



Proposal for the
**REDEVELOPMENT
OF THE LONG
REACH VILLAGE
CENTER**

TECHNICAL PROPOSAL PART A

ORIGINAL

MARCH 1, 2017



OrchardDevelopment
Corporation

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FOREWORD

Ellicott City based Orchard Development Corporation is pleased to present a proposal to Howard County, Maryland for the redevelopment of the Long Reach Village Center. Orchard Development Corporation has assembled a team of design, development, financing, leasing and property management professionals with extensive experience in developing successful mixed-use real estate projects in Columbia, Howard County and across the country.

Our principal goal is for the redevelopment of the Long Reach Village Center to be the catalyst for revitalizing the surrounding neighborhood through the development of a vibrant and sustainable village center. The objectives that have been incorporated into our development plan reflect many components of the ReImagine Long Reach Village Center Proposed Plan, including Economic Sustainability, Connectivity, Community Spaces, and compelling Building and Site Design.

In the evolution of our plan, we were keenly sensitive to the fact that we are dealing with a neighborhood, not just a piece of real estate. Therefore, we established a set of guiding principles that were brought to bear and serve as a guide in our approach to the redevelopment of the Long Reach Village Center:

First, we will respect the concerns and wishes of the Long Reach Community. Orchard Development's standard protocol for every project is to engage the community and exchange ideas on how to best move forward. Our recent experiences with the Metropolitan and the New Cultural Center in Columbia are good examples of positive interaction with the neighboring communities. The center is the Village's focal point, its identity. Revitalized, it will not only be a place that serves area residents, it will generate new activity and become a point of pride for Long Reach and the greater Howard County community.

Second, the Village Center will be a redevelopment that will feature innovation in activity, design, and conservation.

Third, we propose to generate new employment opportunities through our building tenants and through our programs.

Fourth, we will build an energy framework that will enhance the environment with a goal to make the Village Center energy self-sufficient. We will even explore the opportunity to export clean renewable electricity to our neighbors.

Fifth, we will create a fun place to go to visit and to live, collaborating with the Columbia Association, Howard Community College, Howard County Economic Development Authority, The ARC of Howard County, the Howard County Farm Bureau, Vantage House Senior Living Community and various arts organizations in the County.

Sixth, our emphasis will, as always, be on achieving high quality design.

Orchard Development Corporation looks forward to the opportunity for further discussion about our comprehensive and innovative development plan for the Long Reach Village Center.

SUMMARY OF PROPOSED DEVELOPMENT PLAN

At the heart of Orchard Development Corporation's proposed development plan is the vision of a mixed-use center that can be both a focal point and anchor for the Long Reach neighborhood. It will offer live-work-play opportunities for existing residents as well as newcomers, and, it will have features that will make it a destination for greater Columbia and Howard County.

The revitalized Village Center will also include multi-generational housing, with both for-sale and rental options. The center will feature attractive and well-landscaped recreational and community gathering spaces for neighborhood use that will be accessible by foot, bike, public transportation and car. In fact, the Long Reach Village Center will be a transportation hub with a sheltered transit stop for buses, Uber/Lyft, bike racks and a shared bike station. Attractive and easily discernible wayfinding signage will also be integral to the overall redevelopment.

The proposed redevelopment will conform with the existing New Town Zoning requirements, although an amendment to the Preliminary Development Plan will be required to include the proposed residential uses. The Village Center Redevelopment, Major process will be required to implement the proposed plan.

Our vision of the revitalized Long Reach Village Center begins with the demolition of the existing retail and office buildings, including the existing liquor store and deli, both of which are anticipated to re-locate into the a new retail building. The newly constructed buildings will have a mix of retail, office, for-sale townhomes, senior rental apartments, market-rate general occupancy rental apartments as well as new on-street and structured parking, in keeping with the principles of Traditional Neighborhood Development (TND). Also included in the development plan is a prominent plaza, an active vertical farm, and pedestrian links to the Long Reach neighborhood beyond.



PROPOSED DEVELOPMENT PLAN

ECONOMIC SUSTAINABILITY

The commercial success and long-term economic viability of the center owners and merchants is of paramount importance in the redevelopment of the Long Reach Village Center. The inclusion of new residential in the redevelopment is a key component in this success, as it will add significant numbers of customers within a short walking distance of those merchants. Also important is the inclusion of a large plaza/open space with welcoming features for gathering and recreation. The residential, commercial and plaza spaces as well as the adjacent neighborhood will be linked with connecting walkways and paths which will activate pedestrian and bicycle circulation throughout the day and evening hours.

Another key component in the long-term viability of the center is the right mix of commercial and retail tenants. With an abundance of food and retail options just a short drive away, the redevelopment of the Long Reach Village Center needs to fill a different need - a need that does not compete with these other uses. New offerings at Long Reach need to integrate into the project's surroundings, enhancing the village center experience for residents and visitors, again positioning the Long Reach Village Center as the focal point of the surrounding community.

In addition to the commercial elements of the village center, the Orchard Development team understands the importance of the current community uses and intends to retain an enhanced orientation to the Stonehouse, the CA Arts Center and the Interfaith Center. We will also re-locate the County Police sub-station within the new center. In particular, our proposed plan would open up access and visibility for the Stonehouse. Further, we have had preliminary conversations with the owners of two adjacent outparcels, the liquor store and deli, who have expressed interest in being part of the redeveloped center. We will also work with other current tenants in the center who may wish to be part of the redevelopment and insure a smooth transition for all, regardless of their ultimate objectives.

In terms of new retail uses, the focus will be on meeting the daily needs of the neighborhood such uses as carry-out or quick-serve food, pharmacy, medical uses, health and fitness, daycare, c-store, and other related services. The center currently features an active music and arts center which will provide synergy for compatible, proposed concepts such as a food incubator, possible culinary institute, and residential with marketing and amenities at least partially targeted toward artists. This approach will give the center a very distinctive character and serve as a generator of additional attention and interest from beyond the immediate community.

To better substantiate these suggested uses, we have analyzed the demographic and market statistics to target specific types of users, as reflected in the market area maps which can be found in the appendices.

RETAIL MARKET POTENTIAL

Current retail offerings at the Long Reach Village Center are limited and do relate to convenience retail. This type of retail should remain the target; however, it should be brought into a more central location within in the project and expanded upon. Larger, destination-type retailers will not flourish in the Long Reach Village Center due to an abundance of similar offerings only minutes away (see Map #1 for regional overview of amenities).

DAYCARE FACILITY

In analyzing the current population aged 0 – 4 years old and the location of current daycare providers surrounding the Long Reach Village Center, we believe that a new daycare or child-focused activity center is a viable option as part of the redevelopment. Further, this age group is expected to increase through 2021, as highlighted on Map #3 in the appendices.

MEDICAL USE

Adding a medical component to the redevelopment of the Long Reach Village Center will not only provide a use that all could benefit from, but also brings visitors to the community who would support the project’s retail and business components. The first medical map (located in Appendix II) shows where current medical providers are located, specifically area hospitals and community satellite centers affiliated with those hospitals. Within a 10 minute drive from the site, there is only one medical offering affiliated with St. Agnes Hospital. The second medical map shows the percentage of the adult population within the same 10 minute drive that have visited a doctor within the last six months. The highest percentages appear to be just north and west of the site; immediately surrounding the site, 73% to 77% of the population within that trade area have visited the doctors within six months.

We anticipate partnering with one of the area hospitals or larger healthcare providers to establish a location that offers physicians with multiple specialties. A successful example is Mercy Personal Physicians at Lutherville (MPPL). Located in a shopping center along the York Road Corridor in Lutherville, MPPL offers patients a variety of primary care services in one convenient, centrally-located doctors’ office. Staff specializes in internal medicine, family medicine, and pediatrics, treating primary care conditions that range from the common cold and flu, to high blood pressure, high cholesterol, osteoporosis, and arthritis. Of course the facility at Long Reach could also offer urgent care if further investigation warrants.



Medical Partner Example (Left): Mercy Personal Physicians at Lutherville

FOOD INCUBATOR AND/OR CULINARY INSTITUTE

Building on the creative arts that the Long Reach Village Center offers the community, we plan to create a food incubator and/or culinary institute that will be a unique compliment to the center. This concept was recently completed in the Remington neighborhood of Baltimore with *R. House*. Once an old Anderson Body Shop, *R. House* is now a 350-seat food hall featuring an assembly of 10 chefs in one location. A launch pad for chefs that dream of their own restaurant, *R. House* provides the community a variety of dining options, ranging from age-old family recipes to new takes on classic favorites. In the center of it all is a bar offering a full range of libations.

Remington is a known Baltimore destination for artists, entrepreneurs, nonprofits, and innovators. Working in conjunction with the Columbia Art Center, the Long Reach Village Center has the opportunity to be the same. To help further substantiate this suggested use, Map #6 looks at the percent of the population aged between 19 – 35, better known as “Millennials,” in relation to the site. This age group is a driving force in the art community and supports ventures such as *R. House*. 23% of the State of Maryland’s population are Millennials. Looking at the immediate area surrounding LRV, the percentage of the population that are Millennials is over 27%.

Additional retail uses such as an art supply store, book, and music stores will also further enhance the center’s tenant mix.



Rendering of Williamsburg Homes Proposed Townhomes for Long Reach Village Center

RESIDENTIAL

As mentioned earlier, introducing a variety of new residential offerings to the village center will complement and support the retail and office uses by activating the center with pedestrians as well as vehicles throughout the day and evening. We propose a multigenerational mix of for-sale and rental residential. This would include 52 townhomes, 120 multifamily for seniors, and 132 multifamily for general occupancy. The high quality townhomes proposed by Williamsburg Homes will enhance the value of existing homes in the market area. Also, the RPRG market study included in the County’s plan clearly supports 132 general occupancy rental units in the Village Center.

