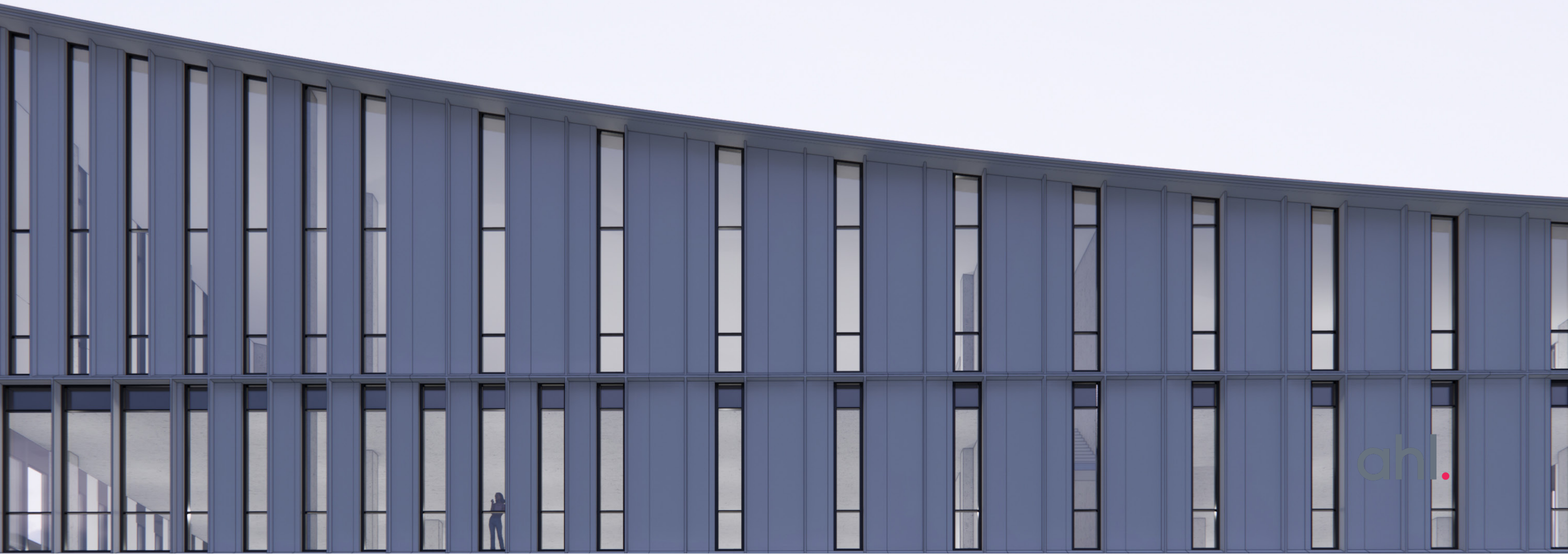


# Kahului Civic Center

Concept Design/ 11.15.2024



ahl.

## Team

### Client

**DAGS** (Department of  
Accounting and General Services)

Gordon Wood, Eric  
Nishimoto, Dora Choy, Joseph  
Earing, Charles Alombro

### User Group

**Hawaii State Library System**  
Stacey Aldrich, Mallory Fujitani

**Maui Community School for  
Adults - MCSA**

Helen Sanpei, Kurt Ginoza

### Design Architect

**AHL** (Architects Hawaii Ltd.)

Dan Sullivan, Si Kim, Ina Wong,  
Jing Zheng, Phong Lam

### Consultants

Civil: **Austin Tsutsumi & Associates**

Electrical: **WSP Engineering**

Landscape: **PBR Hawaii & Associates, Inc.**

Lighting: **Designing With Light**

Mechanical: **WSP Engineering**

Plumbing: **WSP Engineering**

Structure: **WSP Engineering**



1.0

# Vision

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The Maui Civic Center aspires to be more than just a building—it is a vision for Maui’s future, an enduring landmark of civic pride, sustainability, and community spirit. Rising from the heart of the community, this center will be a place where tradition and innovation blend seamlessly to celebrate and empower the unique identity of Maui. It stands as a beacon of unity, embodying the strength, resilience, and shared values of the people of Maui.

# Guiding Principles

At its core, the Kahului Civic Center, with its innovation hub, "The Wave," represents a commitment to community-centric design, fostering spaces for learning, interaction, and collaboration. It unites Maui residents in a shared vision of resilience, sustainability, and cultural pride, setting a new benchmark for responsible development that future projects can aspire to. More than just a civic space, the center honors Civic Identity by serving as a powerful visual symbol of community values, where people from all walks of life can gather, celebrate, and connect. It is envisioned as a defining feature of Maui's civic landscape—a space where cultural traditions are celebrated, public discourse thrives, and community bonds are strengthened.

The Civic Center also exemplifies sustainable development, harmonizing modern technology with traditional wisdom to address pressing environmental and social challenges. The design incorporates renewable resources, advanced energy systems, and climate-responsive features to minimize its ecological footprint, ensuring it stands as a model for environmentally conscious architecture across Hawaii and beyond.

Rooted in Maui's land, history, and volcanic geography, the center honors both cultural heritage and environmental stewardship.

Embracing biophilic principles, it connects occupants to the beauty of Maui's natural landscape, incorporating native materials, green spaces, and natural light to create a harmonious environment that nurtures both community and nature. This integration reflects the spirit of Maui, offering a daily reminder of the island's unique ecological heritage and fostering a sense of peace, well-being, and reverence for the land.

Security, accessibility, and transparency are woven into the center's design, cultivating trust and fostering a shared sense of ownership among the community. Open, adaptable spaces ensure the Civic Center remains responsive to Maui's evolving needs, providing a versatile environment that can accommodate new technologies, shifting priorities, and diverse public uses for generations to come.

Ultimately, the Maui Civic Center is dedicated to the people of Maui, honoring their past, embodying their present, and paving the way for a resilient, inclusive, and sustainable future. As a powerful symbol of progress deeply rooted in tradition, the center blurs the lines between built and natural environments, creating a legacy of hope, unity, and opportunity for all who call Maui home.



# Project Site



# Culture

Maui's culture is a vibrant blend of native Hawaiian traditions and influences from the diverse communities that have made the island their home over centuries. Surfing, or he'e nalu, holds a central place, with origins deeply rooted in ancient Hawaiian practices. Originally a sacred activity for Hawaiian royalty, surfing was a way to connect with the ocean and demonstrate skill and spiritual harmony with nature. Today, it remains an essential part of island life and a cultural symbol of resilience and freedom.

In addition to surfing, hula is a cherished cultural practice on Maui. This traditional dance, accompanied by chanting or Hawaiian music, is more than an art form; it's a storytelling medium that preserves history, mythology, and family heritage. Through graceful, expressive movements, dancers celebrate and pass down the island's ancestral knowledge, nature, and spirituality.

Agricultural traditions from the plantation era are also woven into Maui's cultural identity. The sugar and pineapple plantations that flourished in the late 19th and early 20th centuries brought immigrants from Japan, China, the Philippines, Portugal, and Puerto Rico. These communities brought their own customs, foods, and celebrations, creating a multicultural legacy that remains alive in Maui's festivals, cuisine, and family gatherings.

Hawaiian language and native arts continue to be essential parts of Maui's culture as well. Efforts to revitalize the Hawaiian language, along with crafts like kapa (bark cloth making), lei making, and lauhala weaving, help preserve the island's heritage. Practitioners of these arts work to pass on the knowledge to new generations, keeping the traditions of Maui's ancestors alive.

Ohana (family) and aloha (love and respect) are fundamental Hawaiian values that permeate daily life on Maui. Ohana reflects the importance of family bonds, community, and caring for one another, while aloha embodies kindness, respect, and harmony with others and the land. These values create a strong sense of community on the island, making Maui not just a beautiful place but a community-centered culture that welcomes all with warmth and respect.

1. Surfing at Jaws
2. Hula Dance
3. 19th Century Pineapple Farming
4. Kapa Making
5. Family Luaus
6. Ohana, Community Gathering

1



2



3



4



5



6



# Nature

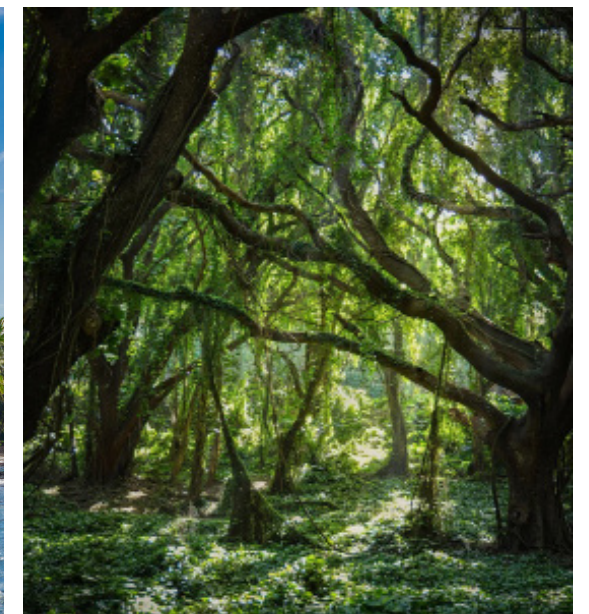
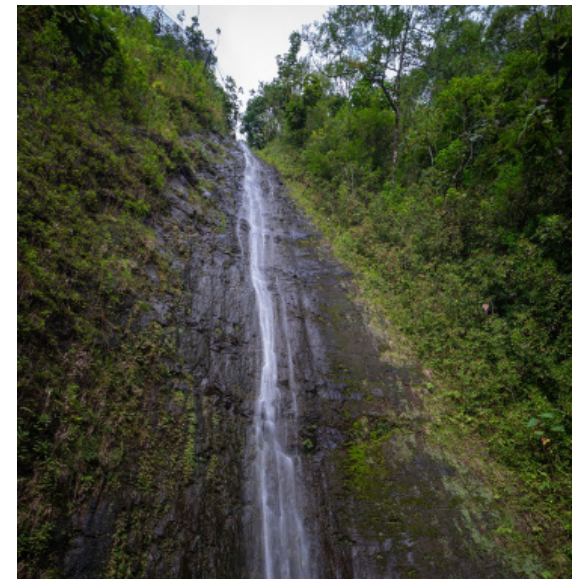
Maui's natural environment is shaped by a powerful synergy of ocean waves, expansive skies, steady winds, and striking volcanic formations, creating a landscape that captivates and inspires. The ocean waves surrounding Maui are central to island life, ranging from gentle lapping waters to powerful swells that draw surfers from around the world. These waves represent not only recreation but also a natural force that continuously reshapes the shoreline, grounding Maui's people in a deep connection to the sea.

Above, the gradient of the Maui sky shifts dramatically throughout the day, from soft morning hues to the golden light of sunset, finally deepening to a star-strewn night sky. This vast sky is an ever-changing canvas that complements Maui's diverse landscapes, setting a stunning backdrop for island life.

The trade winds, blowing consistently from the northeast, bring cooling breezes, carry moisture to rainforests, and sculpt the island's landscapes. These winds are an integral part of Maui's climate, balancing temperatures and supporting the island's unique ecosystems that flourish under their influence.

