM WATER



SANITATION

Commercial Alley_Lincoln Road South

CULTURAL ALLEY

OCEAN COURT

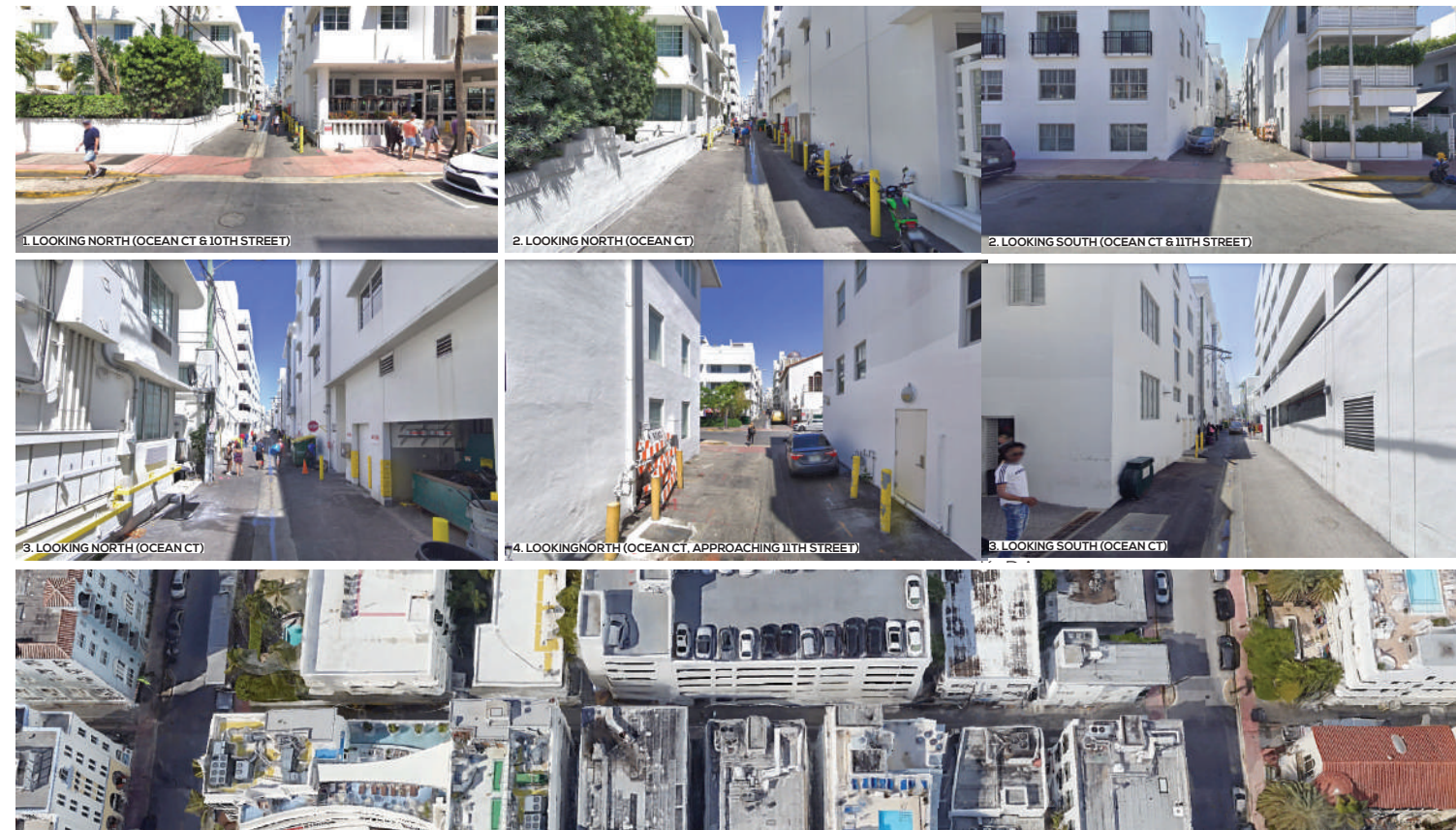
The activation of Ocean Court would certainly be a compliment to the diverse and vibrant Ocean Drive Historic District. With many new cultural and hospitality projects underway in the area, there is certainly a lot of positive transformation happening, however, the alleyways in this district have continued to be overlooked. Spanning from 1st - 14th Ave, the alleys offer a unique opportunity to create a new pedestrian corridor running through some of the most popular spots on Miami Beach.

The intention of this case study is to determine the best methods to activate the Ocean Court Alley between 10th and 11th Ave. We have determined that this Alley offers great potential given its central location on Ocean Drive and between several popular and historic places enjoyed by both visitors and residents. We understand that with a high presence of commercial activity in the alley, whether it's deliveries or trash collection, these operations cannot be totally removed. Our goal is create a multi-modal condition allowing for pedestrians, cars, and trucks to simultaneously operate within the Alley.