Although RPRG was bearish on age-restricted rental, our own experience with age restricted communities in the area challenges this finding. Our age-restricted community Selborne House of Dorsey Hall is in high demand and has been fully occupied for many years. To enhance the level of service and desirability of the senior residential, we are exploring a partnership with Vantage House Senior Living Communities to provide other services beyond independent living. Also, a standard amenity that we offer at all of our senior communities is free van service to area destinations that are not walkable, such as libraries, the mall, grocery store, and similar.

Most of the parking for the retail, office and multifamily would be accommodated in the structured parking garages. The large surface parking field which currently dominates the Long Reach Village Center would be a thing of the past.

CURB APPEAL, MAINTENANCE AND COMMITMENT TO THE COMMUNITY

Another key component in the long-term success of the proposed Long Reach Village Center is that it must have an experienced team composed of owners, property managers and facility management who are committed to the highest possible level of maintenance, upkeep, curb appeal, customer service and safe surroundings for residents, shoppers, guests and the general public. Orchard Development Corporation has a track record spanning nearly 40 years of demonstrated quality care and maintenance of all of our communities and buildings. In addition, Orchard Development Corporation has made its corporate home in Howard County for these many years, and our Chairman as well as many executives and employees live in Howard County. Long Reach Village Center is part of home for us; making it the best that it can be and keeping it that way is part of our commitment to the community that we have supported in so many ways over the years.



The Metropolitan in Columbia, Maryland - Orchard Development Corporation; Building and Landscape Design by Design Collective, Inc.

CONCEPT PLAN

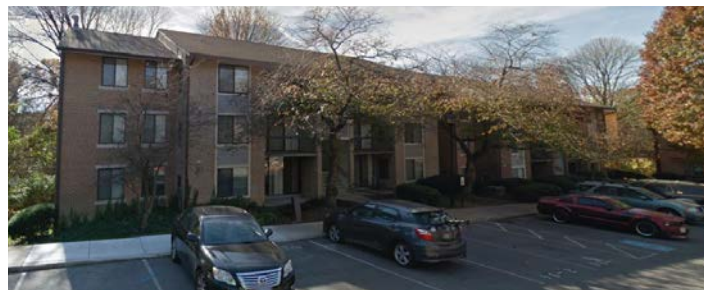
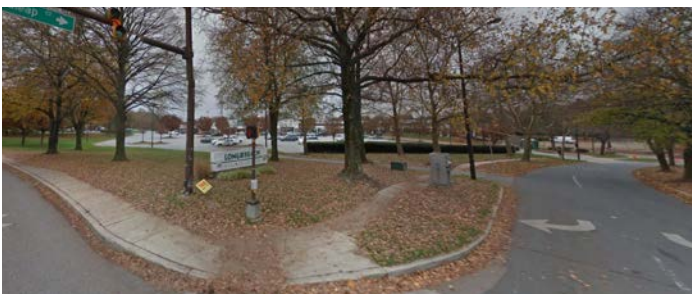
EXISTING CONDITIONS

The Long Reach Village Center is located in the heart of Columbia, Maryland, approximately 15 miles southwest of Baltimore City and 30 miles northeast of Washington, D.C.. Consisting of approximately 10 acres, the proposed development site is conveniently located adjacent to Route 175, a major arterial roadway that connects to U.S. Route 29 and MD Route 100. It is also situated a short drive from MD Route 32 and I-95, providing convenient access to Baltimore, Washington D.C., and nearby towns and communities.

Developed in the late 1970's, the Long Reach Village Center was once a hub for local residents, offering a grocer, shops, restaurants, and a variety of other neighborhood-serving tenants. Various civic spaces were developed to support the commercial center and provide additional conveniences for nearby residents. The Stonehouse, a neighborhood center integrated into the shopping center, is an example of one of the community resources that provides a diversity of banquet and conference spaces. The Columbia Art Center is a separate facility that offers a variety of visual arts classes for a wide-range of ages and interests. Nearby, off-site amenities include Long Reach Park, Long Reach Garden, Long Reach High School, and access to an extensive open space and trail network as well as public transportation.

With the growth of newer commercial centers nearby, a majority of the Long Reach Village Center experienced disinvestment and high vacancy rates. The Village Center became underutilized, incentivizing the opportunity for Howard County to designate 19+ acres as an Urban Renewal Area (identified in red on the facing page). As a result, the County purchased several properties, including the Village Center, that amounted to approximately 7.7 acres of total developable area (indicated as parcel #3 on the facing page).

The existing site offers a wide-range of opportunities for reinvestment. The proposed development plan will capitalize on the area's location and access to surrounding amenities, address previous planning studies and assessments, incorporate community input, and offer a mixed-use center that is vibrant, active, and innovative. The proposed master plan will be a catalyst for future investment and spur redevelopment opportunities for the entire Urban Renewal Area.



Existing Site Photos

PROPERTY OWNERS - PROPOSED REDEVELOPMENT SITE		
#	NAME	ACREAGE
1	LRVC Business Trustation (HHC)	1.39
2	Nam Joon H	0.69
3	Howard County MD	7.70
4	Ko Sang Ki	0.47
Total		10.25

PROPERTY OWNERS - OUTSIDE PROPOSED REDEVELOPMENT SITE		
#	NAME	ACREAGE
5	Gulzar LLC	1.40
6	Columbia Association Inc.	0.69
7	Columbia Association Inc.	5.16
8	Celebration Church Inc.	1.77
Total		9.02



Existing Site Plan

PROPOSED BUILDING & SITE DESIGN

The envisioned Long Reach Village Center master plan has been designed as a mixed-use community that boasts a wide-range of office uses, retail services, and residential types that will serve and benefit the surrounding neighborhoods of Columbia. The proposed site design will exemplify the character found in traditional towns with walkable streets, sidewalks, parks, interconnected blocks, and high-quality architecture that will create an easily-accessible and desirable community.

At the heart of the Village Center will be a large community space that is anchored by an open lawn at the corner of Tamar Drive and Cloudleap Court. Surrounding the Village Green will be an ample selection of retail uses. To the west of the Village Green will be a two-story, mixed-use Market pavilion that will offer a food hall on the ground floor with medical office uses above. The Market will be an authentic, fresh food venue serving a diversity of culinary tastes and an attraction that will promote opportunities for the community to gather and enjoy the adjoining Village Green.

To the south of the Village Green is a five-story, mixed-use building that includes neighborhood-serving retail, a day care, a residential lobby, and kitchen incubator space along the ground floor. Above the retail podium will be market-rate apartments that offer amenity space, outdoor terraces, covered parking, and proximity to a newly designed dog park. At the southern end of the building, attached to the structured parking, will be a three-story, vertical garden that is tied to the kitchen incubator on the ground floor. Both will become feature elements within the community, offering local entrepreneurs resources and the space to slowly scale their business. The vertical garden will not only provide opportunities to grow food that will serve the local community year-round, but will offer a functional space to highlight the importance of sustainable farming, local food sources, and providing fresh, nutritious produce.

The mixed-use architecture will become a vital extension of the streetscape and landscape with a largely transparent ground floor that unites retail, amenity, and recreational uses with outdoor spaces they address. The proposed master plan promotes a dynamic environment that inspires innovation and brings together neighboring communities to a vibrant Village Center.