Finally, Maui's volcanic formations, particularly Haleakalā, stand as monuments to the island's ancient origins. This massive shield volcano and its vast crater are vivid reminders of Maui's fiery beginnings. Volcanic features, including ancient lava flows and black sand beaches, add depth and drama to the landscape, anchoring the island's natural beauty in its geological roots. Together, these elements—waves, sky, wind, and volcanic formations—define Maui's breathtaking nature, inspiring a sense of reverence and connection to the powerful forces that shape the land.

1. Lahaina Banyan Tree
2. Road to Hana
3. Haleakala National Park
4. Manoa Falls
5. Īao Valley State Park
6. Central Valley Isthmus of Maui
7. Punalu'u Black Sand Beach
8. Lush Forest in Maui



# Architecture

The evolution of culture and architecture in Maui reflects a deep connection to the land and a dynamic blend of influences over time. Beginning with traditional Hawaiian structures like hale, which harmonized with the environment, Maui's architecture has adapted with each new era. The arrival of missionaries introduced colonial-style churches, while the plantation era brought simple, practical cottages that housed a diverse immigrant workforce. Charles Dickey's work in the early 20th century combined Hawaiian elements with Western styles, creating the iconic Dickey roof that embodies Hawaii's climate and cultural sensitivity. The mid-century tourism boom led to resort-style, open-air designs that highlighted Maui's natural beauty. Today, Maui's architecture embraces sustainability and biophilic principles, integrating modern technology while honoring the island's heritage. This architectural journey mirrors Maui's cultural resilience and commitment to preserving tradition, adapting to change, and connecting people with nature.

1. Heiau (Hawaiian temples) Pi'ilanihale Heiau - Stone Temple (Pre-Contact and Early Hawaiian Architecture)
2. Holy Ghost Catholic Church, Kula (Colonial Influence and Missionary Style, 19th Century)
3. Puunene Sugar Mill (Plantation Era, Late 19th to Early 20th Century)
4. Wailuku Public Library (Territorial Style and the Dickey Roof, Early 20th Century )
5. The Kahului Airport (OGG) (Mid-Century Modern, 1950s-1970s)
6. Andaz Maui at Wailea Resort, Wailea (Contemporary Sustainable and Biophilic Design (2000s-Present)

1



2



3



4



5



6





# Design Inspiration

## Form

The sweeping roof of the Maui Civic Center flows like a powerful wave, not only capturing the dynamic energy of the ocean but also honoring the region's history as a place where the ali'i once surfed the sacred waters of Nā Wai 'Ehā. This connection to the ocean reflects the fluid movement that has long shaped both the coastline and the cultural heritage of the island.

## Gradient

This gradient design reflects the interplay of light and shadow throughout the day, creating a living canvas that changes with the movement of the sun. It symbolizes the harmonious blending of the island's elements—land, sea, and sky

## Motion

Inspired by the Makani-lawe-malie, the 'wind that takes it easy,' the design breathes with the gentle movement of the wind as it flows from the ocean to the land. This dynamic energy creates a sense of motion throughout the building, carrying the essence of Maui's coastal environment. The rhythm of nature is seamlessly integrated into the architecture, making the building feel alive and constantly in flux, just as the wind shapes the landscape around it.

## Enduring

Inspired by volcanic formations, the building's solid base symbolizes stability and resilience, anchoring it to Maui's landscape. This strong foundation not only enhances structural integrity but also visually connects the building to the island's geological roots, balancing strength with harmony.



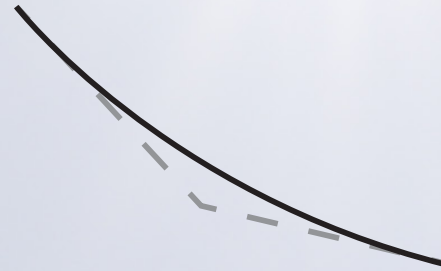
West Facade Faces Kane St.

*Illustrative image demonstrating spatial quality only; details have not yet been refined.*

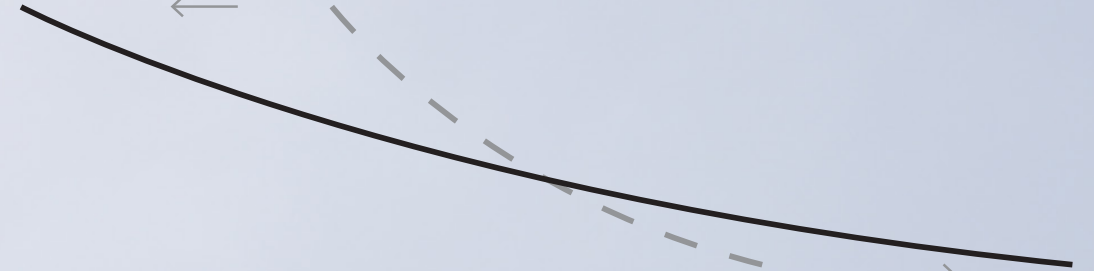
# Roof Formation



A Double Sloped Dickey Roof



A Single Curved Roof Form



A Stretched Curved Roof Form

The roof design of the Maui Civic Center is a contemporary tribute to the traditional Dickey roof, an architectural form integral to Hawaii's design heritage. Originating in the early 20th century, the Dickey roof was developed to harmonize with Hawaii's tropical climate and cultural landscape, combining steep slopes with wide eaves for optimal ventilation and sun protection. Inspired by this iconic style, we transformed the classic double-pitch of the Dickey roof into a continuous, sweeping curve that stretches across the building's length,

embodying the fluidity of a wave and reflecting Maui's coastal essence. This reimagined form honors both the island's architectural tradition and natural beauty, seamlessly blending cultural legacy with a forward-looking, resilient design uniquely suited to Hawaii.



**The Ever-Changing Facade**

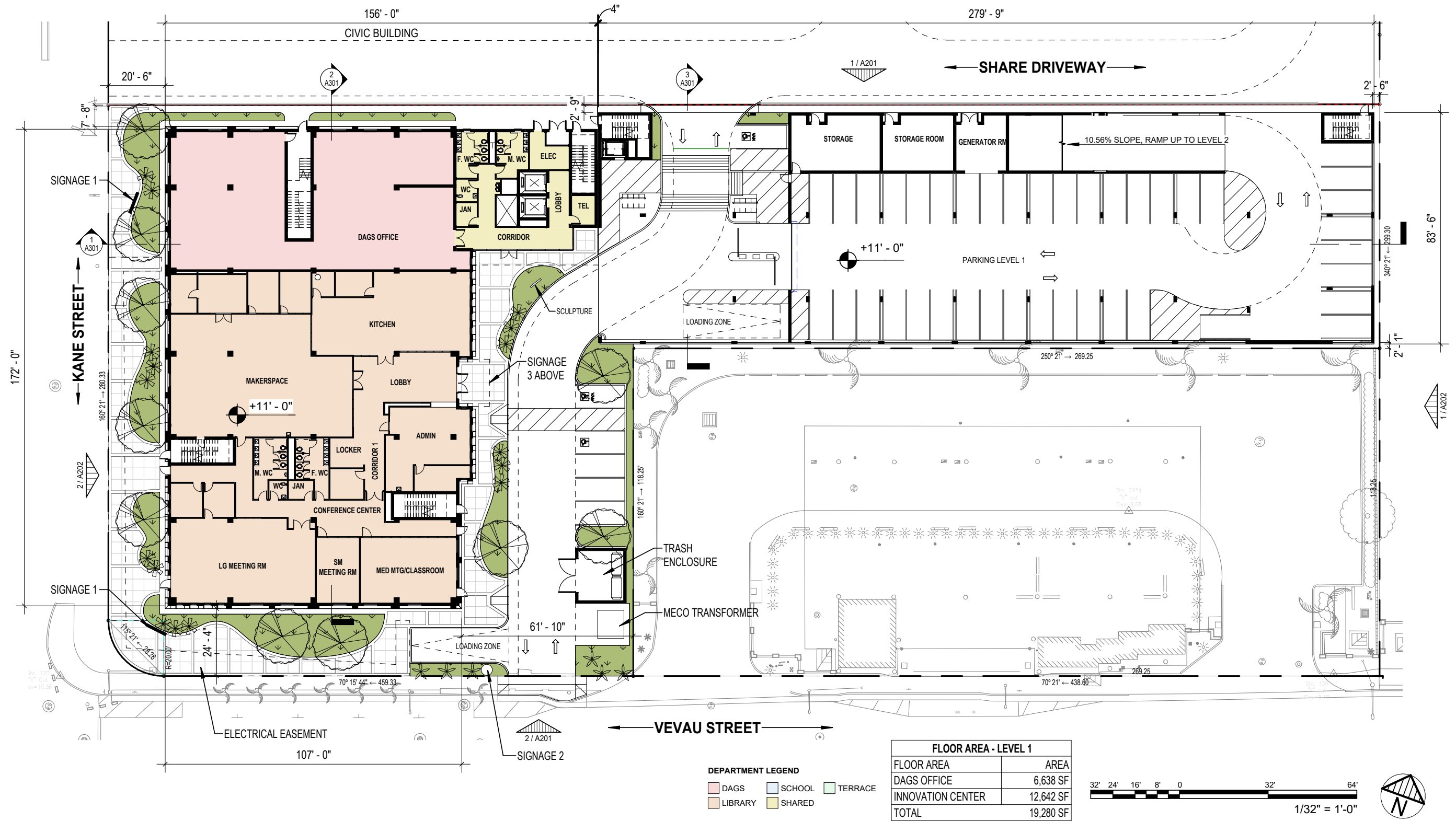
*Illustrative image demonstrating spatial quality only; details have not yet been refined.*