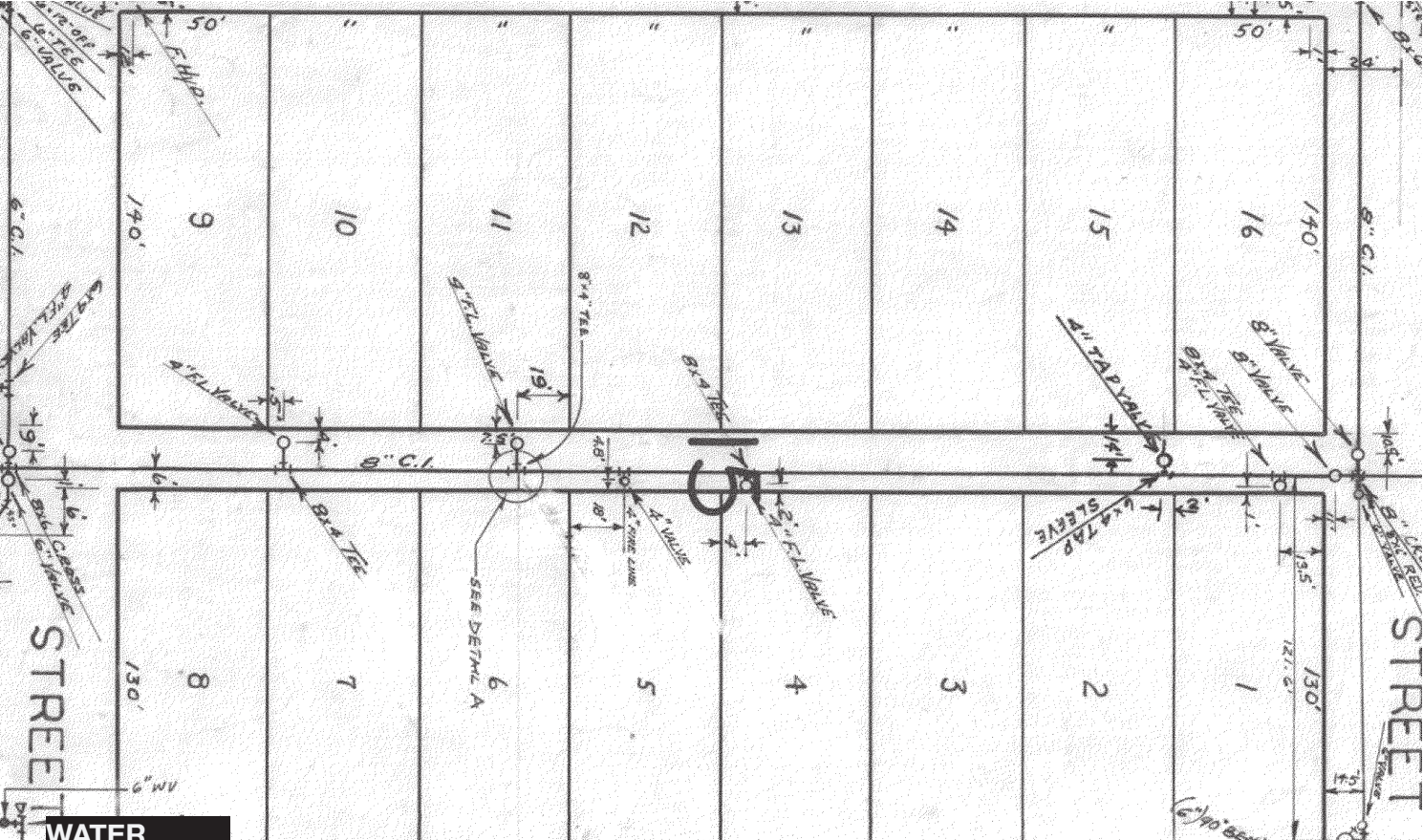
With the addition of raised pedestrian crosswalks, artwork, planters, bench seating, and aromatic flowers, our goal is to make the Ocean Court alley a welcoming and vibrant corridor. The separation of vehicle and pedestrian spaces will be defined with ground lighting and planting, providing a sense of separation, but allowing for overlap in certain situations. Flowers with potent fragrances with help mask the smell of trash while bringing an aesthetic quality to the new planters.