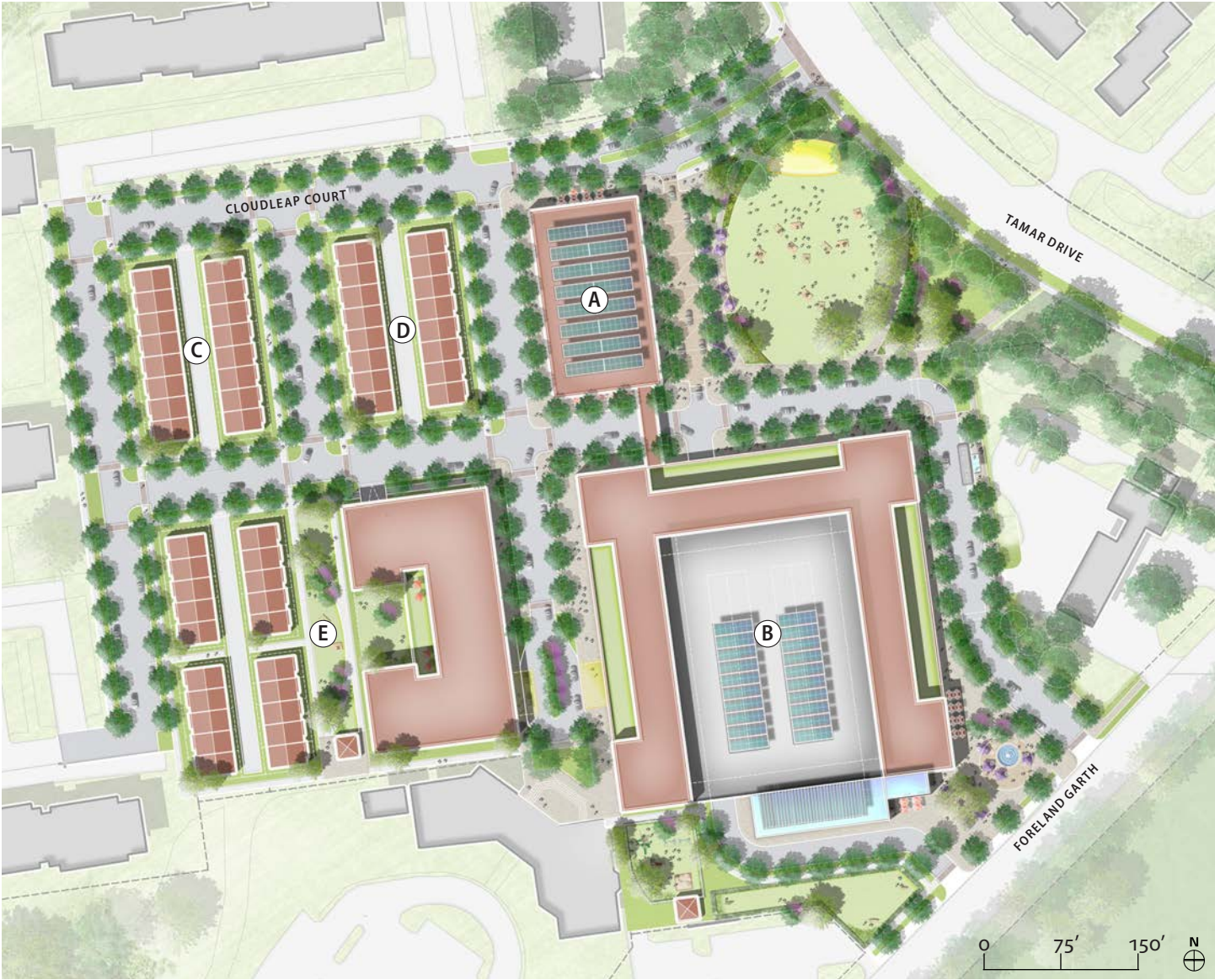


To the west of the Village Green will be a residential area that is characterized by an architecture and scale of development that is sensitive to the existing context. To provide a diversity of housing options, this area will include a mix of townhouses and senior housing in addition to the market-rate apartments that exist near the Village Green. These smaller, residential blocks will create a stronger street network, reinforcing existing connections, and create a pedestrian framework that links to broader community amenities that exist beyond the development site.

In addition to providing a stronger street network, reinforcing the area's defining character, and providing high-quality development, sustainable design practices will play an integral role in making Long Reach Village Center a unique and innovate place to live, work, and visit.

PROPOSED DEVELOPMENT PLAN

DEVELOPMENT SUMMARY												
BLOCK	USE	AREA (Acres)	STORIES	BUILDING FOOTPRINT (sf)		RESIDENTIAL PROGRAM			PARKING REQ.	TOTAL PARKING PROVIDED	PARKING PROVIDED (STRUCTURE)	PARKING PROVIDED (SURFACE)
				Floorplate	Total							
A	Retail Market Pavilion		2	17,500	17,500				88		762	0
	Medical Office			17,500	17,500				88			
B	Retail		5	20,000	20,000				100			
	Incubator Space			20,000	20,000				100			
	Multi-Family			39,000	156,000	132		Units	257			
	Vertical Garden			6,500	19,500							
C	Townhouses		3			16	52	Units	104			104
D	Townhouses		3			16		Units	0			0
E	Townhouses		3			20		Units	0			0
	Senior Housing		6	25,000	150,000	120		IL Units	90		92	0
TOTAL		10.25		145,500	400,500	304		Units	826		854	104



PROPOSED COMMUNITY SPACES

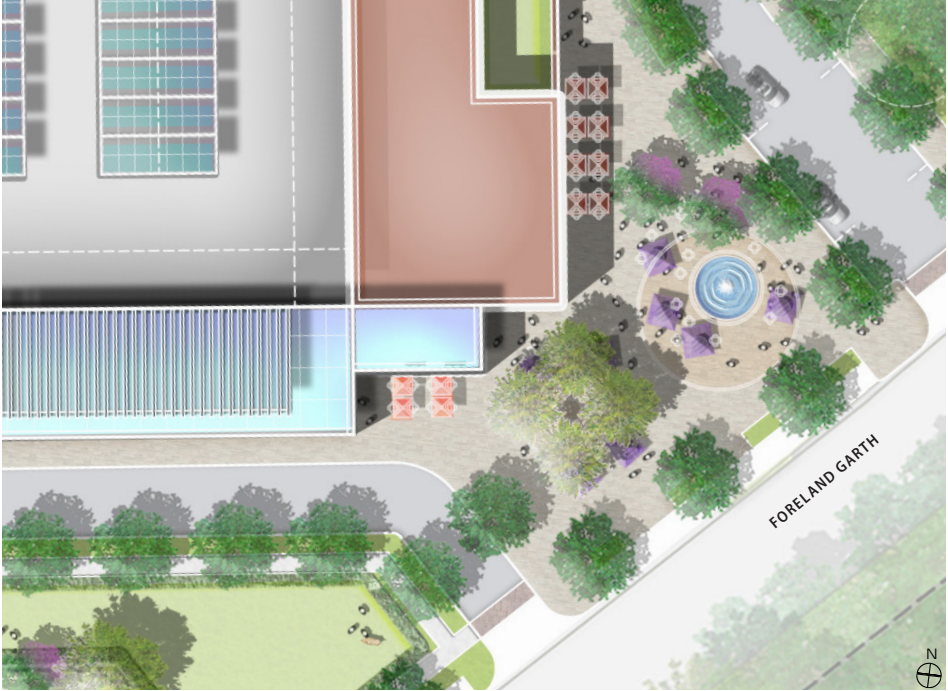
The Long Reach Village Center master plan employs a strong pedestrian framework that links buildings with inviting public spaces, promotes a walkable and accessible community, and improves connectivity to adjacent parks, trails, schools, and neighborhoods. At the heart of the community will be a central Village Green to support retail users and provide opportunities to foster a sense of neighborhood identity and cohesiveness. A series of smaller, public spaces will be developed to include a community dog park, a public plaza, and a neighborhood mews, offering a wide-range of amenities and outdoor spaces for residents and visitors to gather and enjoy.



1 Village Green

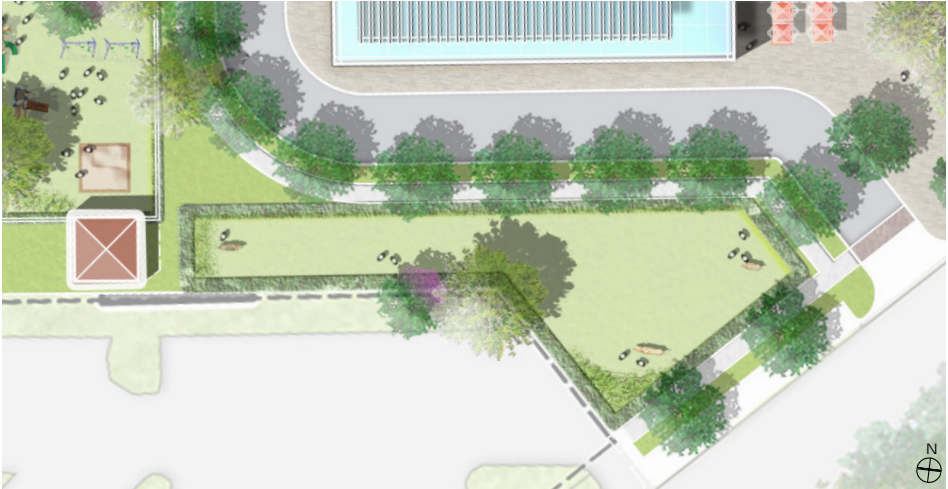
The Village Green will be a defining element and experience. It will serve as a primary amenity space, featuring an open lawn, seating, shade trees, and flexible space that can facilitate a range of passive and active recreation. The manicured green is highlighted by bermed landscaped shoulders with native plantings, flowering trees, integrated stormwater management, and seating to establish a more conducive environment for those who live, work, and visit the space. The pavilion at the corner of Tamar Drive and Cloudleap Court anchors the Village Center, creates a strong, formal gateway and serves as a performance venue. To provide a transition and buffer between the heavily-traveled Tamar Drive, a densely landscaped setback has been incorporated along the east side with a shared-use path. Along the west side of the park, a small hardscaped plaza with one-way vehicular access provides services and opportunities for events.

Along all sides of the park, street trees, walkways, and crosswalks have been incorporated to promote pedestrian safety, walkability, and connections to the larger trail network. A bike share adjacent to the Village's bus stop has been included to further promote alternative modes of transportation.



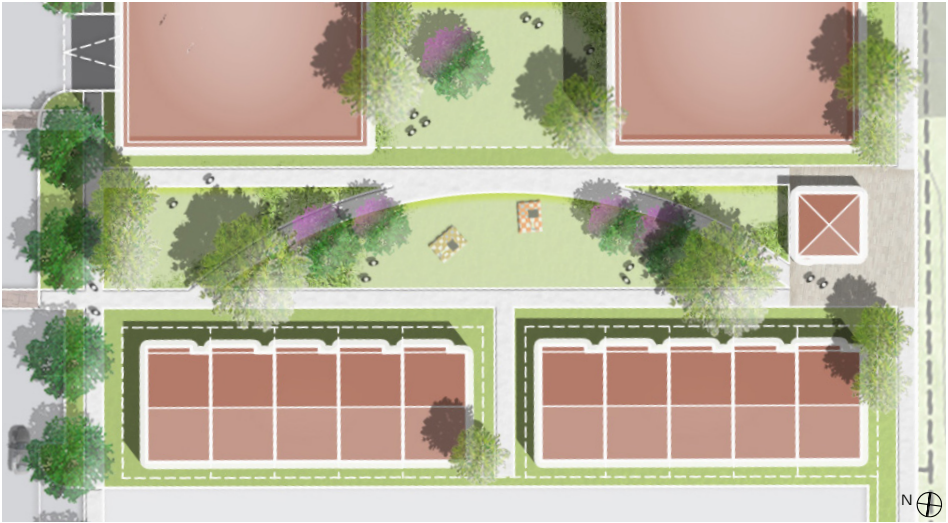
2 Long Reach Plaza

Long Reach Plaza is a contemporary plaza, serving as a visible entry point and front door to Long Reach Village Center from Foreland Court. Positioned adjacent to the kitchen incubator and vertical garden, Long Reach Plaza will serve as a secondary hub for residential and village community life, promoting opportunities for gathering and social interaction. Long Reach Plaza will incorporate a sculptural water feature, a grove of shade trees, stormwater management, and intimate spaces with a variety of seating options. The plaza will be designed to provide flexibility for a wide-range of activities, including outdoor dining, seasonal festivals, and opportunities for academic engagement associated with the vertical garden and incubator space.