# Overview

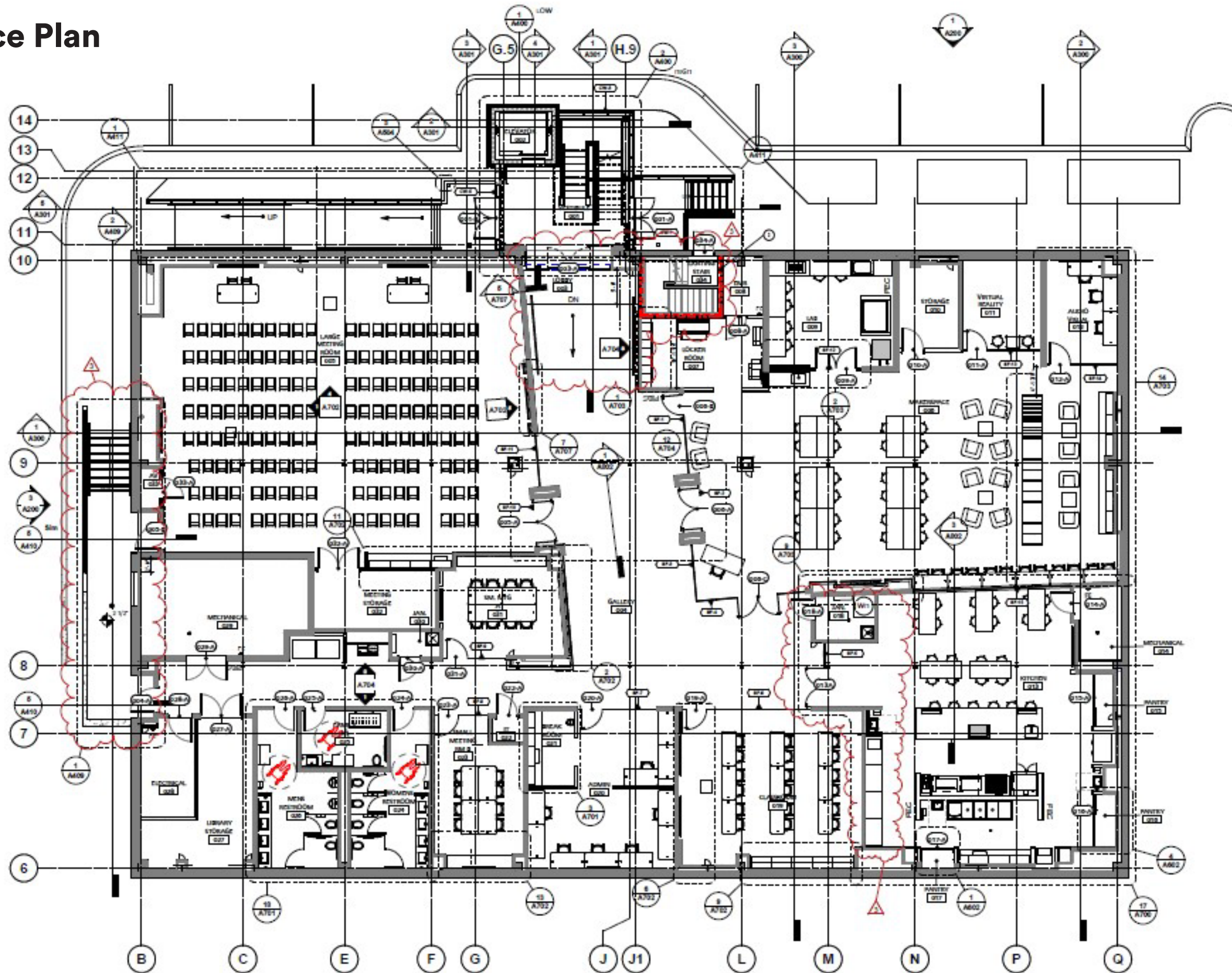
<b>Ground Floor</b>	<b>19,600 SF</b>
Innovation Center	12,650 SF
Office	7,000 SF
<b>2nd Level</b>	<b>17,000 SF</b>
School	9,000 SF
Office	8,000 SF
<b>3rd Level</b>	<b>17,000 SF</b>
Office	17,000 SF
<b>4th Level</b>	<b>17,000 SF</b>
Office	17,000 SF
<b>4th Level Mezzanie</b>	<b>1,800 SF</b>
Office	1,800 SF
<b>Total</b>	<b>± 72,000 SF</b>