CULTURAL ALLEY

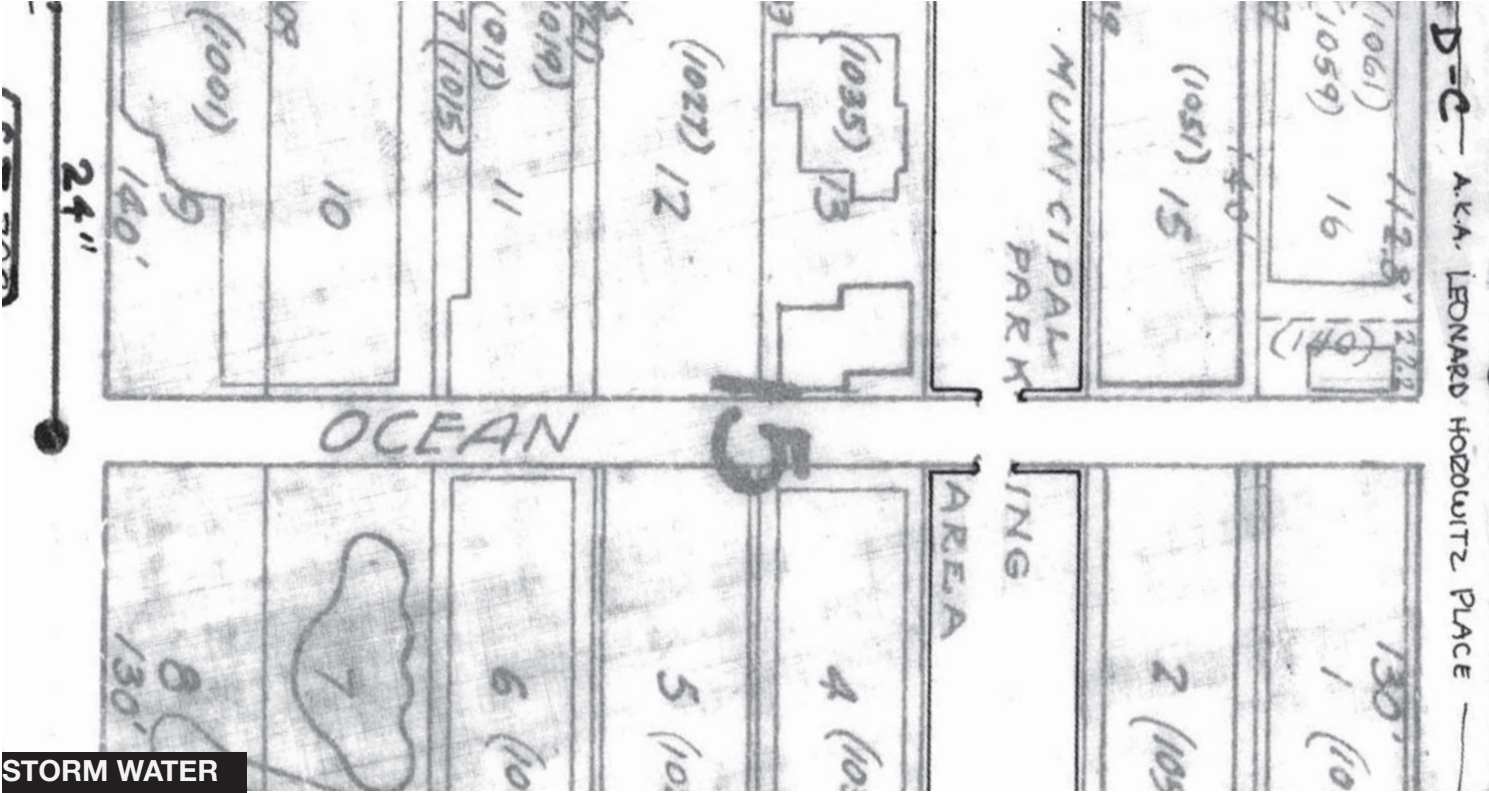


CULTURAL ALLEY

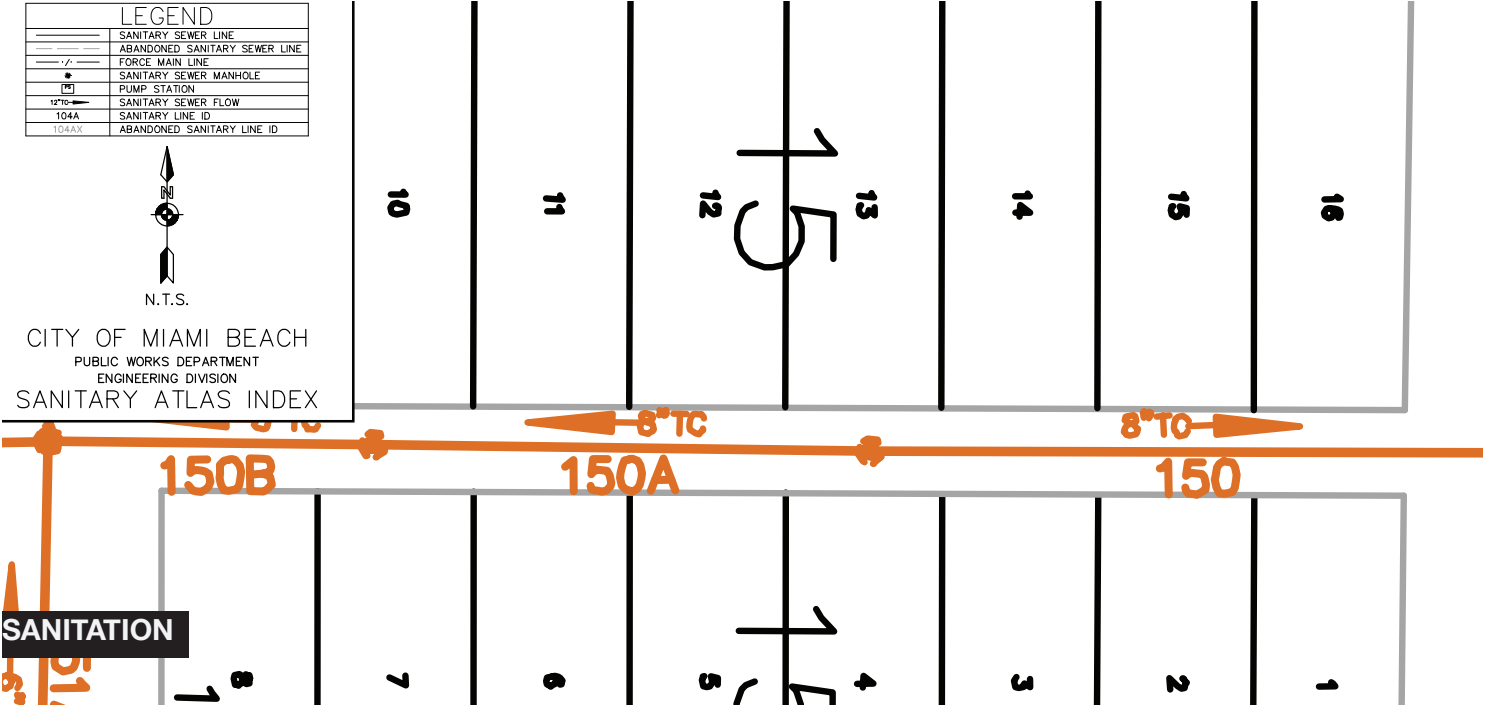


WATER

Cultural Alley_Ocean Court



STORM WATER



SANITATION

RESIDENTIAL ALLEY

MERIDIAN COURT

Meridian Ave. is the main residential corridor for Miami Beach, this Beauty Leaf Tree-lined street can be pleasant for pedestrians because of the dappled light and substantial shade provided by these trees. The network of alley's within this residential district can be used to compliment a very active pedestrian area around Flamingo Park. By creating new raised pedestrian crosswalks, vegetable gardens, and shade canopies, Meridian Court can become an active and enjoyable pedestrian connection for both visitors and local residents. Extending from the vibrant South of 5th District all the way to the historic Flamingo park district, Meridian Court offers great potential to create a new pedestrian friendly corridor in Miami Beach.



CULTURAL ALLEY



1. LOOKING NORTH (MERIDIAN CT & 10TH STREET)



2. LOOKING NORTH (MERIDIAN CT)



5. LOOKING SOUTH (MERIDIAN CT & 11TH STREET)



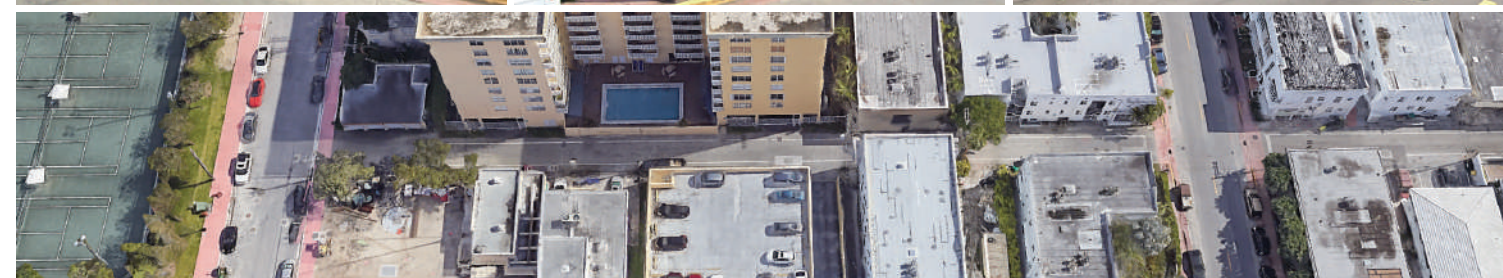
3. LOOKING NORTHWEST (MERIDIAN CT & 10TH STREET)