3 Long Reach Dog Park

Long Reach Dog Park offers an off-leash play area for Long Reach residents' dogs. The design illustrates an optimal layout and amenities. Specific design elements will include: a safe and accessible site location with close proximity to parking, shade, a 4-foot high fence partially concealed by a dense hedge and equipped with a double-gated entry, durable, long-wearing surface material, a potable water source, park furniture, and informational signage.



4 Long Reach Mews

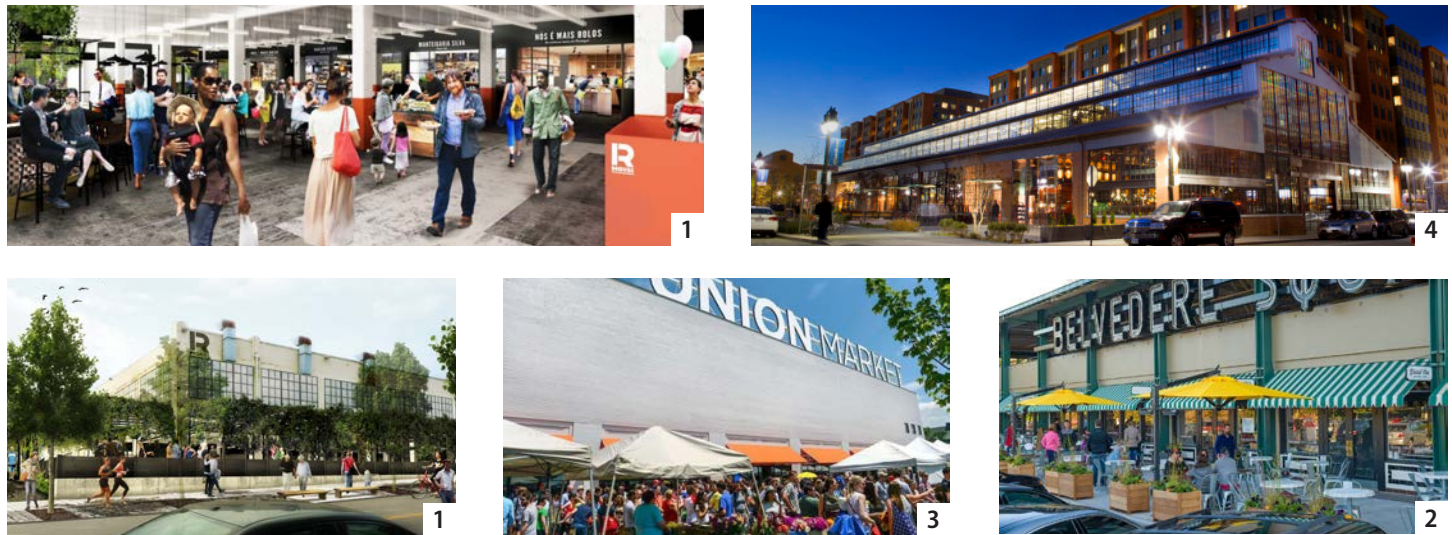
Long Reach Mews is a linear public green that provides a long axis, visually connecting the residential area of Long Reach Village Center to the existing Cultural Art Center. This tranquil greenway creates visual interest through an informal landscape, incorporating native plantings, regularly spaced ornamental trees and shrubs that define frontage adjacent to residential, and a paved walkway. The design of this space will integrate and complement the neighborhood context, enhancing the community's pedestrian network.

PRECEDENTS



Vertical Garden - Vertical Harvest | Jackson, Wyoming

Vertical Harvest is one of the world's first vertical greenhouses providing locally grown, fresh produce to nearby communities year-round. Utilizing vacant land adjacent in an effort to screen an existing parking garage, this greenhouse stands three stories tall and contains 13,500 square feet of space. The structure's footprint currently uses 1/10 of an acre, growing approximately 5 acres of traditional agriculture each year. Vertical Harvest not only provides a unique source for local food, but is a model for integrating innovative employment strategies, providing jobs, internships, and educational opportunities for residents with intellectual and physical disabilities.



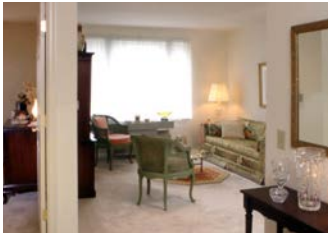
Market Pavilion Buildings - R House¹ & Belvedere Square² | Baltimore, Maryland
Union Market³ & Boilermaker Shops⁴ | Washington, DC

Market pavilion buildings have gained a resurgence in the development world, offering visitors and nearby residents a unique shopping and dining experience. They have become a popular and authentic gathering place that infuse interesting spaces with a wide-range of culinary offerings and experiences. Market pavilion buildings also provide unique opportunities for businesses to scale and grow, creating a launch pad for chefs and local entrepreneurs.



Multi-Family Housing - The Metropolitan | Columbia, Maryland

Design Collective recently completed with The Howard Hughes Corporation, Kettler, and Orchard Development on the first phase of new development in Downtown Columbia that includes approximately 375 'Class A' rental residential units and over 14,000 square feet of retail space. This first phase of development is part of a larger development plan that will provide up to 13 million square feet of net new density consisting of approximately 5,500 residential units, five million square feet of office, one million square feet of retail and up to 640 hotel rooms.



Senior Housing - The Selborne House at Dorsey Hall | Ellicott City, Maryland

The Selborne House at Dorsey Hall is an affordable independent living community completed with Orchard Development. The development has 120 one-bedroom units, including 8,000 SF of common space with offices, a multi-purpose lounge, library, hobby rooms, and a medical exam room. A beautiful landscaped courtyard located behind the facility overlooks wetlands full of wildlife. This project was recognized by the National Association of Home Builders as one of the nation's best senior housing communities.

SUSTAINABILITY & GREEN DESIGN

Our vision for the proposed redevelopment of the Long Reach Village Center is to create a truly sustainable mixed-use redevelopment. We have taken a village-centric approach that integrates net positive energy along with other innovative discussed below which include vertical farming strategies and a state of the art food/tech incubation space all in concert with new multigenerational residential.

Our objective for the new Long Reach Village Center is to achieve the highest levels of sustainability and design for the site. Energy infrastructure plans anticipate achieving both “net-positive” energy and a LEED Platinum rating. The Long Reach Village Center will be designed to produce more power than it uses, to bring clean energy and greater reliability both to on-site operations and to share with community stakeholders. This can be achieved through a strategic combination of energy efficiency, automated building control systems, geothermal heating and cooling, solar electric power, battery storage, and the conversion of organic food waste. Together this systems approach will establish a site that offers low utility costs for all tenants, while providing higher power quality, sustainability, reliability, and resilience to system disruptions on the wider energy grid. The additional clean and affordable power of between 1-3 MW will be offered to surrounding community commercial/institutional users as well as LRVC residents, through well-structured contractual partnership arrangements.

Building a strong backbone of clean and resilient on-site energy resources will also support Howard County’s wider emergency response capabilities. The Long Reach Village Center will be designed to integrate microgrid capacities, including co-generation and battery storage to enhance the reliability and resilience of the site, allowing it to remain operational even when the wider regional electric power grid fails. This strategy will explore developing a community district loop for heating and cooling distribution, as well as decentralized strategies for on-site power generation resources. The economics of such a system will also be enhanced by integration of nearby energy loads like adjacent athletic facilities (Columbia Association’s newly planned tennis bubble) and Long Reach High School, providing both clean energy and greatly enhanced system reliability. In recent years, major utilities including BGE / Exelon have also offered strong public support for incorporation of Microgrid projects into the regional energy distribution grid, to

add resiliency and community benefits. Long Reach is a desirable community to host such infrastructure because of the high school, gas stations, and community meeting spaces, along with residential housing. All of these stakeholders will benefit along with Howard County, through improved affordability, reliability and resilience.

Our team has a great depth of experience in working with government, businesses and communities on similar strategies for alternative energy systems including net positive energy solutions.

Key features of this sustainable and resilient energy infrastructure design will include exploration of the following technologies and design approaches, with a careful emphasis on integration of financial modeling and early integration within core planning efforts to ensure strongly positive economics. These systems include the following: passive design; energy efficiency in the areas of high performance HVAC, lighting and the building envelope; controls systems; power generation including solar PV, natural gas fuel cell and biomass system; power storage and distribution; heating; geothermal; and tax credits and incentives, utilization of the County’s recently passed PACE (Property Assisted Clean Energy) legislation and leverage Sustainable Community Designation.



INNOVATIVE REDEVELOPMENT FEATURES

FOOD & TECHNOLOGY INCUBATOR/ TRAINING CENTER

In evaluating innovative approaches to the redevelopment of the Long Reach Village Center and potential uses to be included in the center, we learned that many Howard County businesses are traveling as far as Bethesda for a co-working kitchen, only to drive back to Howard County to sell and share their products.

