



Mixed-Use

As an integrated architecture, engineering, and construction firm, Marx Okubo is naturally drawn to complex mixed-use spaces. Most common in urban environments, mixed-use is a zoning type that may blend residential, commercial, cultural, institutional, industrial, recreational, or entertainment components. Even in suburban areas, many have a “village” feel, bringing together various spaces in a cohesive way for modern living.

Our approach to mixed-use work is never a standard set of services because ideas, requirements, and parties involved vary so significantly in this type of work. Our technical teams bring together the best subject matter experts for each highly individual mixed-use project we touch nationwide. And because we’re used to looking at all of our projects through a systemic, holistic lens, the intricacies of mixed-use developments suit us well.

We regularly consult on a wide range of services such as property condition assessments on repurposed, aging, and new construction mixed-use centers; sustainability or accessibility evaluations for compliance; and parking and amenities integration.

KEY MIXED-USE DEVELOPMENT SERVICES:

- > Integrated property condition assessment
- > Owner representation
- > Project management
- > Accessibility/ADA compliance review
- > Sustainability, resiliency, and seismic studies
- > Fire protection/life safety
- > User flow/experience analysis

Office
Retail
Hospitality
Multifamily Residential

Arts, Culture & Entertainment
Industrial/Warehouse
Education
Parking Structures

Data Centers
• **Mixed-Use**
Healthcare



Pittsburgh Cultural Trust Portfolio

Pittsburgh, Pennsylvania

CLIENT

Pittsburgh Cultural Trust

SERVICES

Facility Condition Assessment

Located in Pittsburgh's downtown Cultural District—a 14-block, arts-centered neighborhood, this project was part of the Heinz family's Pittsburgh Cultural Trust (PCT) portfolio. The PCT is a non-profit formed in the 1980s to transform a tired red-light district into a destination area for the arts. The organization has a diverse portfolio of real estate assets that encompasses 35 facilities within one million square feet, including theatrical venues, visual art galleries, public art spaces, offices, and mixed-use commercial buildings.

PCT has revitalized the cultural district by renovating, reopening, and repurposing various assets situated within the neighborhood. Stretching from the David L. Lawrence Convention Center on Tenth Street down Liberty Avenue and Penn Avenue to Sixth Street, the district draws upwards of two million annual visitors who come to experience the arts, public parks, restaurants, and a burgeoning retail sector.

Marx Okubo performed comprehensive facility condition assessments of PCT's portfolio including Benedum Center, a 2,800-seat theater, and Byham Theater (originally constructed in 1903), galleries, public spaces, offices, and other real estate assets. The intent of the project was to review and identify deferred and future maintenance needs for each of the assets in the portfolio, prioritizing the capital improvement work and providing PCT with a comprehensive assessment and documentation that they could ultimately use for future fundraising efforts.



OUTCOME

Marx Okubo worked with building ownership to be the needed conductor and provide framework for successful diagnostics, monitoring, and building operations.

Boulder Commons

Boulder, Colorado

CLIENT

Cushman & Wakefield

SERVICES

Facility Condition Assessment

In 2022, Marx Okubo performed a facility condition assessment of Boulder Commons at the request of property management, Cushman & Wakefield. The project included a survey of the facility which included a total of three buildings: two of the buildings that we were involved with during construction, and a third building constructed in a later phase. Marx Okubo reviewed the building enclosure, mechanical systems, and electrical systems, including the photovoltaic systems.

Management had reported a variety of challenges—inoperable solar panels, an inability to meet net zero energy consumption at the buildings and properly track energy consumption throughout the buildings and tenants, inoperable mechanical systems, and issues with the building enclosure. To gain more insight, Marx Okubo interviewed all the parties involved during construction (solar installer, commissioning agent, mechanical designer, electrical designer, and the architect of record).