# Ground Level Plan



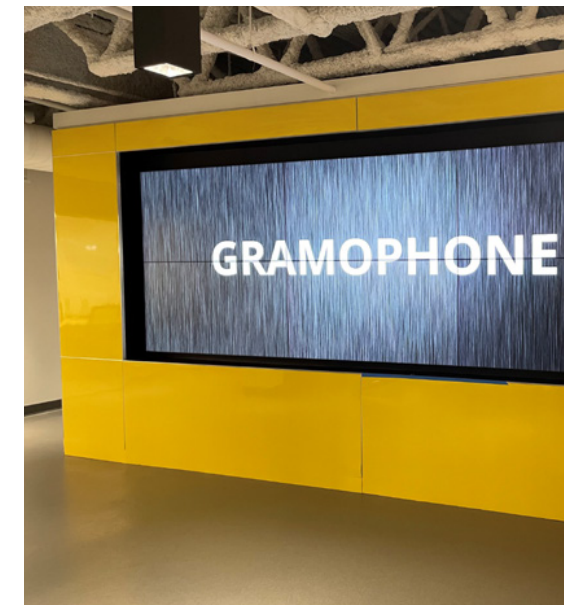
# Reference Plan



# Reference Images



Entrance



Entry



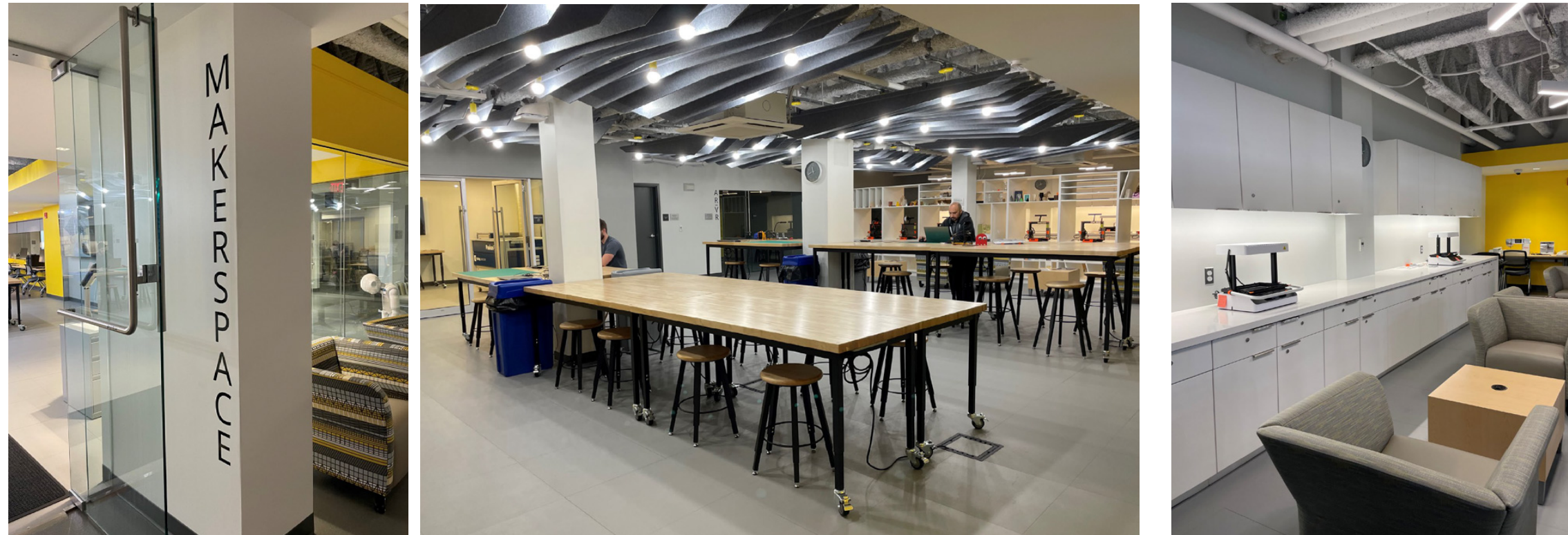
Large Meeting Room



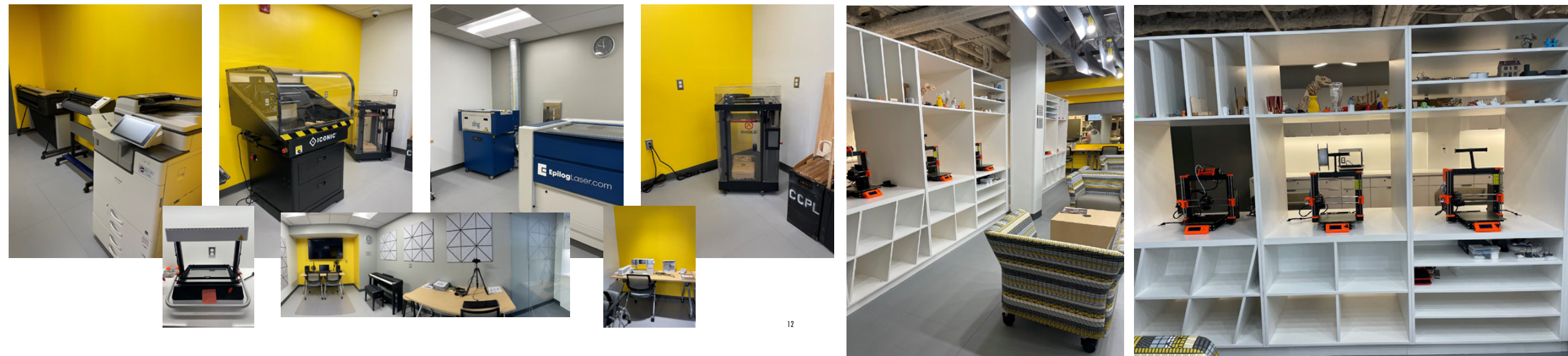
Small Meeting Room



# Reference Images



Makerspace



Makerspace Equipment Examples

# Reference Images

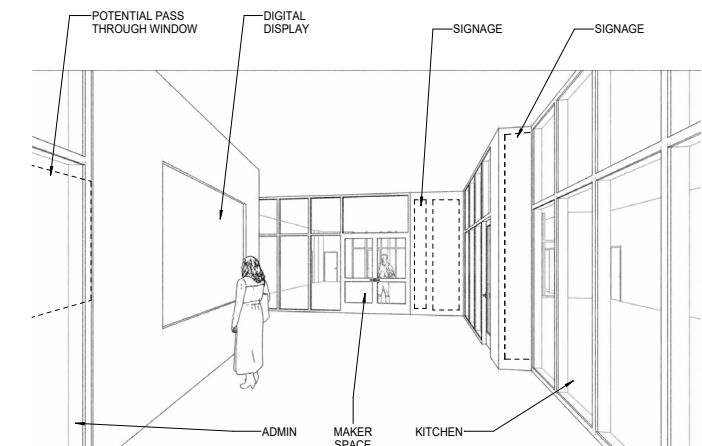
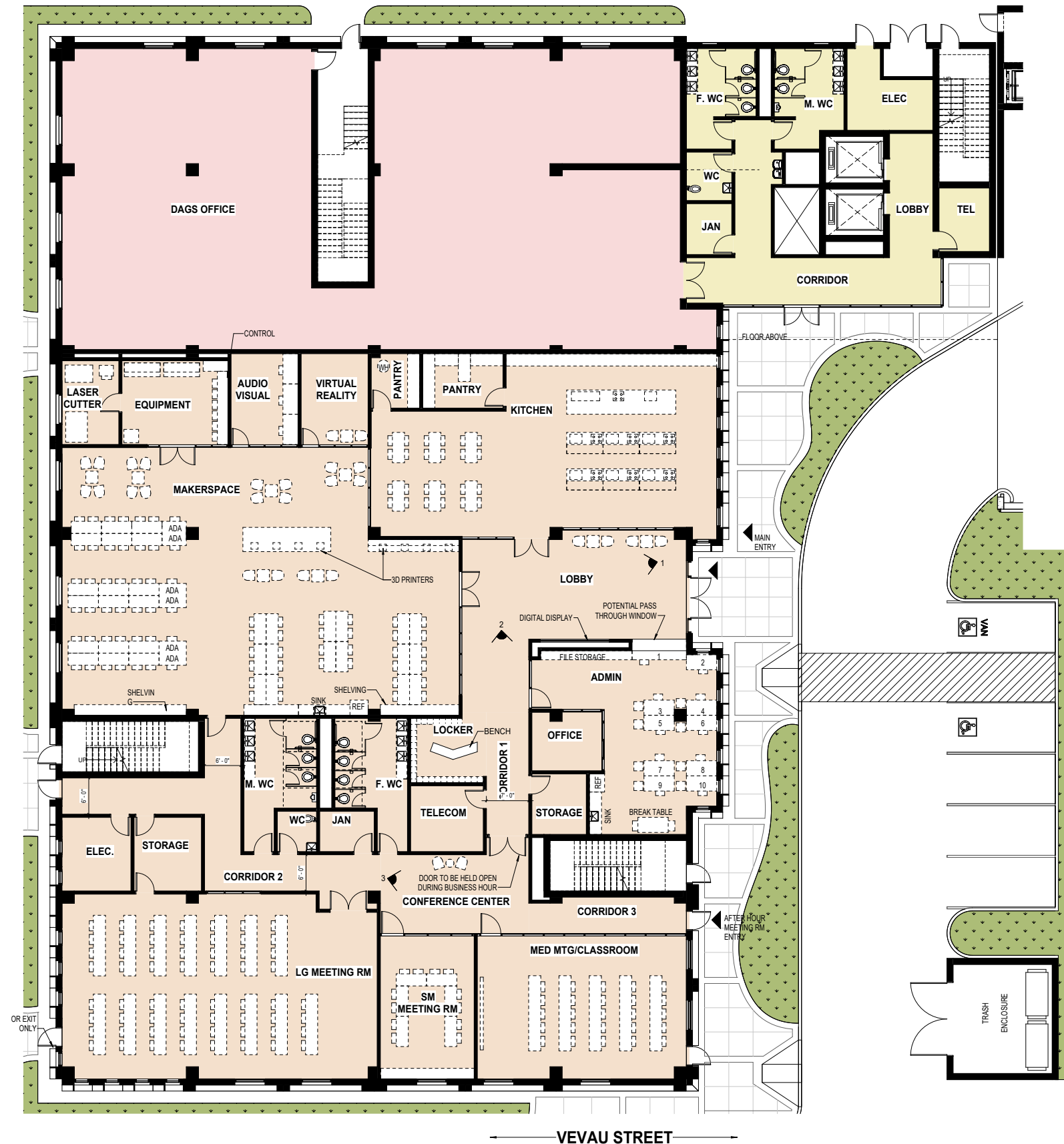


14

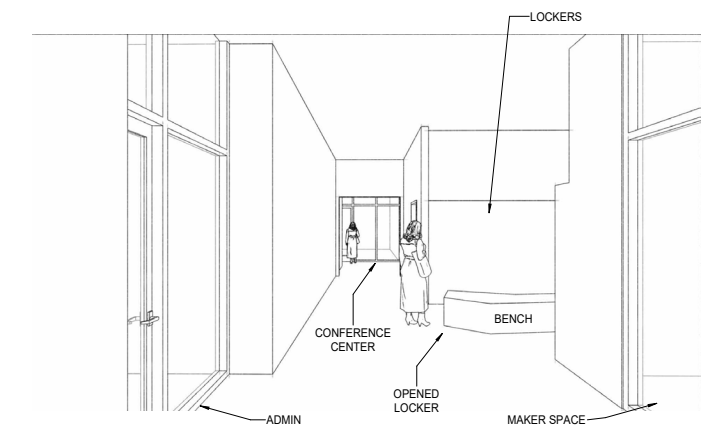


Kitchen

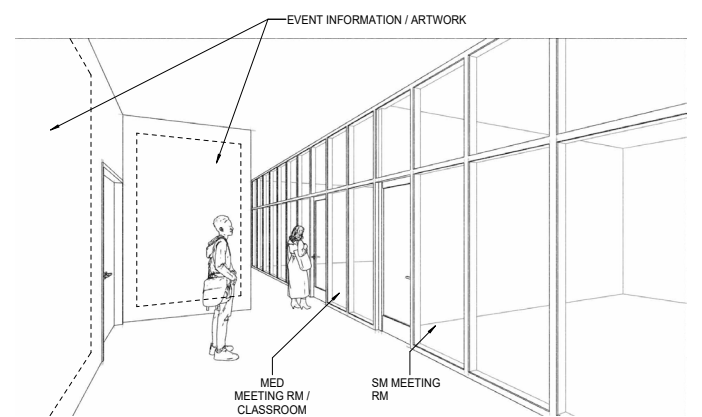
# Enlarged Building Ground Level Plan



VIEW 1 - LOBBY



VIEW 2 - CORRIDOR 1



VIEW 3 - CONFERENCE CENTER

NOTE: CEILING TO BE AT 12 FT FROM FLOOR FINISH

**DEPARTMENT LEGEND**

- DAGS
- SCHOOL
- TERRACE
- LIBRARY
- SHARED



T H E W A V E

Library Entry

*Illustrative image demonstrating spatial quality only; details have not yet been refined.*



Lobby Space

*Illustrative image demonstrating spatial quality only; details have not yet been refined.*





## Maker Space

*Illustrative image demonstrating spatial quality only; details have not yet been refined.*



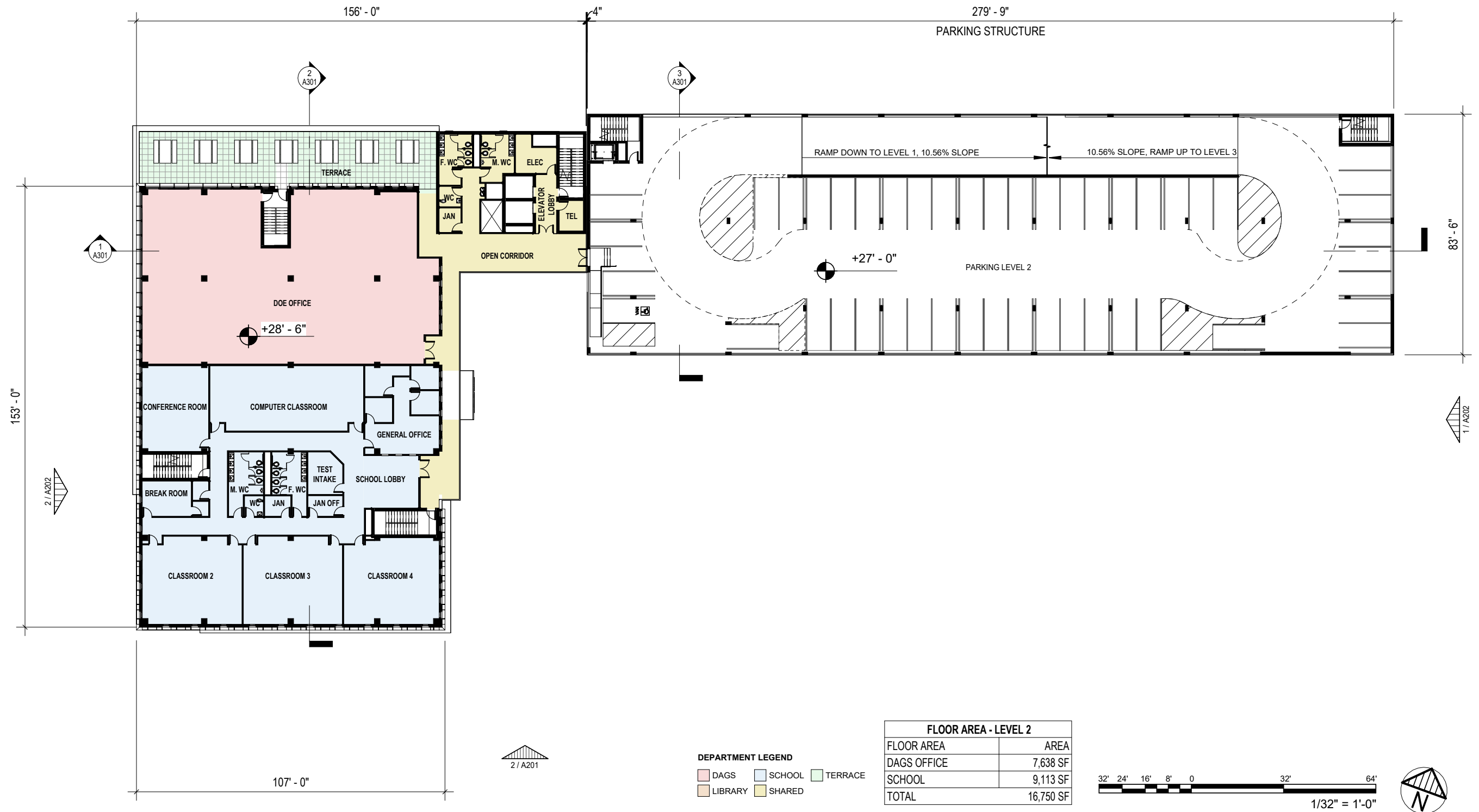


Meeting Room Space

*Illustrative image demonstrating spatial quality only; details have not yet been refined.*