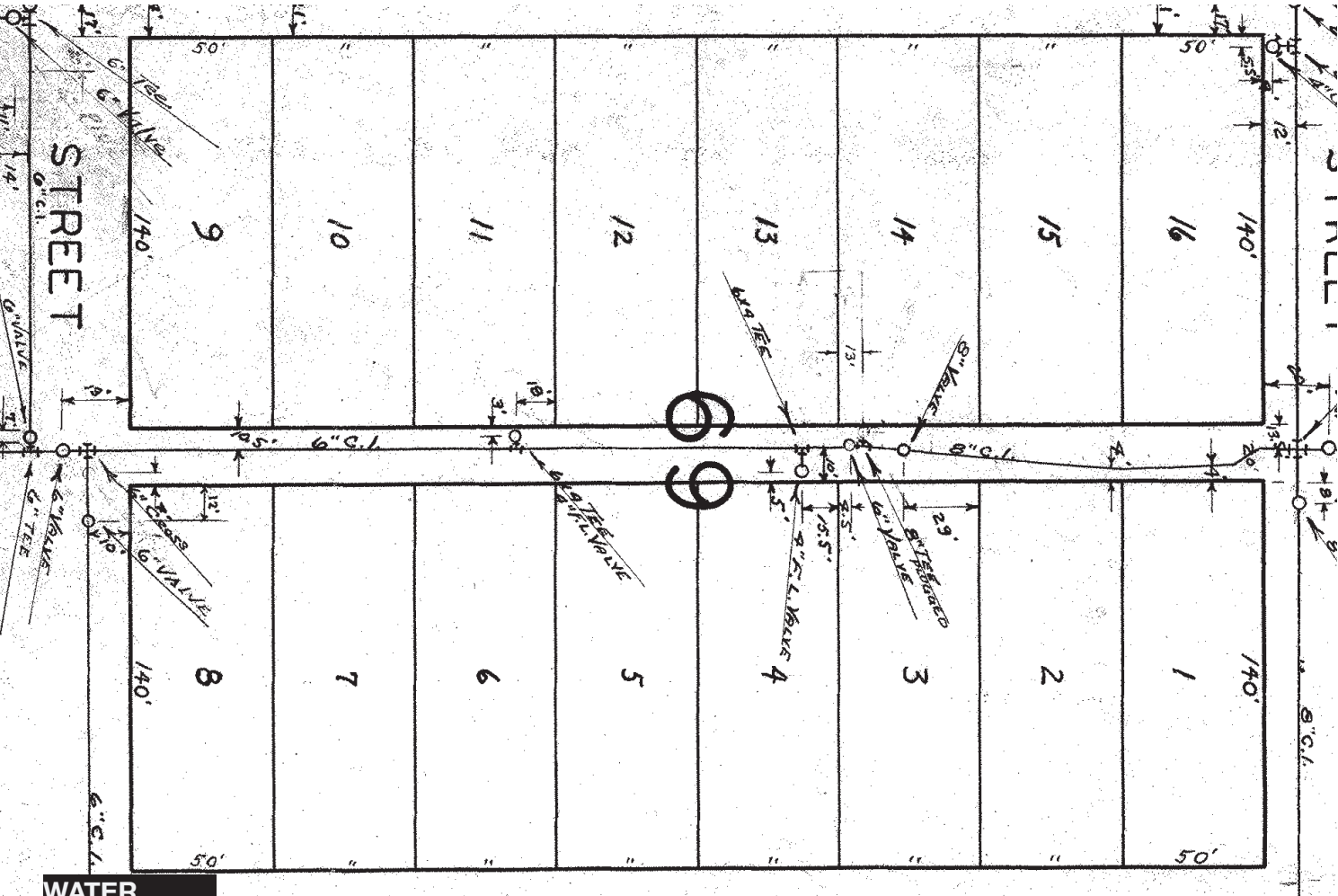
4. LOOKING NORTHEAST (MERIDIAN CT & 10TH STREET)