The building envelope evaluation revealed that changes to the building envelope assembly made during construction created reduced thermal performance. Although the buildings were specified with fully adhered TPO membrane roofs, mechanically attached TPO membrane roofs were installed instead. The use of thermal imagery allowed Marx Okubo to understand that the performance of the building envelope and where thermal transfer points were occurring at the East façade solar panel assembly, structural framing locations, and critical roof-to-wall junctures. The original energy model was not updated to reflect the as-built conditions—the change during construction or what was not fully considered during design.

Boulder Commons

(continued)



Marx Okubo learned that not all buildings designed as net zero are ready to achieve net zero when the transition is made to a building operations team. During our review, Marx Okubo provided a succinct analysis and resolutions to our client. With regard to the building operation, we discovered that net zero requirements were not carried over into the tenant leases. There were no green lease requirements, no required commissioning of tenant systems (such as HVAC) after tenant build out, no energy metering requirements implemented into the tenant leases. Commissioning was performed upon completion of the core and shell construction; however, not all issues identified during the commissioning process were repaired.

With regard to the photovoltaic systems installed on each building, we observed incorrect placement of inverters, solar panels that were not in operation, and no way to clear snow from the roof-mounted panels located in the interior of an array. During construction it appeared that there were many knowledgeable consultants engaged without interfacing with each other. There was no “conductor” – no single source overseeing the performance of the building, from conception to post-occupancy. Marx Okubo worked with building ownership to be the needed conductor and provide framework for successful diagnostics, monitoring, and building operations.



OUTCOME

We successfully integrated project protocols to ensure the owners that the project was well-organized, on schedule, on budget and completed according to the original construction and contract documents.

Avalon

Alpharetta, Georgia

CLIENT

PGIM Real Estate

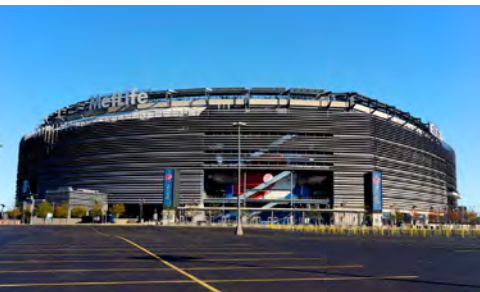
SERVICES

Owner's Representation,
Constructability Reviews

Avalon is a mixed-use development containing residential, commercial, hospitality and office buildings on approximately 86 acres. The development was constructed in three phases, each with different equity investors. Marx Okubo provided owner's representation services for all phases.

Phase I included four multifamily residential buildings over retail, two office buildings over retail, Regal Cinemas, Whole Foods Market, two small retail buildings along the mall walk, two retail support buildings, two parking garages, a branch bank and four standalone outparcel retail and restaurant buildings. Phase II included a five-story, multifamily residential building with an enclosed parking garage and street-level retail, the Container Store, a standalone parking garage, and an office and retail building with dedicated parking garage. Phase III included the 43,000-square-foot, 330-guestroom Alpharetta Hotel & Conference Center. The entire Phase III facility, including all hotel amenity areas and public spaces, encompasses 270,298 square feet.

The most significant challenge faced by Marx Okubo during this project was coordinating the multitude of contractors, tenant representatives, architects and designers working on this intricate, multifaceted project—yet we successfully integrated project protocols to ensure the owners that the project was well-organized, on schedule, on budget and completed according to the original construction and contract documents.



American Dream Meadowlands

Meadowlands, New Jersey

CLIENT

Alliance Bernstein

SERVICES

Construction Loan Monitoring

American Dream Meadowlands was developed by Triple Five as the third largest entertainment/retail center in North America, following West Edmonton Mall and Mall of America. The complex contains approximately three million square feet of entertainment-focused and traditional retail space, including anchor department stores, in-line retail, an amusement park, an NFL size ice skating rink, 120 food courts/restaurants, a movie complex, the first indoor ski and snowboard park in the Western Hemisphere, an aquarium and a water park. The project partially opened in 2019 and, after some setbacks due to the pandemic in 2020, it fully opened in 2021.