This led our team to the conclusion that a food and tech incubator would fill a tremendous unmet need and provide a unique focal point for the new center. Such a facility would provide a hub for the region's food product entrepreneurs, agricultural and technology community. The proposed 25,000 sq. ft. state-of-the-art facility acts as a cross-functional kitchen, dining and co-working space for operations and innovation for entrepreneurs in the food processing, agriculture and technology industries. Currently, there are numerous food entrepreneurs in the region that are in need of a co-working kitchen space. Many are either exceeding the \$25,000/year revenue maximum (for in home production) do not meet FDA compliance requirements, or simply cannot meet growing demand due to the limitations of their existing capacity.

Additionally, many stakeholders, including University of Maryland Howard County extension office, could make very good use of our site as a demonstration space for their programming. UMD also sees our facility as a resource for reducing food waste for local farms as it can be frozen and preserved for distribution to local food banks and community organizations.

Commercial Kitchen Co-Working Space

- » A 10,000 sq. ft. with five state of the art cooking stations (1 allergy free designated) within a thriving Columbia environment. Our facility will offer amazing value to all food-oriented entrepreneurs and community organizations in the Baltimore/D.C. Region

Co-Packing Facility

- » Our 10,000 sq. ft. Co-Packing Facility will act as a cross functional logistics center for the region's food entrepreneurs prep and packaging needs. We aim to act as a supportive infrastructure to the agricultural and packaging ecosystem.



Training Center - Workforce Development

- » Our partnership with the Howard Community College as well as Power52, 501 (c)(3) and the expectation of NCCER accreditation in June of 2017 offers a 5,000 sq. ft. state of the art career training center. Subject matter will cover financial literacy, traditional trades, solar + energy efficiency training and agricultural technology. With a “student-to-mentor loop” we offer the community a center that builds true skills and value into Power52 participants.

Micro-store fronts

- » These are planned as cross functional “stationary food truck” style storefronts offering a showcase space for custom food, beverage and art combinations. These spaces will accentuate the amenity focal point.

VERTICAL FARM

The integration of clean natural food growth within a vibrant village center development, offering healthy local produce 365 days a year, is another innovative feature that we believe would be well received by the community and would further establish the reimagined Long Reach Village Center as a compelling destination. As discussed above in the description of the Concept Plan, the vertical farm will be located on the south side of the parking structure.

Urban agriculture is taking shape to be a meaningful component in meeting the demands that our growing population is placing on food producers of the world. This method of farming has been increasing in popularity largely because of concern for our natural resources and the necessity to find safe and reliable food sources.

The leading method of raising plants indoors is hydroponic growing, a system where plants establish themselves in an inert growing medium and the roots suspend themselves in nutrient-rich water that recirculates again and again. This reuse leads to an estimated 90% water efficiency over field-based farming. In addition, indoor agriculture removes the need for the use of pesticides and herbicides because the environment is almost entirely isolated

from outside threats. Thus, the runoff that is often found in field-based farming no longer occurs, preventing pollutants from entering the environment. Finally, locally grown food avoids the need to move product miles from where it is produced, vastly reducing the transportation carbon footprint.

Calculations show that 1-acre of indoor farming is equal to 10-acres of outdoor growing. This efficiency is the result of the incredible economy of space in plant layout and the ideal growing climate which allows plants to thrive in the indoor environment where external factors such as light and water are carefully controlled and monitored. Vertical farming systems essentially stacks greenhouse systems on top of one another and the output is multiplied.

The proposed vertical hydroponic farm will be a highly productive, environmentally-friendly source for local “365” fresh produce.

Our natural produce will be offered to local restaurants, community residents/volunteers and other charity organizations. We will be able to provide clean, natural food locally so that our community can be closer to where our food and health truly comes. Opportunities have also been identified to partner with HCPSS and other large county consumers, who see tremendous value in a local production partner. The organic waste associated with our growth can also be processed into a usable clean bio-fuel.

Vertical farm innovator Penny McBride of Vertical Harvest will work with our team to establish a successful vertical farm. We will also partner with Power52 and The Arc of Howard County to marry the Vertical Farm operation with workforce development programming. This will offer skills development along with internship and employment opportunities. It will also enable us to provide fresh natural food and well-paying jobs for community residents who work with and for LRVC’s Vertical Farm.

URBAN RENEWAL STRATEGIES FOR LONG-TERM REVITALIZATION

INTEGRATION OF PLAN WITH SURROUNDING PROPERTIES

As previously discussed, sustainability is a key element in the redevelopment of the Long Reach Village Center. Our strategies include a mixed of uses, abundant public gathering spaces, creation of a transportation hub, careful integration of retail and commercial offerings to fit the needs of Long Reach and the greater Howard County community, preservation of current uses and a committed team of long-term owners and management.

But urban renewal is not done in a vacuum. A successful urban renewal effort must be woven into the fabric of the surrounding neighborhood. Our plan accomplishes this in the many ways discussed above and the interconnection and linkage discussed below, but also through careful attention to building height and massing, the welcoming transition from Tamar Drive with a gateway entrance feature, with the lush Village Green and plaza beyond and the many innovative elements that are not available anywhere in Howard County. Together, the Long Reach Village Center can be transformed from an underutilized eyesore to a desirable destination for shopping, public events, employment and residential.



Future Development Potential - The illustrative plan highlights a potential development framework for the southwestern portion of the Urban Renewal Area. The long-term development plan indicates the opportunity to expand the proposed street network and incorporate additional parks and open spaces to create a successful, neighborhood extension of the Long Reach Village Center Master Plan.

THE DEVELOPMENT TEAM

OVERVIEW OF TEAM

Orchard Development Corporation has assembled a team of design, development, financing, leasing and property management professionals with extensive experience in executing successful mixed-use real estate projects in Columbia, Howard County, and across the country. Every member of the team is based nearby in Maryland, and, many have deep roots in Howard County, including Orchard Development, Williamsburg Homes and energy expert Jason Jannati.

In addition, key team members have collaborated on other similar successful mixed-use projects. Most notably in Columbia, Orchard Development Corporation was a co-developer on the Metropolitan, the 380-unit mid-rise multifamily project with retail and a parking garage on the edge of Columbia Mall. Also involved in the project was Gutschick, Little & Weber, PA for civil engineering; Design Collective, Inc. for architecture, interior design and landscape design, and; Todd D Brown, Esq., a Partner with Shulman Rogers, on zoning, legislative, land use and plan approvals.

Ellicott City-based Orchard Development Corporation (ODC) has called Howard County home for nearly 40 years and will serve as the lead developer for the mixed-use redevelopment of the Long Reach Village Center. ODC has a long and successful history of residential, retail and commercial development in and around Howard County. ODC also has a proven track record of working with the County in partnership on a number of projects, including the Orchard Crossing Apartments; Patuxent Square, a mixed-use residential and retail project; and the New Cultural Center, a mixed-use performing and visual arts center with residential that is currently moving through the approval process and is slated for a construction start this Fall.

Other key members of our team include the design professionals at Design Collective, Inc. and Gutschick Little & Weber, PA. As noted, we have worked successfully with both firms on a number of projects, most recently the Metropolitan in Downtown Columbia and the New Cultural Center located in the Crescent Neighborhood. Both firms have extensive experience in Howard County as well as with similar mixed-use projects.

Adding to our depth and capabilities in the area of zoning, land use and the site plan approval process is arguably the most experienced attorney who works in this realm in Howard County, Todd D. Brown Esq. ODC has worked with Mr. Brown on the Metropolitan and New Cultural Center projects; additionally, Mr. Brown has done extensive work for the Howard Hughes Corporation, among other clients.

A project of this size and scope will rely on a large general contractor with a proven track record on large and sophisticated projects. We are privileged to have one of the preeminent general contractors in the country on our team, the Baltimore-based Whiting-Turner Contracting Company.

We take the business of energy conservation and alternative energy very seriously, and, for that reason, we have a full complement of experienced experts who are at the cutting edge of energy technology on the team. They include Jason Jannati, a Columbia-based alternative energy entrepreneur, Urban Ingenuity, an experienced energy system finance firm, and Bith Energy, Inc., a certified Minority Business Enterprise (MBE) as well as a Disadvantaged Business Enterprise (DBE) with a track record in alternative energy design and solutions.

In the area of expanded services for seniors and innovative project features, including a food incubator, workforce training, and responsible community farming, our team is rounded out with a broad range of highly visible and successful organizations including Howard Community College, The ARC of Howard County, Vantage House Senior Communities, Power52 and Vertical Harvest.