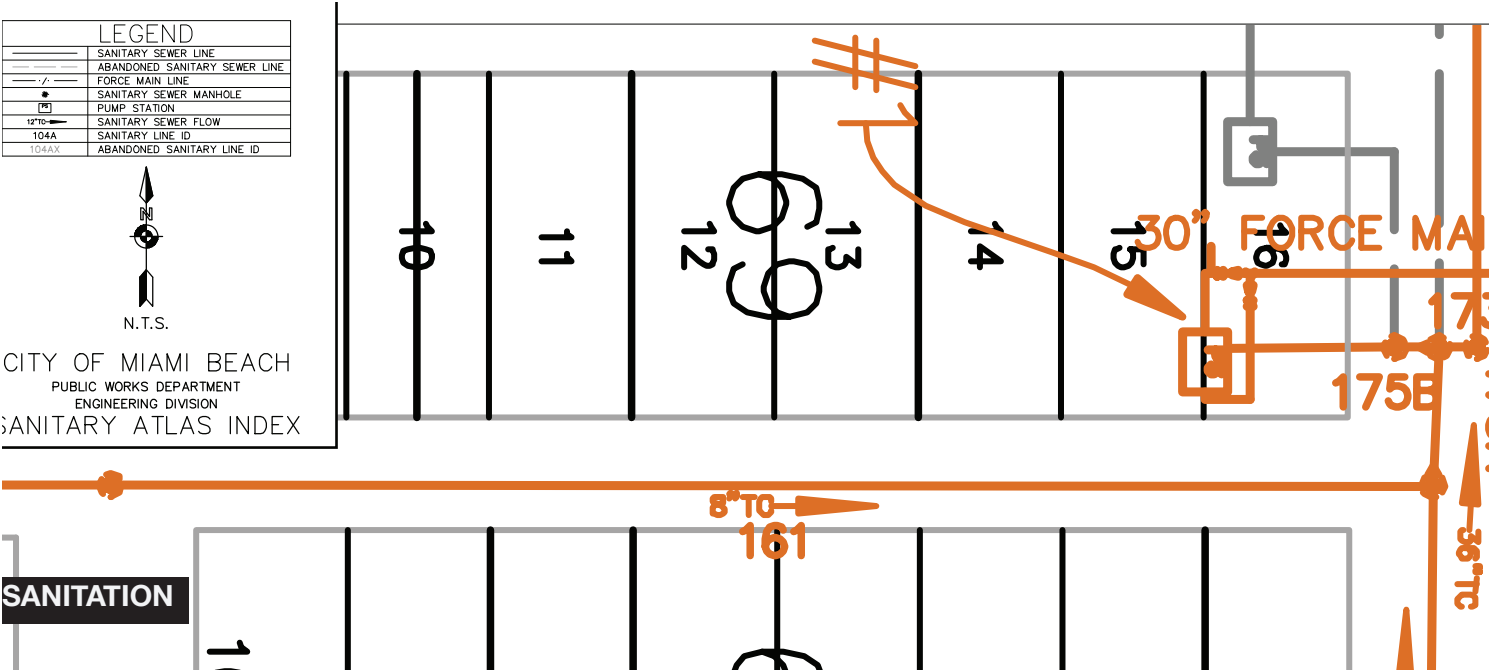
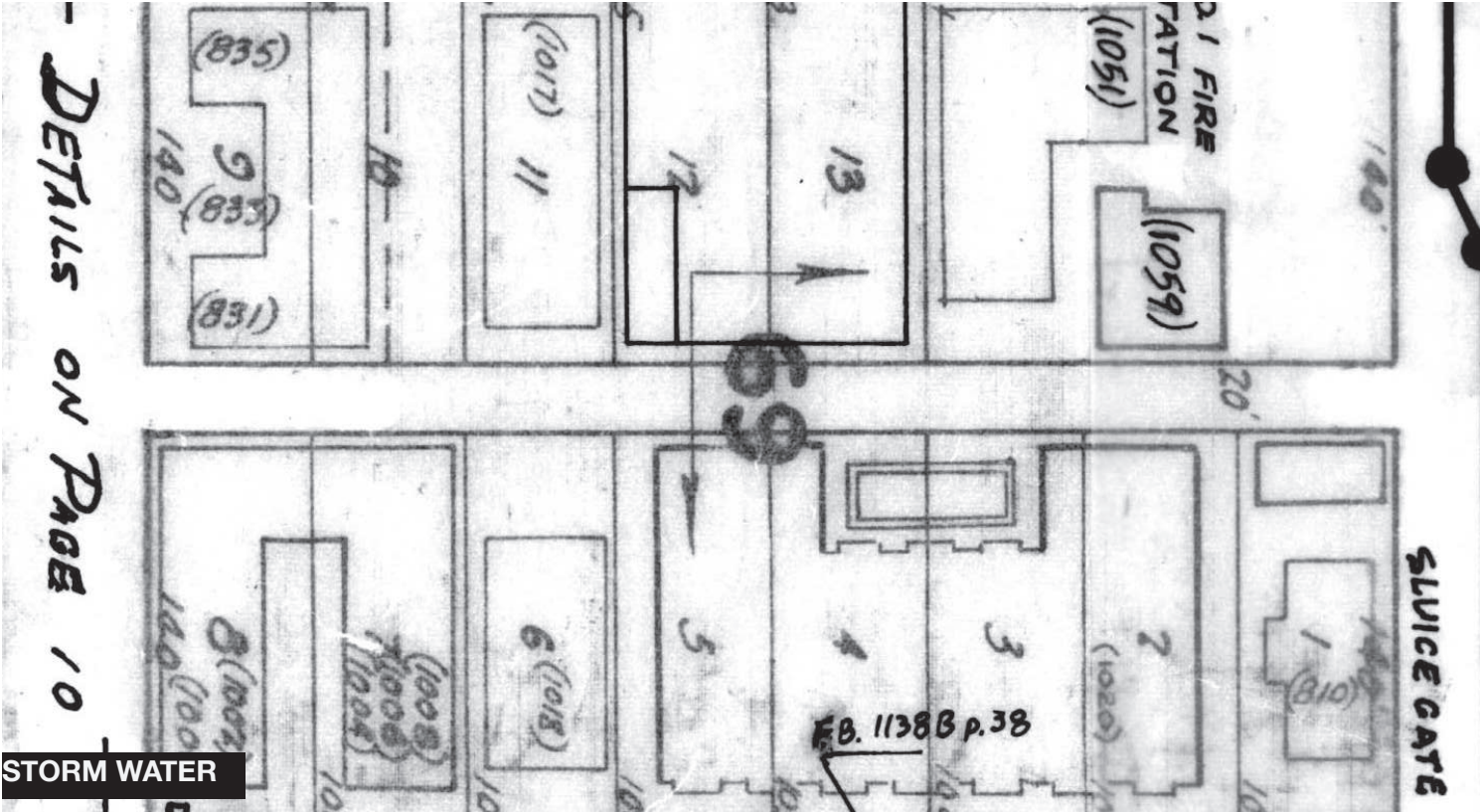
7. LOOKING SOUTHWEST (MERIDIAN CT & 11TH STREET)



COMMERCIAL ALLEY



Commercial Alley_Lincoln Road South



5. CONSTRUCTION BUDGET

COST ESTIMATE:

Date of Estimation: March 13, 2020

Design Architect: KoDA Miami
350 Lincoln Road
Miami Beach, Florida 33139

Prepared For: City of Miami Beach
Miami Beach, Florida 33139

	COMMERCIAL	CULTURAL	RESIDENTIAL
Project Grand Total (\$)	\$1,024,000	\$1,503,000	\$1,550,000
Cost per Lineal Foot (\$/LF)	\$12,800	\$12,350	\$12,920
Total Lineal Footage (LF)	80	120	120
Cost per Square Foot (\$/SF)	\$110	\$116	\$119
Gross Square Foot Area (SF)	10,500	13,000	13,000
Cumulative Mark-Ups (%)	61.7%	61.7%	61.7%

