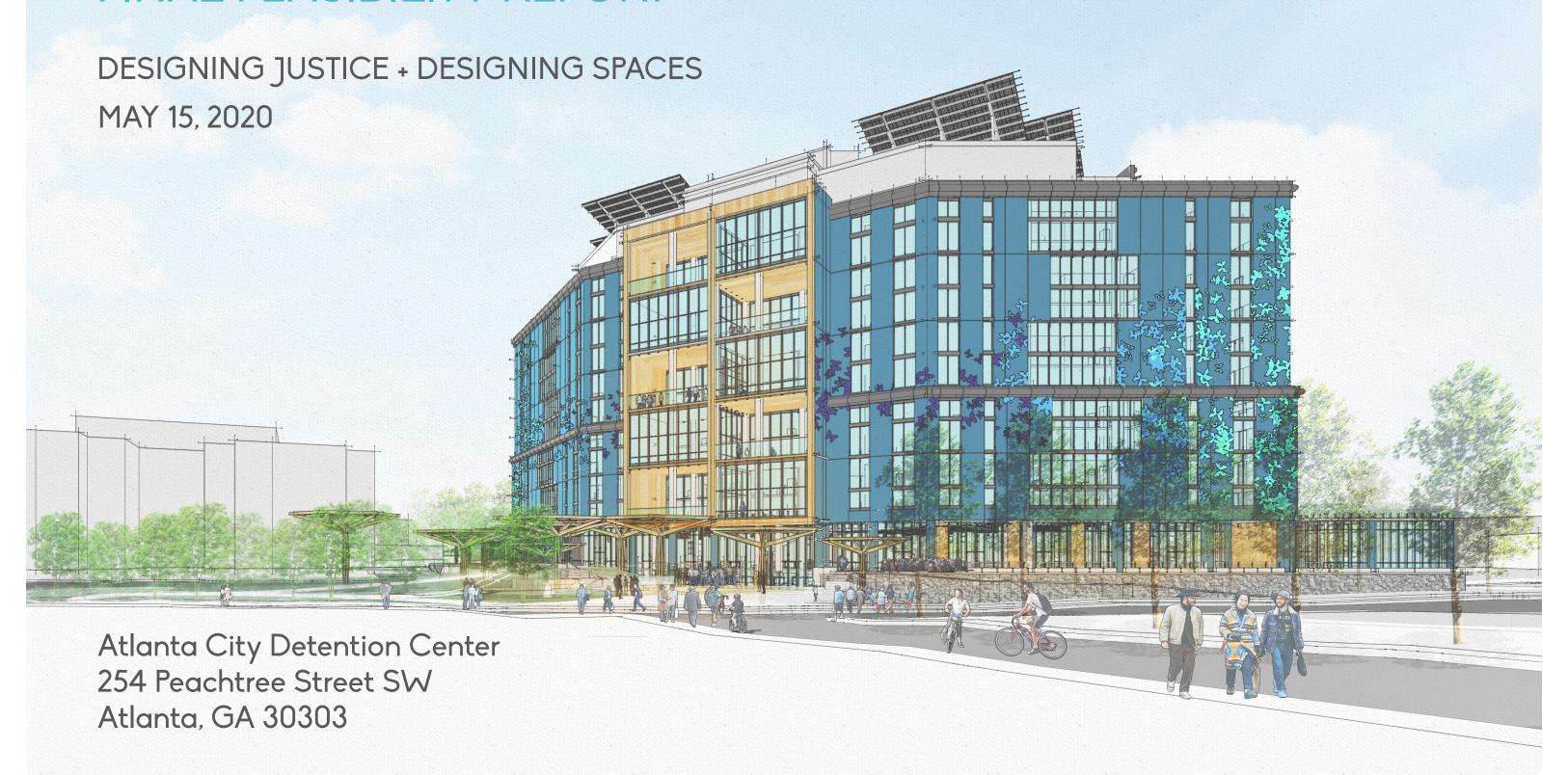
## CENTER FOR EQUITY

## FINAL FEASIBILITY REPORT



## Center for Equity

## Final Feasibility Report

### Contents

Final Feasibility Report Summary1
What Time Is It Now?2
Master Planning
Repurposing Strategies
Building Uses & Programs25
#1: Equity Podium
#2: Downtown Anchor
New Build Strategies
#3: Center for Equity Campus 50
#4: Distributed Equity
Building Systems & Sustainability
Conclusions & Summary









## Final Feasibility Report Summary

#### Background

Reimagining the Atlanta City Detention Center (ACDC) is a bold partnership between the city of Atlanta and community members to transform the building into a center for wellness and community services. The initial campaign to close the ACDC was started 5 years ago by two community organizers: Women on the Rise and the Racial Justice Action Center. In 2019, Mayor Bottoms signed legislation to form a task force composed of representatives from local government and community members in order to provide recommendations for the transformation. Under Mayor Bottoms, the administration has adopted new policies and programs to decriminalize low-level offenses, expand a pre-arrest diversion initiative, eliminate municipal cash bail, and end a long-term contract with ICE. These policies and programs have led to a continuing decline in the jail's daily population, and positioned ACDC to be repurposed and reimagined into a new model for national replication — a Center for Equity.

The Center for Equity is intended to be a multifaceted center for wellness and healing, skills-building, economic mobility, and crime prevention for people, families, and communities impacted by a history of over-incarceration. Planning for the reimagining process began in late 2018, and by June of 2019 a task force of 52 Atlantans had been created to oversee the process. The group was divided into 3 working

groups — Policy, Program, and Building — to oversee these aspects of the project. With a focus on the built environment and real estate financing, Designing Justice + Designing Spaces (DJDS) worked with the Building Working Group, representatives from the Mayor's Office, Bloomberg Associates, Women on the Rise, and the Racial Justice Action Center to begin the process of engaging key stakeholders and communities in defining what the Center for Equity should include, what it would cost, how it would be financed, and what it should look and feel like. By the end of 2019, over 600 residents had been engaged through a series of town halls, workshops and focus groups. While this phase of work is complete we know that the effort to continually engage the community in these next phases is essential to success.

### 4 Development Options

After the creative engagement process, DJDS coded and analyzed the data from which several key concepts and design features emerged that have been translated into the design and programming of the 4 development options included in this report. The focus and primary content of this report is an elaboration of these 4 development options with supporting imagery, financial models, and sustainability/engineering opportunities developed with Arup engineers.

In addition to thinking about the building, DJDS collaborated with Atlanta City Studios and Mithun to analyze the broader downtown

context around the building understanding that the surrounding area and former supporting infrastructure must be reimagined in order for the Center for Equity to be successfully realized. The analysis and resulting site design from these initiatives is included here and serves as an introduction.

The report should be read in conjunction with — and is supportive of — the policy and programming work group reports issued earlier this year.

### Adding Value

In each of the four development strategies, we have considered the following major design components: programming, architecture, real estate finance, and policy implications. The tremendous amount of input, information, and analysis embedded in this document will support the next steps in iterating and refining the 4 development strategies presented in this report to arrive at one option for implementation. The outcomes from this highly collaborative process have been successful; and, as it stands today, provide a national example of how municipalities and communities can work together to close and reimagine criminal justice infrastructure into places that can heal and restore. We could not think of a more critical time to share this work and begin to reimagine justice in the agency of freedom and wellness.





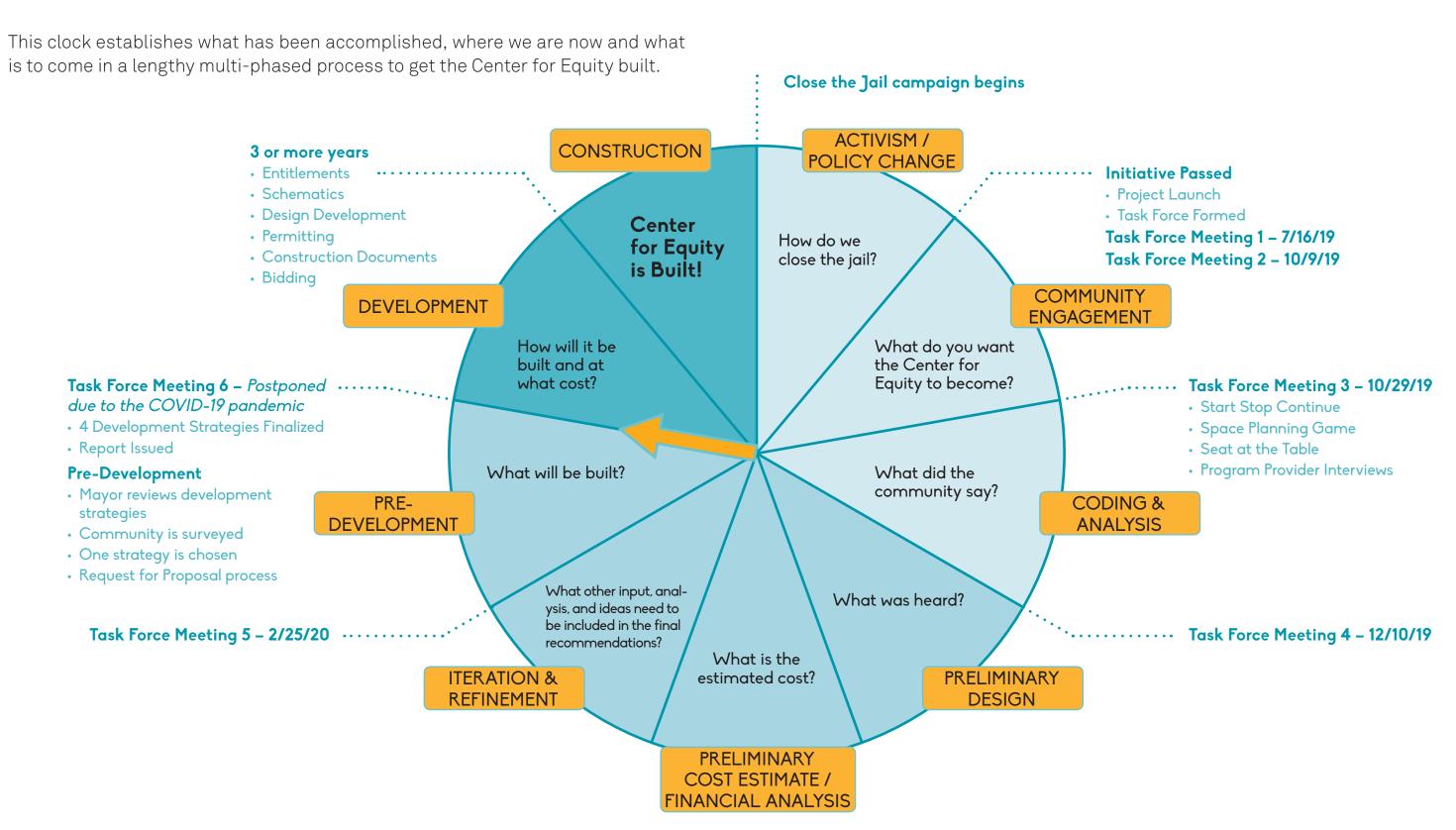








## What time is it now?







## Center for Equity as Catalyst for Neighborhood Transformation



**FUTURE DEVELOPMENT OPPORTUNITIES** 



### **FUTURE DISTRIBUTED INFRASTRUCTURE**





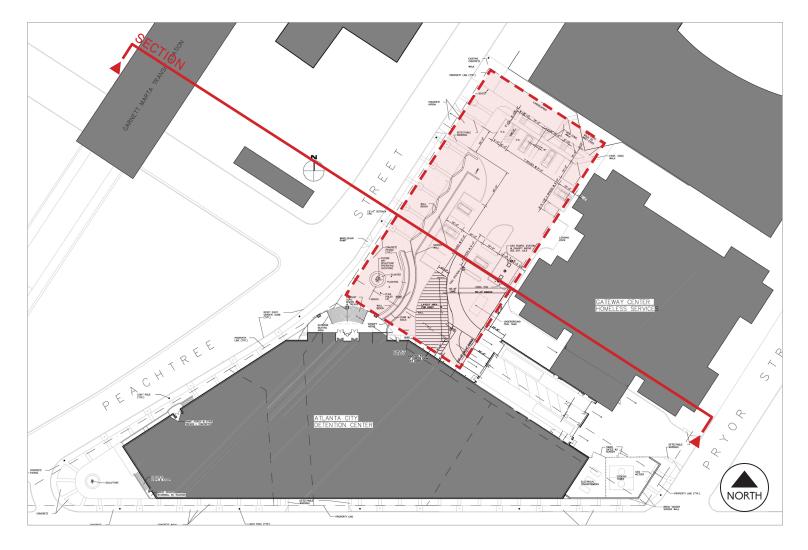




## MASTER PLANNING // Workshop: Reimagining the Block

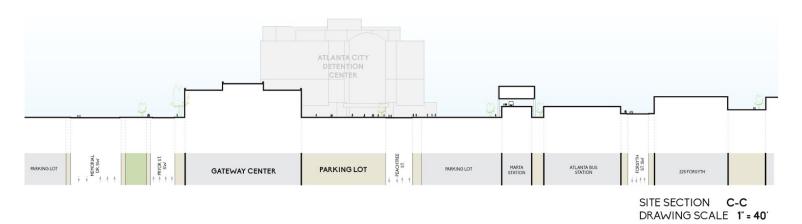
### What's Possible

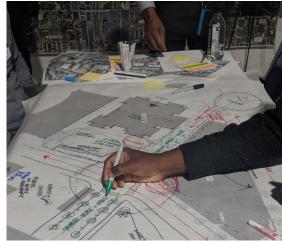
- How can the shared lot between the proposed Center for Equity and the Gateway Center for homeless better support the programs/uses?
- Rethinking existing uses, lots, and businesses around the site
- How are the bail bonds sites redeveloped?
- There is hope that the Gateway Center will not be needed in the future and can be redeveloped into housing
- Reinvigorate all sides of the building site with ground floor activation, frontage for plazas and multiple entries, built-in spaces for pop-up shops / farmers markets







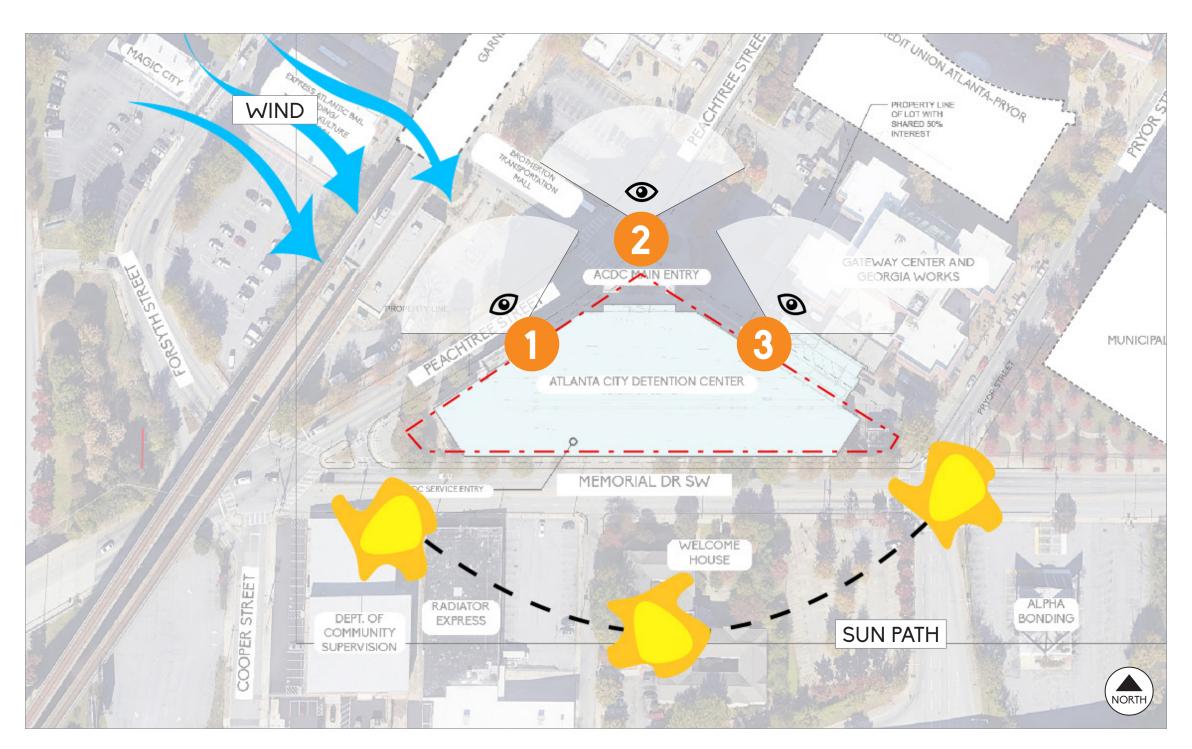






## Views and Sightlines

A basic site analysis examines views, the path of the sun for heat gain, and shading and wind patterns that affect the site. In the study diagrams on the following pages, we examine various factors around the site that inform both repurposing or new build strategies.





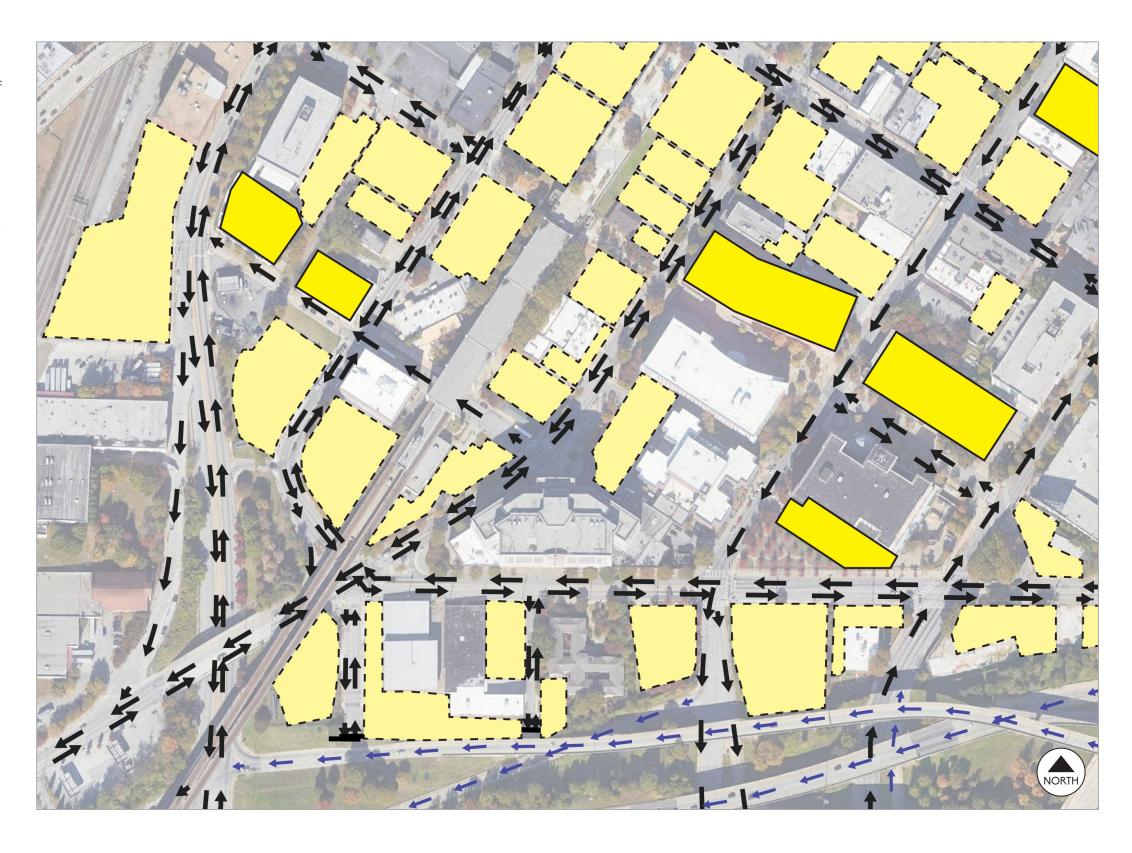






## Parking Lots and Garages

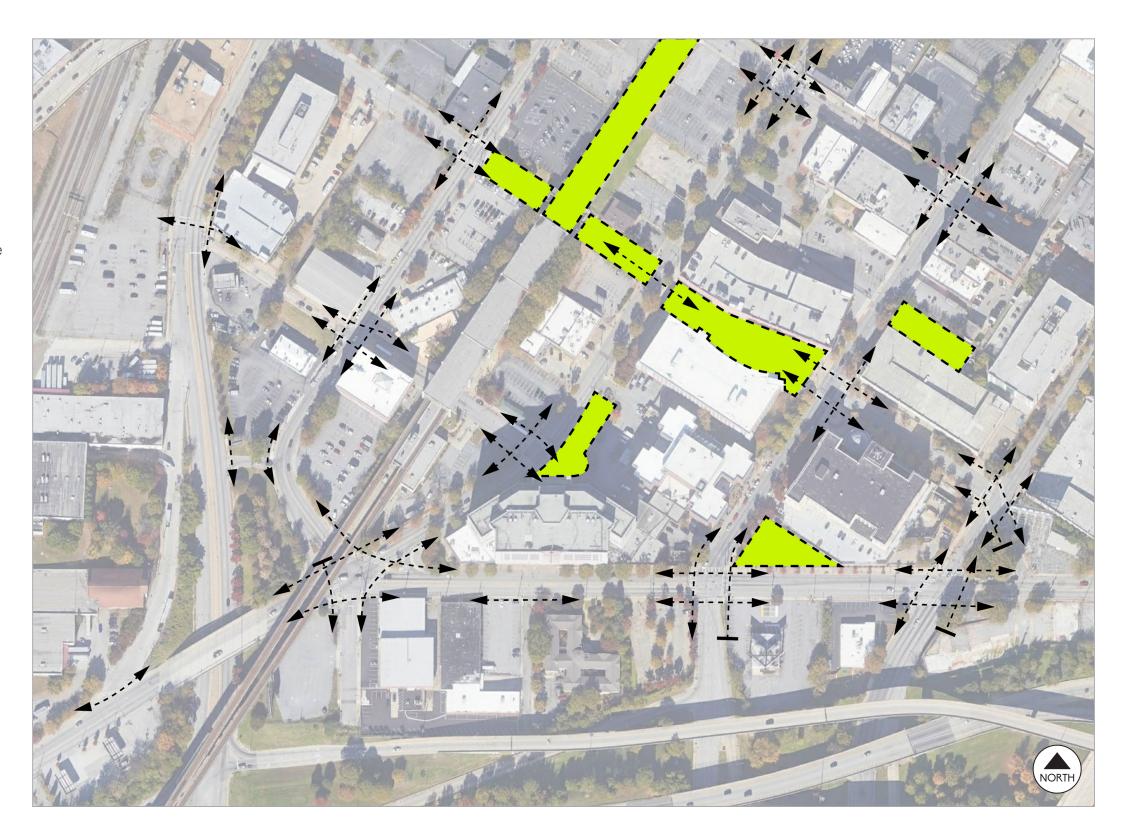
- Areas in yellow highlight a disproportionate amount of land dedicated to inefficient surface parking lots and cars in an area located adjacent to a MARTA station
- Develop municipal parking deals for a few larger centralized multi-level municipal parking garages and develop surface lots for density
- These areas could offer more potential for open green space as well as more missions-aligned development for the Center for Equity.





## Public Open Space and Access

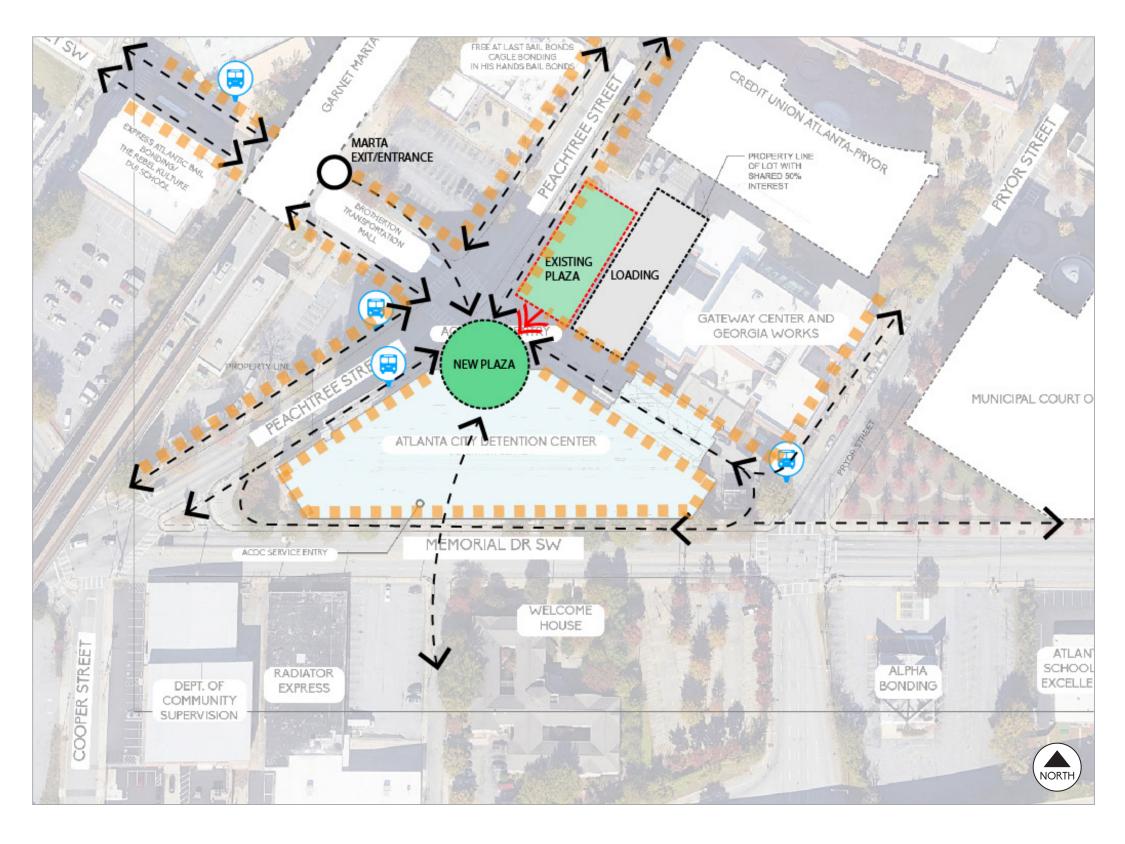
- The lack of public open green space is in stark contrast to parking in the area
- Promoting local food production, cultivation and distribution in South Downtown
- Expression of public art, culture, and permanent support for local artists
- Promoting cohabitation and reducing competition for the public space by encouraging stakeholders to share their environment
- Addressing homelessness, build public spaces that are hospitable to all





### Pedestrian and Vehicular Flow

- Promoting pedestrian safety/circulation and access with improved pedestrian pathways around ACDC
- Improve pedestrian experience from MARTA to entry of ACDC with a mix of amenities and proposed improvements from the South Downtown Transit Enhancement Plan
  - Future MARTA improvements include streetscape and wayfinding enhancements
  - New proposed roadside plaza at the Trinity Avenue entrance activated with pop-up retail, signage, and lighting
  - Better integration of the Greyhound station/ Brotherton Street

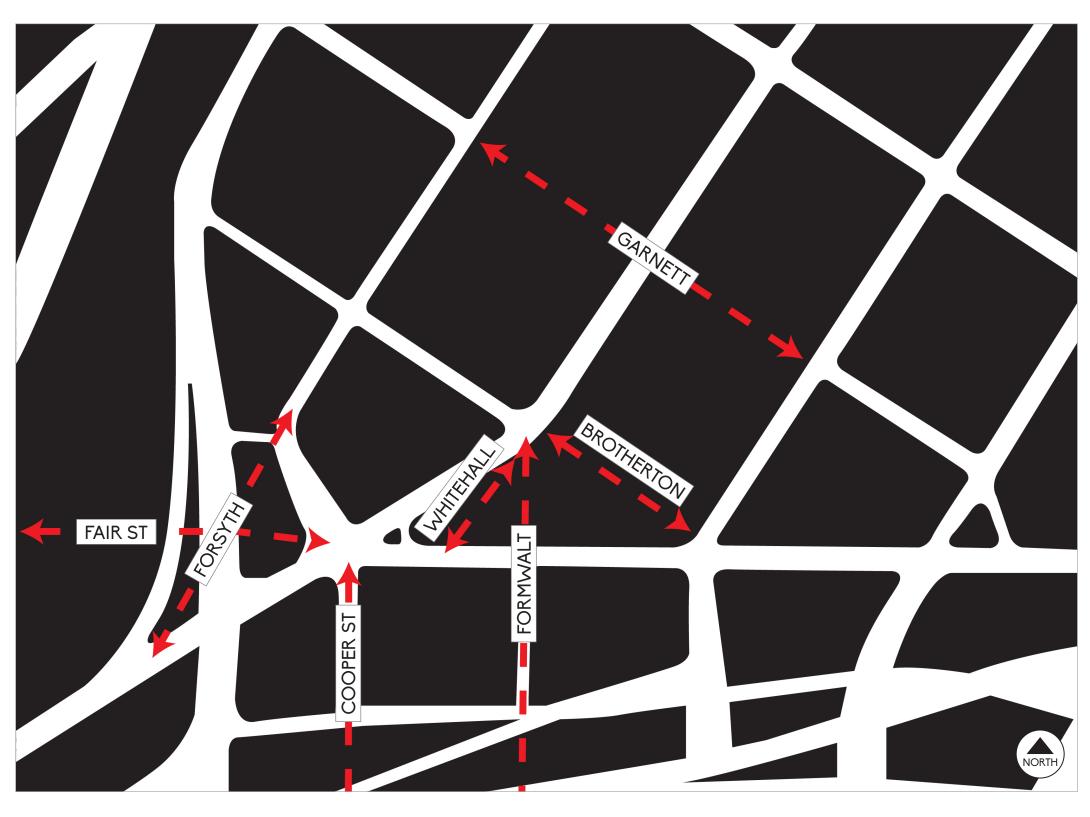




### Historic Connections

- The red arrows indicate former street connections which could be re-established like the Brotherton Street connection through the site
- Transform the shared space between ACDC and Gateway
- Improve fluidity across sites and create a stronger connection between Pryor and Peachtree Streets







### MASTER PLANNING STUDIES

### Environmental Justice Issues —> Site Design Responses

#### FEMA 'X' FLOOD ZONES

Portions adjacent to the site endure occasional flooding, based on existing FEMA maps.