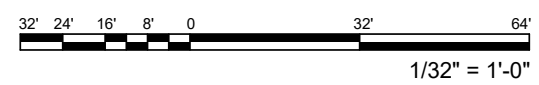


# 2nd Level Plan

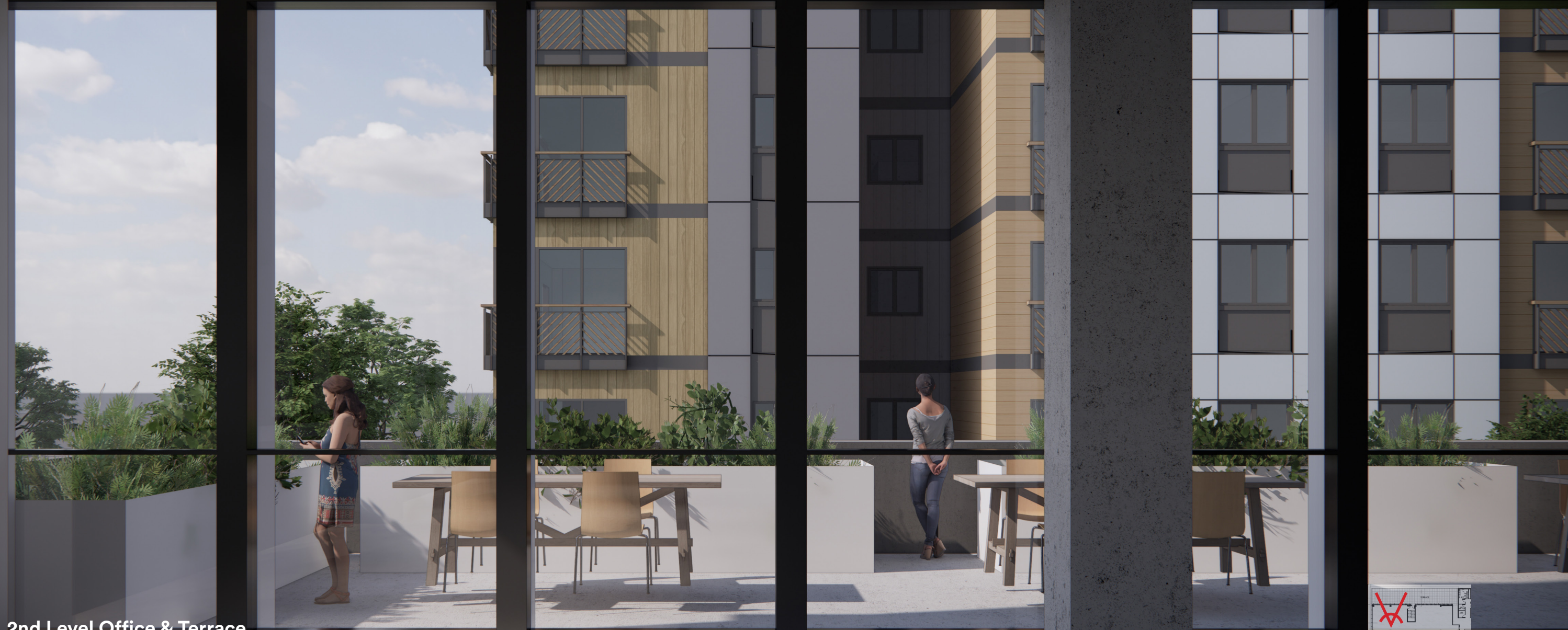


FLOOR AREA - LEVEL 2	
FLOOR AREA	AREA
DAGS OFFICE	7,638 SF
SCHOOL	9,113 SF
<b>TOTAL</b>	<b>16,750 SF</b>

DEPARTMENT LEGEND			
<span style="display:inline-block; width:10px; height:10px; background-color: #f08080; border:1px solid black;"></span>	DAGS	<span style="display:inline-block; width:10px; height:10px; background-color: #add8e6; border:1px solid black;"></span>	SCHOOL
<span style="display:inline-block; width:10px; height:10px; background-color: #90ee90; border:1px solid black;"></span>	TERRACE	<span style="display:inline-block; width:10px; height:10px; background-color: #ffff00; border:1px solid black;"></span>	SHARED







2nd Level Office & Terrace

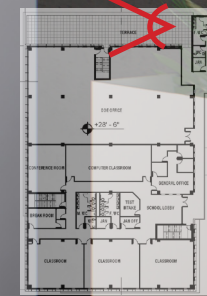
*Illustrative image demonstrating spatial quality only; details have not yet been refined.*





2nd Level Terrace

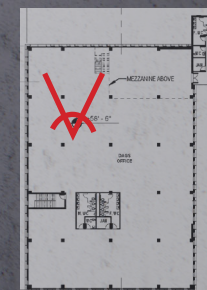
*Illustrative image demonstrating spatial quality only; details have not yet been refined.*





2nd Level Open Corridor

*Illustrative image demonstrating spatial quality only; details have not yet been refined.*



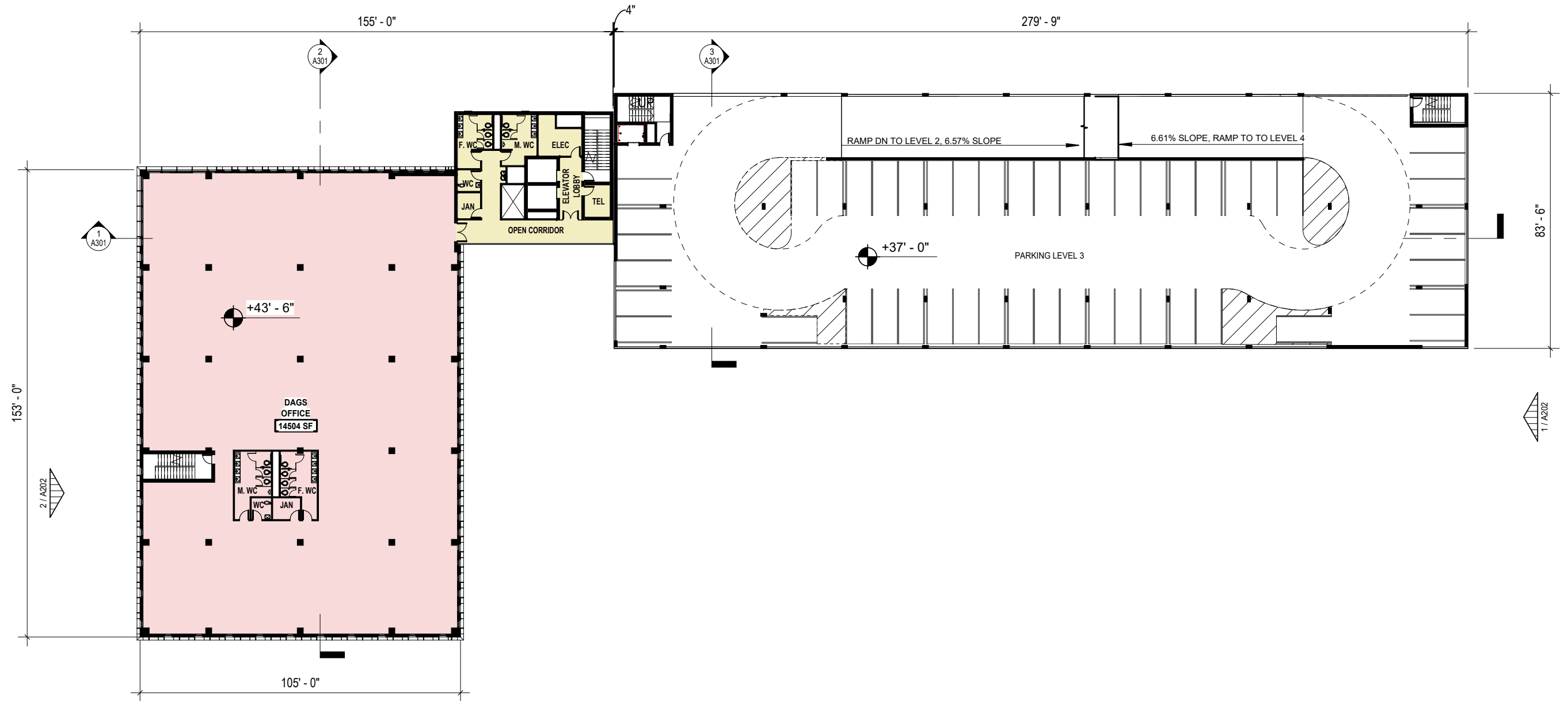


2nd Level Open Corridor

*Illustrative image demonstrating spatial quality only; details have not yet been refined.*



# 3rd Level Plan



**DEPARTMENT LEGEND**

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<span style="display:inline-block; width:10px; height:10px; background-color: #f5deb3; border:1px solid black;"></span> LIBRARY	<span style="display:inline-block; width:10px; height:10px; background-color: #fffacd; border:1px solid black;"></span> SHARED	

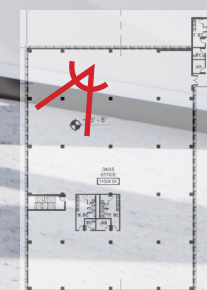
FLOOR AREA - LEVEL 3	
FLOOR AREA	AREA
DAGS OFFICE	17,130 SF
<b>TOTAL</b>	<b>17,130 SF</b>



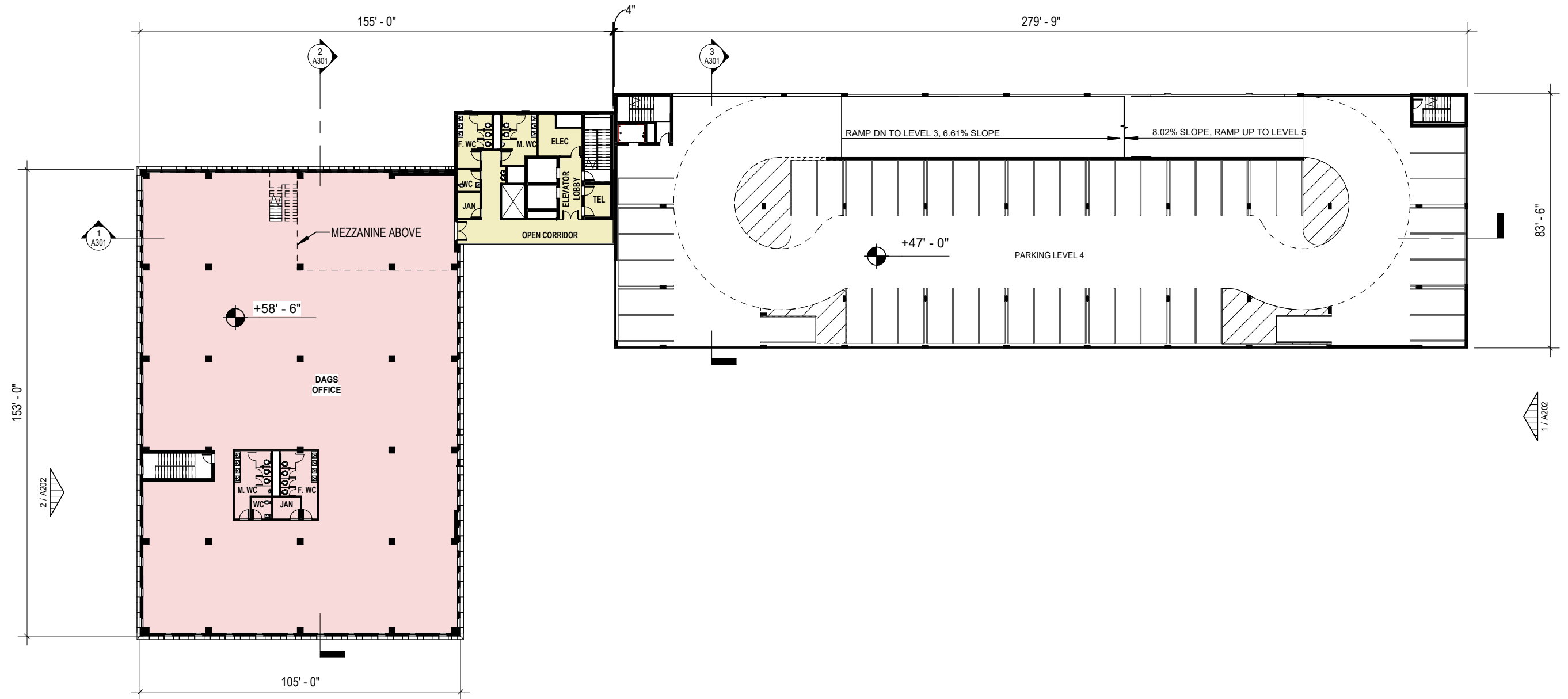


3rd Level Office Space

*Illustrative image demonstrating spatial quality only; details have not yet been refined.*