(The Executive Summary's Project Grand totals are rounded up to the next \$1,000)

5. CONSTRUCTION BUDGET

OVERVIEW

AREA ANALYSIS:

Commercial Alley

Width:

Length:

Area:

Alley
Euclid Street Crossing
Meridian Street Crossing

20 ft
30 ft
30 ft

300 ft
70 ft
65 ft

6,000 sf
2,100 sf
1,950 sf

Commerial Alley Total Area:

10,050 sf

\$1,023,328

Cultural Alley

Alley
10th Street Crossing
11th Street Crossing

20 ft
50 ft
50 ft

400 ft
50 ft
50 ft

8,000 sf
2,500 sf
2,500 sf

Cultural Alley Total Area:

13,000 sf

\$1,502,868

Residential Alley

Alley
10th Street Crossing
11th Street Crossing

20 ft
50 ft
50 ft

400 ft
50 ft
50 ft

8,000 sf
2,500 sf
2,500 sf

Residential Alley Total Area:

13,000 sf

\$1,548,776

	COMMERCIAL	CULTURAL	RESIDENTIAL
Project Grand Total (\$)	\$1,024,000	\$1,503,000	\$1,550,000
Cost per Lineal Foot (\$/LF)	\$12,800	\$12,350	\$12,920
Total Lineal Footage (LF)	80	120	120
Cost per Square Foot (\$/SF)	\$110	\$116	\$119
Gross Square Foot Area (SF)	10,500	13,000	13,000
Cumulative Mark-Ups (%)	61.7%	61.7%	61.7%

Date of Estimation: 03.13.2020

(The Executive Summary's Project Grand totals are rounded up to the next \$1,000)

281 Sixth Avenue, 2nd Floor
New York, NY 10014
Tel 212-209-1180
Fax 212-209-1195



Commercial Alley

DIV	Description	SF Cost	% of Total	Div. Total	
01 00 00	GENERAL REQUIREMENTS	\$3.56	5.7%	\$35,820	
02 00 00	EXISTING CONDITIONS	\$3.20	5.1%	\$32,193	
09 00 00	FINISHES	\$1.31	2.1%	\$13,200	
13 00 00	SPECIAL CONSTRUCTION	\$1.19	1.9%	\$12,000	
26 00 00	ELECTRICAL	\$2.51	4.0%	\$25,200	
31 00 00	EARTHWORK	\$3.47	5.5%	\$34,825	
32 00 00	EXTERIOR IMPROVEMENTS	\$25.64	40.7%	\$257,689	
33 00 00	UTILITIES	\$22.08	35.1%	\$221,900	
Subtotal (direct trades)		\$62.97	100.0%	\$632,828	
GRAND TOTAL		61.7%	\$101.82	100.0%	\$1,023,328

Cultural Alley

DIV	Description	SF Cost	% of Total	Div. Total	
01 00 00	GENERAL REQUIREMENTS	\$5.23	5.7%	\$52,606	
02 00 00	EXISTING CONDITIONS	\$3.30	3.6%	\$33,202	
09 00 00	FINISHES	\$1.81	2.0%	\$18,200	
13 00 00	SPECIAL CONSTRUCTION	\$5.73	6.2%	\$57,600	
26 00 00	ELECTRICAL	\$6.37	6.9%	\$64,000	
31 00 00	EARTHWORK	\$3.99	4.3%	\$40,106	
32 00 00	EXTERIOR IMPROVEMENTS	\$41.66	45.0%	\$418,654	
33 00 00	UTILITIES	\$24.38	26.4%	\$245,000	
Subtotal (direct trades)		\$92.47	100.0%	\$929,368	
GRAND TOTAL		61.7%	\$145.54	100.0%	\$1,502,868

Residential Alley

DIV	Description	SF Cost	% of Total	Div. Total	
01 00 00	GENERAL REQUIREMENTS	\$5.40	5.7%	\$54,248	
02 00 00	EXISTING CONDITIONS	\$3.30	3.5%	\$33,202	
09 00 00	FINISHES	\$1.81	1.9%	\$18,200	
13 00 00	SPECIAL CONSTRUCTION	\$5.73	6.0%	\$57,600	
26 00 00	ELECTRICAL	\$6.37	6.7%	\$64,000	
31 00 00	EARTHWORK	\$3.99	4.2%	\$40,106	
32 00 00	EXTERIOR IMPROVEMENTS	\$44.38	46.5%	\$446,020	
33 00 00	UTILITIES	\$24.38	25.6%	\$245,000	
Subtotal (direct trades)		\$95.36	100.0%	\$958,376	
GRAND TOTAL		61.7%	\$154.21	100.0%	\$1,549,776

5. CONSTRUCTION BUDGET

QUALIFICATIONS & ASSUMPTIONS

The estimate is based on Master Plan Documents as prepared by KODA dated February 28, 2020.

The project is to renovate various alleys to improve mobility, reduce flooding, enhance urban ecologies and maximize the culture identity of the city. These alleys are located in Miami Beach, Florida.

A separate estimate included here isolates the a section of commercial alley, cultural alley and residential alley to provide a square foot and a lineal foot master planning cost budget all the Miami Beach alleys.

A start date of April 2021 and a completion date of April 2023 equating to a 24 month construction period. Escalation prediction is base on a 3.5% rate per year.

STUART-LYNN COMPANY DISCLAIMER

This SLC report was derived from the information provided to our office by others along with the most accurate and responsible understanding of constructibility, market conditions, schedule and resource availability by the combined efforts of professionals associated with this work; manipulation of a live document may result in unintended and misleading reporting.

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Fax 212-209-1195

STUART-LYNN
COMPANY

Construction Cost
Planning

MARK-UPS (Mark-ups are cumulative)

This SLC report was derived from the information provided to our office by others along with the most accurate and responsible understanding of constructability, market conditions, schedule and resource availability by the combined efforts of professionals associated with this work; manipulation of a live document may result in unintended and misleading reporting.