The American Dream Meadowlands project was previously a failed concept of a regional mall "Xanadu," originally developed by the Mills Corporation. The core and shell construction of the original mall was nearly completed in 2006, when construction ultimately halted. Triple Five had taken over the redevelopment of the project in 2013 and was continuing design and construction while obtaining financing to complete the project. Marx Okubo was engaged by the mezzanine lender in 2017 to evaluate the condition of the existing construction and the redevelopment plan proposed by Triple Five to transform the existing structure into an entertainment-focused complex.

Marx Okubo evaluated a very complex project under a tight deadline, as work had been essentially halted until all financing was in place, and it was critical to re-engage the subcontractors as quickly as possible to limit stress on the budget and the schedule. Marx Okubo performed construction oversight throughout the project's progression.



Yard Mixed-Use

Portland, Oregon

CLIENT

Skylab Architecture

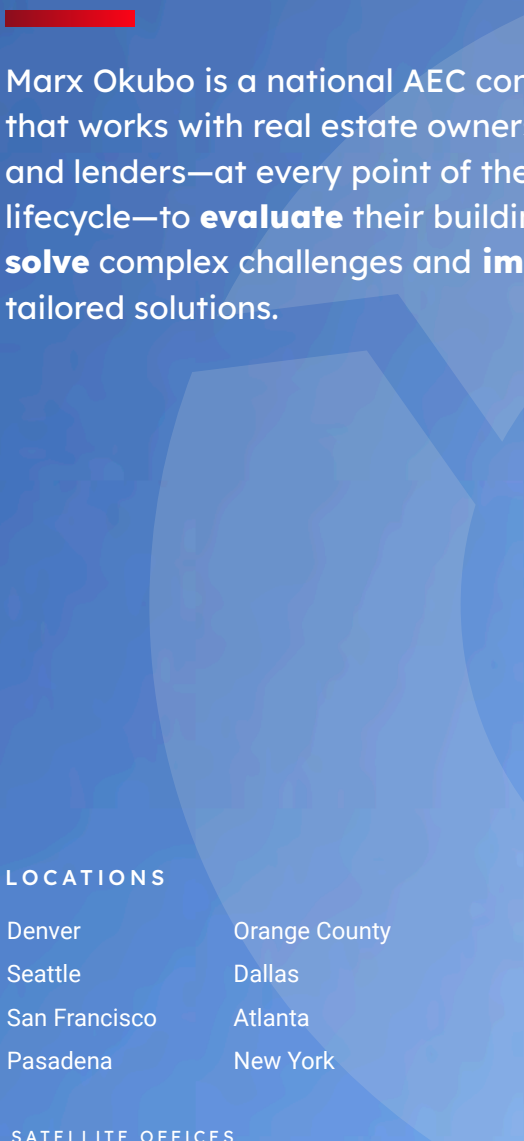
SERVICES

Constructability Reviews,
Construction Loan Monitoring,
Accessibility

This 21-story, mixed-use building includes residential, retail, commercial and office space as well as parking with extensive podium and site improvements. The award-winning design firm turned to Marx Okubo for its expertise and guidance regarding accessibility.

Our team reviewed the drawings at 100% CD and then performed multiple site visits to confirm compliance to drawings, and we also reviewed the paths of travel, parking, common use areas, lobby, and leasing office. Ultimately, Marx Okubo helped the architect achieve compliance with local, state, and federal accessibility requirements.

↗ Uncertainty **doesn't stand a chance.**



Marx Okubo is a national AEC consulting firm that works with real estate owners, investors and lenders—at every point of the property lifecycle—to **evaluate** their building projects, **solve** complex challenges and **implement** tailored solutions.

LOCATIONS

Denver	Orange County
Seattle	Dallas
San Francisco	Atlanta
Pasadena	New York

SATELLITE OFFICES

Portland	Houston	Tampa
San Diego	Boston	Orlando
Phoenix	Washington, D.C.	Miami
Austin	Nashville	