# 4th Level Plan

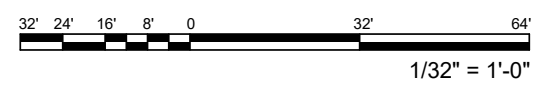


**DEPARTMENT LEGEND**

DAGS	SCHOOL	TERRACE
LIBRARY	SHARED	

**FLOOR AREA - LEVEL 4**

FLOOR AREA	AREA
DAGS OFFICE	17,130 SF
TOTAL	17,130 SF





## 4th Level Office Space

*Illustrative image demonstrating spatial quality only; details have not yet been refined.*





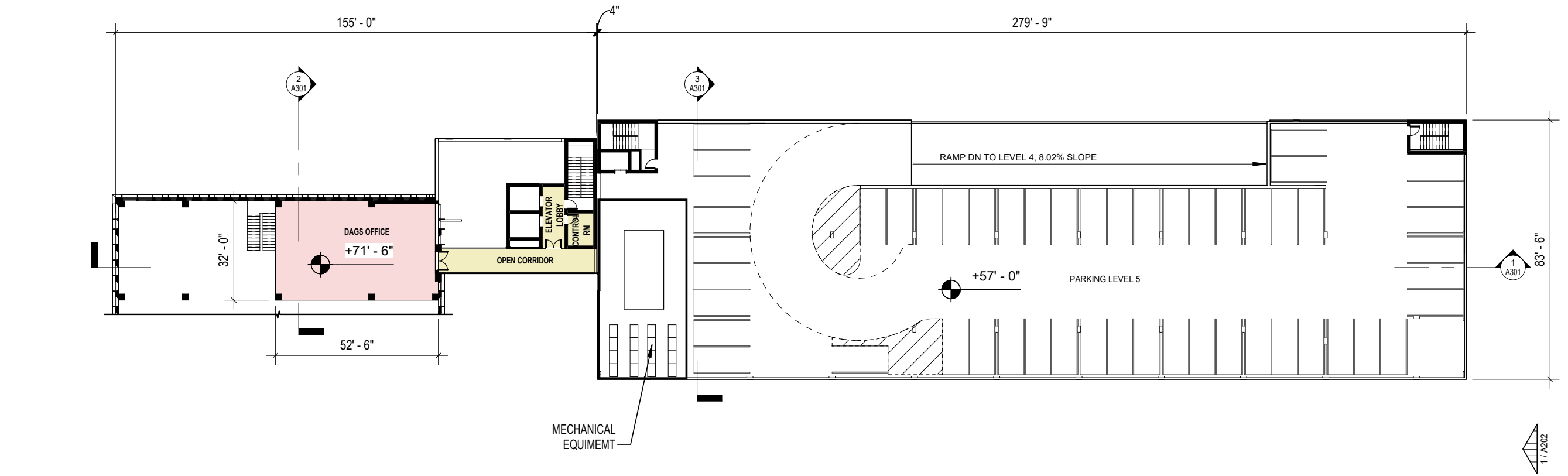


4th Level Open Corridor

*Illustrative image demonstrating spatial quality only; details have not yet been refined.*



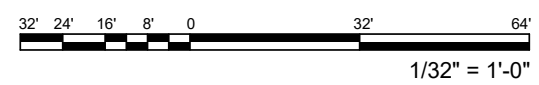
# 4th Level Mezzanine



**DEPARTMENT LEGEND**

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<span style="display:inline-block; width:10px; height:10px; background-color: #f5deb3; border:1px solid black;"></span> LIBRARY	<span style="display:inline-block; width:10px; height:10px; background-color: #fffacd; border:1px solid black;"></span> SHARED	

FLOOR AREA - MEZZANINE	
FLOOR AREA	AREA
DAGS OFFICE	151 SF
DAGS OFFICE	1,687 SF
<b>TOTAL</b>	<b>1,838 SF</b>

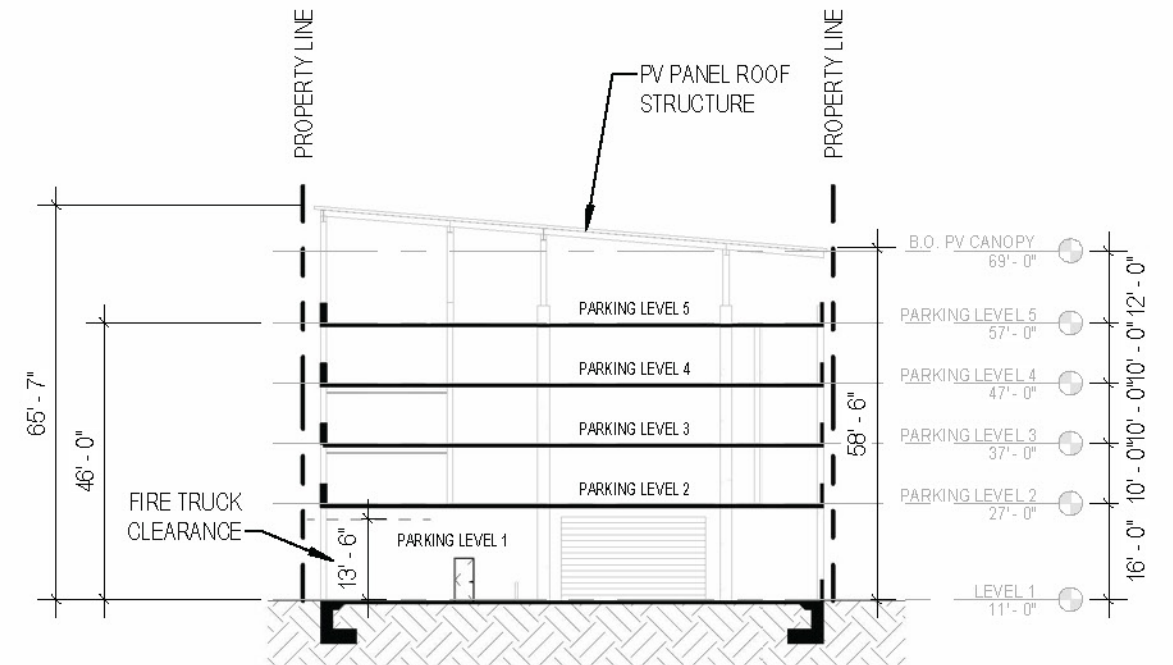
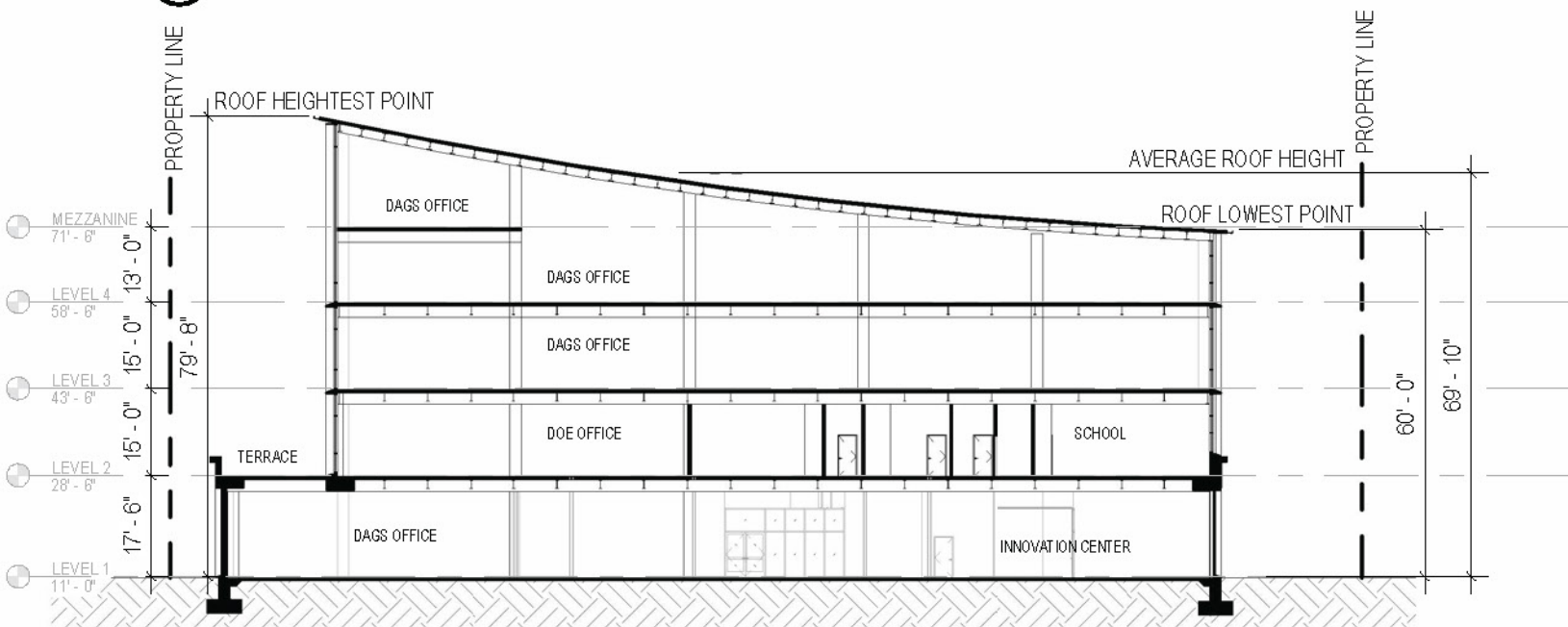
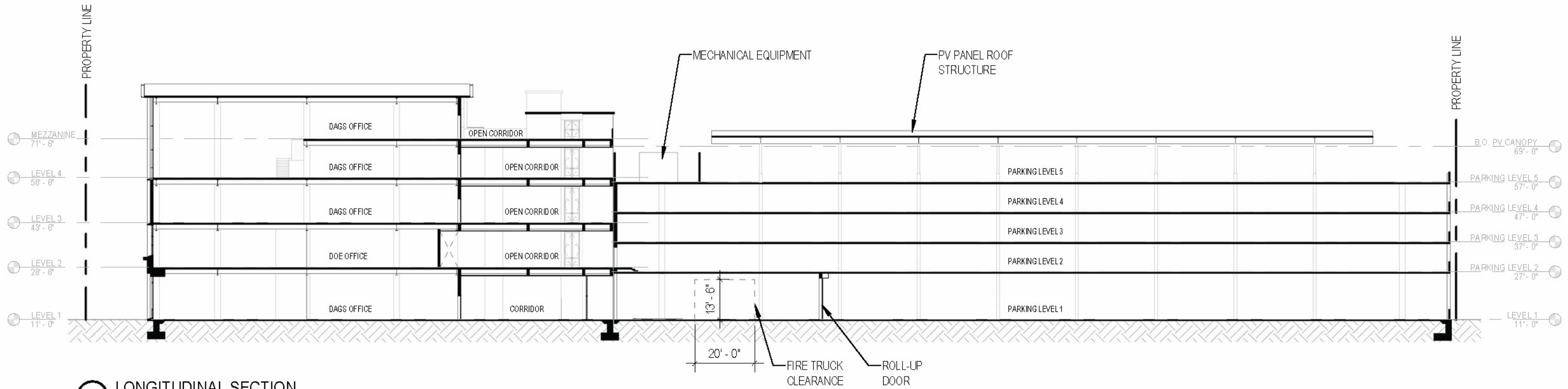


## 4th Level Mezzanine Office Space

*Illustrative image demonstrating spatial quality only; details have not yet been refined.*



# Building Sections





**Kane St. Looking Towards South**

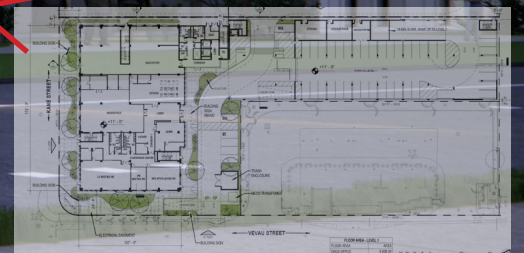
*Illustrative image demonstrating spatial quality only; details have not yet been refined.*





**Kane St. Looking Towards Share St.**

*Illustrative image demonstrating spatial quality only; details have not yet been refined.*





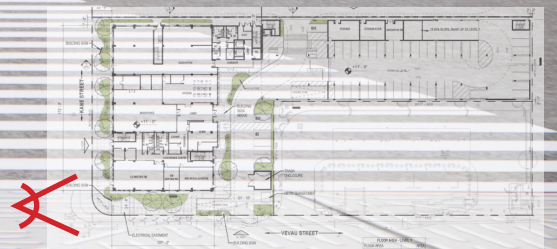
**Kane St. and Vevau St. Corner**

*Illustrative image demonstrating spatial quality only; details have not yet been refined.*



Walking Toward Civic Center From S-W

*Illustrative image demonstrating spatial quality only; details have not yet been refined.*







Walking Toward Civic Center on Vevau St.