Design Contingency 20.0%

The Design Contingency mark-up is added to account for minor design changes that may occur during the designing of the project. At the Pre-bid or Final phase estimate, this mark-up is eliminated.

General Conditions 8.5%

The General Conditions mark-up accounts for the legal requirements and costs of the project.

Construction Management Fees 3.0%

The Construction Management Fee accounts for the cost of having a management firm coordinate the project and act as the owner’s representative in all aspects of the construction project.

Insurance; General Liability 1.5%

This mark-up covers the required General Liability Insurance that will have to be carried during the construction period.

Bidding/Construction Contingency 7.5%

The Bidding/Construction Contingency mark-up accounts for unforeseen emergencies or design shortfalls identified after the construction project commences.

Completion Bond 3.0%

The Completion Bond is a guarantee given to the owner to assure that the contractor will complete the project. If the contractor completes the project, the bond amount is refunded to the contractor. If the contractor fails to complete the project, the owner is within his/her rights to keep the bond to help complete the project.

Escalation (April 2022) 7.29%

The Escalation Mark-up is added to account for the increases in cost that may occur between the date when the final cost is estimated and the mid-point of the construction of the project.

Total Cumulative Mark-up: 61.7%

5. CONSTRUCTION BUDGET

QUALIFICATIONS & ASSUMPTIONS

The estimate is based on Master Plan Documents as prepared by KODA dated February 28, 2020.

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STUART-LYNN
COMPANY

Construction Cost
Planning

ESTIMATE LABOR RATES

This estimate has been created using Union Labor

AREA CALCULATIONS

GSF measured from exterior face of structure in accordance with American Institute of

Commercial Alley Total Area = **10,050 sf**

Cultural alley Total Area = **13,000 sf**

Residential Alley Total Areas = **13,000 sf**

EXCLUSIONS

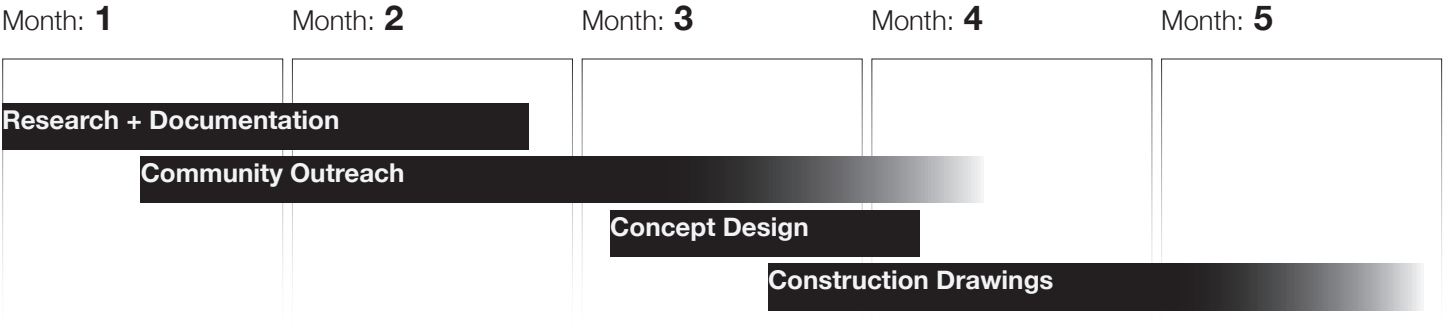
Mock up allowance is intended for performance evaluation

- Hazardous material remediation, asbestos abatement, lead paint abatement, etc.
- Monitoring of any adjacent structures.
- Cultural art sculptures. (Supports are included).
- Renovation cost of adjacent buildings.
- Renovation costs of existing dinning restaurants and retail spaces.
- Proposed adjacent parking lots and parking garages.
- FF&E (Furniture, Fixtures & Equipment) such as movable furniture, desks, outdoor tables & chairs, etc. unless otherwise noted.
- Phasing, swing space, mobilization, etc.
- Soft costs such as land costs, financing, etc.
- Building permit

6. TIMING

DESIGN SCHEDULE

Design scope is currently scheduled to commence upon approval of submitted proposal. The design process is estimated to require 4-6 months.



CONSTRUCTION SCHEDULE (per Alley)



What have we done?

RESEARCH & MASTER PLAN / OVERVIEW

- City of MB History
- Early Economic Drivers
- Current Economic Drivers
- Demographics
- DPW Meetings
- Public Transportation Mapping
- Meeting with City Commissioners
- Trash Routes + City Contracts
- DPW City Atlas
- Discussions with Industry Professionals

DESIGN GUIDELINES

- Developing a Design Toolkit
- Native Plant Species
- Non-Native Plant Species
- Aromatic Flowers
- Low Impact Development (LID) Methods
- Trash Solutions
- Lighting
- Art Walls
- Cost Estimation Package