#### FREEWAY AIR POLLUTION ZONES

The site's proximity to highways places it within a high air pollution zone within the city.







Each site strategy introduces filtration tree groves to improve air quality. Focus on trees with canopies that extent the entire height of the tree for maximum filtration potential.

#### **URBAN HEAT ISLAND**

The large amount of adjacent paved surfaces creates an urban heat island affect around the site and neighborhood.





WATER FEATURES AND SHADE CANOPIES

Strategies for microclimate comfort include interactive water features and tree planting and architectural shade canopies.



#### CISTERNS AND STORMWATER REUSE

Each site scheme addresses this through the use stormwater cisterns and reuse of the water for irrigation and interactive water features.





### MASTER PLANNING STUDIES

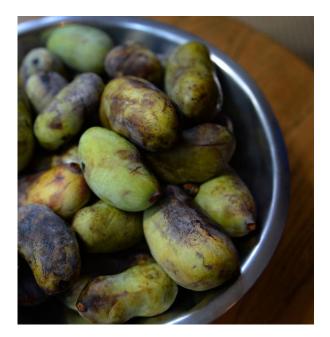
### Strategies that Engage History + Culture + Environment

### PAWPAW TREE COMMEMORATIVE GROVES

The Pawpaw tree, the only native fruit tree in the southeast, was often a food source for enslaved Africans as they made their way north, often in the wilderness, along the Underground Railroad.









### STORY WALLS

New site walls are seeded with aggregate crushed from the demolition of the existing detention center and used to create patterns that honor the community and those families that have endured mass incarceration.



### **DEMO MATERIAL REUSE**

Demolition debris is reused from the teardown of the detention center and given new purpose in uses throughout the landscape as paving and seating.







### MASTER PLANNING STUDIES

### Prototypes: Precedents for Day 1 Interventions

These precedents are examples of site activation processes which explore how strategic community gatherings and activities can be implemented to bring awareness and prepare the site and its surroundings for a new use as well as continued events for the future.

#### PEDESTRIAN-BASED **PLACEMAKING**

Placemaking: Rethink streets as places for people, design open spaces as multi-use destinations, build local economies through open air markets, design buildings to support places, create a public health agenda







#### DOWNTOWN WICHITA **GALLERY ALLEY**

Goal: Accelerate revitalization through promoting urban, walkable, peopleoriented development and local art through a new urban design concept





#### **DETROIT PEACHES + GREENS FESTIVAL**

Genesis: An old UPS truck delivering fresh fruits and vegetables to the residents has now developed into a festival with food, talent shows, horse-drawn hay rides and community gardens











## CENTER FOR EQUITY // 9 Pathways to Equity

### A New Kind of One-Stop Shop

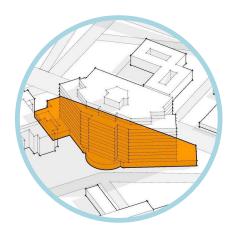
Starting in September of 2019, a series of community engagement events and workshops were held over a period of several months collecting data from the Task Force and the broader Atlanta community about what type of services and uses should be located in the Center for Equity. During these events, the data was collected through community engagement questionnaires, surveys, in-person service provider interviews and user interviews. The results of this information gathering was ultimately synthesized into a set of program guidelines known as the 9 Pathways. These guidelines will inform the eventual selection of prospective building tenants. The guidelines will also help integrate equity into the building programming and design themes throughout the development process.





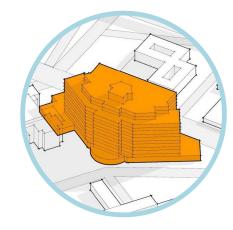
### 4 DEVELOPMENT STRATEGIES

Building on the 9 Pathways and a financial and real estate market analysis\*, we have prepared four development strategies for the Center for Equity. Two involve repurposing the existing building and two involve demolishing the building.



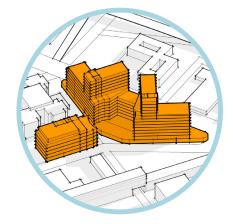
## **EQUITY PODIUM**

- Limit construction cost
- Reduced development period
- Strategic demolition
- Facade replacement
- Split tenancy Center for Equity and noncenter tenants
- Attract non-center tenants with complementary uses
- Positive cash flow from non-center area is used to finance development of the Center.
- Preserve option to expand Center in a second phase
- Tenant fit-out costs = \$77 \$177 / SF



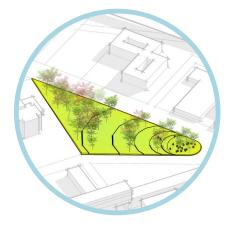
## **DOWNTOWN ANCHOR**

- Incorporation of all desired programmatic uses
- Catalytic project for South Downtown
- The change of use carries complexity. Increased contingencies (time and money)
- Anticipated development costs and uses create a financing gap
- Creative financing structures can cover some development costs
- · A bold project vision can attract additional resources (strategic partnerships, philanthropy)
- Tenant fit-out costs = \$77 \$177 / SF



## **CENTER FOR EQUITY CAMPUS**

- Demolition of the existing structure
- Incorporation of all desired programmatic uses
- Fresh start reduces construction complexity, development contingencies, and architectural compromises
- Significant opportunities for public-private partnerships, multi-phased development, and innovative ownership structures
- Relies heavily on the strength of financial/ transactional deal-making
- Tenant fit-out costs = \$77 \$177 / SF



## **DISTRIBUTED EQUITY**

- ACDC is demolished and site is developed as a park, memorial, urban farm or seed bank
- · Service model pivot. A decentralized network of smaller Centers for Equity replaces the concept of a single center.
- Site selections could be based upon which communities were most impacted by ACDC and would most benefit from accessible resources.
- Smaller, neighborhood-oriented Centers improve ability to execute by reducing the execution risks associated with large-scale projects, while offering greater flexibility to customize by neighborhood
- Through the development of the modules, a small format Center for Equity is estimated to be 75-100K SF (20% of the size of the current ACDC)
- Depending on desired site locations, Centers could be new construction or repurposed buildings
- The current ACDC site could pilot the small format Center for Equity with new construction

<sup>\*</sup> Real Estate Market Analysis prepared by Emory University's Goizueta Business School.





# REPURPOSING STRATEGIES

This section proposes two development options with architectural design strategies to repurpose the existing building into a Center for Equity. These options include:

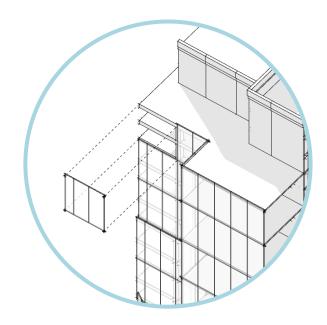
Option #1: Equity Podium — Building Partially Repurposed

Option #2: Downtown Anchor — Building Fully Repurposed

## REPURPOSING THE BUILDING // Design Strategies for Transformation

### A New Facade and Letting the Light In

The existing building is designed for a single use as a detention center where the main purpose is to isolate. Repurposing it into a building with multiple uses requires integration of flexible spaces and bringing in ample natural light for uses such as housing, social services, and retail. We propose four basic design strategies to support a range of uses that welcome and embrace the Atlanta community.



Replace portions of the existing facade



Cut mezzanine floors to let more light in



Demolish existing interior cells and pod walls

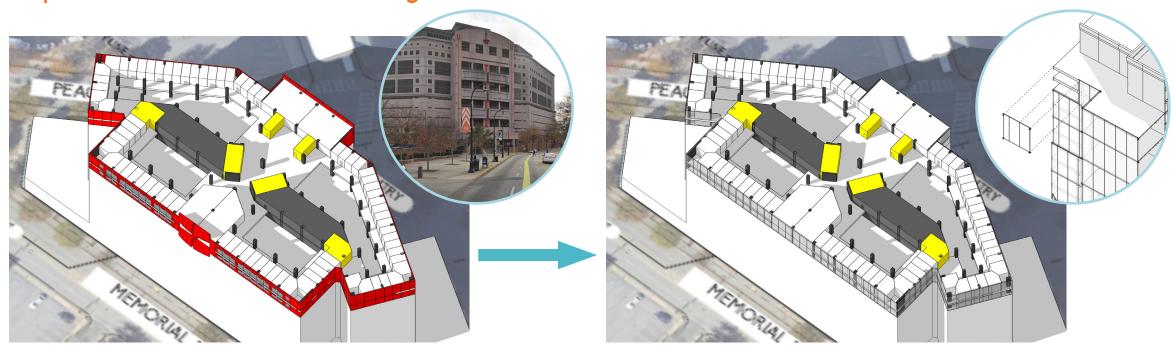


New crosslaminated timber floor mezzanine infill



## REPURPOSING THE BUILDING // Design Strategies for Transformation

### Replace Portions of the Existing Facade



Removing and replacing portions of the existing precast panel facade with a new window wall system allows for ample light to be let into the building. (Existing facade shown in red.)

### Cut Mezzanine Floors to Let More Light In





Notching out the mezzanine floor in strategic areas brings natural light further back into the deep floor plates of the building. (Floor area to be removed shown in red.)

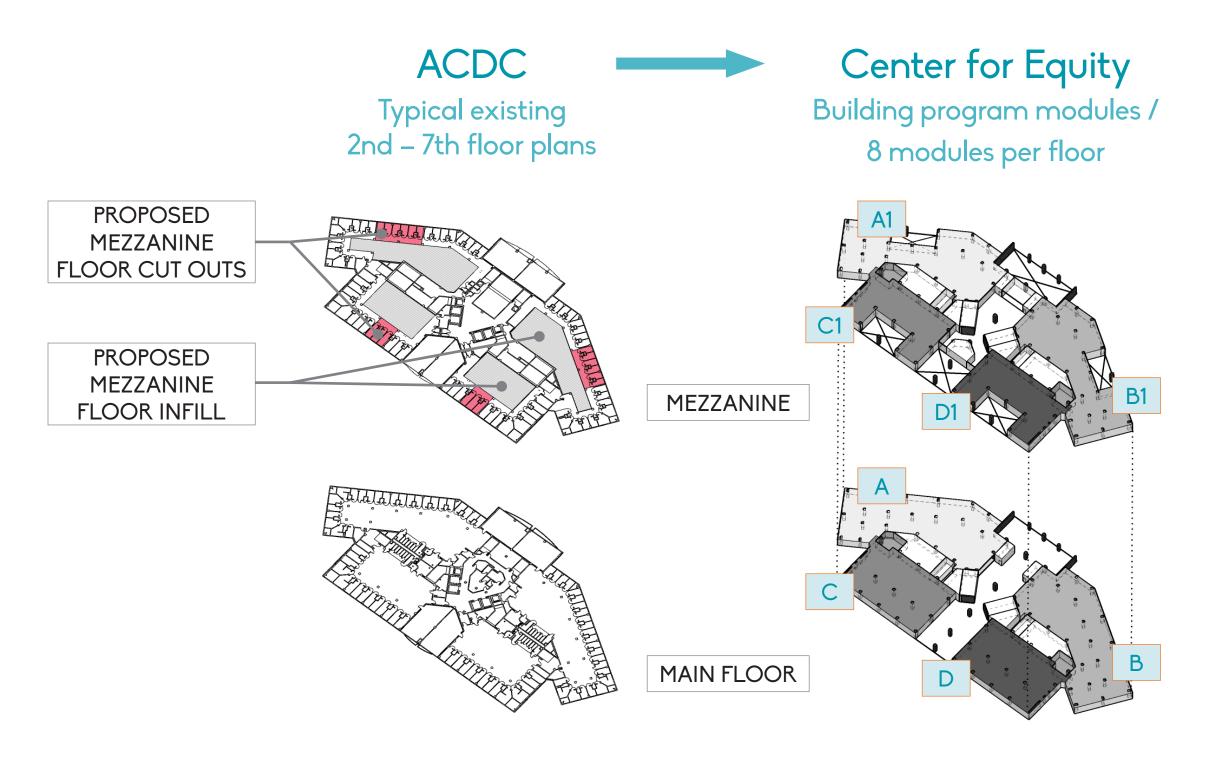


## REPURPOSING THE BUILDING // Building Program Module

### What is it?

The size and complexity of this project does not lend itself to traditional methods of designating use/program requirements.

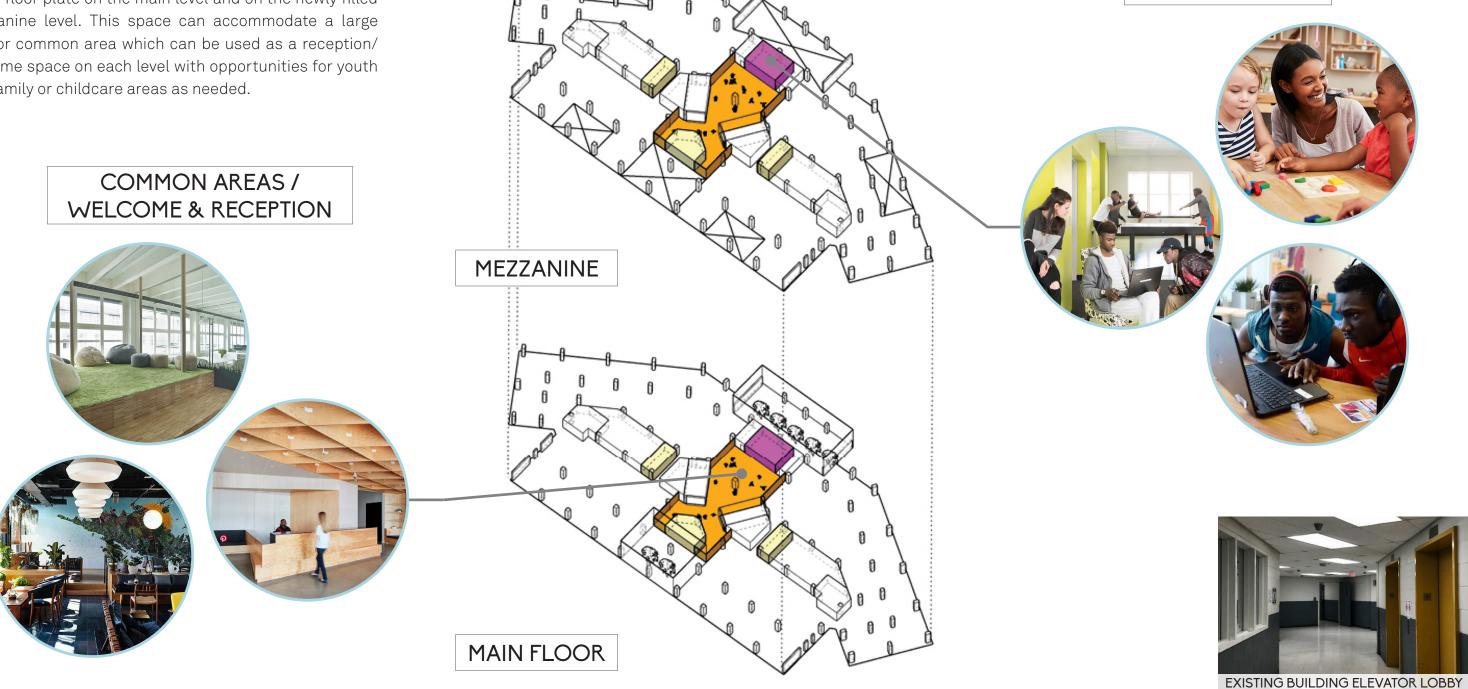
In order to strategically allocate 400,000 SQ FT to various uses, modules have been created at the upper levels 2 through 7 where the floor plate naturally divides into 4 quadrants at the main and mezzanine level of each floor.





### The Hospitality Spine: Indoor Community Spaces

To support the function of the modules, the hospitality spine is one of 3 essential design features provided consistently on each of the upper floors. It occurs right down the middle of the floor plate on the main level and on the newly filled mezzanine level. This space can accommodate a large interior common area which can be used as a reception/welcome space on each level with opportunities for youth and family or childcare areas as needed.





YOUTH & FAMILY

**SPACE** 

## The Hospitality Spine: Indoor Community Spaces

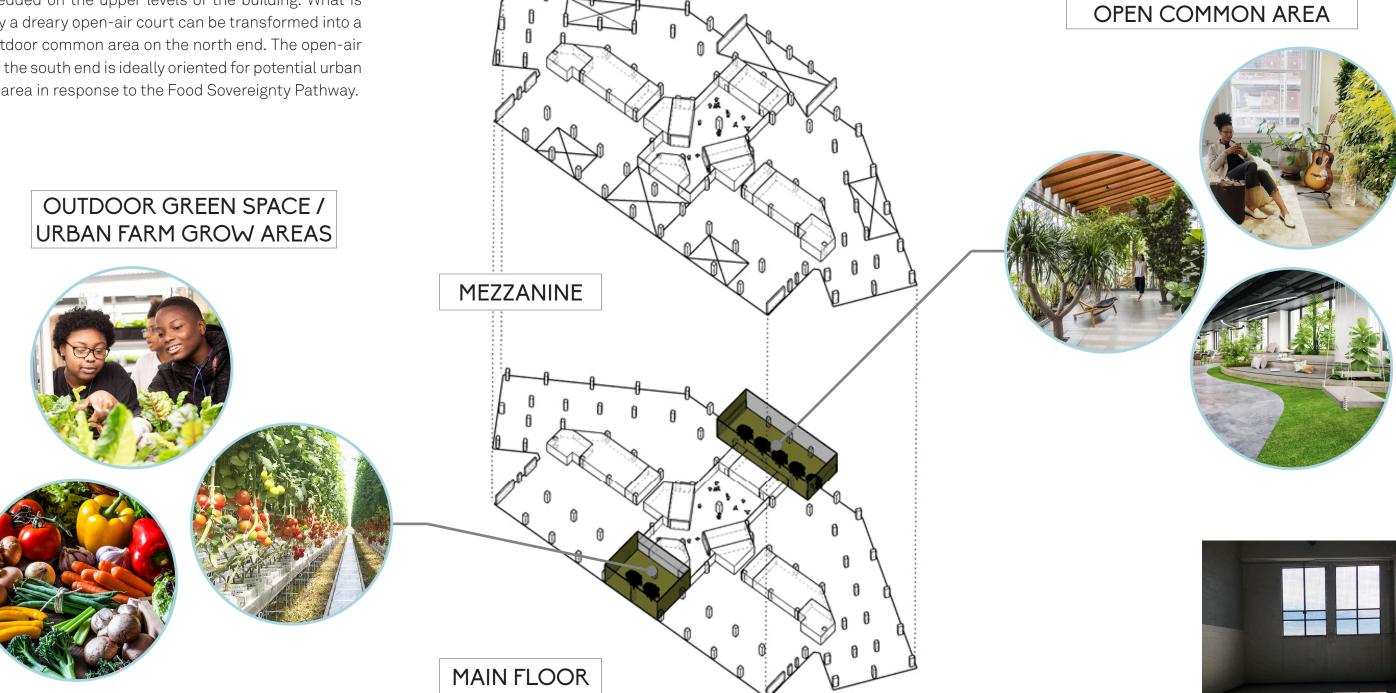
Notching the mezzanine floors creates a dynamic double height space which brings natural light further back into the deep floor plates of the building amplifying the community spaces along the hospitality spine.





### The Hospitality Spine: Embedded Nature

Anchoring the north and south ends of the hospitality spine, there are two opportunities for valuable green space to be embedded on the upper levels of the building. What is currently a dreary open-air court can be transformed into a lively outdoor common area on the north end. The open-air court on the south end is ideally oriented for potential urban farming area in response to the Food Sovereignty Pathway.





EXISTING BUILDING RECREATION

OUTDOOR GREEN SPACE /

### MEP / Vertical Circulation

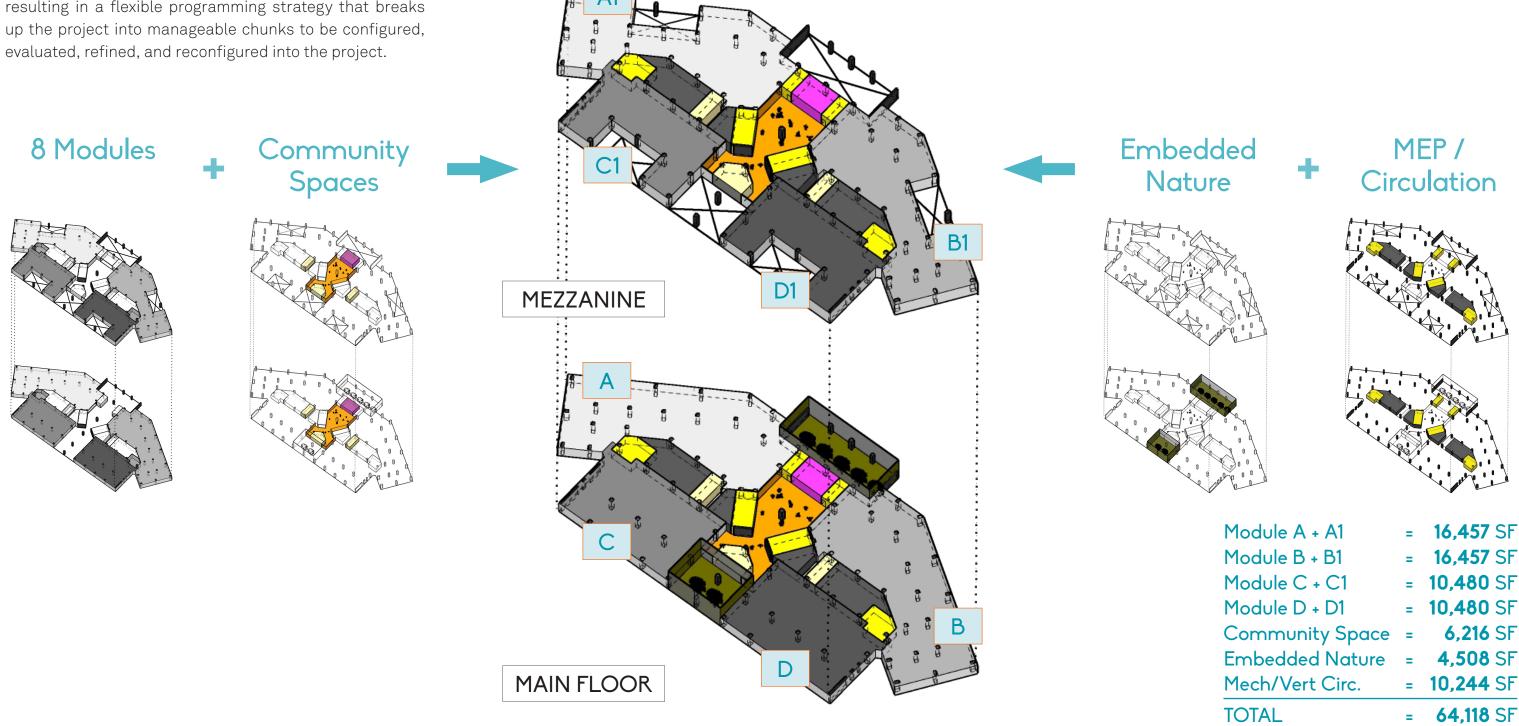
The third design feature is situated perpendicular to the hospitality spine. It consists of essential vertical stair/ MECHANICAL/PLUMBING elevator circulation cores, mechanical/electrical rooms, & ELECTRICAL SPACES and plumbing service areas at each level. STAIRWELLS & **ELEVATORS MEZZANINE** MAIN FLOOR



**EXISTING BUILDING SERVICE AREA** 

## BUILDING PROGRAM MODULES // A Pathway Programming Strategy

The modules combine the four design strategies for transformation along with its essential design features resulting in a flexible programming strategy that breaks





# REPURPOSING STRATEGIES: BUILDING USES & PROGRAMS



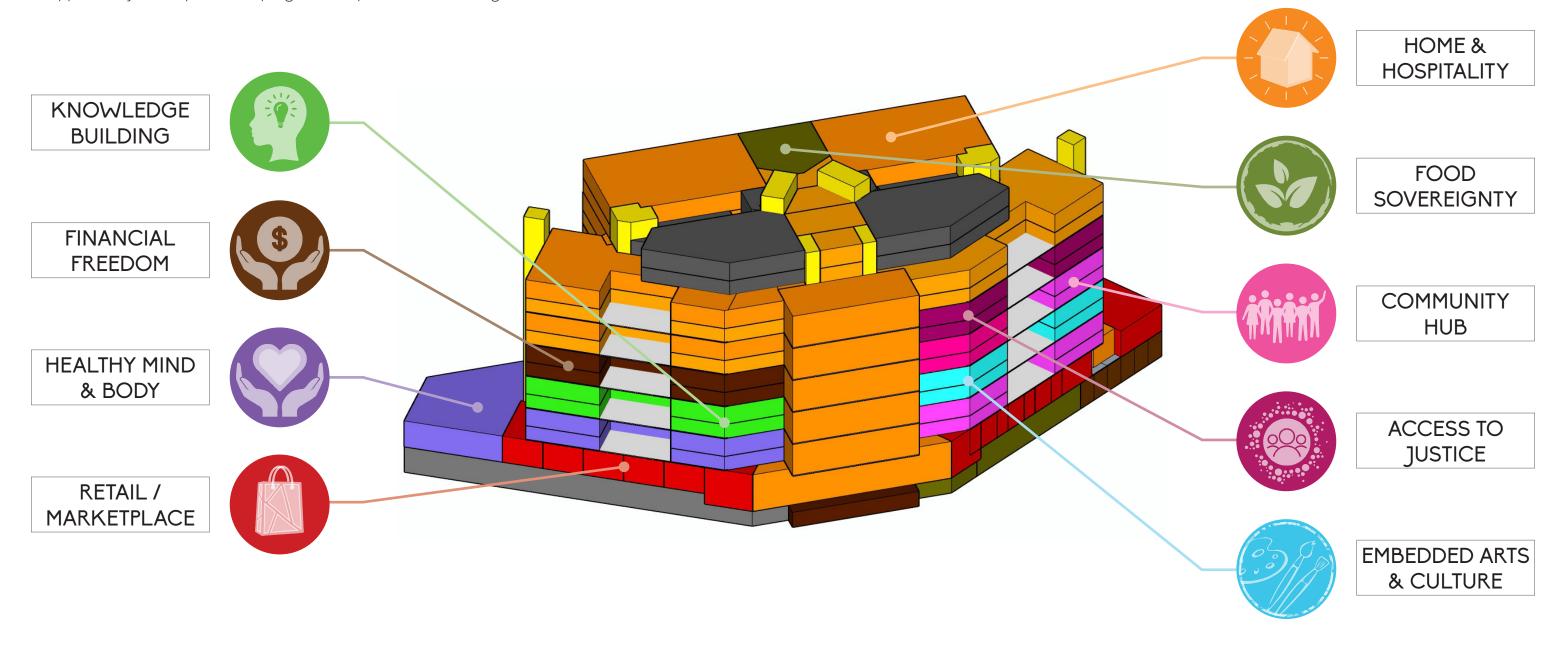
## **INTEGRATING THE 9 PATHWAYS**

The question of equity and what it means for this project is as varied and layered as the people the Center will serve. The response is a building program that is comprised of the 9 Pathways identified during community engagement. Integrating all of these uses and being deliberate about their implementation and operation is the means by which we can embed the mission of social and economic equity mandated by the residents of the City of Atlanta.