*Illustrative image demonstrating spatial quality only; details have not yet been refined.*





**Drive Way**

*Illustrative image demonstrating spatial quality only; details have not yet been refined.*





T H E W A V E

Library Entry

*Illustrative image demonstrating spatial quality only; details have not yet been refined.*





**Aerial View of West Facade**

*Illustrative image demonstrating spatial quality only; details have not yet been refined.*

**Mahalo!**



7.0

# Sustainability & Resilience

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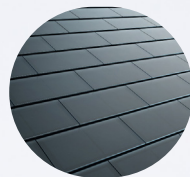
Our vision encapsulates a comprehensive and forward-looking conceptual framework that guides the design process, ensuring harmonious integration of aesthetics, functionality, cultural context, and sustainability to bring a built environment to life.

# Material Selection

Selecting materials that are both sustainable and resilient minimizes environmental impact through responsible sourcing and lower embodied energy, while also enhancing the building's ability to withstand environmental stresses. These materials require fewer replacements, conserving resources and ensuring the building remains stable and secure under challenging conditions, which supports both a sustainable lifecycle and long-term resilience.



White  
Aluminium Panel



Solar Roof Tiles  
(Potential)



Low-E  
Reflective Glass



Darker Tone Precast  
Aggregated  
Concrete



Dark  
Aluminium Mullion



Perforated Metal Panel with  
Culture Pattern



Green Concrete



Solar Panels

# Energy Efficiency

Energy-efficient buildings use less power, lowering reliance on nonrenewable resources and reducing greenhouse gas emissions. This sustainable approach not only lessens the building's environmental footprint but also makes it more resilient to power disruptions, requiring less energy to maintain safe, comfortable conditions during shortages or outages.

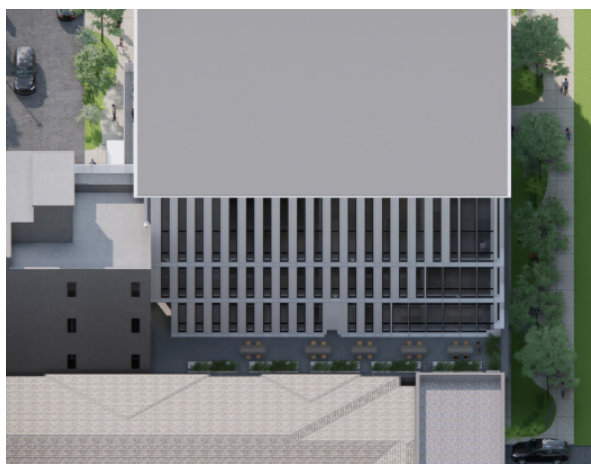
## Building Facade Design Response to Reduce Solar Heatgain



Less Transparency on South and West Facade

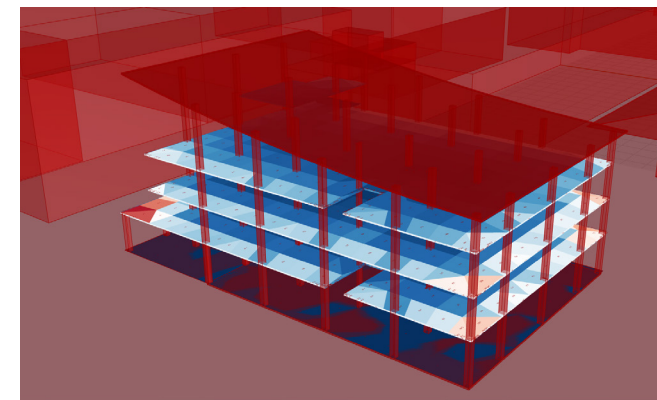


More Transparency on East Facade



More Transparency on North Facade

## Before

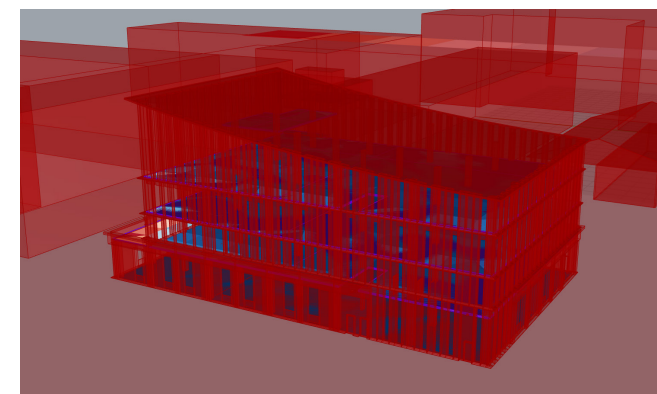


We utilize solar radiation tools to analyze the effectiveness of our facade design in reducing solar heat gain.

Without Facade Geometry

13,429

## After



With Facade Geometry

4,622

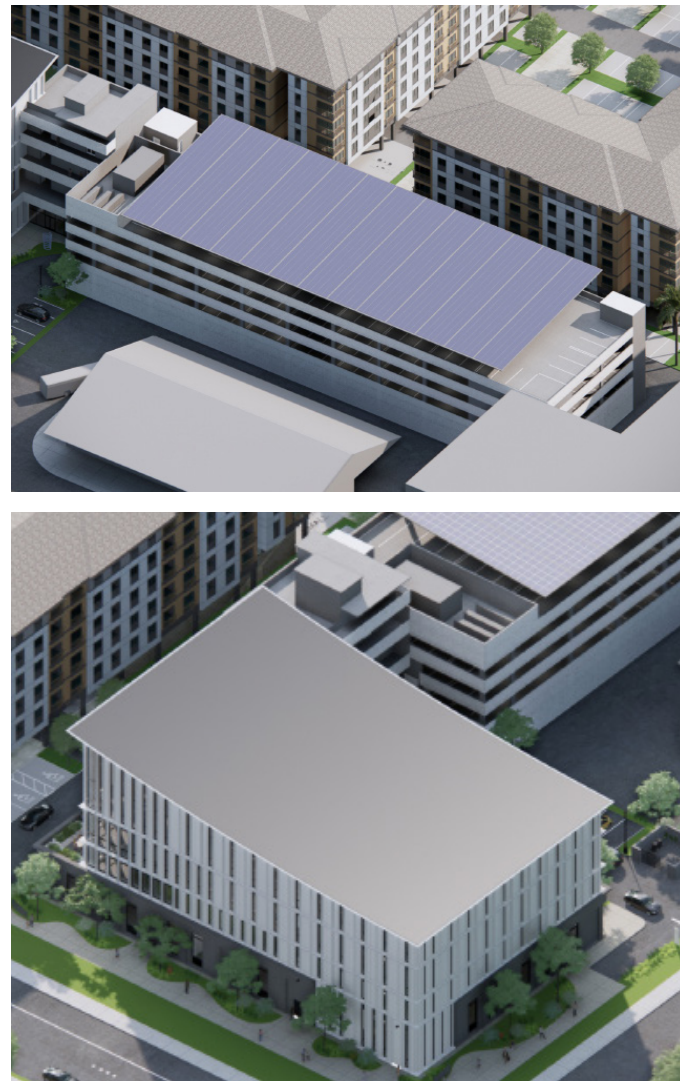
\* This analysis only takes facade geometry into consideration and does not include the impact of glass on solar reduction.

## Total Reduction On Solar Heatgain:

It reduce about **65%** of solar heatgain with this facade geometry



### Solar Panel Intergration



Install photovoltaic (PV) panels on the roof or as part of a building-integrated system to generate clean energy on-site.

### Natural Lighting and Daylight Optimization



North Facing Large Windows Bring in huge amount of day light, white tone also help with ambience lighting, make the overall space brighter.

### Shading Elements Intergration



Horizontal and Vertical Fins reduce solar heatgain

# Water Management Efficiency

Kahului, located on Maui's leeward side, experiences a semi-arid climate with an average annual rainfall of approximately 17.83 inches. This relatively low precipitation suggests that implementing a rainwater harvesting system could be beneficial.

**Water Collection from Roof:** Rainwater flows from the roof into gutters along the edges, which channel the

water to downspouts.

**Downspouts:** Downspouts guide water to ground level, preventing overflow and directing it to landscape areas.

**Flow to Landscape Area (Pre-Filtration):** Water flows into a bioswale or rain garden to slow down, infiltrate, and filter out debris and contaminants.