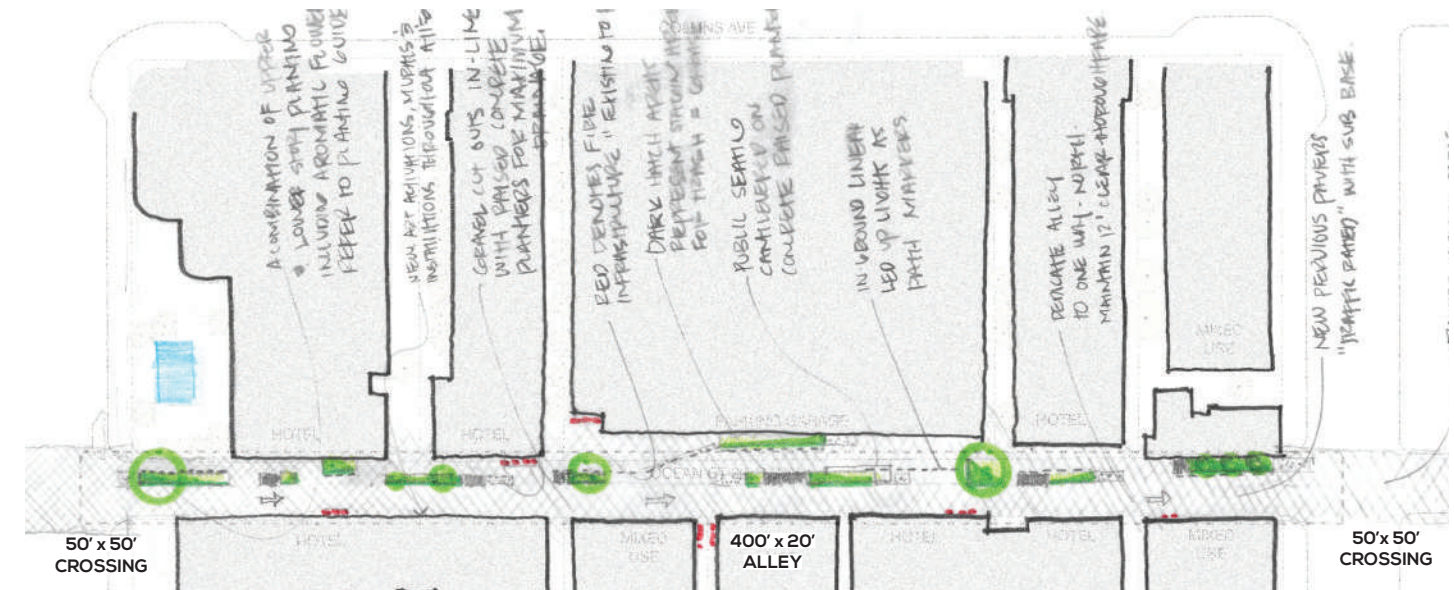
What are we doing now?

MEETING WITH THE CITY / COMMISSIONERS + GETTING FEEDBACK

What's next?

SPECIFIC INTERVENTIONS

- Residential - MERIDIAN COURT
- Commercial - LINCOLN LANE SOUTH
- Cultural - OCEAN COURT



Works cited

Burgos, Lila, and Tamar Sarkisian . “East Cahuenga Alley Revitalization Project.” The Los Angeles Sustainability Collaborative, 2013.

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Produced By: Jake Crociati
Spring 2020

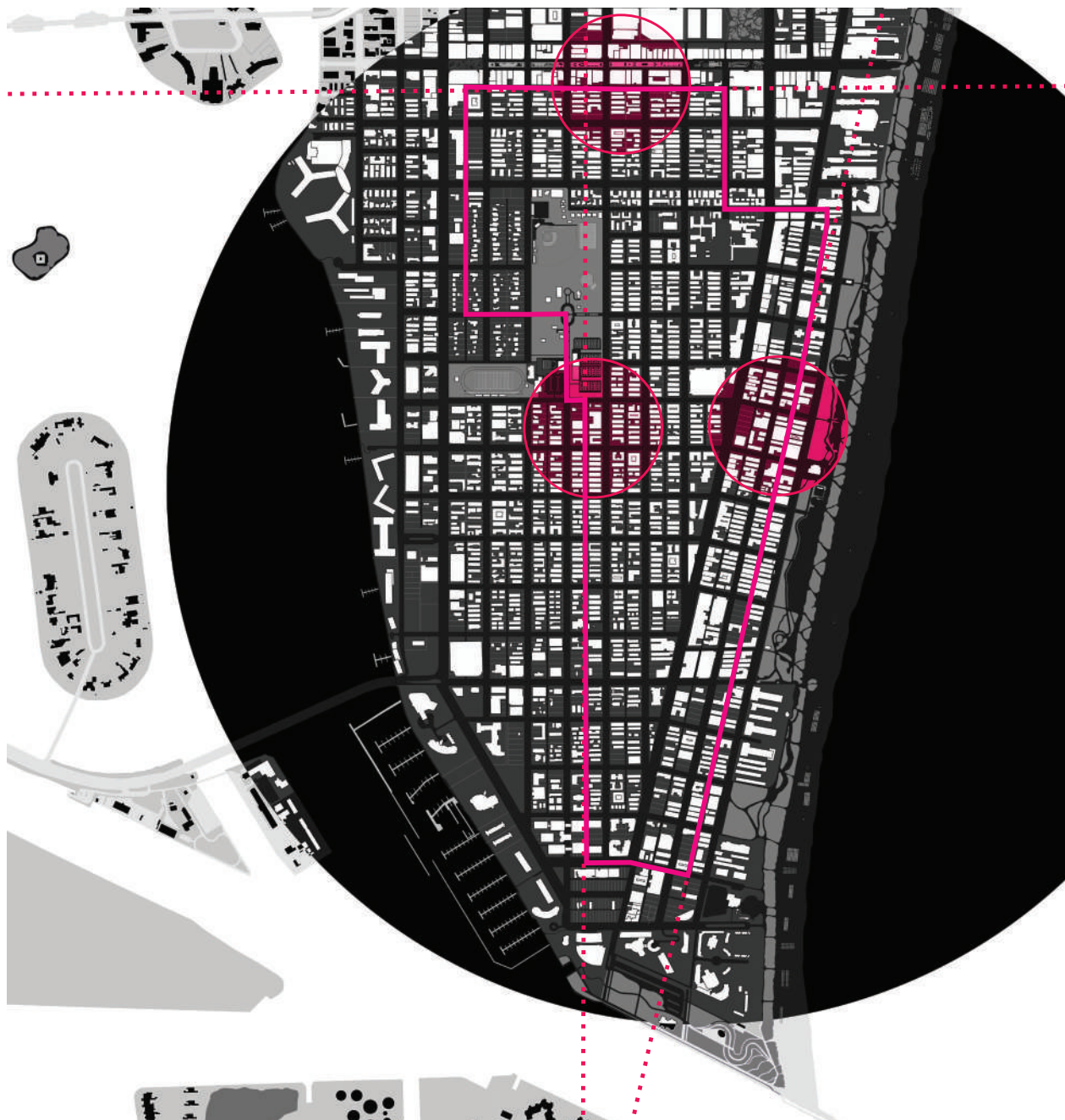
In Colaboration with: KoDA Miami
Wesley Kean

University of Miami, School of Architecture
PAIR Program| Professor Wyn Bradley

JAKE CROCIATI



ADAPTATIONS OF ALLEYS IN MIAMI BEACH



“THE SPACE BETWEEN”