## CENTER FOR EQUITY // Village Pathway Programming

## A New Kind of One-Stop Shop

In order to facilitate an iterative design process, the 9 Pathways can be expressed within the modules to meet a variety of programming opportunities. Each Pathway provides an opportunity for its particular program components to be designed within a module.





## CENTER FOR EQUITY // Village Pathways & Intersections

## A New Kind of One-Stop Shop



### Pathway Components

A pathway could take up one or two modules or it could take up eight modules depending on prospective tenant and the type of program components they need.

The diagrams on the following pages show suggested layouts for the Pathways, and the number of components for a particular program. They allow prospective tenants a way to visualize their program in the building.





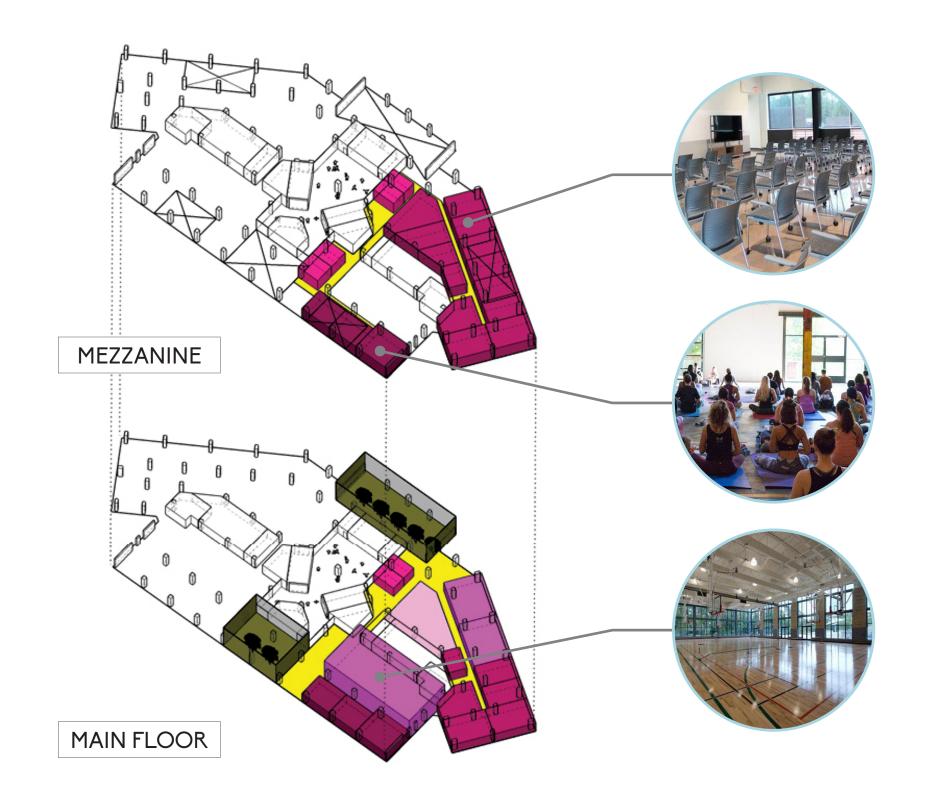
A priority program was a community hub. This Pathway will be designed with common spaces found in a community hub such as large multi-purpose rooms, various sizes of meeting rooms, and event spaces that can be rented out. These components and their sizes are based on precedent research for similar spaces.

### Sample Components

- (6) Admin Offices / Staff Areas
- (19) Classrooms / Community Meeting Spaces / Labs
- (3) Dance / Yoga / Group Exercise Rooms
- (1) Large Multipurpose Event Space
- (3) Workout / Equipment Rooms
- (1) Library Resource Area

### Financial Summary

Modules B & D	26,937 SF
Base Building Costs	\$121 / SF
Tenant Improvement	\$127 / SF
Total Development Costs	\$6.9M
Rental Income	\$12 - \$18 / SF
Coverage: Operations	1.7x - 2.6x
Coverage: Total Costs	0.6x - 0.9x





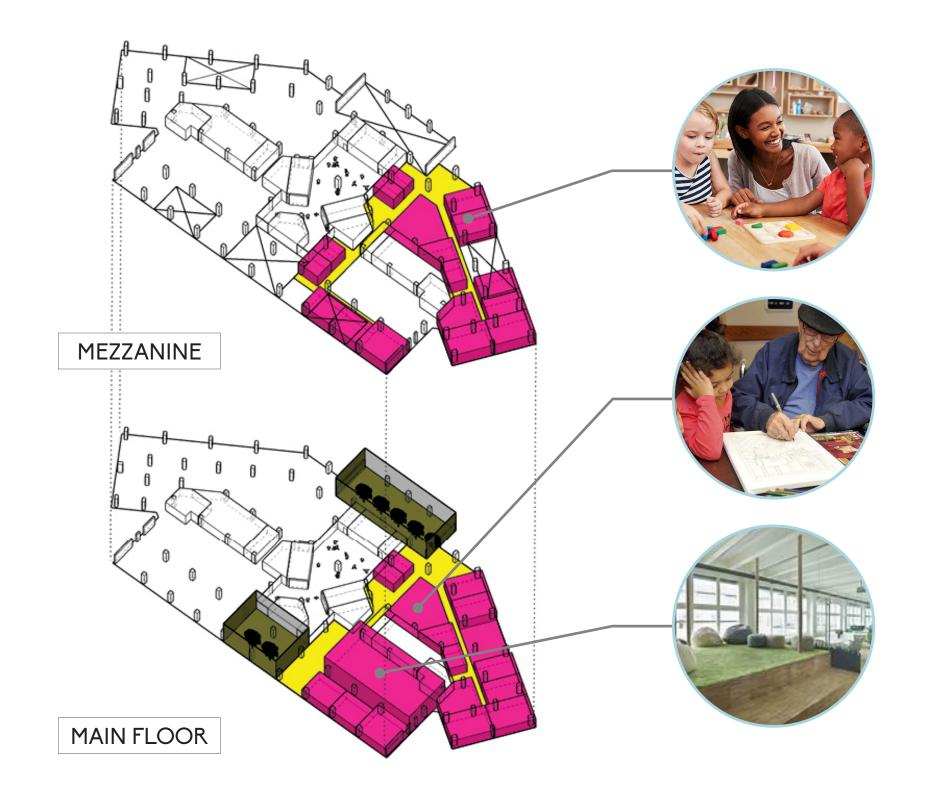
A Pathway could occupy one or two modules or it could take up four to eight modules depending on the type of program components it needs. Childcare is another community need which can serve as a large component of the community hub.

### Sample Components

- (6) Staff & Parent Areas
- (12) Classrooms
- (1) Library Resource Area
- (2) Indoor Play Areas
- (1) Large Multipurpose Room
- (6) Multipurpose Rooms
- (6) Labs / Art Rooms
- (2) Food Prep Areas
- (2) Outdoor Play Areas

### Financial Summary

Modules B & D	26,937 SF
Base Building Costs	\$121 / SF
Tenant Improvement	\$127 / SF
Total Development Costs	\$6.9M
Rental Income	\$12 - \$18 / SF
Coverage: Operations	1.7x - 2.6x
Coverage: Total Costs	0.6x - 0.9x





### PATHWAYS 2 – 7

The remaining pathways were developed similarly with their specific program components. The sizes of these components and the adjacencies would all need to be refined by prospective tenants of the building.



### Access to Justice

Justice spaces: legal clinic, law library, diversion programs, restorative justice, family resource centers



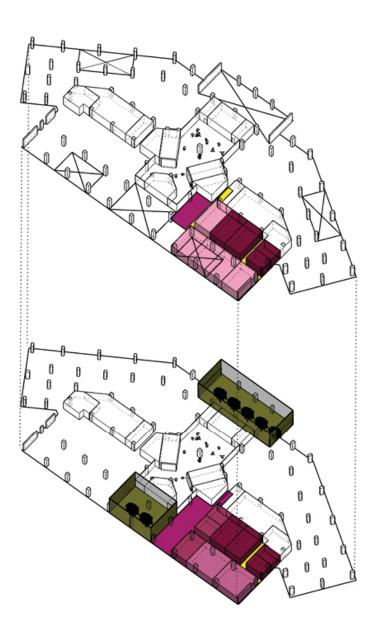
### Healthy Mind & Body

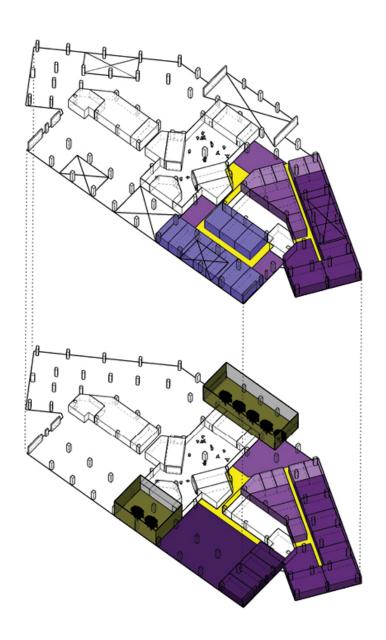
Behavioral health and holistic services: clinic, apothecary, beauty and grooming, counseling, spa and massage, fitness

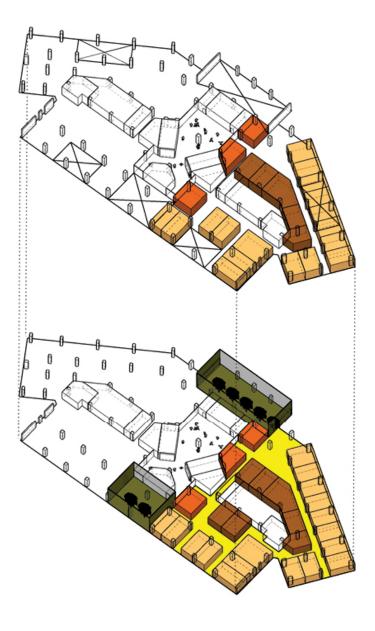


### Home & Hospitality

Housing: re-entry, mixed-use, activated lobby, communal space, outdoor space









### PATHWAYS 2 – 7

Modules allow for exploration of programming options so that prospective tenants have a strategy to see themselves and their program in the building.



### Arts & Culture

Healing modality and creative expression: art / film / music / dance studios, public art, maker spaces, theater, classrooms



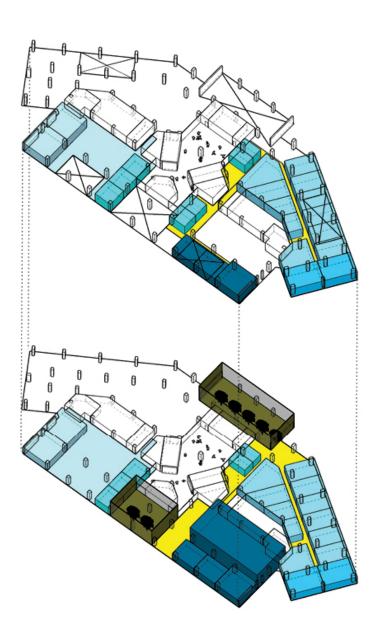
### Knowledge Building

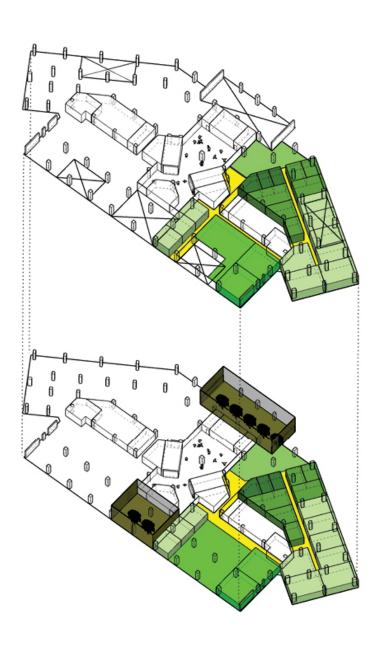
Education: adult education, job placement, workforce development, intergenerational programs

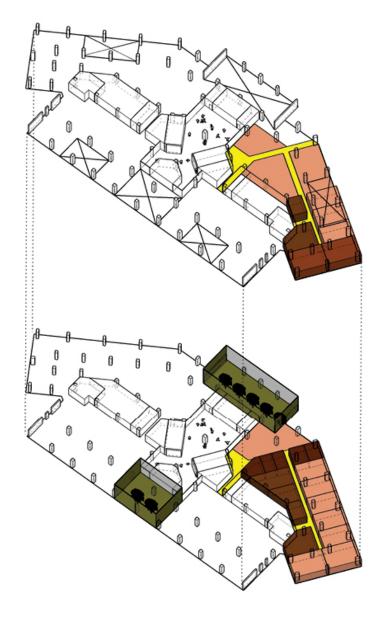


### Financial Freedom

Employment and empowerment: financial literacy, social enterprise, co-op ownership, business incubation, credit union



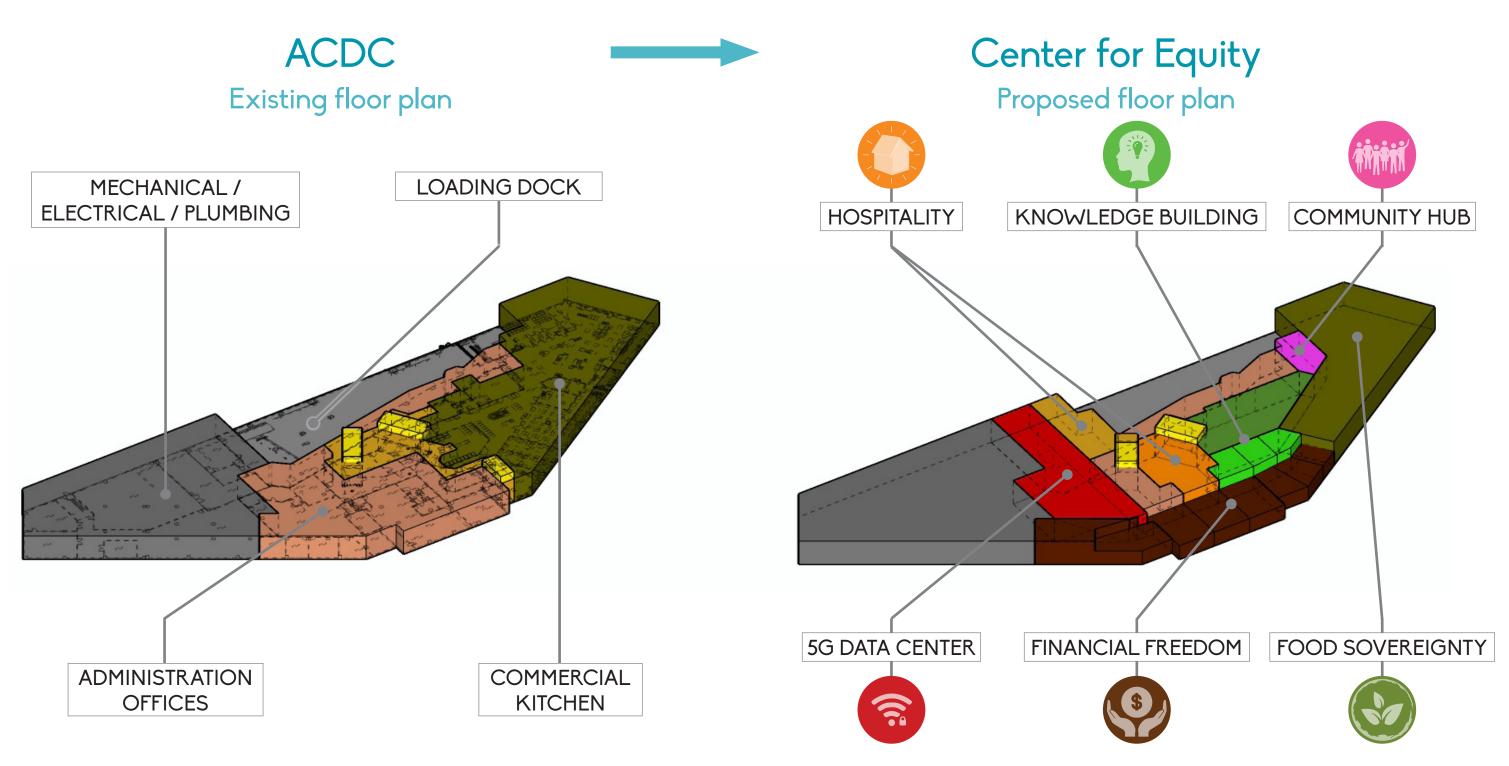






## PATHWAY PROGRAMMING // Transforming the Basement Level

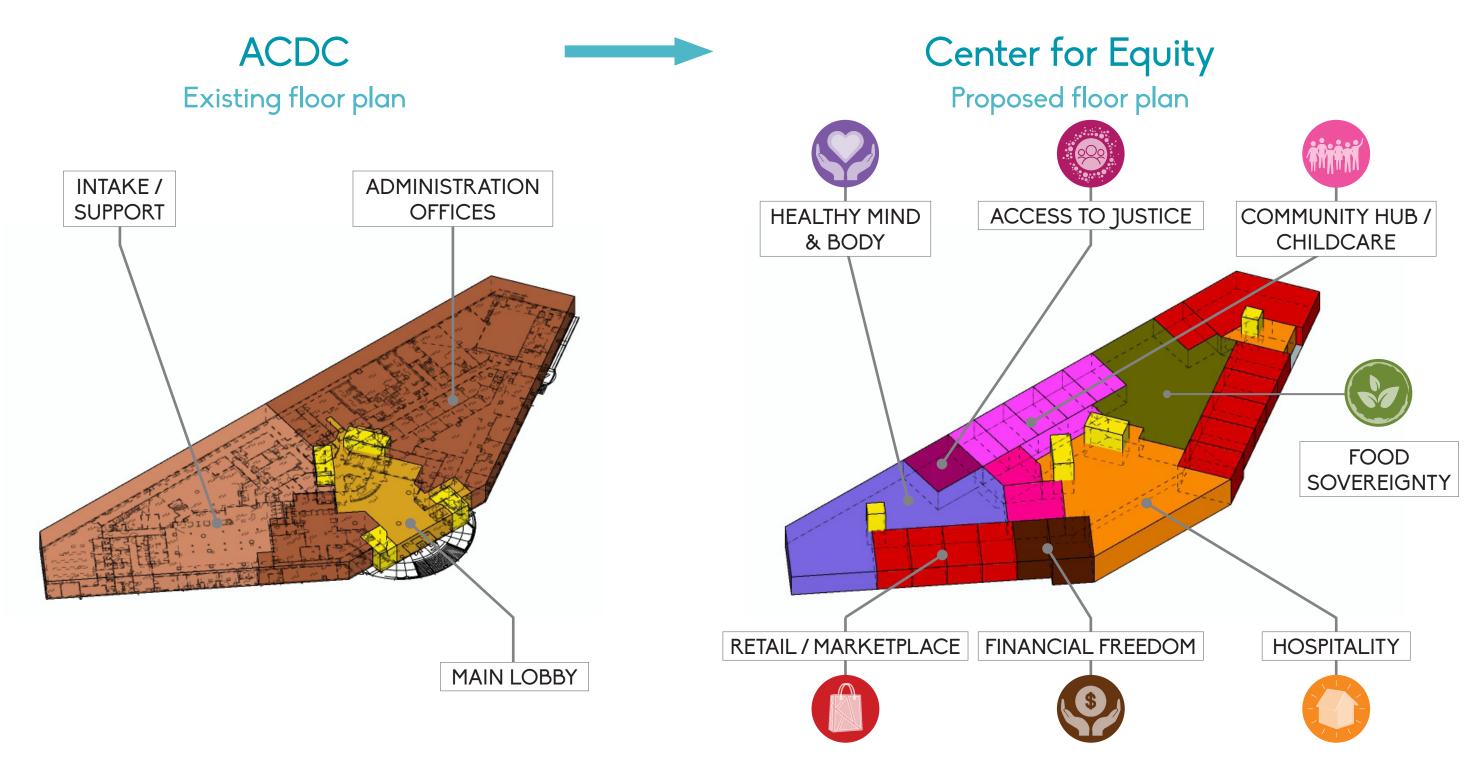
The existing basement and ground floor levels have different floor plan configurations but the Pathways can still be applied to these levels and transform them as well, linking a food incubator program to the existing commercial kitchen or vocational learning programs focused on the buildings mechanical systems located on this level or centered around a new 5G data center.





## PATHWAY PROGRAMMING // Transforming the Ground Level

The transformation of the ground floor is most critical to this success of the Center for Equity. The application of the Pathways offers opportunities for a trauma-informed welcome center activated with a food market or grocery, access to behavioral health, and a credit union, all anchored with daily needs retail, child care, and community gathering spaces.





### **BIOPHILIC DESIGN**

### **Building Section**

A biophilic design expresses the synergy between elements in nature, the body and its experience of the built environment.

Using this philosophy is part of a trauma-informed approach in that the inclusion of these design features supports the calming of our nervous system and helps us retain a connection to the natural world even when inside the building. This approach is reflected in the following design strategies:

- A new opening in the existing floor slab is supported with a timber tree-like substructure extending up from the basement signifying a new seed has been planted for the growth and a break through of a new purpose for the building to serve and heal. New canopy structures replicate this idea and form at the exterior as one enters the building.
- Representations of and living nature in the form of hanging plants, plant imagery and grow rooms — permeate the space.
- Referencing natural elements such as clouds and butterflies at the ceiling plane.
- Use of natural materials such as wood and bamboo bring additional warmth into the space.
- Opening up of the entry and facade to let natural light in!





## SOUTHERN HOSPITALITY

## The Super Lobby

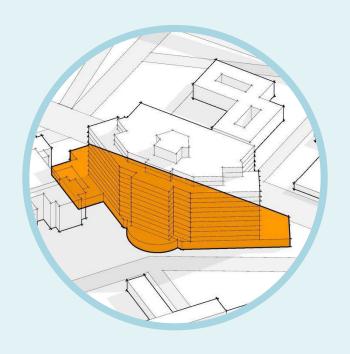
The super lobby mirrors the community's desire to have a welcoming, accessible and inclusive experience when entering the building. In addition to embedding biophilic design elements, this reimagined lobby does so by:

- Emphasizing and facilitating an the indooroutdoor connection through paving and canopy structures that extend from the exterior plaza into the lobby. An exterior commemorative butterfly art feature also flows onto the interior ceiling.
- Cutting a portion of the ground floor and lowering it to street level to create seamless accessibility into the space.
- Making visible all the programmatic elements of the 9 Pathways including a friendly cafe and grocery for a variety food options.
- Locating a hospitality desk at the very front.
- Providing casual and formal spaces for people to sit alone or gather in groups.
- Providing space for cell phone charging and Internet access.





# #1: EQUITY PODIUM



MINIMUM REPURPOSING

# MINIMAL REPURPOSING // OPTION #1: Equity Podium

## Design Strategy

The Equity Podium is a minimum repurposing strategy where the Center for Equity programming modules along with the hospitality spine and essential design features are solely focused on the lower basement, ground and second floor levels as a theoretical podium anchor. The remaining floors above will be gutted and constructed as a "warm shell" build out with only the code-required HVAC, plumbing and electrical building essentials, ready for full tenant improvements. The exterior skin will be minimally modified to let natural light in and accommodate a variety of market rate tenant programs.





# MINIMAL REPURPOSING // Option #1: Equity Podium

## Finance & Development

#### Hard Cost Budget

Total Square Feet	471,000
Development Cost / SF	85
Leasable Space - "Warm Shell"	122,580
Leasable Space - "Cold Shell"	294,403
Acquisition Costs	0
Soft Costs (20% of Hard Costs)	6,680,000
Hard Costs	33,370,000
Total Development Costs	40,040,000

Hard Cost Detail	% of Hard Costs	Budget
Substructure (Foundations)	0.0%	0
Structural System	4.0%	1,320,000
Exterior Wall	12.0%	4,020,000
Exterior Doors & Windows	12.2%	4,080,000
Roofing	1.7%	580,000
Partitions	1.7%	560,000
Interior Doors & Glazing	0.4%	150,000
Casework & Millwork	0.2%	80,000
Accessories	0.3%	90,000
Stairs & Railings	1.0%	320,000
Wall Finishes	3.1%	1,030,000
Floor Finishes	1.8%	590,000
Ceiling Finishes	0.4%	150,000
Conveying Systems	3.0%	1,010,000
Plumbing	5.6%	1,870,000
HVAC	8.1%	2,710,000
Fire Protection	0.4%	120,000
Electrical Distribution	4.7%	1,570,000
Lighting	2.8%	920,000
Special Systems	2.2%	740,000
Fixed Equipment	0.0%	0
"Gut" Interior	6.8%	2,270,000
Total Sitework	5.7%	1,890,000
Total Hazardous Abatement Allowance	0.0%	0
CM General Conditions & Requirements	6.6%	2,210,000
Non-Negotiated General Requirements	1.3%	430,000
Construction Manager (CM) Fee	3.7%	1,220,000
Design/Market Conditions Contingency	10.7%	3,580,000

**Note:** Development budget excludes financing expenses and tenant fit-out costs that range from \$77-\$177/SF.

#### Summary

Financial feasibility and programmatic viability are the two approaches driving this development strategy. The optimized design lies sandwiched between a ceiling created by the **financial constraints** of the cost of construction and completed building operations and a floor created by the **minimal programmatic elements** and the resulting physical space required to create a Center for Equity that achieves its stated intentions. Through programmatic creativity in introducing new or combining uses, the design and development intentions focus on widening the space between these opposing factors.

#### Financial Balancing

This scenario focuses on determining the split between the unmodified space with positive cash flow from complementary uses and the SF of repurposed space for the Center for Equity with presumably negative cash flow. Given the size of the building, there's a good chance the project could be a breakeven proposition if the Center for Equity were a small percent of the total building.

The starting point is the location of the Center for Equity at the base of the existing structure with sufficient space to house the core set of programmatic elements. Secondarily, the entire facade is replaced and interior cells demolished; both design decisions are rooted in policy, construction best practices, and leasing considerations.

- A partial or two-phase facade replacement is impractical. Whether the
  entire building is occupied, it is important to transform the image of the
  building from its original use to the proposed concept. In order to appeal to
  commercial tenants, the new facade also has practical considerations such
  as the addition of windows (light and air).
- Similarly, the Atlanta City Detention Center will require significant demolition. Construction best practice recommends that demolition be completed at the beginning and all at once. Demolition has air quality and noise considerations, life safety requirements, interruptions to vertical circulation (elevators and stairs), the necessity to protect the building's mechanical infrastructure and finishes, etc. Simultaneously, the cell demolition/removal further supports the jail abolitionist intention of permanently decommissioning the facility.

#### Upper Floors — Cold Shell

In order to contain the construction budget, the upper floors will be left in "cold shell" condition. In construction, a cold shell is a space that has no furnishings, infrastructure, heat, or plumbing. It is effectively a skeleton of a building. The tenant would need to plan for an extensive build-out of the space. As these floors will have a new facade and open floors from the removal of the existing cells, the collective space represents a two-part leasing opportunity.

- Immediately, the space can be used for a tenancy with limited build-out requirements.
- In the future, the Center for Equity or complementary uses could expand into the upper floors.