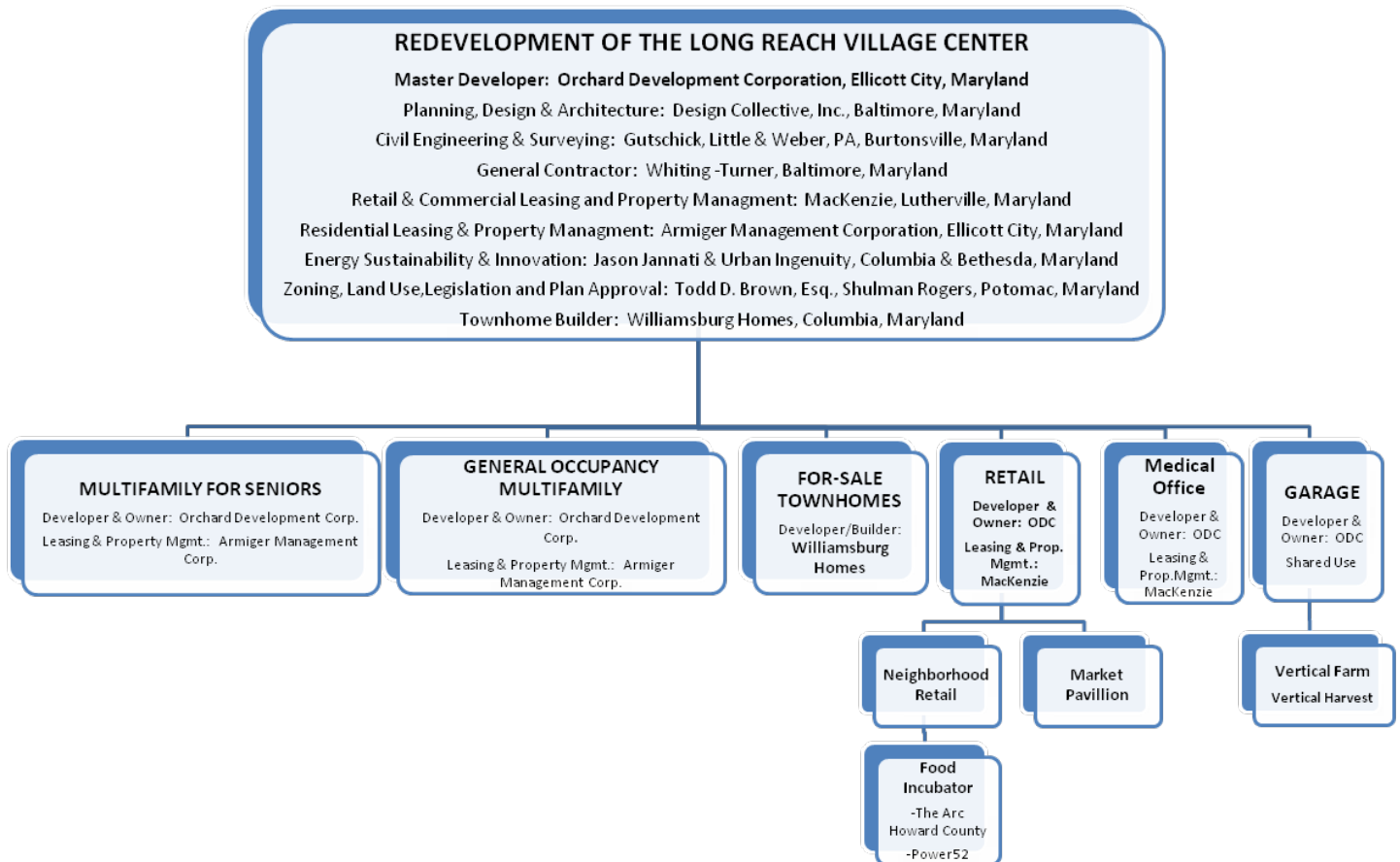
Our proposal includes not only a mix of uses, but a well thought out range of uses and strategies that are designed to meet the needs of the existing Long Reach Village residents, to attract new residents and business, to offer compelling reasons to be a destination for the larger Howard County Community, and to be able to sustain itself for the long haul. The ODC team has the experience and vision to make this happen.

ORGANIZATION CHART

An organization chart displaying the roles and relationships between the principal team members follows. Below is the summary of the team:

Master Developer Planning, Design & Architecture Civil Engineering & Surveying General Contractor Retail/Comm. Leasing & Prop. Mgmt. Energy Sustainability & Innovation	Orchard Development Corporation Design Collective, Inc. Gutschick Little & Weber Whiting-Turner Contracting Co. MacKenzie Companies Jason Jannati, Urban Ingenuity & BithEnergy, Inc. Williamsburg Homes Vantage House Senior Living Comm. The Arc of Howard County Howard Community College Power52 Vertical Harvest Howard Bank	L. Earl Armiger, CEO Cecily Bedwell, AICP Carl K. Gutschick, PE Jeff Cooper, VP John Harrington, Sr. VP Jason Jannati Robert Wallace, Sr. Bruce Harvey, Pres. Meriann P. Ritacco, Ex. Dir. Cindy Parr, Exec. Dir. Kathleen Hetherington, Ed.D. Ray Lewis Penny McBride, Founder Mary Ann Scully, Chairman, President, and CEO Spencer B. Perry, VP Brian LaChapelle, Sen. VP Brendan Scanlon, Sen. Dir.
Townhome Builder Senior Living Enhanced Services Food Incubator & Workforce Training		
Vertical Garden Lender Partner		
Lender Bank Lender Bank Equity Financing	BB&T AGM Financial Services Greysteel	

* Detailed Firm qualification information and resumes can be found in Appendix IV.



SUMMARY EXAMPLES OF SUCCESSFUL DEVELOPMENT



The Metropolitan Columbia, Maryland (co-developed with HHC & Kettler)

- » 380 Apartments
- » 14,000 sf Retail
- » Completion: September 2014
- » Completed Value: \$92,000,000
- » Fully Stabilized, Residential & Retail

Patuxent Square N. Laurel, Maryland

- » 80 Apartments
- » 16,000 sf Retail
- » Completion: May 2007
- » Completed Value: \$20,400,000
- » Fully Stabilized, Residential & Retail

Selborne House of Dorsey Hall Columbia, Maryland

- » 120 Senior Apartments
- » Completed Value: \$21,600,000
- » Fully Stabilized

Orchard Crossing Apartments Columbia, Maryland

- » 187 Apartments
- » Completion: September 1992
- » Completed Value: \$26,500,000
- » Fully Stabilized

DESIGN COLLECTIVE



Warfield Neighborhood Columbia, Maryland

- » Size: 45 Acres
- » Completion: 2013 (Architecture is currently under construction)
- » Project Cost: \$350,000
- » Services Rendered: Planning & Full Architecture Design

Howard Community College Masterplan & Architecture Columbia, Maryland

- » Size: 120 Acres
- » Completion: 2006
- » Project Cost: \$185,000
- » Services Rendered: Planning & Full Architecture Design

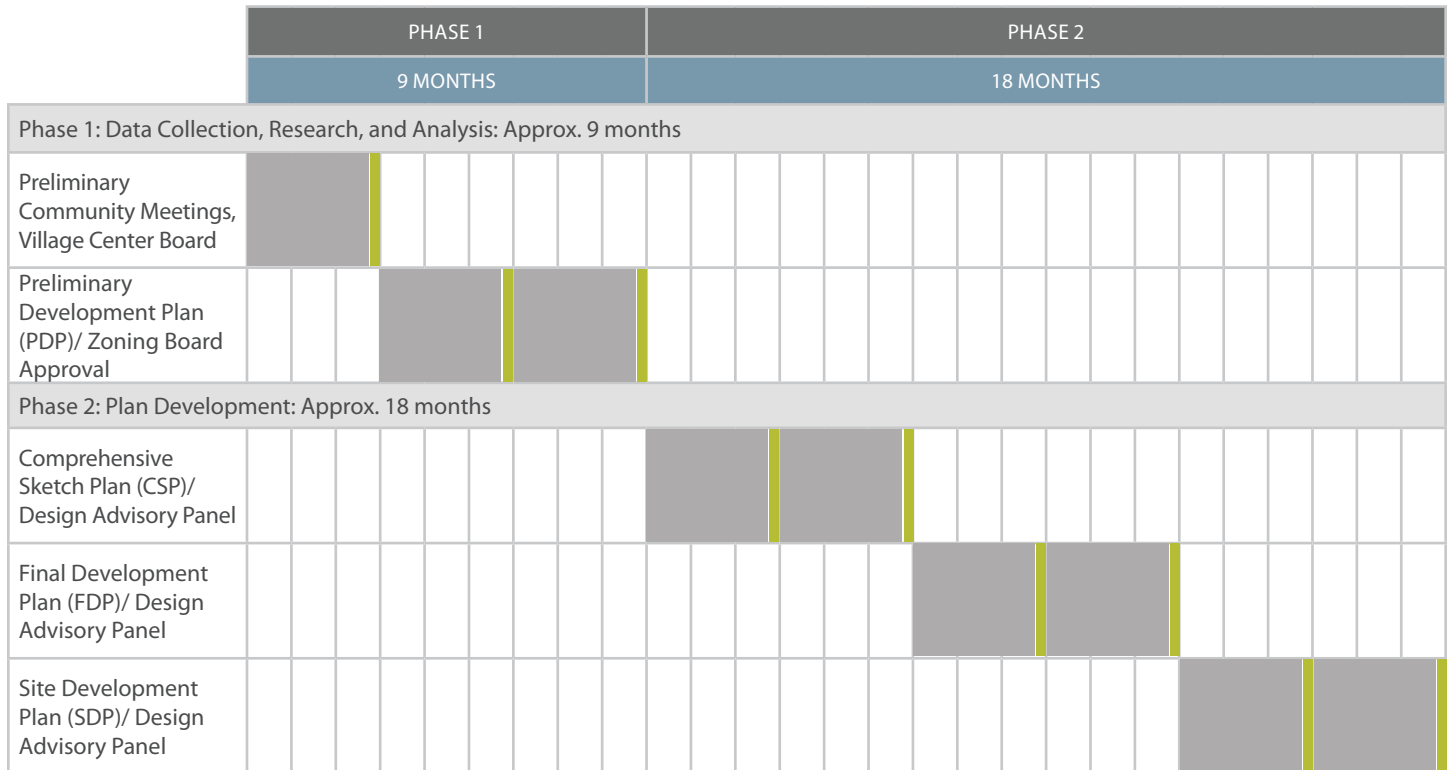
Columbia Town Center Charrette Columbia, Maryland

- » Size: 14,000 Acres
- » Completion: 2005
- » Project Cost: \$350,000
- » Services Rendered: Planning

Metropolitan Columbia, Maryland

- » 380 Apartments
- » 13,700 sf Retail
- » Completion: 2015
- » Completed Value: \$58,600,000
- » Services Rendered: Full Architecture Design, Interior Design & Landscape Architecture