**Percolation:** Soil filters out larger particles, resulting in cleaner water before reaching the storage tank.

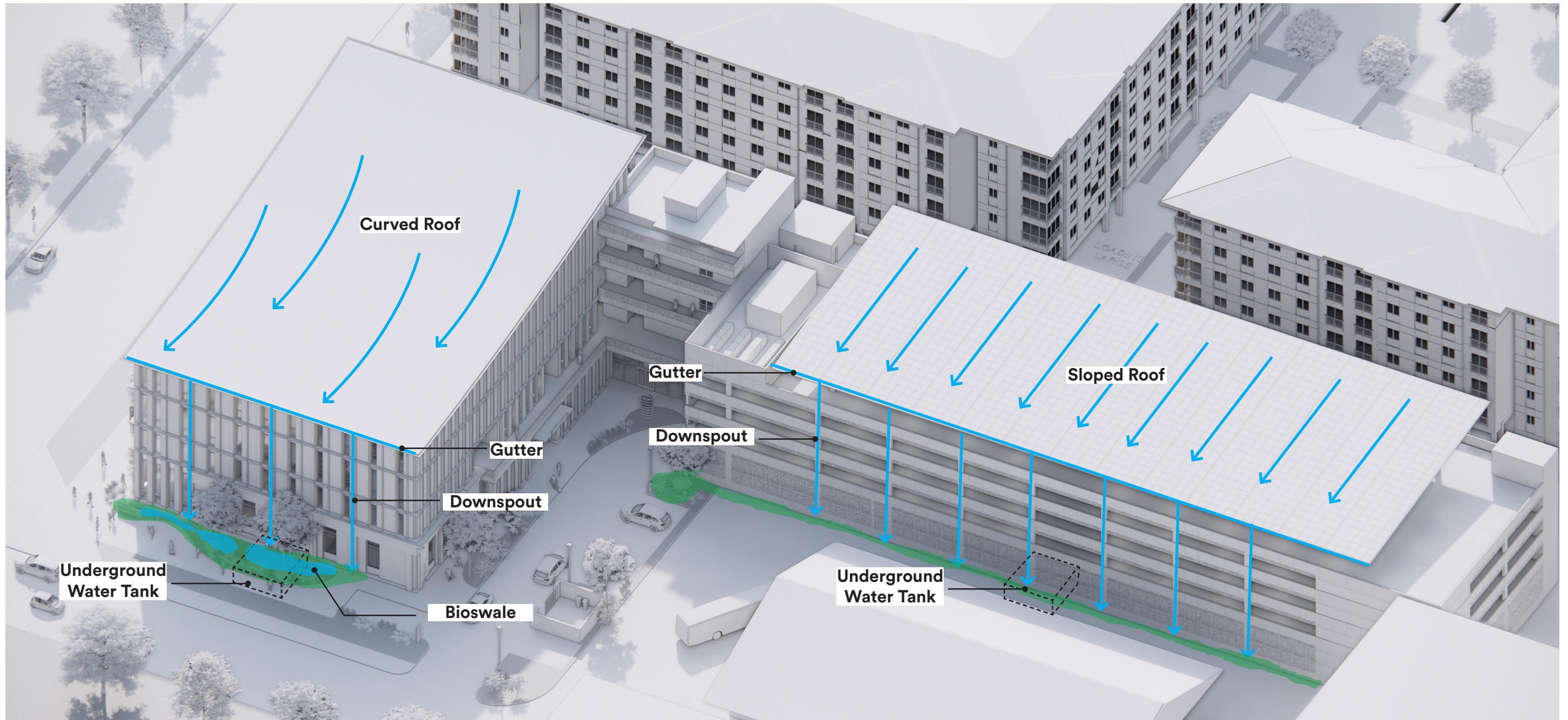
**Underground Storage Tank beneath Landscape:** Water flows from the landscape to an underground storage tank for safe, long-term storage.

**Overflow Protection:** An overflow outlet directs excess water to a safe drainage area during heavy rain.

**Reusing the Stored Water:** A pump draws water from the tank for landscape irrigation or other non-potable uses, like washing surfaces or flushing toilets.

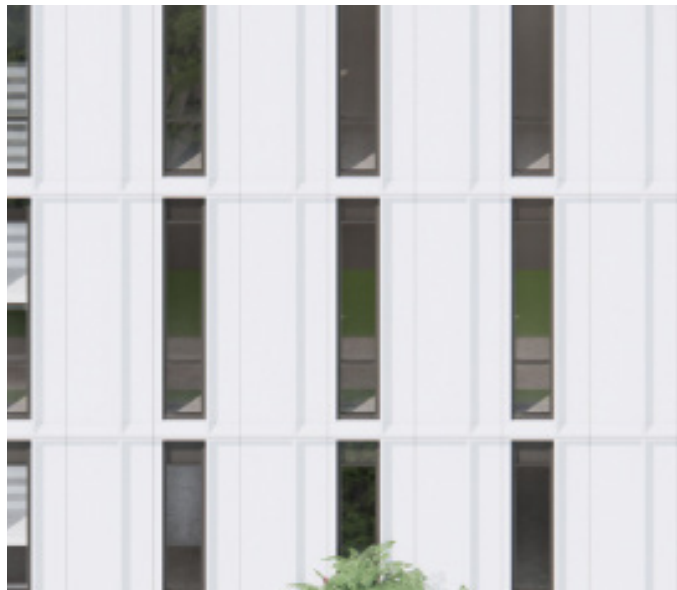
**System Maintenance:** Gutters, downspouts, and filters need regular cleaning to prevent clogs.

**Check Storage Tank:** Inspect the tank for sediment build-up and clean it as needed to maintain water quality.



## Durability and Maintenance Efficiency

Efficient operations and low-maintenance systems reduce resource consumption over time, lowering the building's environmental impact and reducing waste associated with repairs and replacements. Buildings designed for easy maintenance are more resilient, remaining functional and safe with minimal intervention, even when access to maintenance resources is limited.



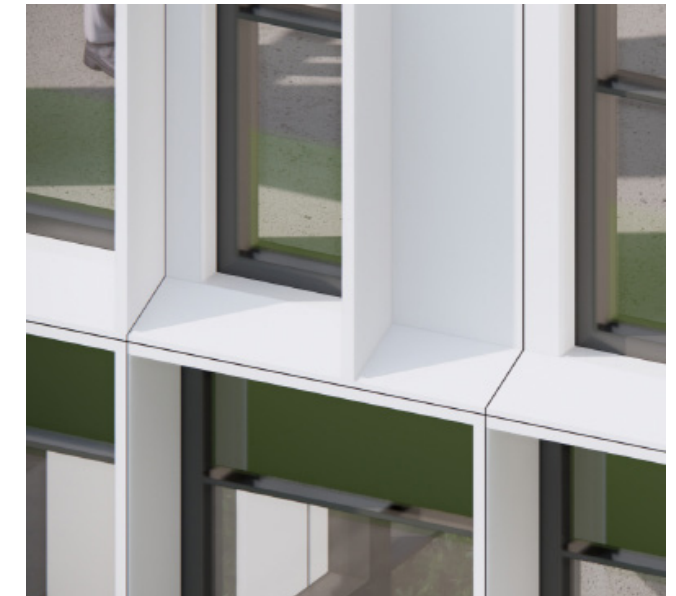
Reduction on Glass Area on the Facade



Limited Terrace Space



Linear Base Design with Limited Glass Area



Chamfered Facade and Sloped Roof allow water to run off

# Environment for Health and Well-being

Focuses on creating a workspace that supports physical health, mental well-being, and social interaction. This includes natural lighting, air quality, biophilic elements, ergonomic furnishings, and spaces designed to encourage collaboration and community.



**Natural Light & View**

Large Windows and Skylights: Maximize natural light to reduce the need for artificial lighting, which can boost mood and productivity.

Views of Nature: Position workspaces near windows with views of nature or incorporate interior green walls to provide calming, visually stimulating elements.



**Air Quality and Ventilation**

High-Quality Ventilation Systems: Use advanced HVAC systems to ensure clean, fresh air circulation and reduce indoor pollutants.

Low-VOC Materials: Select materials with low or zero volatile organic compounds (VOCs) to improve air quality and reduce exposure to harmful chemicals.



**Biophilic Design Elements**

Integrate accessibility to outdoor space, plants, natural materials, and views of nature to reduce stress, improve focus, and create a calming atmosphere.



**Social and Collaboration Spaces**

Design areas for social interaction and teamwork to encourage collaboration, creativity, and a sense of community.



### Noise Control and Acoustic Comfort

Minimize noise distractions with soundproofing, quiet zones, and ambient noise solutions to create a peaceful work environment.



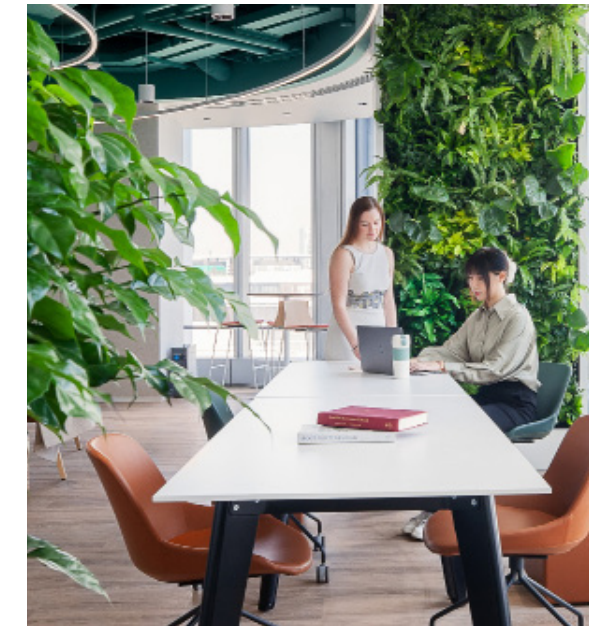
### Thermal Comfort

Ensure temperature and humidity control to maintain a comfortable environment, with individual temperature adjustments where possible.



### Ergonomic and Flexible Workspaces

Provide ergonomic furniture and adjustable workspaces to support physical comfort and reduce strain from prolonged sitting.



### Mental Wellness and Relaxation Areas

Offer dedicated spaces for mental breaks, relaxation, or meditation to help employees manage stress and recharge.

# Flexibility and Adaptability

Emphasizes a design that accommodates changing needs over time, allowing spaces to transform based on evolving work styles, team sizes, and functions. Modular furniture, movable walls, and multipurpose areas enable the office to quickly adapt to different uses and layouts.



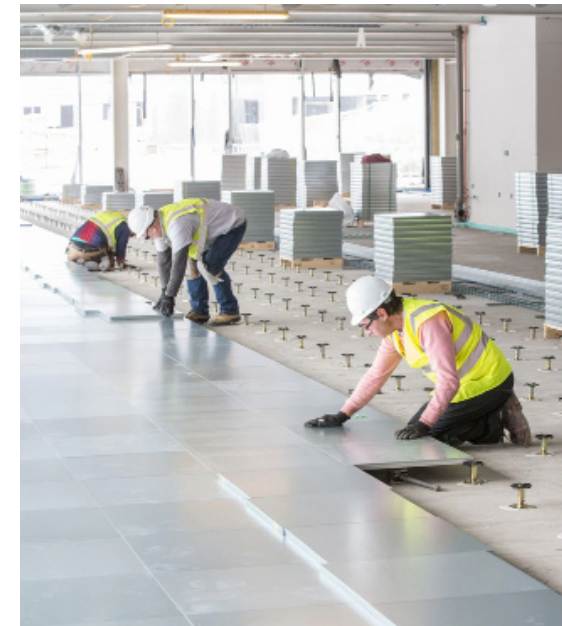
**Open Floor Plans**

Our design prioritizes expansive, open floor plates, allowing for a range of workspace configurations and minimizing fixed elements, enabling easy reconfiguration as needs evolve.



**Adaptable Core Design**

The building core is strategically positioned to the neck area to maximize the usable floor area of civic center.



**Raised Access Floors**

Our design intention is to include raised flooring, simplifying the rerouting of electrical, data, and HVAC systems, which supports future technological upgrades and layout adjustments. (will be incorporated in the next pahse)



**Modular Building Systems**

Prefabricated, modular construction components in our design allow sections of the building to be added, removed, or reconfigured, supporting future expansions.