Programmatic uses for the upper floors could be evaluated in three ways; (1) ability to pay rent, (2) low development costs — minimal demo, tenant improvements, etc, (3) programmatic alignment to the lower floors — workforce development, health/wellness, etc. Upper floor examples may include 5G data centers, mushroom farms, and/or welding stations, etc.

#### Lower Floors

The Center for Equity would be built to warm shell conditions. A "warm shell" is a residential or commercial space with finished interiors, cooling and heating system, rest-rooms and plumbing, interior

lighting, etc. Each tenant space would be later completed/finished to that tenant's specifications as represented in the nine pathways.

The number of repurposed lower floors would be determined by (1) the ability to pay rent, (2) development costs, (3) profitability of the upper floors, (4) additional revenues from redirected municipal funds from the jail closure and (5) availability of philanthropy.



# #2: DOWNTOWN ANCHOR



**FULL REPURPOSING** 

# FULL REPURPOSING // Option #2: Downtown Anchor

## Design Strategy

The Downtown Anchor design strategy is a full repurposing of the building where the Center for Equity programming modules and essential design features are built out on all seven floors including the basement. The existing precast panels will be removed to the maximum extent possible to accommodate the new recessed floor cut outs at the mezzanine levels and glazing openings are staggered to enliven the facade. Warm timber cladding highlights the center of the north and south facades where new public space and Food Sovereignty programming anchors each end of the hospitality spine. The storefront along the ground floor is activated with daily needs retail, restaurants, and community spaces.





# FULL REPURPOSING // Option #2: Downtown Anchor

### Finance & Development

#### Hard Cost Budget

Total Gross Square Feet	540,432
Development Cost / Gross SF	121
Leasable Space - "Warm Shell"	372,877
Acquisition Costs	0
Soft Costs (20% of Hard Costs)	10,910,000
Hard Costs	54,530,000
Total Development Costs	65,440,000

Hard Cost Detail	% of Hard Costs	Budget
Substructure (Foundations)	0.0%	0
Structural System	2.4%	1,320,000
Exterior Wall	9.2%	5,000,000
Exterior Doors & Windows	9.4%	5,130,000
Roofing	1.1%	580,000
Partitions	3.0%	1,650,000
Interior Doors & Glazing	0.7%	400,000
Casework & Millwork	0.6%	320,000
Accessories	0.5%	290,000
Stairs & Railings	0.6%	320,000
Wall Finishes	3.9%	2,110,000
FloorFinishes	2.3%	1,270,000
Ceiling Finishes	1.0%	520,000
Conveying Systems	2.5%	1,350,000
Plumbing	3.9%	2,140,000
HVAC	14.3%	7,800,000
Fire Protection	0.7%	360,000
Electrical Distribution	7.9%	4,300,000
Lighting	3.8%	2,090,000
Special Systems	1.8%	960,000
Fixed Equipment	0.0%	0
"Gut" Interior	5.0%	2,710,000
Total Sitework	3.5%	1,890,000
Total Hazardous Abatement Allowance	0.0%	0
CM General Conditions & Requirements	6.6%	3,610,000
Non-Negotiated General Requirements	1.3%	700,000
Construction Manager (CM) Fee	3.6%	1,990,000
Design/Market Conditions Contingency	10.7%	5,850,000

**Note**: Development budget excludes financing expenses and tenant fit-out costs that range from \$77-\$177/SF.

#### Summary

The power of the full repurposing scenario is in the reversal of the building's purpose. The building lies near the center of the city, yet, as a jail, it is an imposing, walled-off fortress that is neither inviting nor the place where any visitor would want to be.

The full repurposing of the exact building makes an equally strong and opposite statement to the citizenry of Atlanta. In its fully expressed, 500,000 total square feet, the transformed building as the Center for Equity becomes a destination that is an open and inclusive place that stands in the promotion of healing, equity, and freedom rather than punishment, inequity, and containment.

The notion of a destination has specific relevance in the context of catalytic development, a specific type of real estate development, and urban planning.

#### Catalytic Development

Catalytic development incorporates many urban design best practices to address difficult urban challenges while delivering long-term economic returns to both the public and private sectors. The fully repurposed Center for Equity has the scale to be a place-based redirection of South Downtown Atlanta that catalyzes and facilitates other large-scale investment in this concentrated, walkable urban area.

Three features typically set catalytic development apart from traditional real estate development:

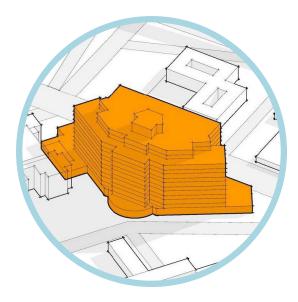
- 1. Integrated development. The assemblage of and investment in proximate land parcels that together reshape the area and help spur additional growth.
- 2. Employment first. Either substantial employment growth early in the redevelopment process or an existing central employment base with significant entry-level opportunity.
- 3. Patient equity. Large scale urban redevelopment takes a long time. Return on investment is expected well beyond a five-year investment period.

The site holds all three features:

- 1. There is a significant number of nearby, underdeveloped parcels surrounding ACDC and important transportation nodes (MARTA Garnett and Atlanta Bus Stations) that can be integrated.
- 2. The existing civil service employment base offers significant entry-level employment opportunities and the repurposed ACDC offers equitable employment opportunities for the early growth phase.
- 3. The size of ACDC and the current state of South Downtown will require significant equity and time respectively before a return on investment can be realized.

#### Financing Gap

The intended programmatic uses' ability to pay rents will not cover the cost of construction and completed operations expenses. Therefore, this development strategy relies heavily on the power of the vision to appeal to external sources of capital that can be the patient equity needed to bridge the financing gap, realize the project and catalyze development.





## Site Systems

#### Rainwater Cistern

Stormwater is collected from the existing low point along Peachtree Street and channeled into an underground cistern. Water is then filtered for reuse at street level in a series of water features including shallow pools and a cascade over a Story Wall. Water features are interactive, dynamic, and also serve as microclimate features to cool people off and counter urban heat island effect.

#### Commemorative Pawpaw Grove

A grove of Pawpaw trees celebrates a culturally significant tree and food. Small footpaths weave through the grove, and 1-2 person benches provide quiet, contemplative resting spots or small social gathering opportunities.

#### Story Walls

Low walls provide a space for community and local artists' work to be showcased. Walls are focused around areas where people gather to enter the Center and provide a background for telling the community's stories. Story walls are used to honor the community and families that have endured mass incarceration.



**REPURPOSED SITE** 



COMMEMORATIVE PAWPAW GROVE



**RAINWATER CISTERN & WATER FEATURES** 



**STORY WALLS** 





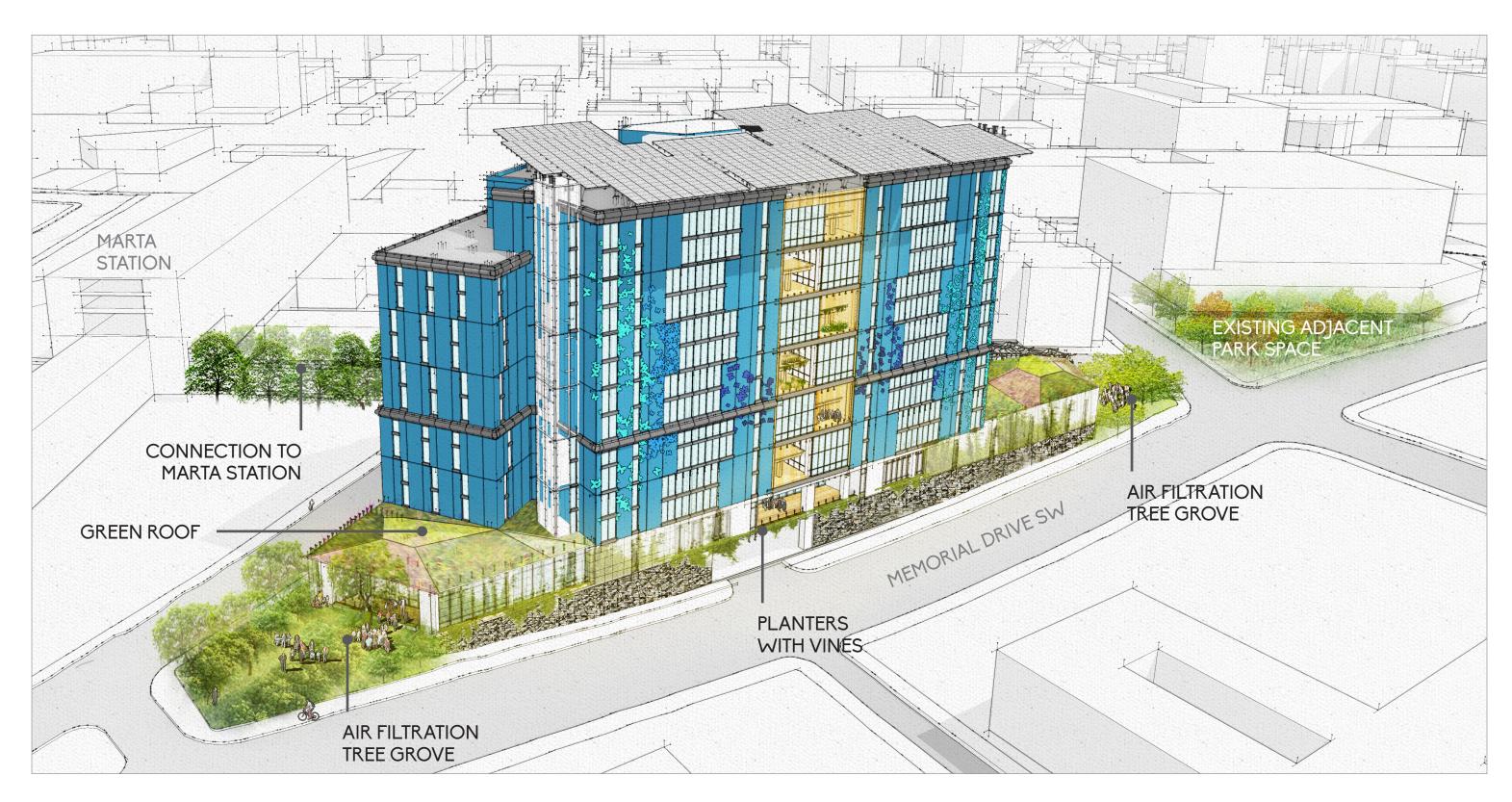
#### Front Aerial







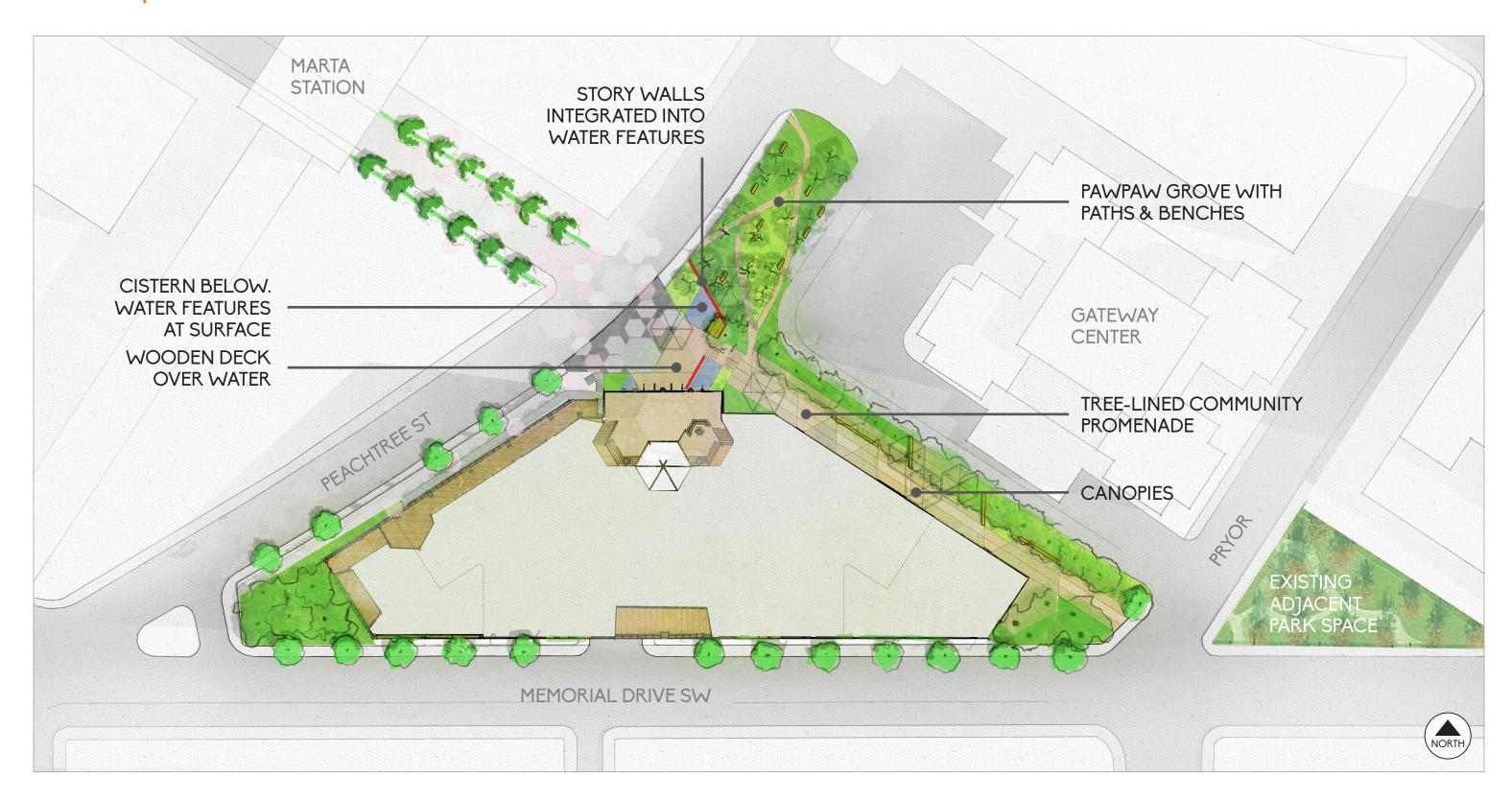
#### Rear Aerial





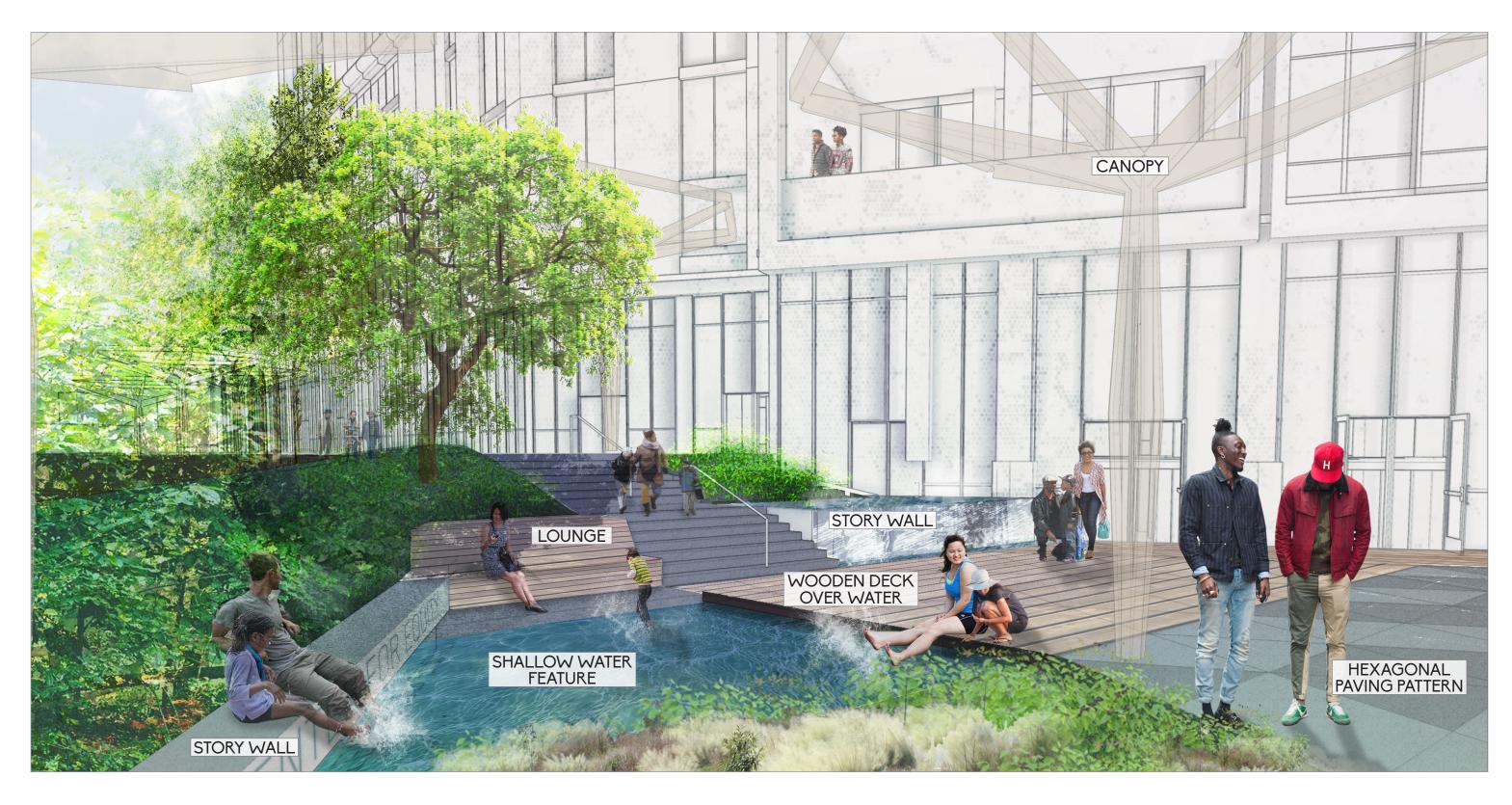


## Landscape Plan













## **BUILDING COLOR OPTIONS**

## Concepts

Vibrant color will drastically change the look and energy of the existing building. For the minimally repurposed Equity Podium scheme, a neutral grey is balanced with a bright color emphasizing the location of the Center for Equity programming at the lower podium level. Color is applied to the entire building for the fully repurposed Downtown Anchor. We propose vibrant colors to express this bold step forward and unapologetically announce a new a positive presence in downtown Atlanta.

## Equity Podium



STEEL BLUE



GREEN PALETTE WITH GREEN/ORANGE BUTTERFLY GRADIENT



NEUTRAL PALETTE WITH GREEN/YELLOW BUTTERFLY GRADIENT











# EMBEDDED ART // The Butterfly Concept

#### **Precedents**

Incorporating art into the Center for Equity project is also one of the critical design processes to reflect and incorporate the community into the building process. As a symbolic representation of endurance, change, hope, and life the butterfly concept proposes to use recycled aluminum to fabricate butterflies in honor of each individual impacted by the jail to be installed on the facade of the building. They can be fabricated by local artists and donations can be made in honor of individuals or groups to have a butterfly placed on the Center for Equity. They add an inspired way to bring additional color, texture and new life to the building. The butterflies sweep across the building in mass in honor of those impacted, creating an unstoppable force of change.



Zara Store Brisbane, Queensland, Australia // Architects: Studio 505



Astra Rooftop Restaurant, Miami Florida









# NEW BUILD STRATEGES

This section describes two catalytic development options that involve completely demolishing the existing building. These options include:

Option #3: Center for Equity Campus

Option #4: Distributed Equity

# #3: CENTER FOR EQUITY CAMPUS



**NEW BUILD** 

### Design Strategy

#### The Place

The new Center for Equity Campus rises up from the ashes of the old ACDC site and expands to include a 3rd building on the current plaza adjacent to ACDC. The 3 new buildings spiral around a gorgeous commemorative outdoor plaza and are interconnected by streets and walkways that flow through the site. This strategy means that the buildings are more appropriately scaled to the surrounding neighborhood and can be customized to supportive the variety of uses the community wanted to see in the Center for Equity and support co-development strategies on the site.

The feeling of warmth and invitation to enter and is enhanced by balconies and terraces that carve away the building forms. New timber construction form the bones of the buildings and this naturally beautiful frame is clad with a new window wall systems incorporating vertical and horizontal shading systems unique to each orientation of the building. The facades of the upper level towers are finished with warm brick and timber cladding, metal panels, and vertical circulation towers highlighted in vibrant colors.

#### The Programming

The 9 Pathways are spread throughout 3 buildings. Programming from daily needs retail, community spaces at the ground floor, to behavioral health, housing, food, and education are housed in new ground-up construction allowing for the most advanced sustainable building technology and landscape design approaches to be incorporated.





## Finance & Development

#### Hard Cost Budget

Total Square Feet	468,138
Development Cost / SF	231
Leasable Space - "Warm Shell"	379,610
Acquisition Costs	0
Soft Costs (20% of Hard Costs)	18,020,000
Hard Costs	90,060,000
Total Development Costs	108,080,000

Hard Cost Detail	% of Hard Costs	Budget
Substructure (Foundations)	2.5%	2,270,000
Structural System	17.8%	16,030,000
Exterior Wall	12.6%	11,310,000
Exterior Doors & Windows	9.4%	8,480,000
Roofing	1.1%	950,000
Partitions	0.9%	850,000
Interior Doors & Glazing	0.3%	280,000
Casework & Millwork	0.2%	170,000
Accessories	0.2%	140,000
Stairs & Railings	1.1%	970,000
Wall Finishes	1.7%	1,500,000
FloorFinishes	0.9%	840,000
Ceiling Finishes	0.3%	250,000
Conveying Systems	3.0%	2,740,000
Plumbing	2.3%	2,110,000
HVAC	3.8%	3,380,000
Fire Protection	1.9%	1,680,000
Electrical Distribution	3.6%	3,200,000
Lighting	1.3%	1,160,000
Special Systems	1.5%	1,310,000
Fixed Equipment	0.1%	90,000
"Gut" Interior	8.1%	7,330,000
Total Sitework	1.9%	1,740,000
Total Hazardous Abatement Allowance	1.5%	1,380,000
CM General Conditions & Requirements	6.6%	5,960,000
Non-Negotiated General Requirements	1.3%	1,140,000
Construction Manager (CM) Fee	3.6%	3,280,000
Design/Market Conditions Contingency	10.7%	9,650,000

**Note:** Development budget excludes financing expenses and tenant fit-out costs that range from \$77-\$177/SF.

#### Summary

The theme of new construction is new opportunities. While the Full Repurposing found its strength in the almost poetic reversal of purpose — harm to healing — by using the same structure, the New Construction offers the chance of a completely new interpretation of the site. The value of a new interpretation is driven by the opportunity to create a project that is more closely aligned with current needs, as well as our current view of the future.

The development scenario assumes that the existing Atlanta City Detention Center is demolished and is replaced by a newly constructed building(s) for the Center for Equity. Similar to the Full Repurposing scenario, new construction maintains the potential for a catalytic development with several important differences:

**Scale.** The newly built Center for Equity can be scaled appropriately. The existing structure is a very large building that is substantially larger than the minimum space requirements established in the Minimal Repurposing scenario.

**Risk.** New construction is more predictable. It is easier to control costs or pass the potential for cost overruns to the builder. The dramatic change of use in the Full Repurposing scenario holds a certain level of unpredictability that should be acknowledged by a high contingency for the anticipated complexity.

**Design Trade-Offs.** Similar to risk, a new building will have fewer design trade-offs because the project will begin with a clean slate. While the new building program may not ultimately call for parking, parking is a good example of a design element that could be easily incorporated into a new building, yet accomplished only with difficulty in a repurposed building.

**Deal Making.** There are opportunities for the City to create value for its site through financial/transactional dealmaking. Within a public-private partnership structure, there are compelling opportunities where the city and a private developer could mutually create and share value creation. The following are two such examples:

• The existing jail could be removed and the site is conveyed to a private developer in exchange for some amount of mission-aligned space for the Center for Equity in a newly constructed building.

• The City could use its credit rating to lower the cost of capital, implement favorable zoning treatment through the entitlement process, etc.

**Cost.** Despite the advanced starting place of the repurposing strategies, new construction is better able to capture the efficiencies of technology and modern construction methodologies/materials, which lower development costs to levels that are comparable, per square foot, to the repurposing scenarios.

Marketability. New construction also has the ability to more closely meet the requirement of current demand for space. The current COVID-19 health crisis illustrates how market demand and the nature of space requirements change both quickly and slowly over time.

Site-Specific. It is understood that there may be inherent value in locating the Center for Equity in the repurposed Atlanta City Detention Center or building new on its site. However, new construction poses the question of whether or not the Center for Equity best serves the community at the current site, or might it be located elsewhere or in several locations as illustrated in the Distributed Equity scenario.

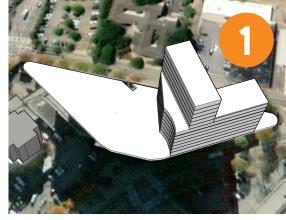




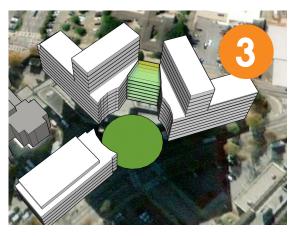
## Site Analysis — Structure & Phasing

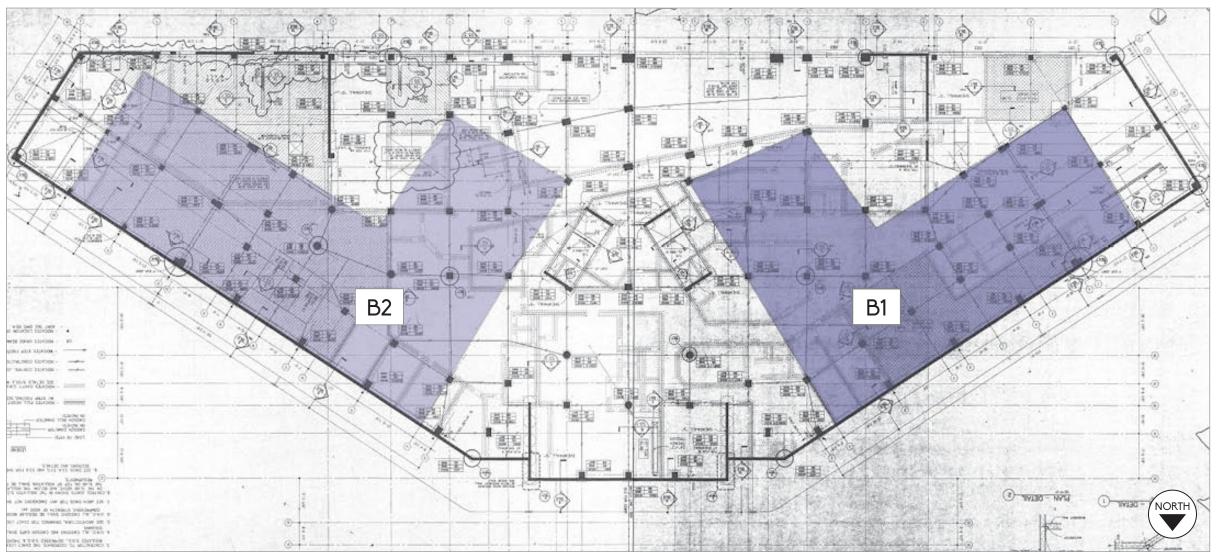
There is potential to maximize savings on the new construction by reusing the existing foundation structure of caissons. We also propose recycling the demolished concrete in an off-site batch plant to produce concrete for the new construction. Creating two separate buildings allows for the potential to either phase the project as a single owner or sell half the site to a market-rate developer. Phasing of the project is possible here and easier. All 3 buildings can be used for Center for Equity or carve off Building 1 for developers (most valuable site). As analyzed in the previous diagrams we propose a 3rd building in the existing public space.