TIMELINE



PHASE 1

Step 1: Preliminary Community Meetings, Village Center Board

- » Village Center Community Plan
- » Village Center Concept Planning Workshop

(3 Months to achieve approval)

Step 2: Preliminary Development Plan (PDP)/Zoning Board Approval

- » Pre-Submission Meeting 1
- » Pre-Submission Meeting 2

(6 Months to achieve approval)

PHASE 2

Step 3: Comprehensive Sketch Plan (CSP)/ Design Advisory Panel (to extent required)

- » Staff Review
- » Planning Board Hearing

(6 Months to achieve approval)

Step 4: Final Development Plan (FDP)/ Design Advisory Panel (to extent required)

- » Staff Review
- » Planning Board Hearing

(6 Months to achieve approval)

Step 5: Site Development Plan (SDP)/ Design Advisory Panel (to extent required)

- » Staff Review
- » Planning Board Hearing

(6 Months to achieve approval - Building Permit Review will be achieved during the SDP Process simultaneously)

CONCLUDING SUMMARY

Orchard Development Corporation has laid out a plan for the Long Reach Village Center that addresses the redevelopment objectives outlined in the Reimagine Long Reach Village Center Proposed Plan, is consistent with the County's Urban Renewal Law and meets the criteria established in the RFP. More importantly, we view our plan as a starting point to engage the Long Reach Village community and the County in a series of meetings and charrettes designed to fine-tune and improve the overall plan, the buildout program, layout and plan features to best fit the needs of current residents and business. Specific objectives have been addressed as follows:

ECONOMIC SUSTAINABILITY

A careful mix of convenience retail and services combined with innovative uses like a food & tech incubator, market pavilion and vertical farm will set the Long Reach Village Center apart from any of Columbia's Village Centers as well as other retail and commercial offerings in the Columbia area. Adding further stability to the new retail and commercial is a new multi-generational mix of residential, including for-sale townhomes as well multifamily rental options, all within the Center and pedestrian friendly. Finally, the proposed partnerships with Howard Community College, The ARC of Howard County, the Howard County Farm Bureau, Vertical Harvests and Power52 add stable institutional and entrepreneurial support and expertise that will enhance the stability and sustainability of the retail and commercial uses.

CONNECTIVITY

The proposed plan provides well marked, easily identifiable pedestrian circulation in and around the Village Center, with connections to the high school and surrounding community. We also propose the Center to be a transportation hub, as shown on the concept plan, with a sheltered transit stop for buses and Uber/Lyft, bike rack and a shared bike station. These pedestrian and transportation links beyond Long Reach will help activate the Center and make it more accessible as a destination.

COMMUNITY SPACES

A focal point of the proposed plan is a large welcoming green and plaza at the intersection of Tamar and Cloudleap, with an outdoor pavilion, seating, walkways and a wide-open green space. This area can serve as a venue for community festivals, entertainment, and all manner of gatherings. In addition, the Market Pavilion will open up to the plaza with a wide sidewalk, which will

be able to accommodate outdoor café tables for dining in good weather. Further, we understand the importance of the current community uses and we intend to retain an enhanced orientation to the Stonehouse, the CA Arts Center and the Interfaith Center. We will also re-locate the County Police sub-station within the new center. Especially, our proposed plan would open up access and visibility for the Stonehouse.

BUILDING & SITE DESIGN

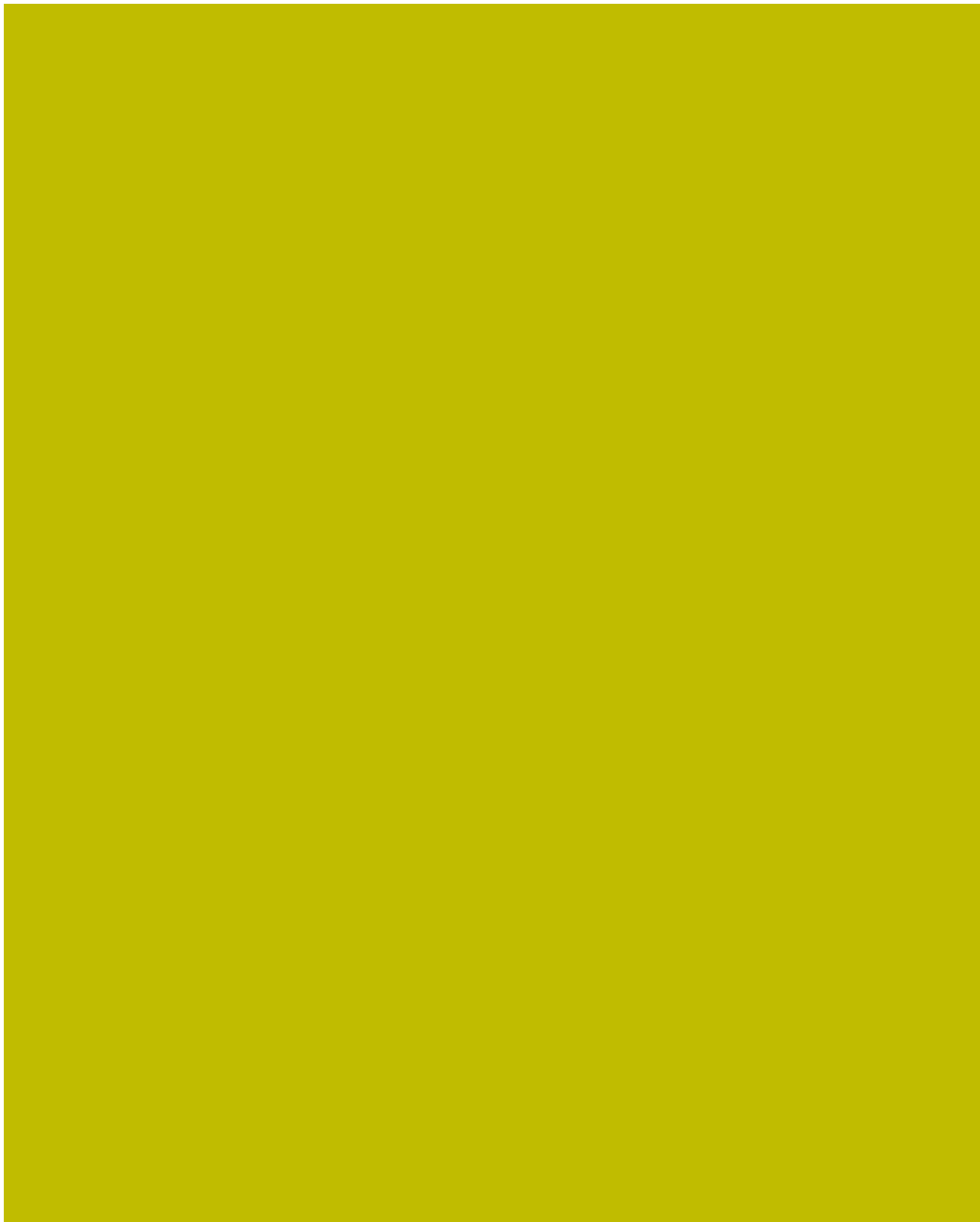
The award winning firm of Design Collective, Inc. has developed a concept plan that is rich in features and high quality finishes, including landscaping, and which integrates well with the existing neighborhood. The buildings will be LEED certified and the site will be developed utilizing best practices in all areas of storm water management and environmental controls. In addition, Williamsburg Homes will offer a high quality of design and finish in their for sale townhomes, adding attractiveness and value to Long Reach.

INNOVATION

ODC's vision for the Long Reach Village Center redevelopment includes a number of innovative elements designed to enhance sustainability, attract a broader surrounding community, address energy efficiency and environmental issues, and create a fun place to live, work and shop. These features include state of the art alternative energy solutions, a food & tech incubator and vertical farm. It's not just innovation for innovation sake, these features will contribute to the synergy that will make the new Village Center a success.