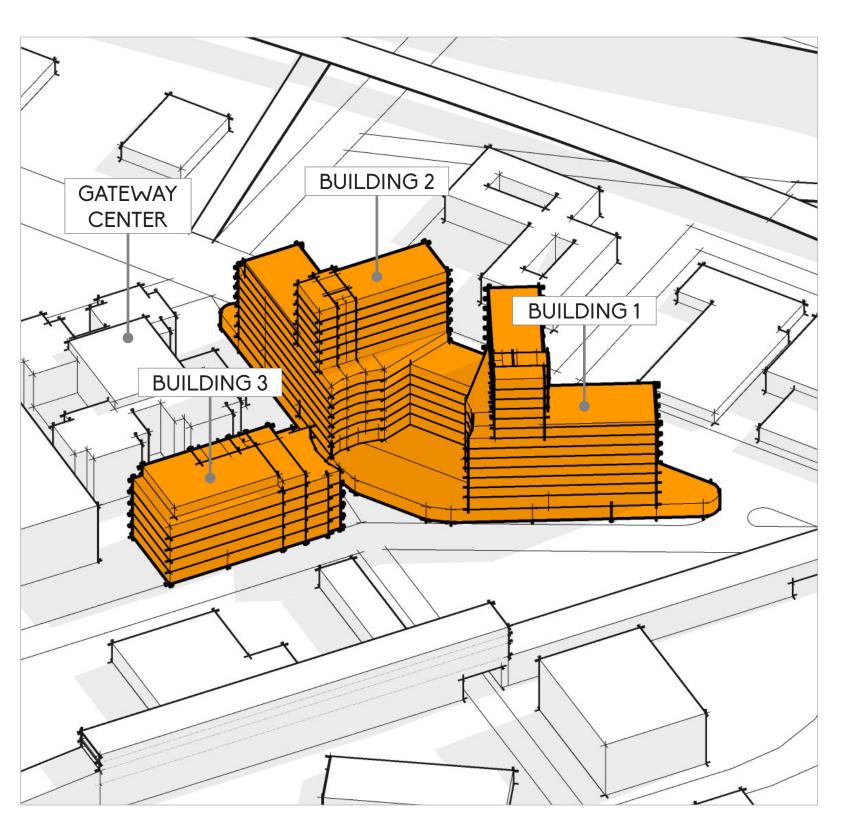




## Site Massing

This reorganization of the Center for Equity into a campus comprised of 3 buildings will support the downtown master plan and the outputs from the master planning workshop in a few ways:

- 1. The scale/massing is now more in relationship to the existing building and context of the neighborhood
- 2. Improved and activated public open space and street edges
- 3. Creates a new physical, potentially catalytic anchor to South Downtown and a stop for people on their way home





**ACTIVATED PUBLIC PLAZA** 









## Site Systems

#### Rainwater Cistern

Stormwater is collected from the existing low point along Peachtree Street and channeled into a cistern located in the park deck below. Water is then filtered for reuse at street level in a series of bands of water and cascades over Story Walls. There is also a round water feature at the center of the circles where debris from the former building forms stepping stones over the shallow pool.

#### Commemorative Grove

A grove of Pawpaw trees on the south side of the roof deck celebrates a culturally significant tree and food. Small footpaths weave through the grove, and 1-2 person benches provide quiet, contemplative resting spots or small social gathering opportunities.

#### Story Walls

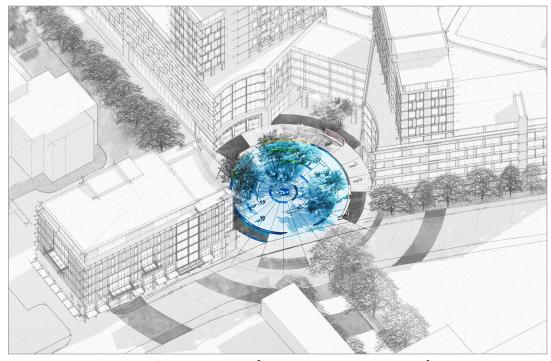
Low walls provide a space for community and local artists' work to be showcased. Walls rise up in concentric bands within the plaza. Water from the cistern cascades over some of the Story Walls to create a dynamic moment for community storytelling.



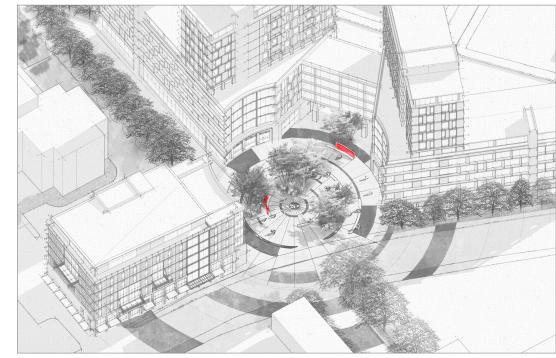
**FULL SITE** 



**COMMEMORATIVE GROVE** 



RAINWATER CISTERN (BELOW PLAZA)



STORY WALLS WITH WATER FALL FEATURE



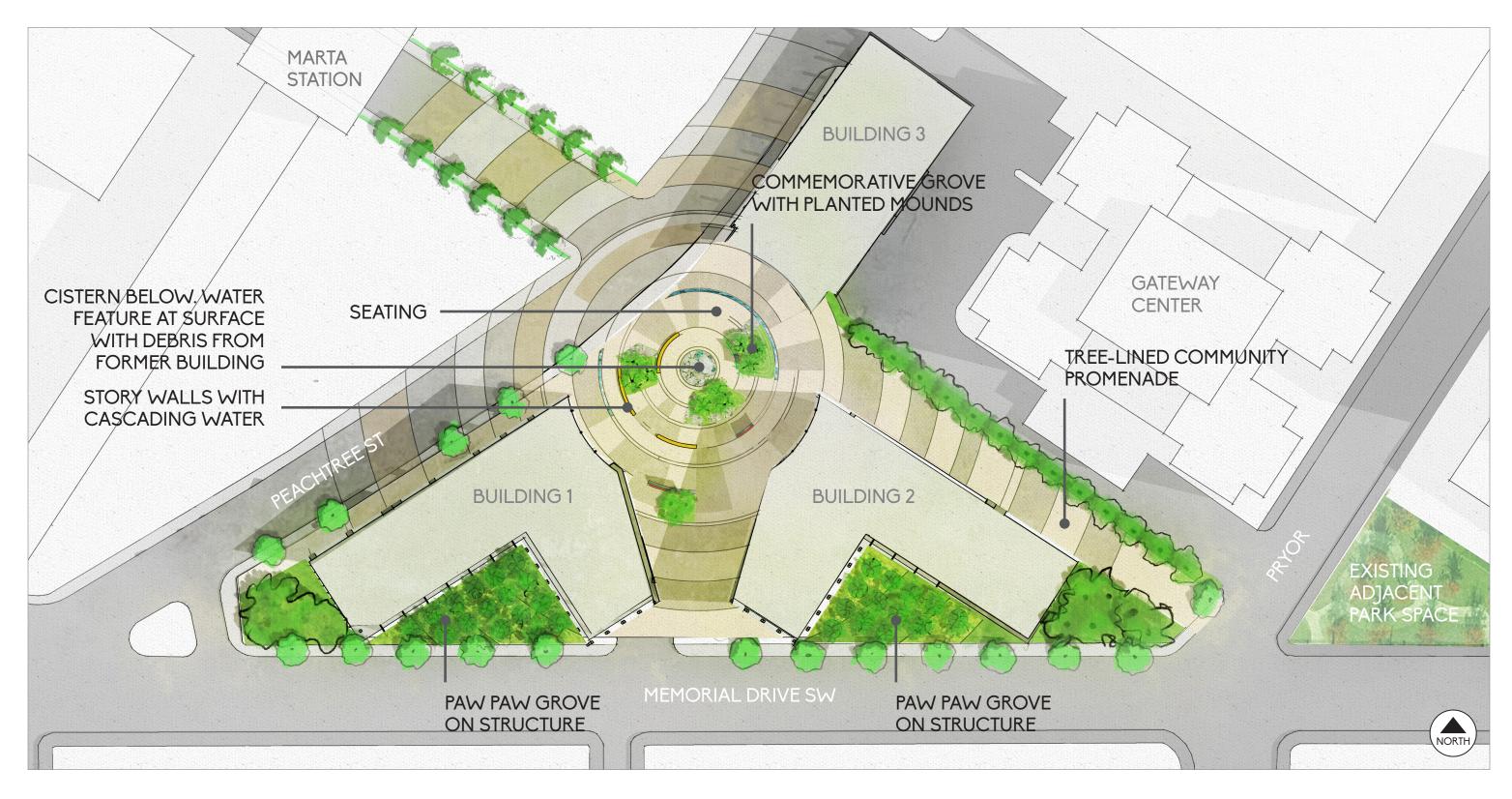








## Landscape Plan













# Expressing the Pathways: Basement Level Programming

The basement has the potential to accommodate on site parking as well as a commercial kitchen, grocery store, and 5G data center.





## Expressing the Pathways: Ground Level Programming

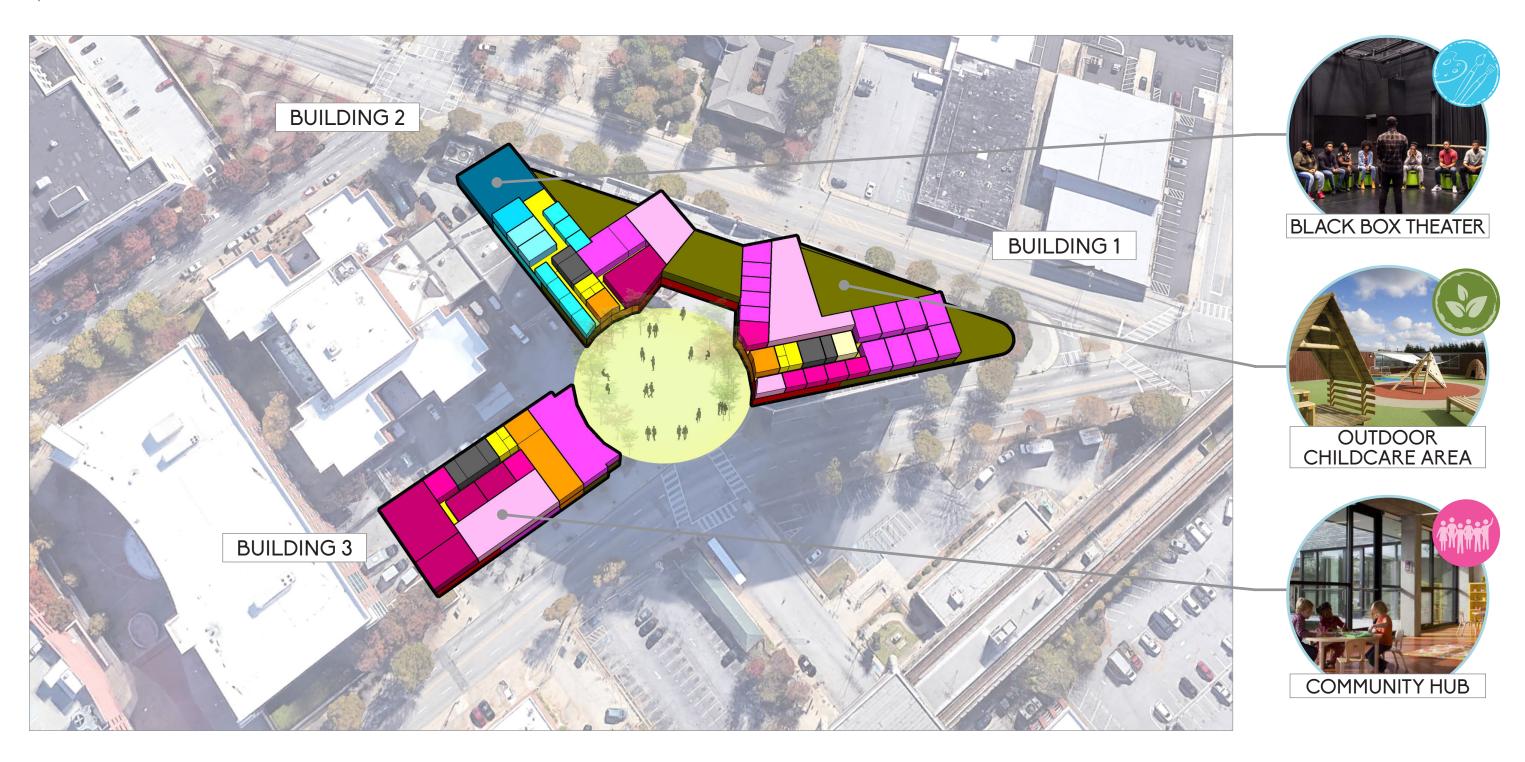
This ground floor option shows a mix of arts and culture, daily needs retail, food businesses, and community spaces that would activate the ground floor and plaza.





# Expressing the Pathways: Second Floor — Community Hub

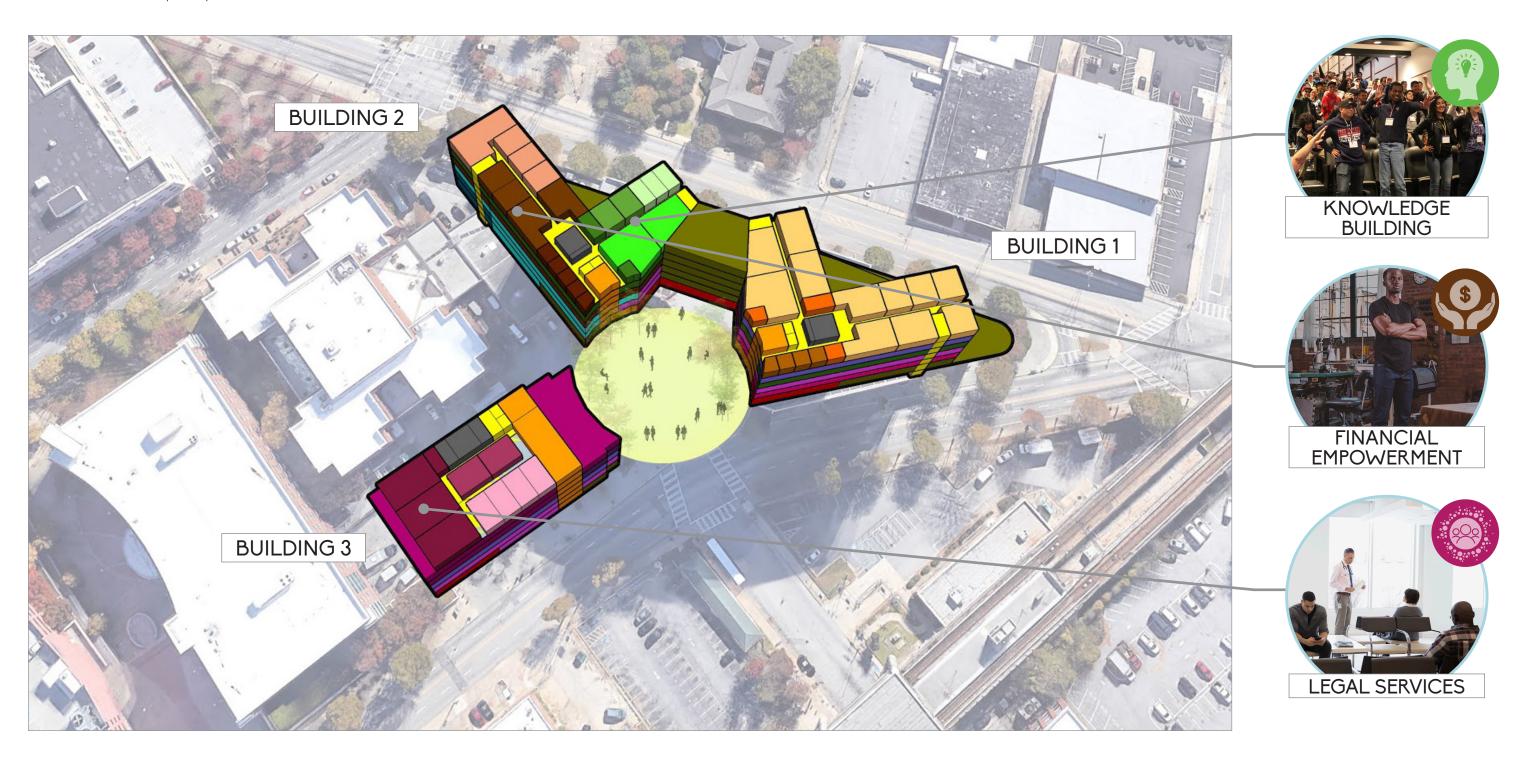
The second floor supports a multitude of community spaces including childcare with outdoor space and cultural activities.





# Expressing the Pathways: Sixth Floor — One-Stop Shop

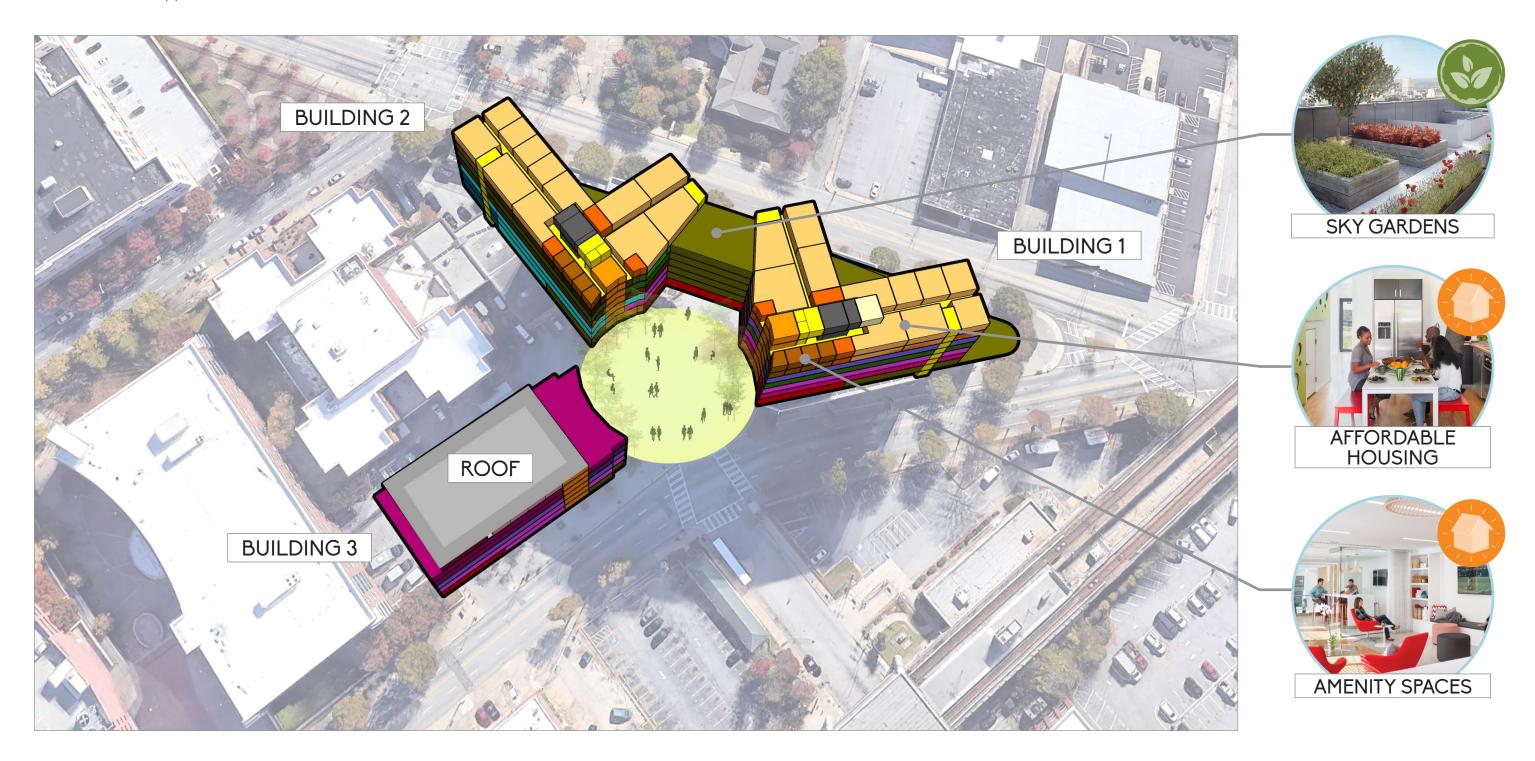
As we move up the building, education, financial empowerment, and access to justice aggregate to create a one-stop shop.





# Expressing the Pathways: Seventh Floor — Affordable Housing

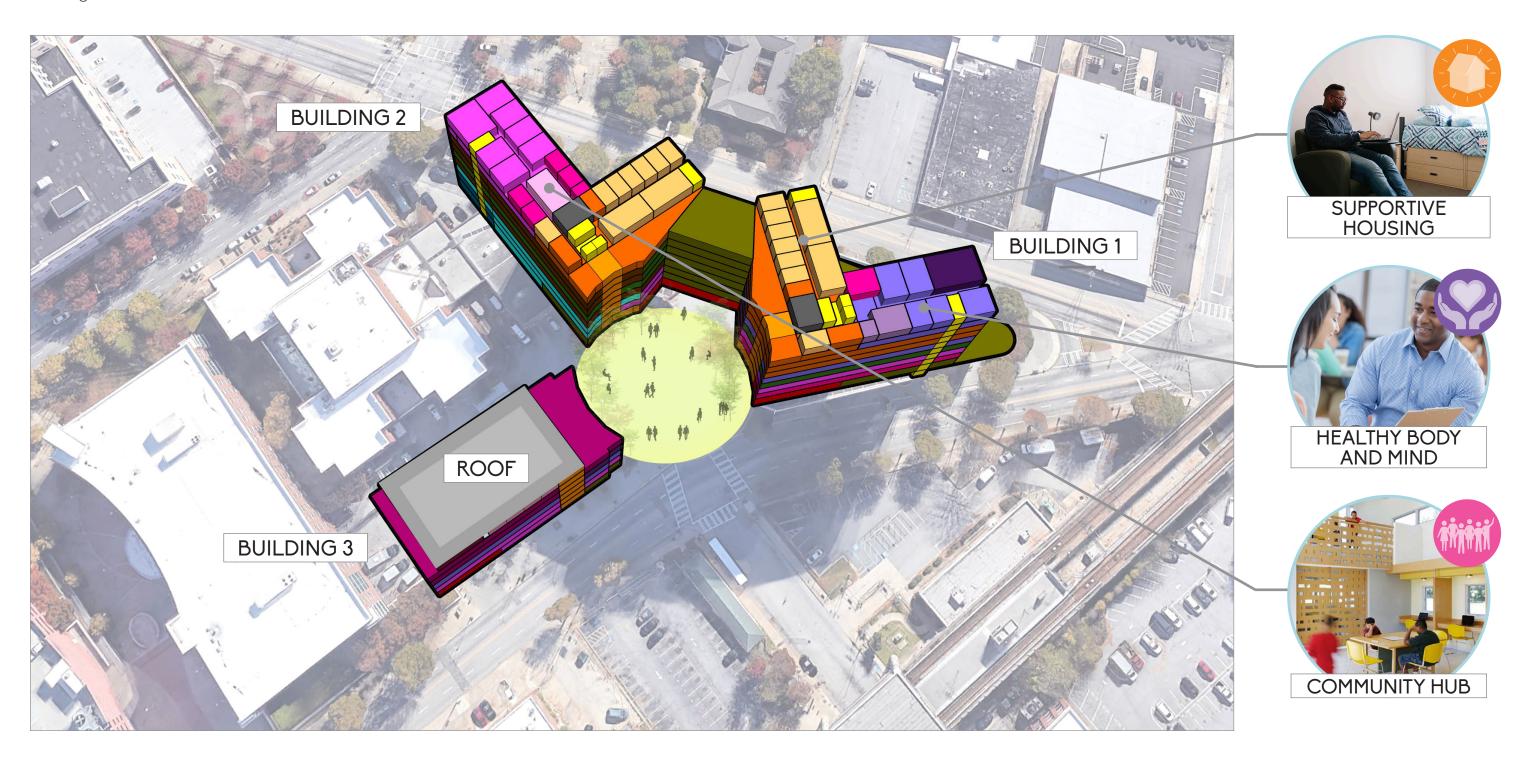
A mix of affordable one, two, and three bedroom housing units with supportive services can work well on the upper levels.





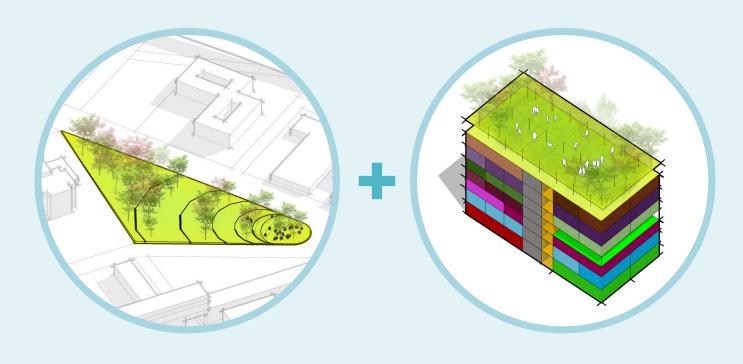
## Expressing the Pathways: Eighth Floor — Transitional Housing

Behavioral health services and community hub amenities can be combined with supportive housing as well.





# #4: DISTRIBUTED EQUITY



**NEW BUILD** 

## Design Strategy

This section describes a unique 4th option: Distributed Equity. This options looks at demolishing the site and creating a series of smaller centers of equity through the City of Atlanta in communities most impacted by mass incarceration.





## Finance & Development

#### **Strategy Narrative**

- ACDC is demolished and the site is developed as a park, memorial, urban farm, or seed bank
- Service model pivot; a decentralized network of smaller Centers for Equity replaces the concept of a single Center
- Site selections could be based upon which communities were most impacted by ACDC and would most benefit from accessible resources
- Smaller, neighborhood-oriented Centers improve ability to execute by reducing the execution risks associated with large-scale projects, while offering greater flexibility to customize by neighborhood
- Through the development of the modules, a small format Center for Equity is estimated to be 75-100K SF or 20% of the size of the current ACDC
- Depending on desired site locations, additional Centers could be new construction or repurposed buildings
- The current ACDC site could pilot the small format Center for Equity with new construction





#### Part I: Demo & Grow







## Site Systems

#### Rainwater Cistern

Stormwater is collected from the existing low point along Peachtree Street, filtered, and channeled through brick-lined runnels to water a grove of Pawpaw trees. Water fills a large rectangular cistern and stores water for reuse in a misty, magical surface water feature visible through the grove of trees.

#### Commemorative Pawpaw Grove

A grove of Pawpaw trees celebrates a culturally significant tree and food. Trees are watered by filtered rainwater. Grove creates a shady, contemplative space that leads to a reflective water feature. Small benches dispersed throughout the grove provide intimate gathering spots.

#### Story Walls

Low walls provide a space for community and local artists' work to be showcased. Walls create large gestures across the park and provide a space to feature stories significant to the community. One story wall wraps around a small brick plaza made from bricks from the former detention center. Other story walls stand alone to be viewed from all sides.

#### Green Lungs

Two dense groves of trees provide shade to counter urban heat island effect and provide air filtration to counter air pollution from nearby highways. Groves are interspersed with remnant columns.



**RAINWATER CISTERN** 



PAWPAW GROVE



"GREEN LUNGS"



STORY WALLS





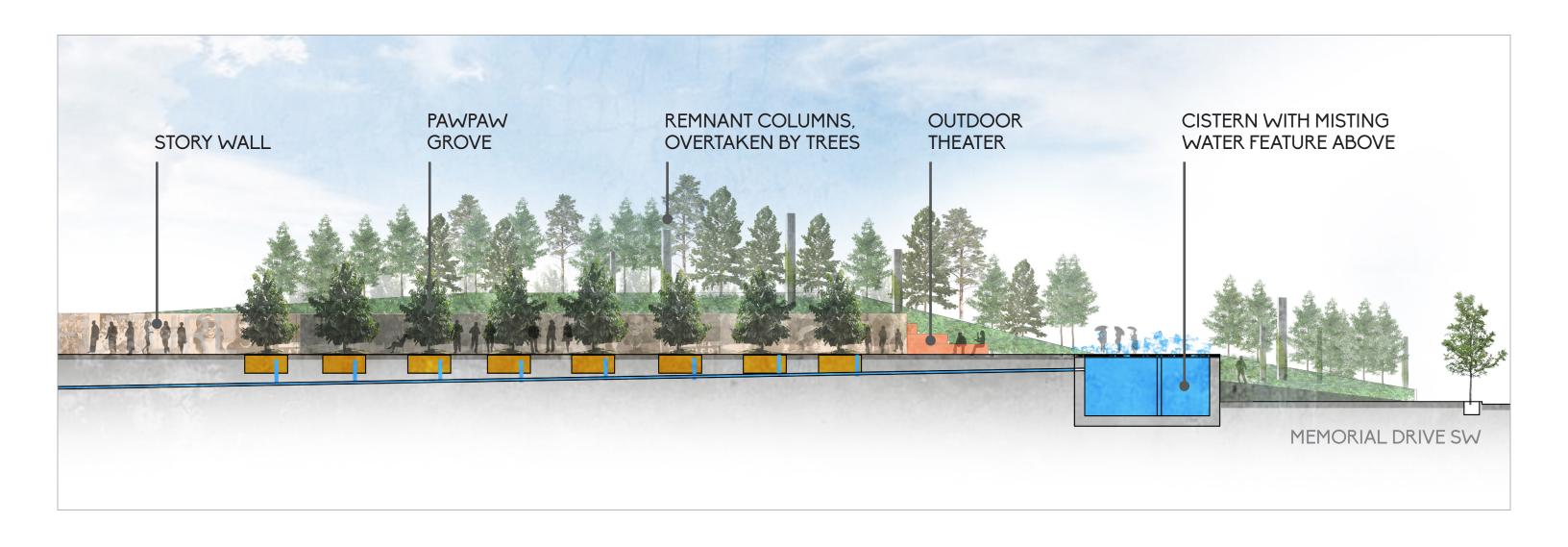
## Landscape Plan







Pawpaw Grove & Cistern Station







Outdoor Performance Space & Story Wall





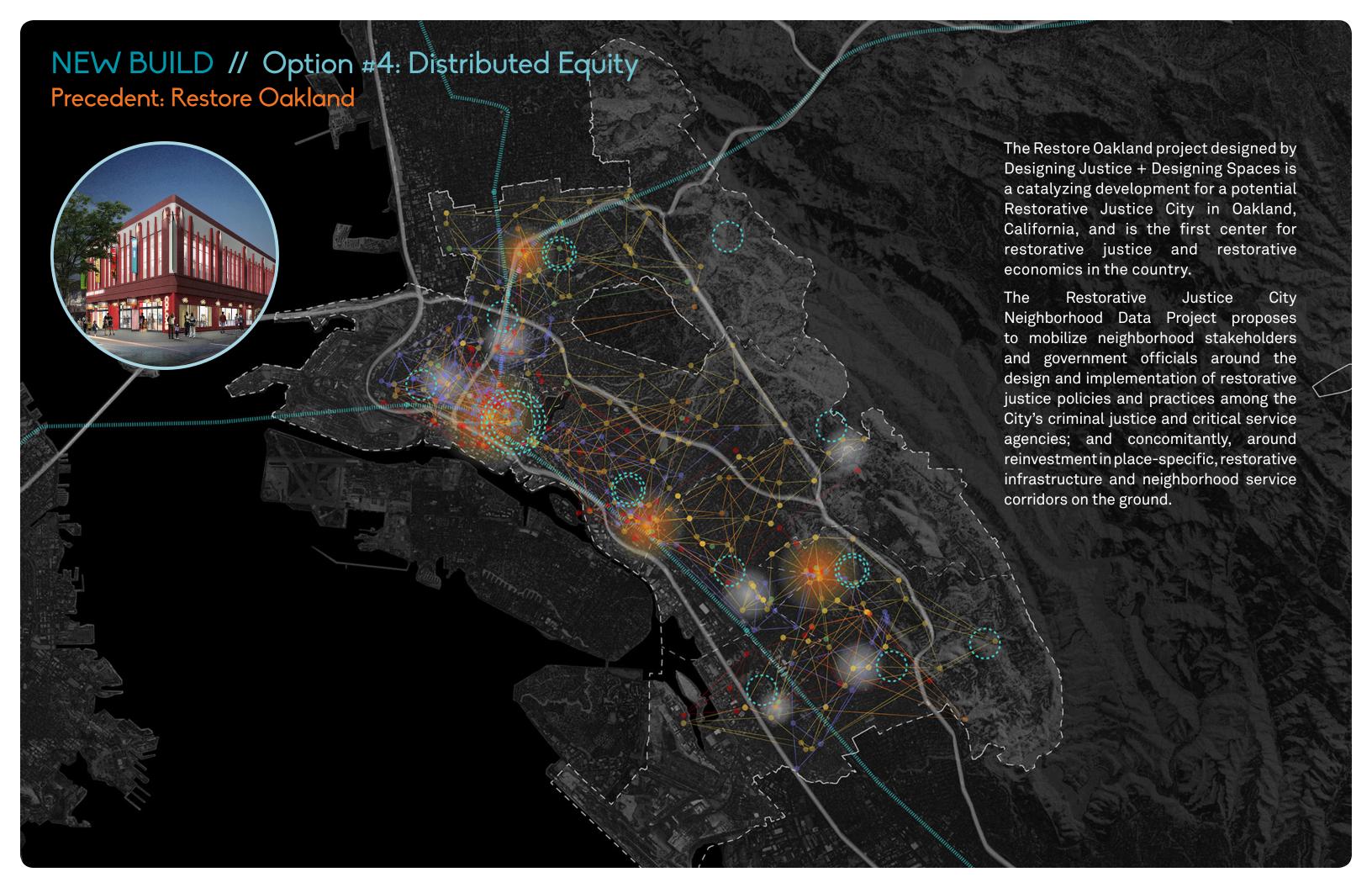


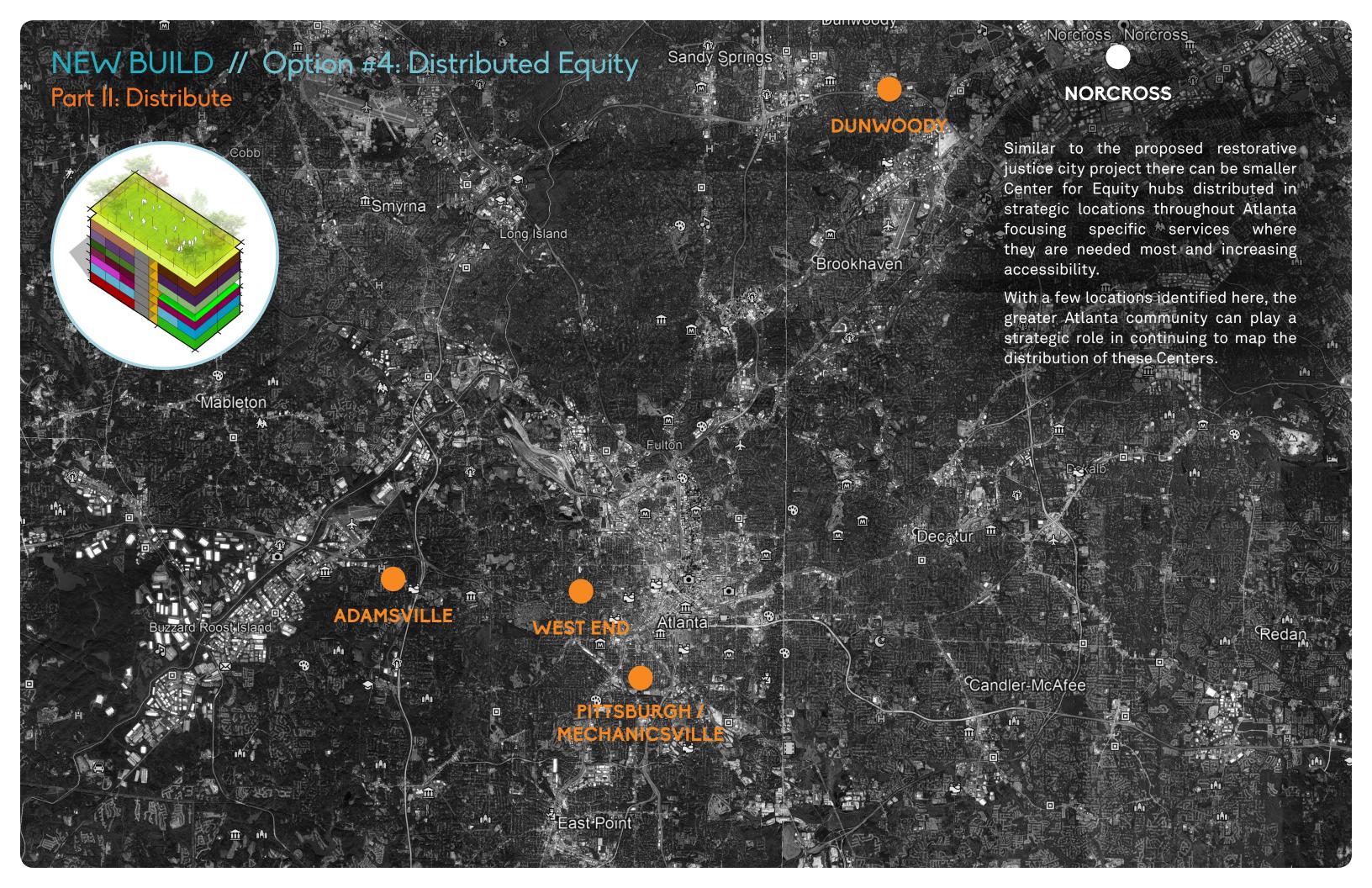
Pawpaw Grove & Cistern





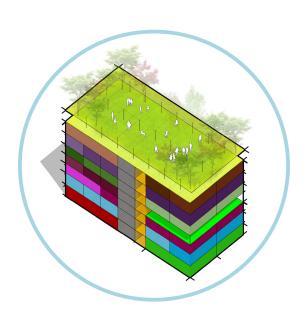




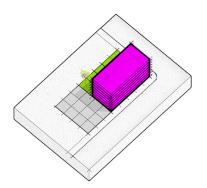


#### Part II: Distribute

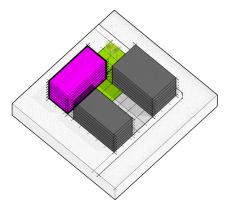
The Distributed Equity strategy offers several opportunities for a community to tailor a Center for Equity to the distinct needs of a neighborhood with more affordable investment in smaller existing buildings or new development sites. Each option incorporates the 9 Pathways as needed along with green spaces.



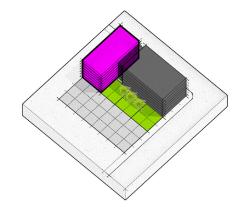
#### New Building Options



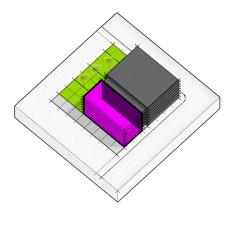
STAND ALONE SMALL SITE



STAND ALONE WITHIN A CAMPUS

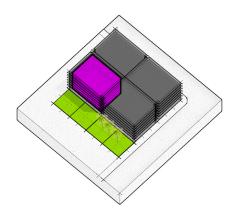


EXISTING BUILDING ADDITION

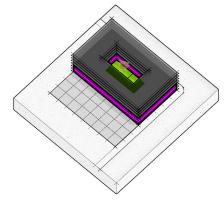


EXISTING BUILDING ADDITION

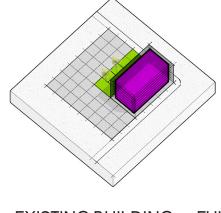
#### **Existing Building Options**



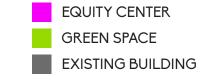
EXISTING BUILDING COMMERCIAL SPACE



EXISTING BUILDING — MULTI-LEVEL COMMERCIAL BUILD OUT



EXISTING BUILDING — FULL COMMERCIAL RENOVATION







Incorporating sustainability practices not only saves energy and operational costs, but offers several potential opportunities within the Knowledge Building and Financial Freedom Pathways. Onsite education, training and vocational programs can be developed around these more efficient building systems in service to those that have been most impacted. These opportunities are outlined in the following pages.

#### **Environmental Analysis**

#### Things to consider

#### Temperature and Humidity

The path of the sun, yearly temperatures, and rainfall all have an impact on a myriad of building design features. These include the exterior building envelope, glazing and roofing material as well as the building interior and how the building systems need to be designed to mitigate heat gain and loss to maintain a comfortable environment.

#### Degree Days

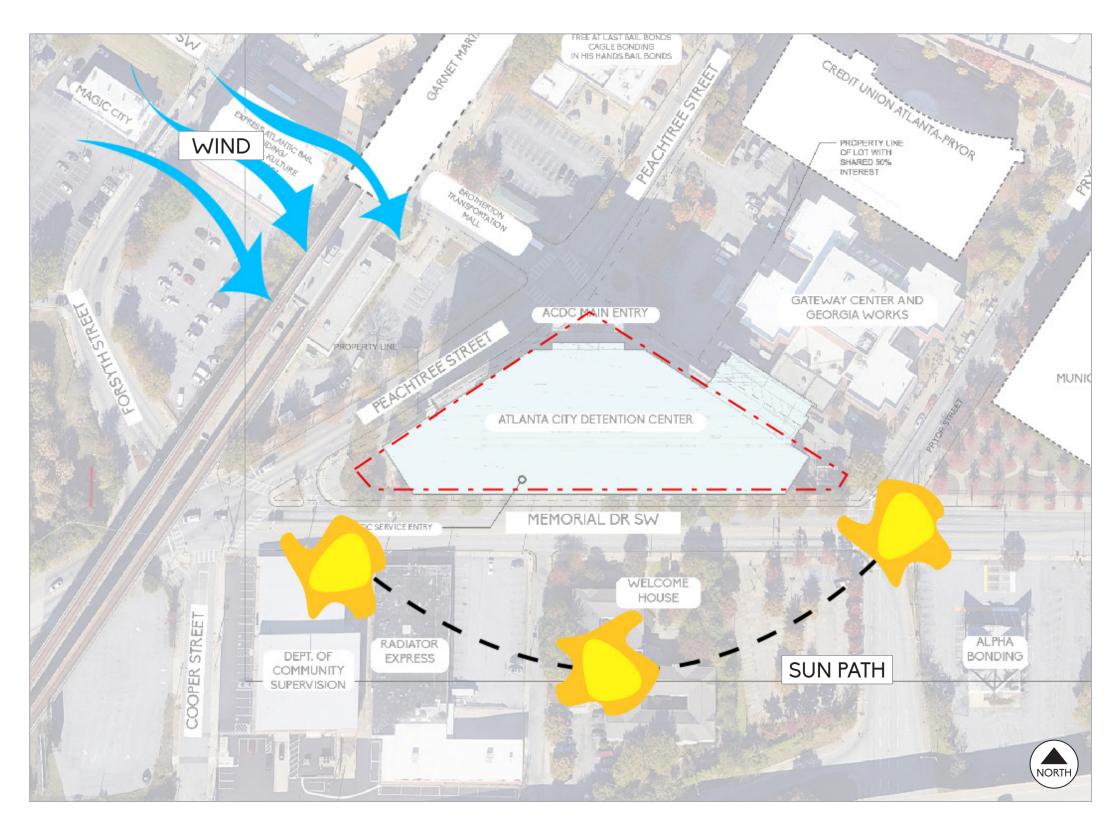
There are heating degree days (HDD) cooling degree days (CDD), and growing degree days. Each measures the amount and length of time the outside air temperature is above (CDD) or below (HDD) a certain temperature. This helps determine the amount of energy and type of HVAC systems needed to regulate building temperature. Plant and insect growth is determined by growing degree days.

#### Wind

Wind loads resulting from the speed and the direction of the wind impacts structural systems and building height The downdraught effect which causes gusts of wind at street level affecting pedestrians and cars, must also be considered.

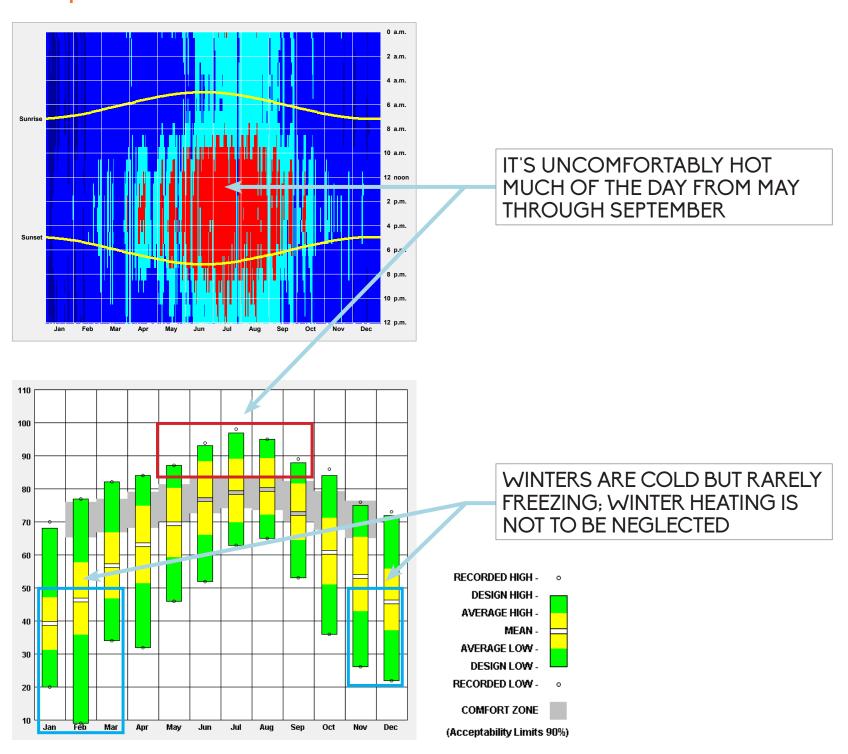
#### **Building Orientation**

The orientation of the existing building as well as orientation for a new building is key in optimizing the above factors for sustainability.



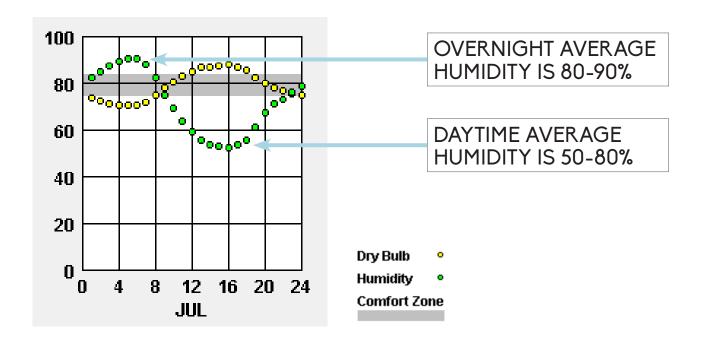


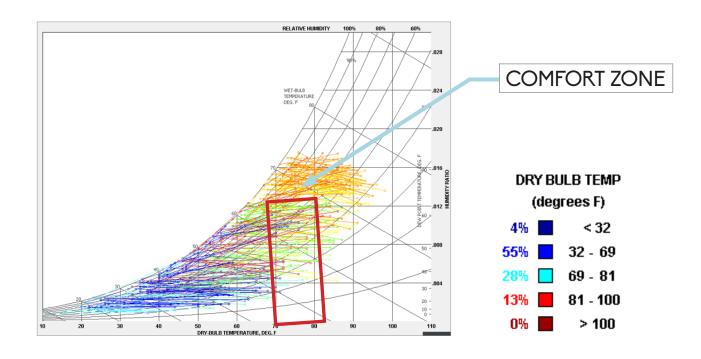
#### Temperature



#### Humidity

In June, July, and August it is hot and humid day and night



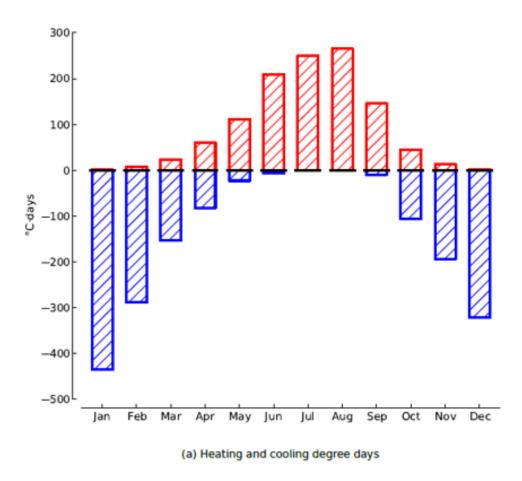






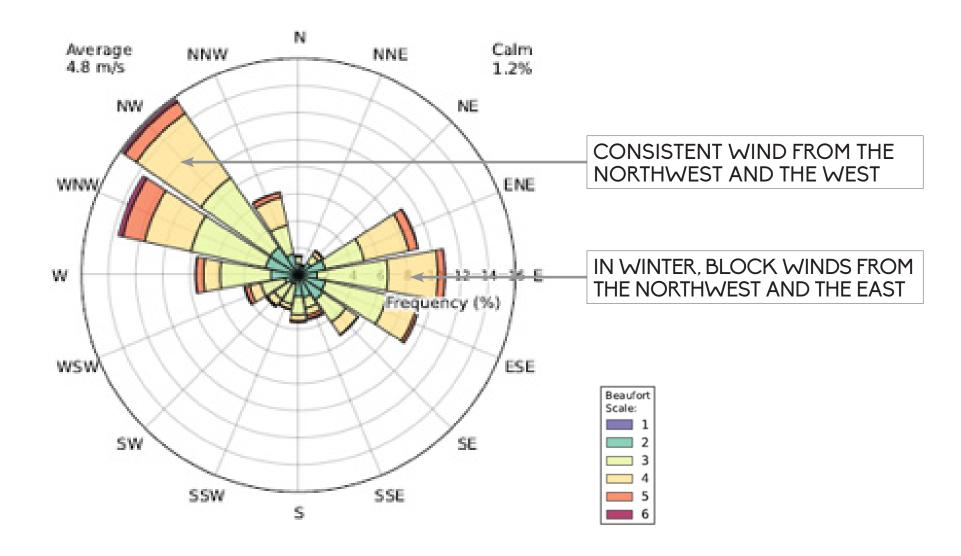
#### Degree Days

Although there are slightly more heating degree days, indoor spaces have natural heat gains so the mechanical load on the building will be strongly cooling dominated.



#### Wind Seasonal and Average

Summer potential for natural ventilation is limited because air is too hot and humid to be comfortable.







#### Potential Cost Savings

High-performance building strategies, whether active or passive, will save operating costs.

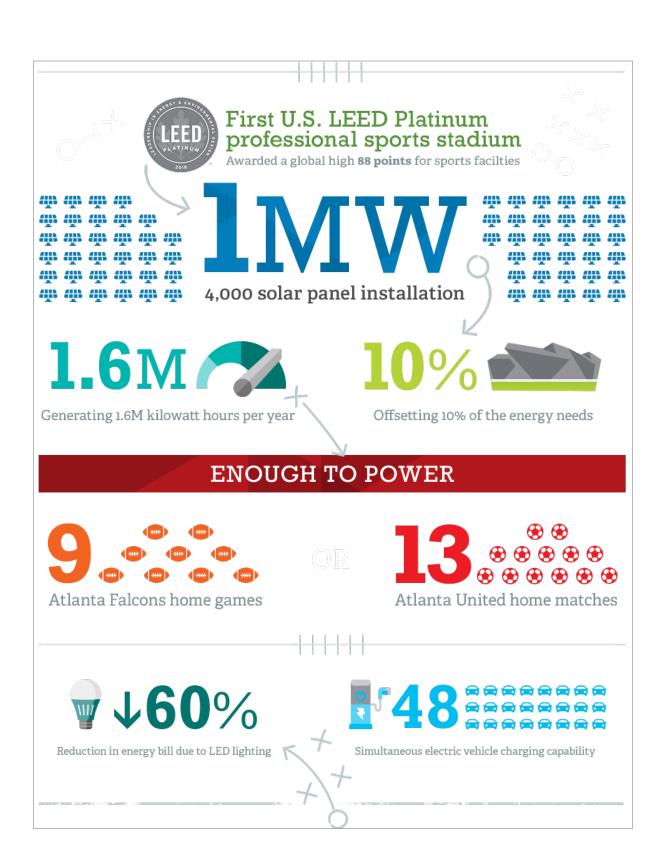
	Baseline building <sup>1</sup>	Atlanta benchmark building	LEED Gold building
Energy Use Intensity (EUI- kBTU/sf/yr)	70	62.2	50-56
Cost Savings (\$ annual)	_	\$72,000	\$137,000-\$195,000

#### 1 Based on a 420,000 SF building. Sources:

- CBECS 2012 Microdata, accessed April 2, 2020 https://eia.gov/consumption/commercial/data/2012/xls/2012\_public\_use\_data\_aug2016.csv
- Atlanta Building Efficiency Benchmarked Data, accessed April 2, 2020
   <a href="https://public.tableau.com/profile/office.of.resilience#!/vizhome/shared/42RQM3P4X">https://public.tableau.com/profile/office.of.resilience#!/vizhome/shared/42RQM3P4X</a>
- NBI Energy Performance of LEED NC Report https://newbuildings.org/sites/default/files/Energy\_Performance\_of\_LEED-NC\_Buildings-Final\_3-4-08b.pdi
- GBIG Analysis of DC Private Building Benchmark Disclosure Data http://insight.gbig.org/do-leed-buildings-perform-indeed-they-do/
- Georgia Power Mercedes Benz Stadium Energy Efficiency Fact Sheet <a href="https://georgiapower.com/community/arts-and-culture/community-sports/mercedes-benz-stadium.html">https://georgiapower.com/community/arts-and-culture/community-sports/mercedes-benz-stadium.html</a>







## Solar Energy

- South-facing panels will produce much more energy or hot water than other orientations
- ~200-230kW¹ potential rooftop PV capacity
- 1,250-1,450 kWh/yr per kW<sup>1</sup>
- ~\$30,000 annually
- \$2,000-\$3,000/month seasonally



- Incident solar energy: https://www.google.com/get/sunroof/building/33.7472871/-84.3954736/#?f=buy&b=500
- PV production from PVWatts: https://pvwatts.nrel.gov/pvwatts.php
- Energy rates per Georgia Power https://www.georgiapower.com/content/dam/georgia-power/ pdfs/business-pdfs/rates-schedules/small-business/PLL-11.pdf



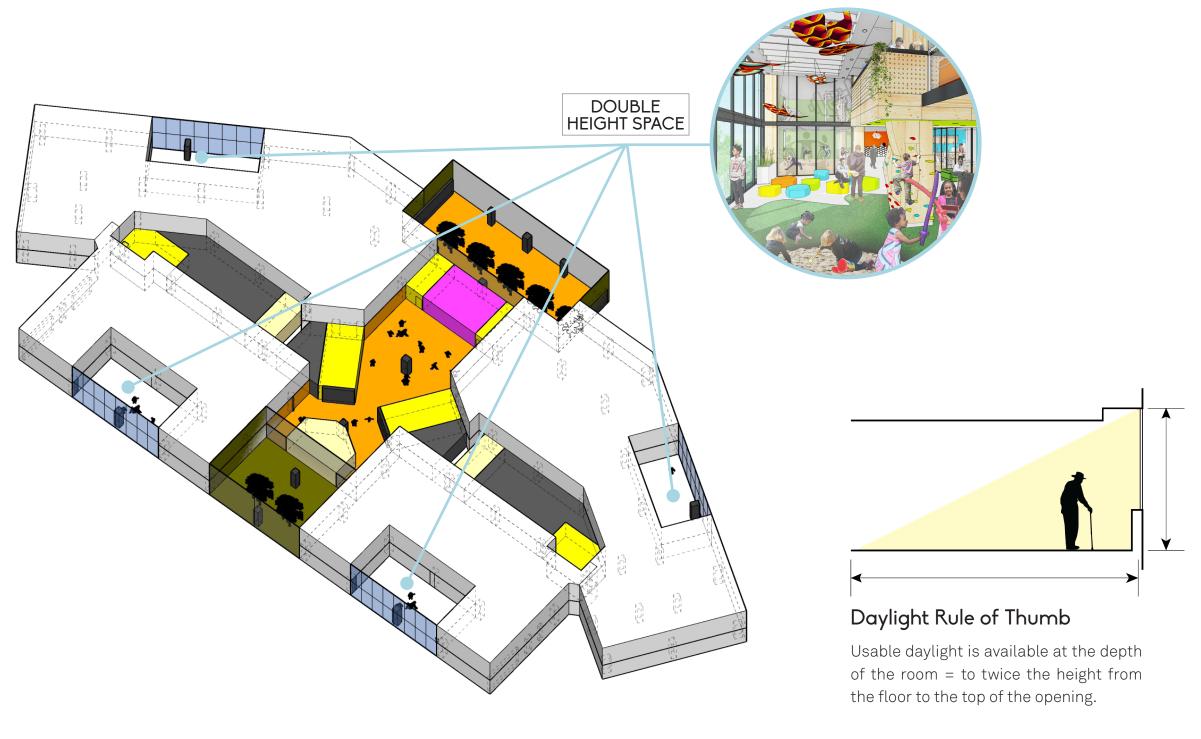


Sources:



## Solar Shading & Daylighting Strategies

Notching out the mezzanine floor in strategic areas brings natural light further back into the deep floor plates of the building. This can be applied to either the repurposing or new construction options, in areas with windows.





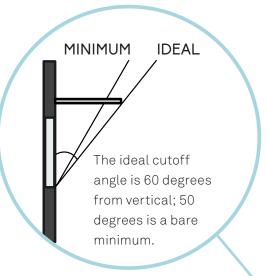






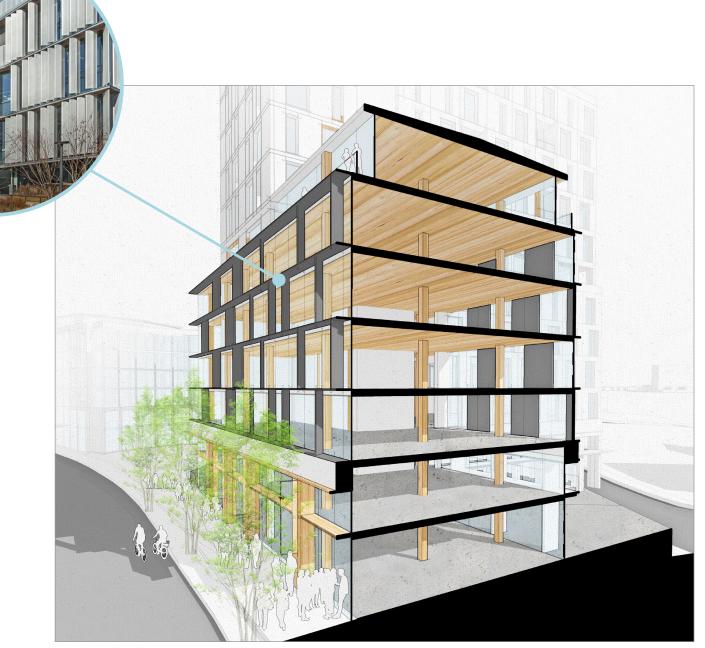
## Solar Shading & Daylighting Strategies

Various shading treatments can be applied to the south facade in either scheme to manage incoming daylight and avoid glare.









Kroon Hall, Yale University

Ennead Architects

LOUVER SHADING SYSTEM ON NORTHWEST FACADE OF NEW BUILD



#### Active Climate Control Strategies





#### **Benefits:**

- May utilize desiccant dehumidification to provide efficient cooling
- Provides all ventilation air
- Avoids additional energy redundancies

Feasibility: New and Repurposed



## LOCAL / PERSONAL COMFORT CONTROLS

#### **Benefits:**

 Fans, fan coil units (FCUs), and other human-scale interventions can be more efficient and effective at meeting comfort requirements

Feasibility: New and Repurposed

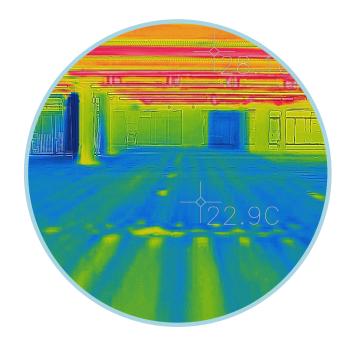


#### INTEGRATED OR SMART BUILDING MANAGEMENT SYSTEMS

#### **Benefits:**

 With various potential tenants, allows for fine tuned controls to efficiently condition individual spaces and zones

Feasibility: New and Repurposed



#### **RADIANT FLOORING**

#### **Benefits:**

- Avoids energy use by conditioning only the occupied areas.
- Thermal capacity of fluids is higher than air, leading to efficient heating and cooling

Feasibility: New Build only

<sup>\*</sup> Used at the Kendeda Building



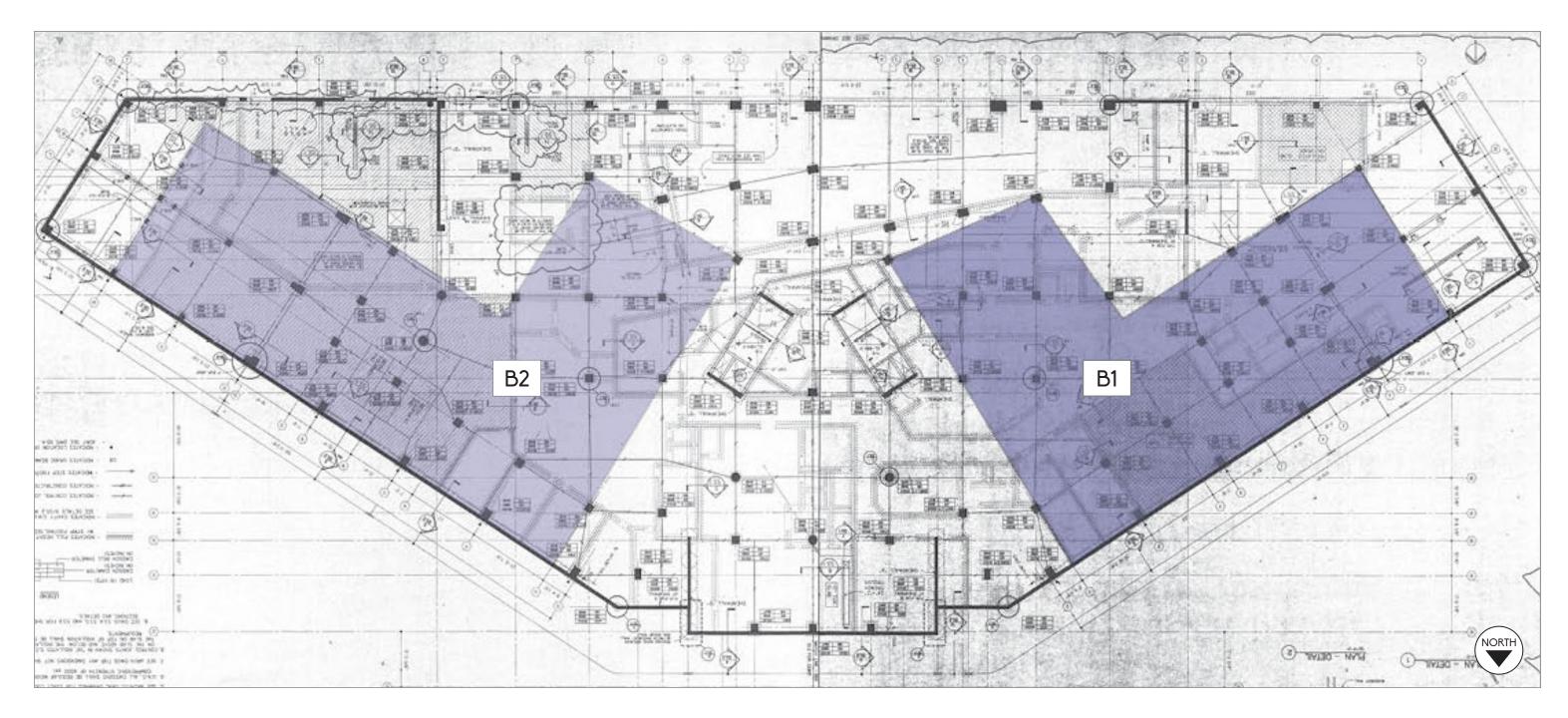


#### Foundation Reuse

Rebuilding on the footprint of the former structure would create the possibility of reusing the existing foundations and basement level — especially if the new building is made with lightweight materials

such as mass timber. This would save significant construction costs, allow for a faster construction schedule, and eliminate the majority of concrete, the largest source of carbon emissions from

building materials. A limited number of existing structural columns could be removed and new columns added, to better accommodate new uses such as parking in the basement level.







## Passive Climate Control Strategies



#### **SHADING**

Shading is important for outdoor spaces and windows in summer

Feasibility: New and Repurposed



#### WIND PROTECTION & SUNSHINE

Wind protection and sunshine are important for winter use of outdoor spaces (balconies, entry plaza)

Feasibility: New and Repurposed



#### **ENVELOPE DESIGN**

Savvy envelope design can aid in managing heating and cooling loads in prioritized spaces

Feasibility: New and Repurposed



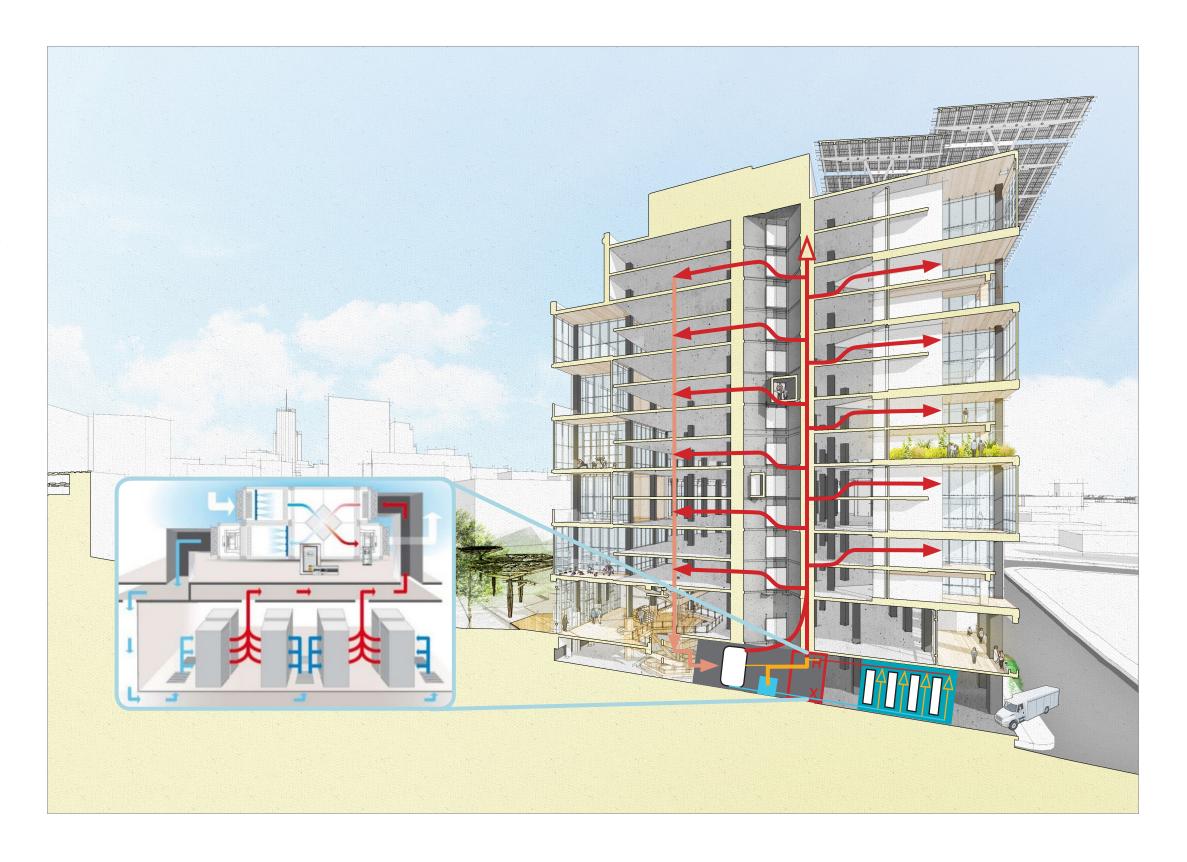


#### Data Center Heat Recovery

A data center heat recovery system offers another potential opportunity that could be employed as a novel and effective way to provide either preheated hot water for domestic HVAC purposes, or preheated air that could be recirculated within the building to provide effective relief for the larger HVAC air handling systems in the building.

Both system configurations would depend on the cooling system for the data center, and would likely be co-located in the basement, between or adjacent to the nearest HVAC or boiler room.

If possible, the system may be linked to the water loops in the aquaponics operation to satisfy their water conditioning and makeup requirements.







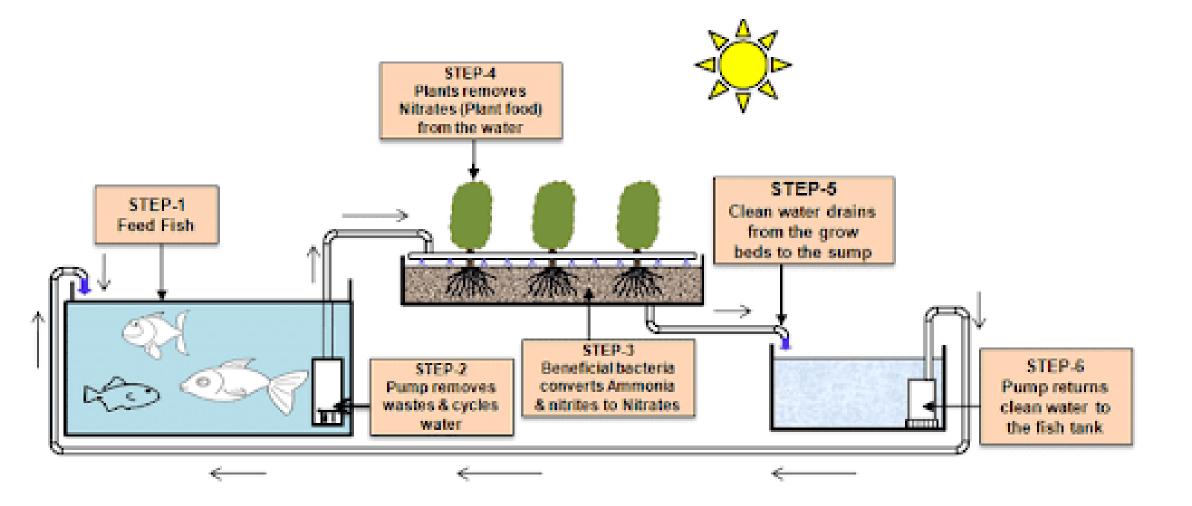
#### Aquaponics

Aquaponics is primarily a closed-loop system that does not consume much water.

Research on a small scale Baltimore aquaponics farm system<sup>1</sup> with two 800-gallon hydroponic and four 200-gallon fish tanks placed monthly top-up demands between **260 gallons** in the winter and **1,590 gallons** in the summer.

Other research<sup>2</sup> has placed aquaponic daily make-up demand to be between 0.5–10% of tank capacity.





<sup>2</sup> Recirculating aquaculture tank production systems: Aquaponics-Integrating fish and plant culture <a href="https://www.researchgate.net/publication/284496499\_Recirculating\_aquaculture\_tank\_production\_systems\_Aquaponics-Integrating\_fish\_and\_plant\_culture\_tank\_production\_systems\_Aquaponics-Integrating\_fish\_and\_plant\_culture\_tank\_production\_systems\_Aquaponics-Integrating\_fish\_and\_plant\_culture\_tank\_production\_systems\_aquaponics-Integrating\_fish\_and\_plant\_culture\_tank\_production\_systems\_aquaponics-Integrating\_fish\_and\_plant\_culture\_tank\_production\_systems\_aquaponics-Integrating\_fish\_and\_plant\_culture\_tank\_production\_systems\_aquaponics-Integrating\_fish\_and\_plant\_culture\_tank\_production\_systems\_aquaponics-Integrating\_fish\_and\_plant\_culture\_tank\_production\_systems\_aquaponics-Integrating\_fish\_and\_plant\_culture\_tank\_production\_systems\_aquaponics-Integrating\_fish\_and\_plant\_culture\_tank\_production\_systems\_aquaponics-Integrating\_fish\_and\_plant\_culture\_tank\_production\_systems\_aquaponics-Integrating\_fish\_and\_plant\_culture\_tank\_production\_systems\_aquaponics-Integrating\_fish\_and\_plant\_culture\_tank\_production\_systems\_aquaponics-Integrating\_fish\_and\_plant\_culture\_tank\_production\_systems\_aquaponics-Integrating\_fish\_and\_plant\_culture\_tank\_production\_systems\_aquaponics-Integrating\_fish\_and\_plant\_culture\_tank\_production\_systems\_aquaponics\_aq





<sup>1</sup> Energy and water use of a small-scale raft aquaponics system in Baltimore, Maryland <a href="https://doi.org/10.1016/j.aquaeng.2015.07.003">https://doi.org/10.1016/j.aquaeng.2015.07.003</a>

#### Storm Water Collection

Using local weather data, and building water demand estimates from the city, we looked to size a cistern for the site.

The inputs included:

- Roof Size
- Irrigated Landscape Area
- Building Operation
- Approximated Indoor Daily Demand

Non-potable water could be used on-site for:

- Aquaponics
- Landscape irrigation
- Flushing
- Showers
- Sinks

Potable water demands would likely be highest in the industrial kitchen.



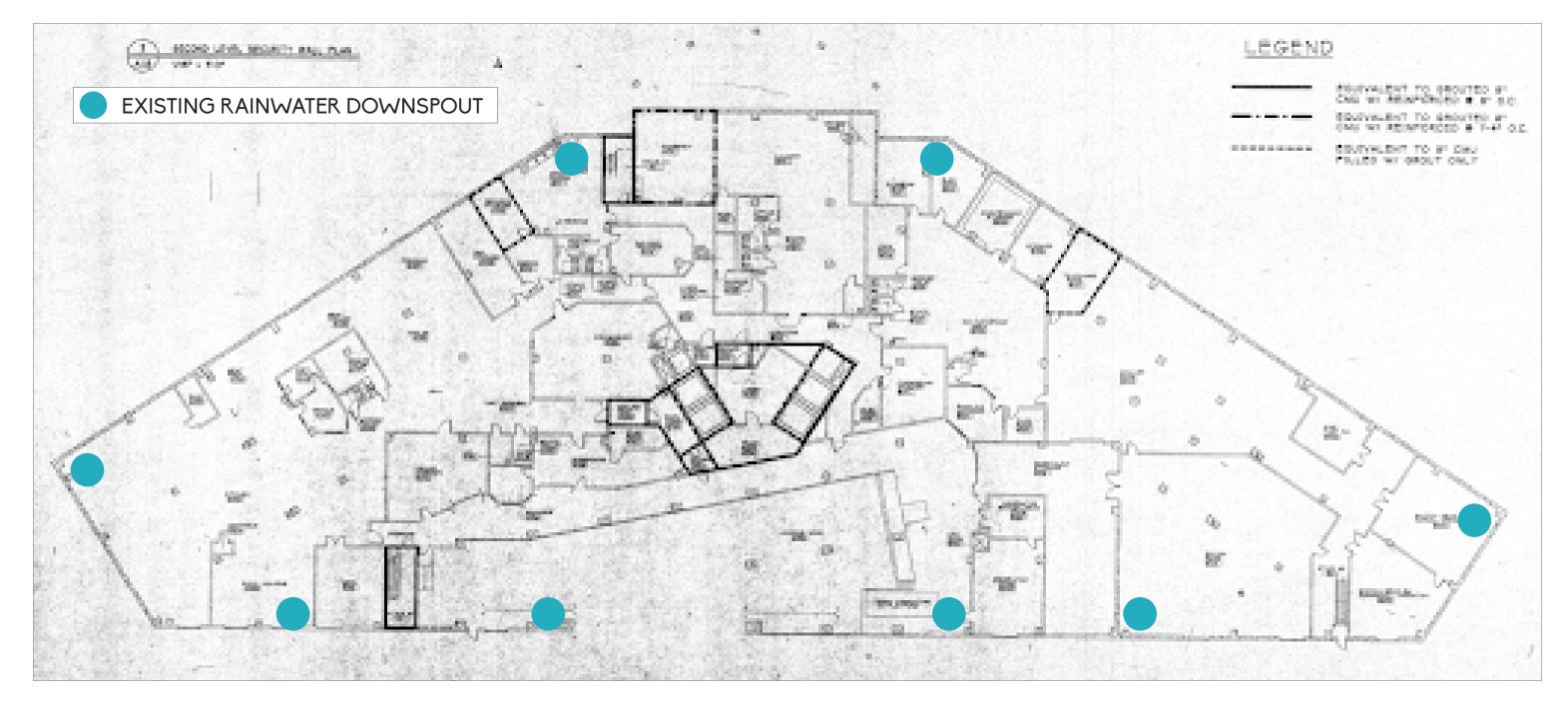




#### Storm Water Collection

A rainwater cistern size between 1,000 and 3,000 gallons would meet approximately 10-20% of estimated water needed for toilet flushing and irrigation.

The existing building has 8 downspouts that carry water down from the rooftops. Depending on the volume of rainwater intended for reuse, one or a nearby group of downspouts could be collected. Greywater from showers in residential units can also be reused. A rainwater collection system and/or greywater reuse system would be easier to implement in the new-build scheme.







## Job Training & Skill Development

Atlanta has many potential partners to use the deconstruction and construction phases of this project as a community development opportunity:

#### • Georgia Trade-UP1

Preparation for entry into construction trades apprenticeship programs or the construction industry

#### Construction Education Foundation of Georgia (CEFGA)<sup>2</sup>

Adult and K-12 student 4-week programs in partnership with foundations, Building Trades Council, Contractors, Government

#### • Georgia Building Trades Academy<sup>3</sup>

Providing Georgia's citizens with the education and employment opportunities that will lead to a successful career in the construction industry















<sup>3</sup> Georgia Building Trades Academy: <a href="http://www.gabta.org">http://www.gabta.org</a>





<sup>1</sup> Georgia Trade-UP: <a href="http://www.gatradeup.org/">http://www.gatradeup.org/</a>

<sup>2</sup> Construction Education Foundation of Georgia (CEFGA): <a href="https://cefga.org/">https://cefga.org/</a>

## Job Training & Skill Development

The Center for Equity can find partners for ongoing training in building and energy management:

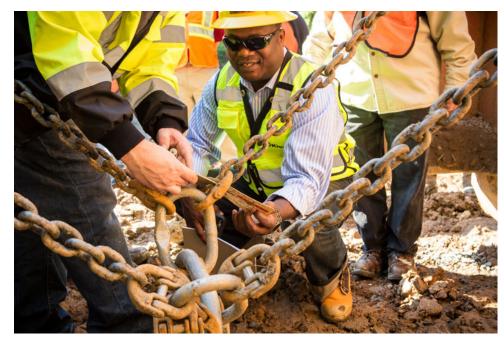
- Southface Energy Institute<sup>1</sup>
  Teaches building energy efficiency and building
  - energy management using buildings as learning centers
- Georgia Tech Professional Education<sup>2</sup>
   Energy management and Facilities Maintenance
   Safety Certificate
- Goodwill of North Georgia<sup>3</sup>
  Building Maintenance Training













- 1 Southface Energy Institute: https://www.southface.org/education/our-courses/
- 2 Georgia Tech Professional Education: Energy Management: <a href="https://pe.gatech.edu/subjects#engineering">https://pe.gatech.edu/subjects#engineering</a> Facilities Maintenance Safety Certificate: <a href="https://pe.gatech.edu/certificates/facilities-maintenance-safety-certificate">https://pe.gatech.edu/certificates/facilities-maintenance-safety-certificate</a>
- 3 Goodwill of North Georgia: <a href="https://goodwillng.org/training-programs/maintenance-technician/">https://goodwillng.org/training-programs/maintenance-technician/</a>





#### **Timber Frame Structure**

Advances in timber construction benefit both the repurposing and new build strategies embodying a new expression of warmth and well being and healing for the Center for Equity.

#### Repurposing:

- The timber infill option at the upper floors increases leasable space in the building where the floor is being cut to let light in
- Allows for a thin floor to match the thickness of the existing post tensioned slabs
- Wood is a warm finish signifying new healing intentions

#### New build:

- Large-scale structural wood systems, including heavy timbers and engineered framing systems can be used as the main structural system to build a high rise building as opposed to concrete and steel
- Easier assembly and reduced construction time and cost
- Less carbon is released during its manufacture resulting in reduced environmental impact
- Lighter weight can enable foundation re-use or smaller new foundations











#### Salvaging of Existing Materials

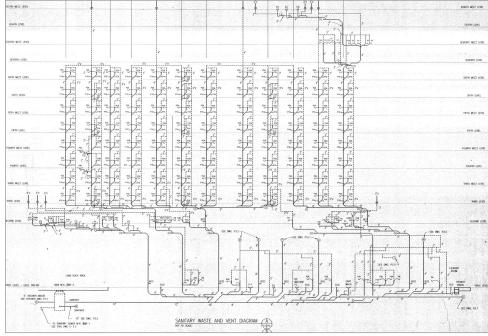
While both schemes will require intensive (or complete) demolition and deconstruction, the existing building holds at least an estimated 225,000 lbs of valuable salvage material, most notably cast iron and copper piping and metal doors. This does not account for the concrete facade panels, interior concrete block walls, electrical wiring, or sheet metal ductwork that could potentially also be recovered.

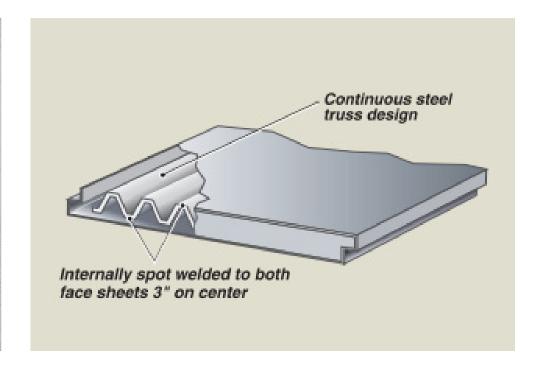
These materials could be given a new life in landscaping or accent design elements, refurbished for use in either scheme, or otherwise up-cycled into art or another use.

The scale of the demolition required might also present an opportunity for impacted communities to receive job training or exposure to certain elements of construction and deconstruction work.

MATERIAL	SOURCE	COUNT/LINEAR FEET	WEIGHT
Sheet Metal products	Security Doors + Access Panels	840+ doors	88,000 lbs
	Toilets + Sinks	1200+ units	47,000 lbs
Cast Iron Piping	Waste/Supply	5200+ linear feet	46,000 lbs
Steel Piping	HW/CHW/Vent	5200+ linear feet	40,000 lbs
Copper Piping	HW/CHW	6600+ linear feet	31,000 lbs











#### Rebates, Loans, Grants

	ELIGIBILITY CRITERIA	ROM \$ VALUE	SUBSIDY TYPE	APPLICABLE TECHNOLOGY	APPLICATION
MACRS <a href="https://programs.dsireusa.org/system/program/detail/676">https://programs.dsireusa.org/system/program/detail/676</a>	Commercial / Nonprofit	Full Depreciation	Corporate Depreciation	Solar Thermal, PV	Tax Recovery
Weatherization Assistance Program <a href="https://programs.dsireusa.org/system/program/detail/5725">https://programs.dsireusa.org/system/program/detail/5725</a>	Low Income Housing	~\$6,500 per application	Grant Program	Major HVAC / Envelope techs	State / Local Weatherization Agency
Low Income Home Energy Assistance Program <a href="https://programs.dsireusa.org/system/program/detail/5712">https://programs.dsireusa.org/system/program/detail/5712</a>	Low Income Residential	Unspecified	Grant Program	Energy Bills	Residents should apply through HHS
Business Energy Investment Tax Credit <a href="https://programs.dsireusa.org/system/program/detail/658">https://programs.dsireusa.org/system/program/detail/658</a>	Commercial	10% of expenditure	Corporate Tax Credit	Solar Thermal, PV	Tax Recovery
DoE Loan Guarantees  https://programs.dsireusa.org/system/program/ detail/3071	Commercial / Nonprofit	Unspecified	Loan Program	Solar Thermal / Biomass, etc	DoE Loan Programs Office
Fannie Mae Green Initiative Loan Program  https://programs.dsireusa.org/system/program/ detail/5780	Multifamily Residential	Unspecified	Loan Program	Various Residential Efficiency Technologies	Through Fannie Mae





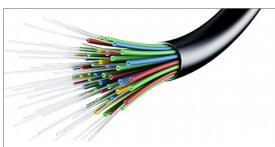
#### Future Forward Communications Infrastructure



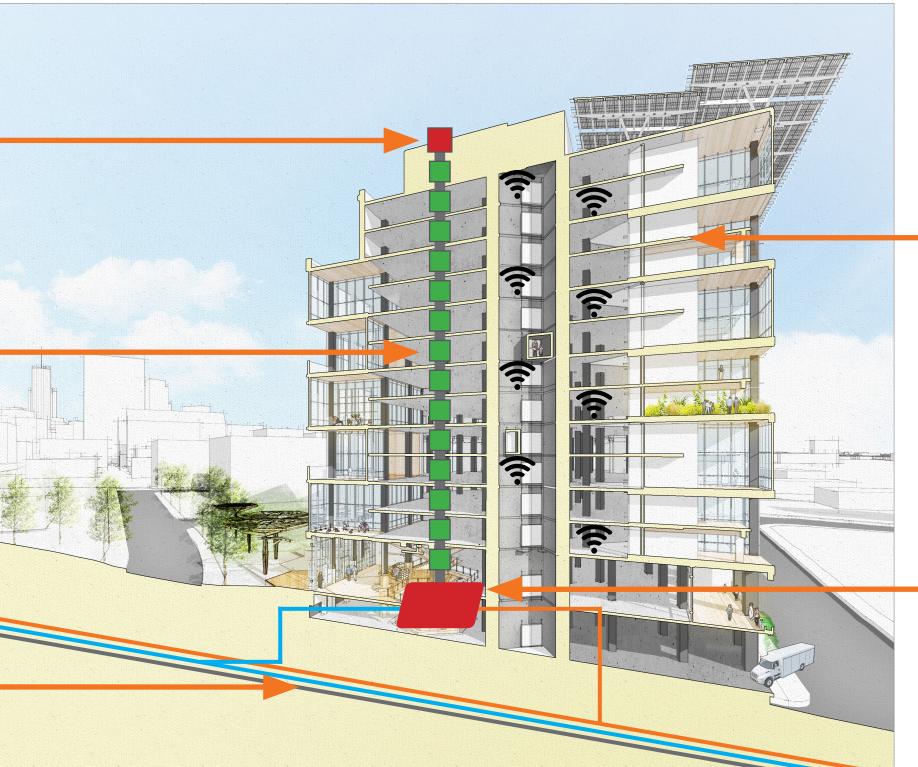
Leasable roof space for antenna arrays. May provide 5G distribution point and revenue opportunities.



Building Technology Network: Provides infrastructure for smart building systems, IoT and Flex Space WiFi.



Multiple nearby fiber infrastructure provides diversity and highspeed connectivity.





"Intelligent Flex Space" (IFS) with robust wireless connectivity and option for local computing space. IFS may create leasing opportunities for small to medium businesses.



Expanded MDF may serve as a on-premises computing center and provide 5G services (e.g., cloud computing).



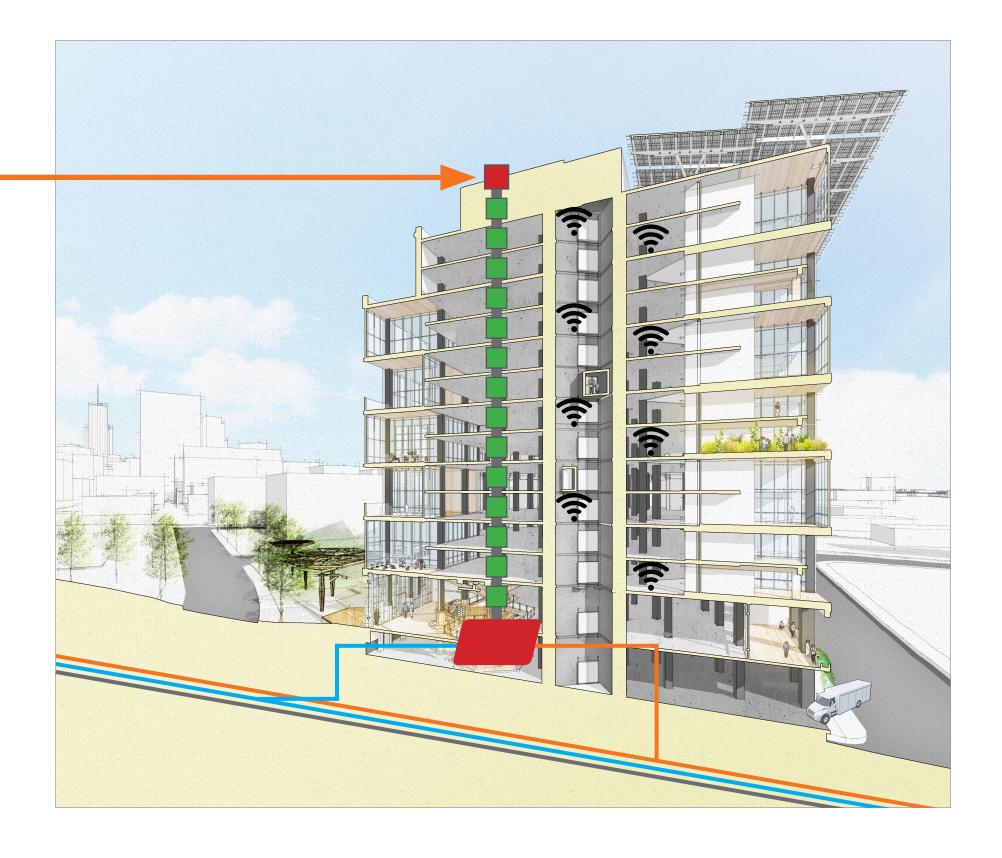


## Leasable Rooftop Antenna Array



#### Serves two purposes:

- 1. Provides the building with **incoming services**:
  - Emergency Responder Radio Communication System
  - Cellular Distributed Antenna
  - Satellite Television
- 2. Area may be **leasable** to local providers to locate Cellular and 5G radio services that serve nearby areas



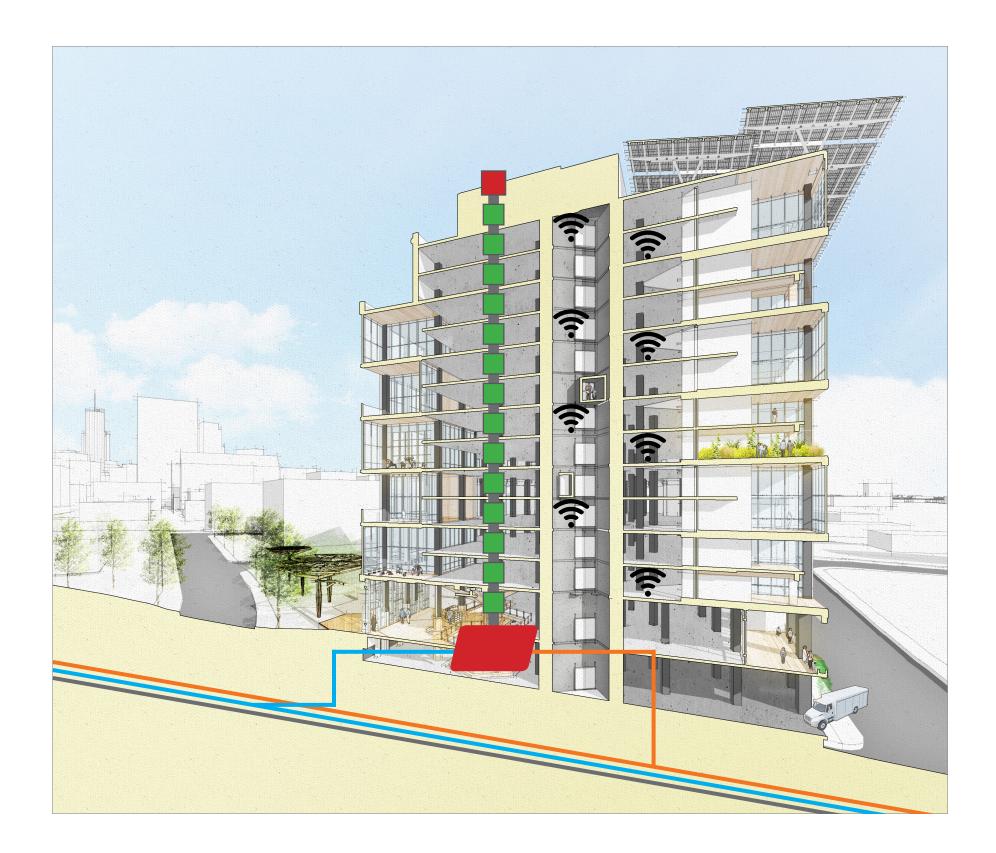




## Building Technology Network



- Building Technology Network (BTN) is an active routing and switching solution that is deployed early during construction.
- The system creates a foundation that allows smart equipment to be commissioned earlier and more predictably. Supports the following:
  - MEP systems
  - ° Lighting
  - Amenity Audiovisual
  - Amenity WiFi
  - ° Solar, PV Monitoring
- Once Deployed, BTN enables:
  - Easier deployment of Intelligent Flex Space services:
    - App-Based access for tenants to Access Control, Lighting, Shading, Amenity AV, Heating and Cooling
  - ° 5G Infrastructure (WiFi 6)
  - Secure Network for Building Technology Systems
  - Secure Network for IoT devices
  - Platform for Integration of Building Technology Subsystems

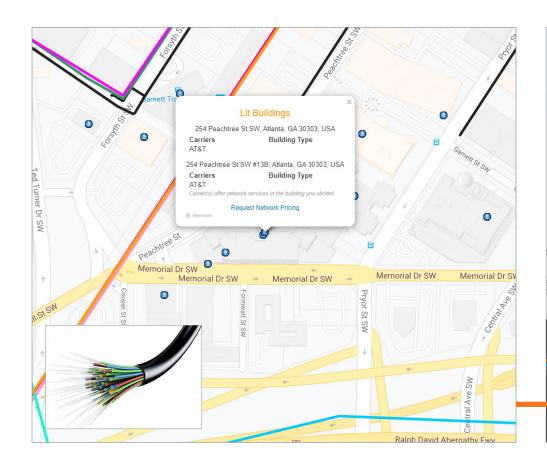


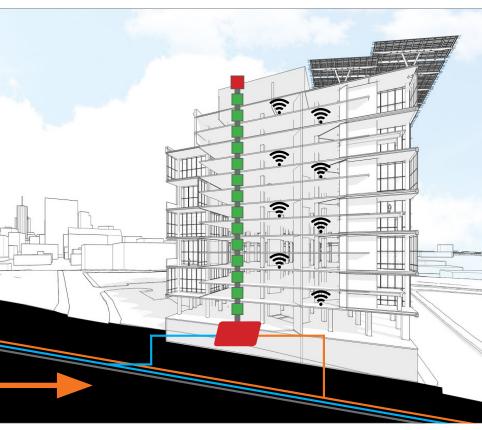




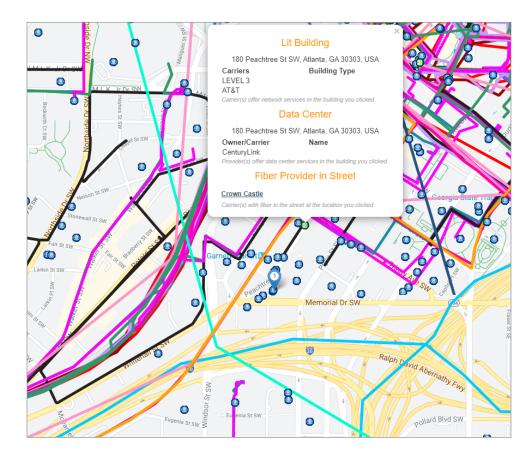
## Existing Surrounding Communication Infrastructure

The property is currently connected ("lit") by **AT&T fiber** 





Additional nearby provider options: Level 3 / Centurylink, BIRCH, Comcast, Zayo



Multiple nearby providers may enable redundant/ diverse connectivity which can enhance the viability of future 5G services and on-premises colocation / computing.





## Intelligent Flex Space

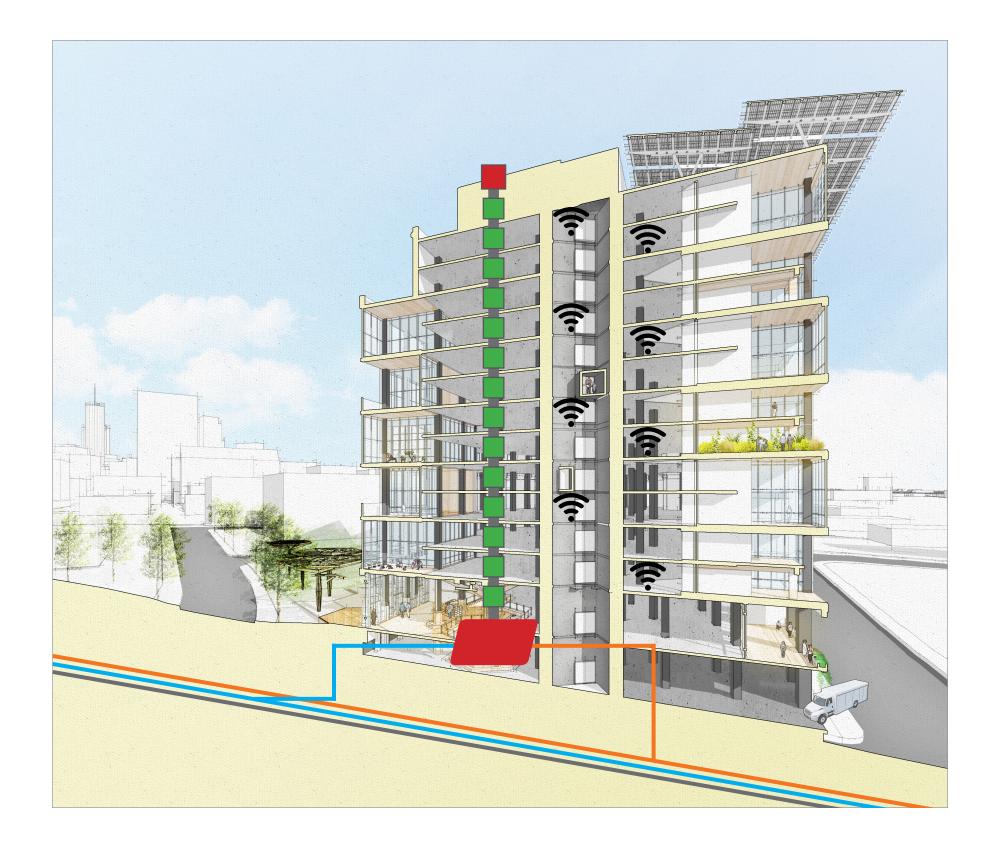


**Intelligent Flex Space:** A multi-use space that may serve as:

- Daily coworking
- A permanent home for small and medium businesses
- A "breakout space" for larger, anchor building tenants

Intelligent Flex Space is similar to a coworking center but takes advantage of improved technologies such as:

- Reliable Internet infrastructure
- Space for local servers and equipment
- Integrated Access Control
- Integrated lighting and climate controls





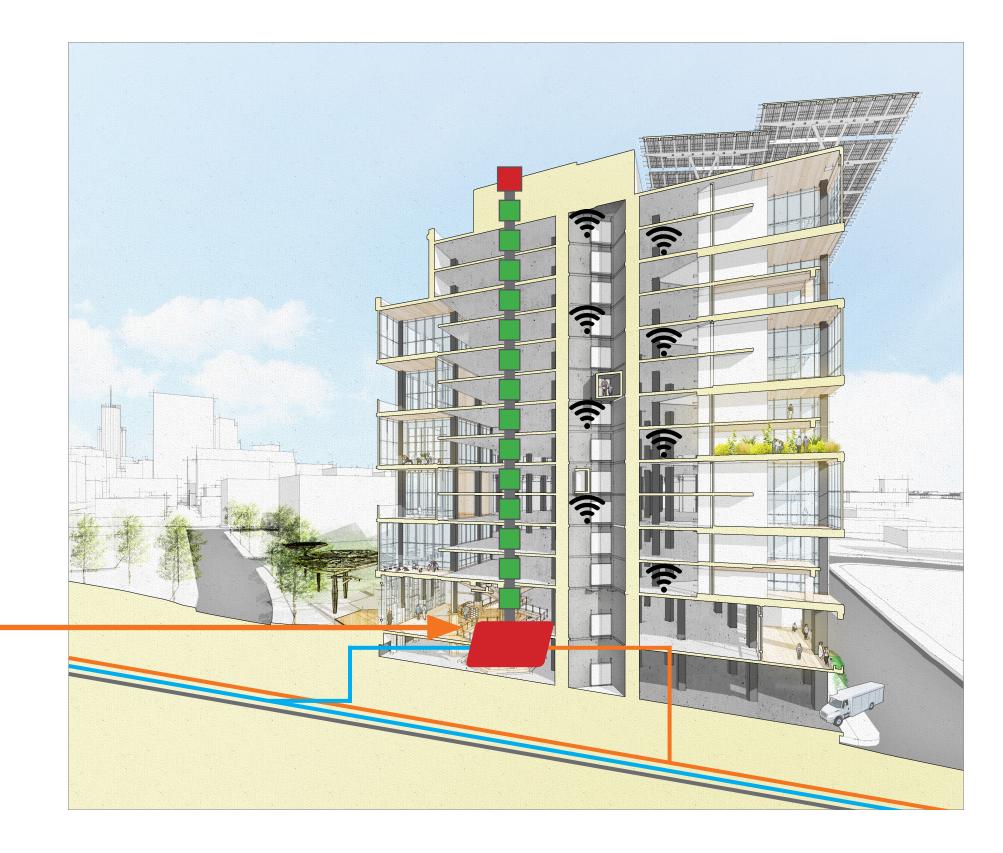


#### Data Center Recommendations



**Tier 2 Data Center:** Provides value to small and medium businesses. Less expensive to deploy.

- 99.749 % uptime
- Partial redundancy in power and cooling
  - UPS and Generator Backup
- Up to 22 hours of downtime per year
- Secure w/  $24 \times 7$ , 365 with Access Control System
  - Secure Cabinets
- Multiple Provider Options: Site is located near multiple providers which may be extended to the building at a reasonable cost.
  - ° AT&T Currently connected<sup>1</sup>



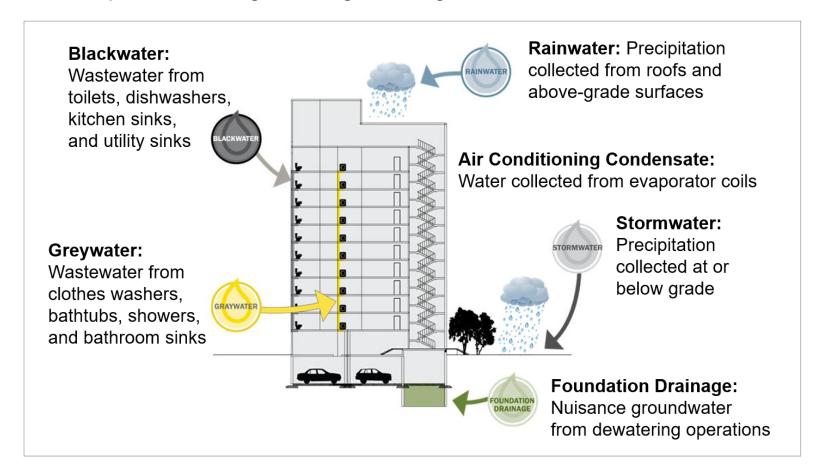
1 Source: Fiberlocator, A CCMI Business

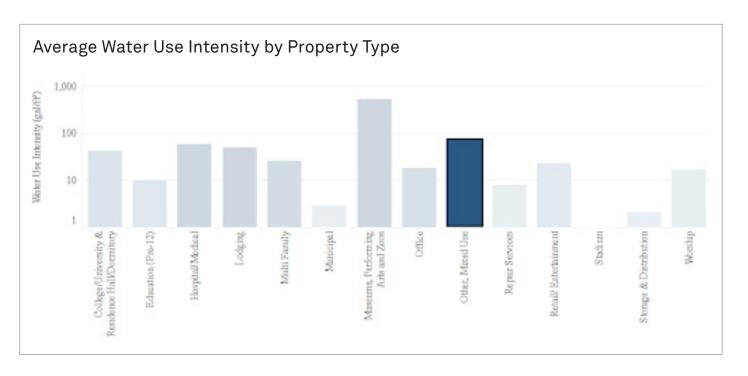


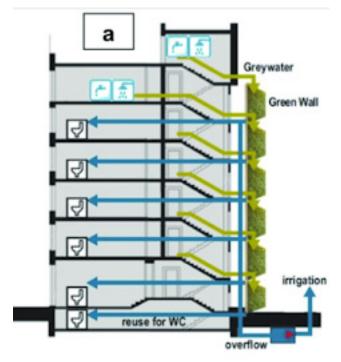


#### Water Story

Having a complete picture of the supplies and demands of water on site is key to effective strategies to manage water usage.





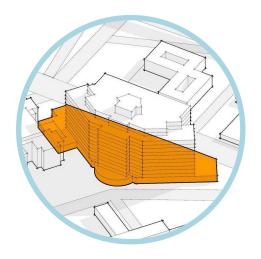








#### 4 DEVELOPMENT STRATEGIES



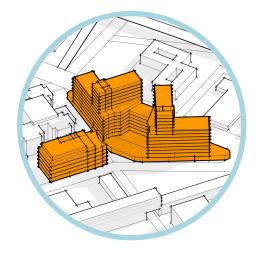
#1: EQUITY PODIUM

- Limit construction cost
- Reduced development period
- Strategic demolition
- Facade replacement
- Split tenancy Center for Equity and noncenter tenants
- Attract non-center tenants with complementary uses
- Create positive cash flow from non-center area to finance development of the Center
- Preserve option to expand Center in a second phase
- Tenant fit-out costs = \$77 \$177 / SF



#2: DOWNTOWN ANCHOR

- Incorporation of all desired programmatic uses
- Catalytic project for South Downtown
- The change of use carries complexity. Increased contingencies (time and money)
- Anticipated development costs and uses create a financing gap
- Creative financing structures can cover some development costs
- A bold project vision can attract additional resources (strategic partnerships, philanthropy)
- Tenant fit-out costs = \$77 \$177 / SF



#3: CENTER FOR EQUITY CAMPUS

- Demolition of the existing structure
- Incorporation of all desired programmatic uses
- Fresh start reduces construction complexity, development contingencies, and architectural compromises
- Significant opportunities for public-private partnerships, multi-phased development, and innovative ownership structures
- Relies heavily on the strength of financial/ transactional deal-making
- Tenant fit-out costs = \$77 \$177 / SF

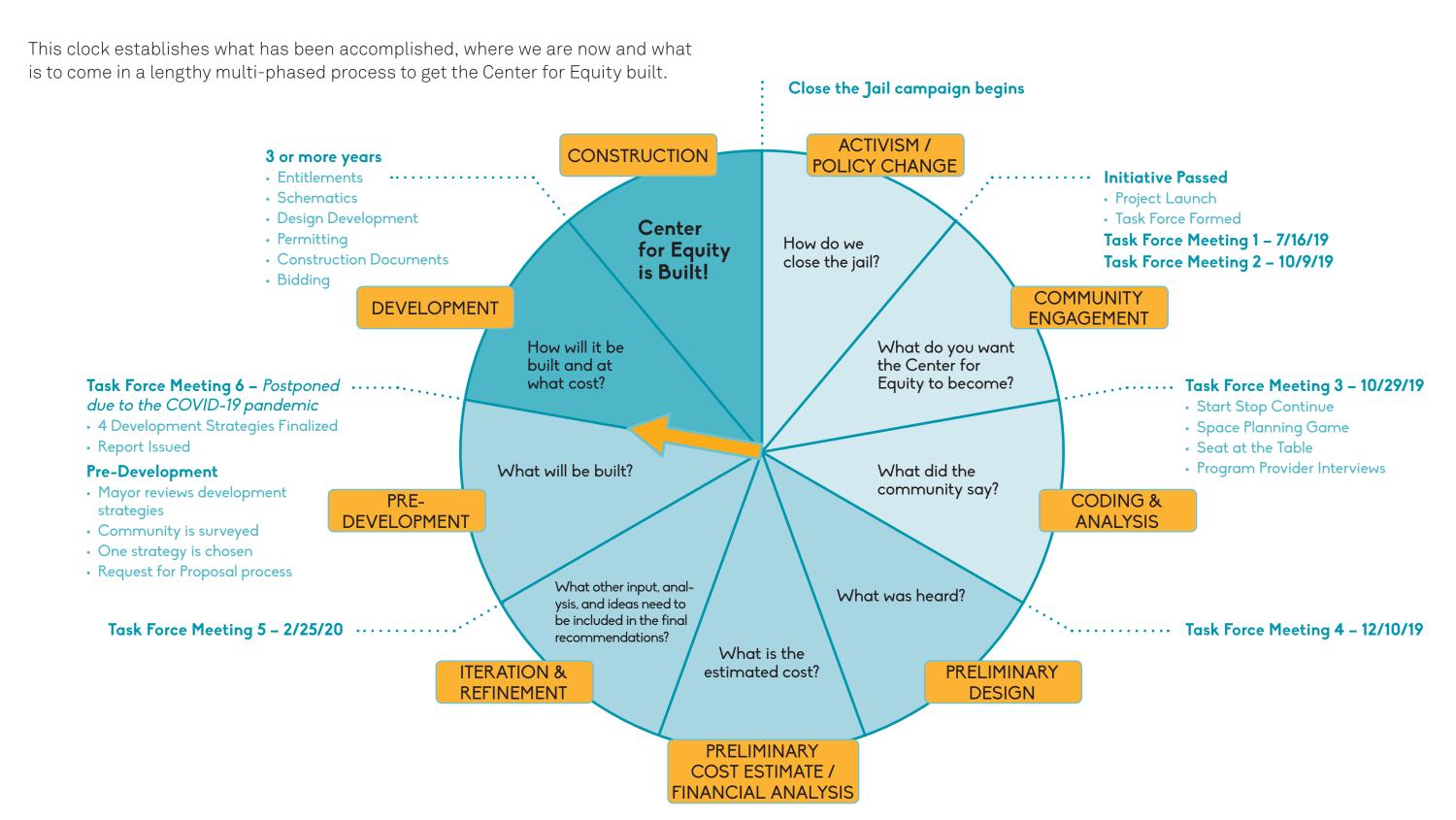


#4:
DISTRIBUTED EQUITY

- ACDC is demolished and site is developed as a park, memorial, urban farm or seed bank
- Service model pivot. A decentralized network of smaller Centers for Equity replaces the concept of a single center.
- Site selections could be based upon which communities were most impacted by ACDC and would most benefit from accessible resources.
- Smaller, neighborhood-oriented Centers improve ability to execute by reducing the execution risks associated with large-scale projects, while offering greater flexibility to customize by neighborhood
- Through the development of the modules, a small format Center for Equity is estimated to be 75-100K SF (20% of the size of the current ACDC)
- Depending on desired site locations, Centers could be new construction or repurposed buildings
- The current ACDC site could pilot the small format Center for Equity with new construction



#### WHAT TIME IS IT NOW?





## DEVELOPMENT THEMES // Moving Toward Iteration & Refinement

#### How do we choose a development option?

- Intention. Jail closure, phase development, catalytic growth
- **Marketing.** Attracting interest from community, municipal leadership, tenants, investors, and lenders
- Site Value. Decision-making around land use
- Option Value. Creating flexibility and viable alternatives
- **Risks.** Weighing construction complexity, development contingencies, architectural compromises
- Costs. Pairing resources with priorities
- **Speed.** Urgency, creating value, time-value of money
- **Mixed Uses.** Non-center tenants offer revenue, but at a cost (space, development cost, etc.)
- Financial Sustainability. Covering operating costs and total development costs
- **Vision Alignment.** Tracking progress of the project development from the 2019 resolution to now

#### What's next?

- It is anticipated that there will be an iterative process to refine the four major design components: programming, architecture, real estate finance, and policy implications.
- Given the inevitable trade-offs that come with a project of this scale, the iterative design process will lift intentions to the surface; some may see the project as foremost about the jail closure while others may see the project as a catalytic first move to reinvigorate the South Downtown neighborhood.



# Center for Equity // Final Feasibility Report

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