LOCAL & EXPERIENCED TEAM

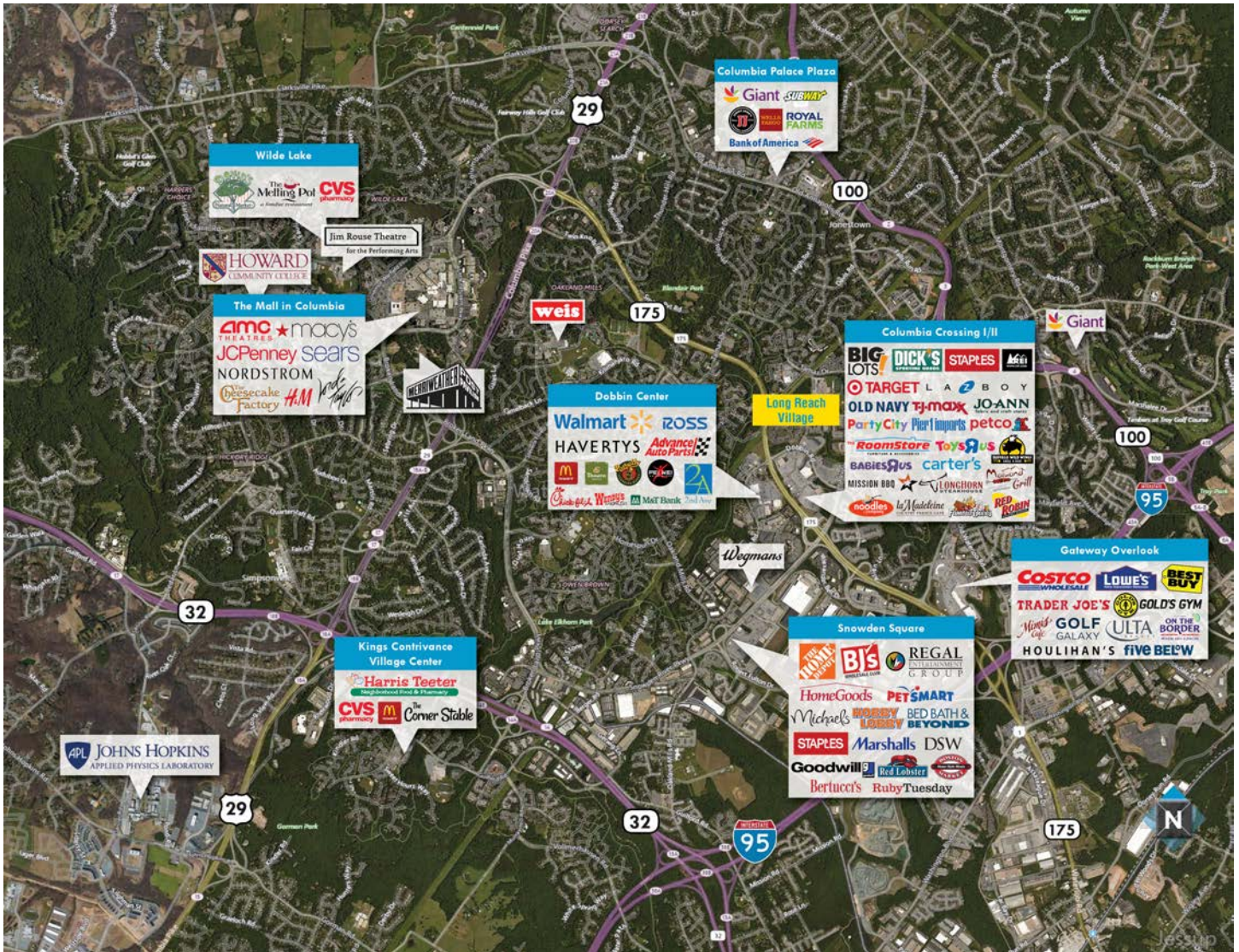
As discussed previously, ODC has assembled a local, broad-based and experienced team. We are committed to get this done right, and we are committed to be fully engaged for the long haul to insure the success and desirability of the Long Reach Village Center for years to come.

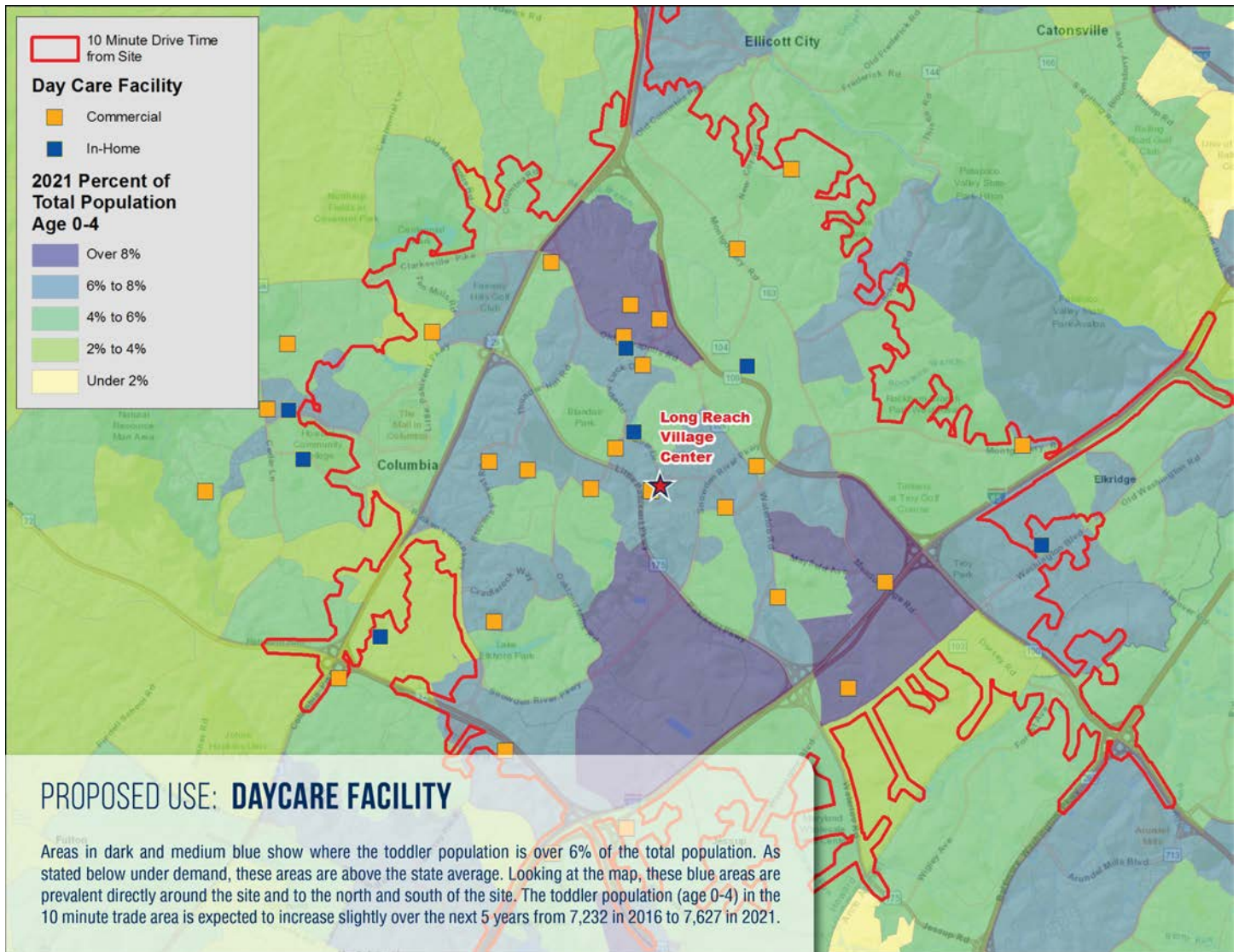




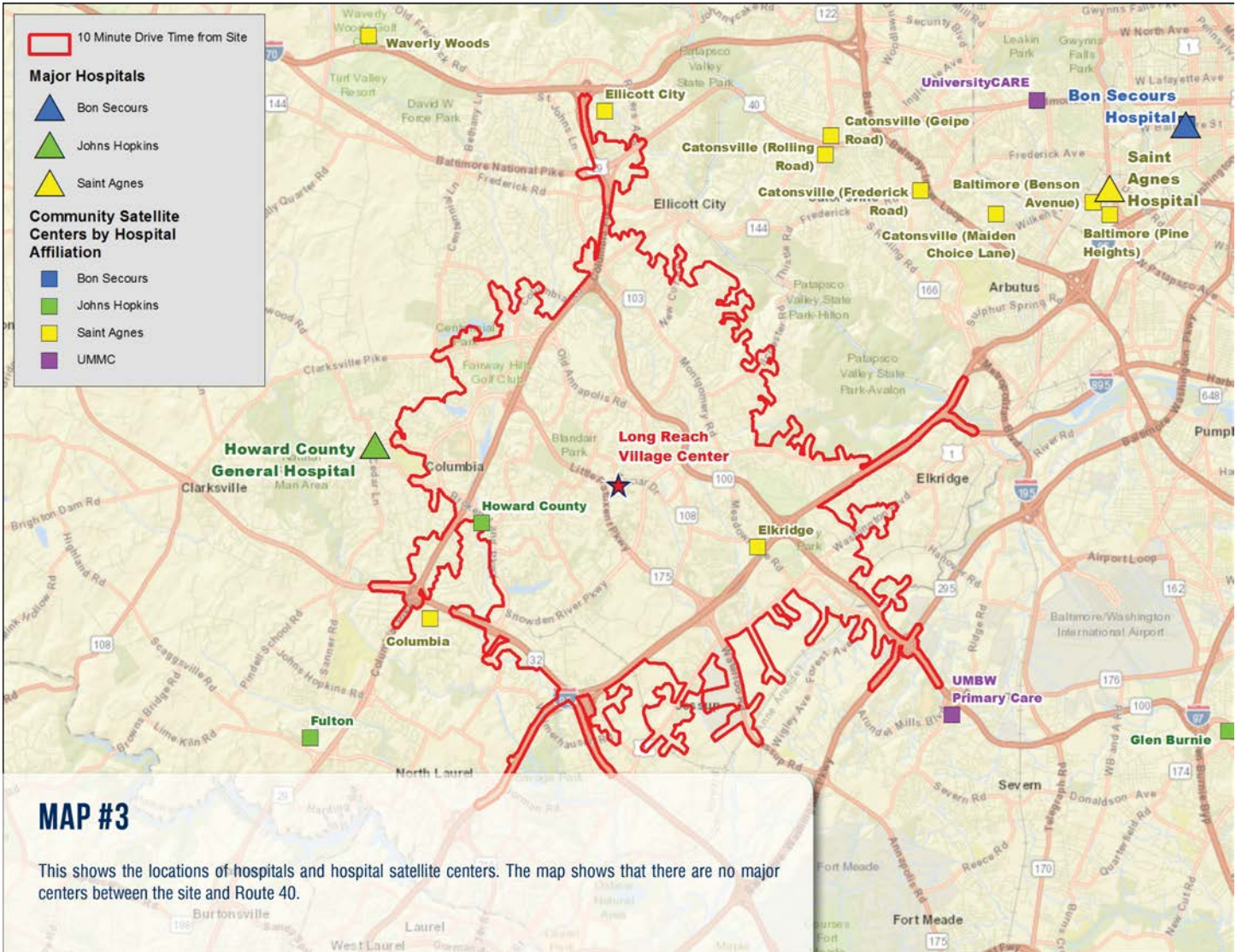
APPENDICES

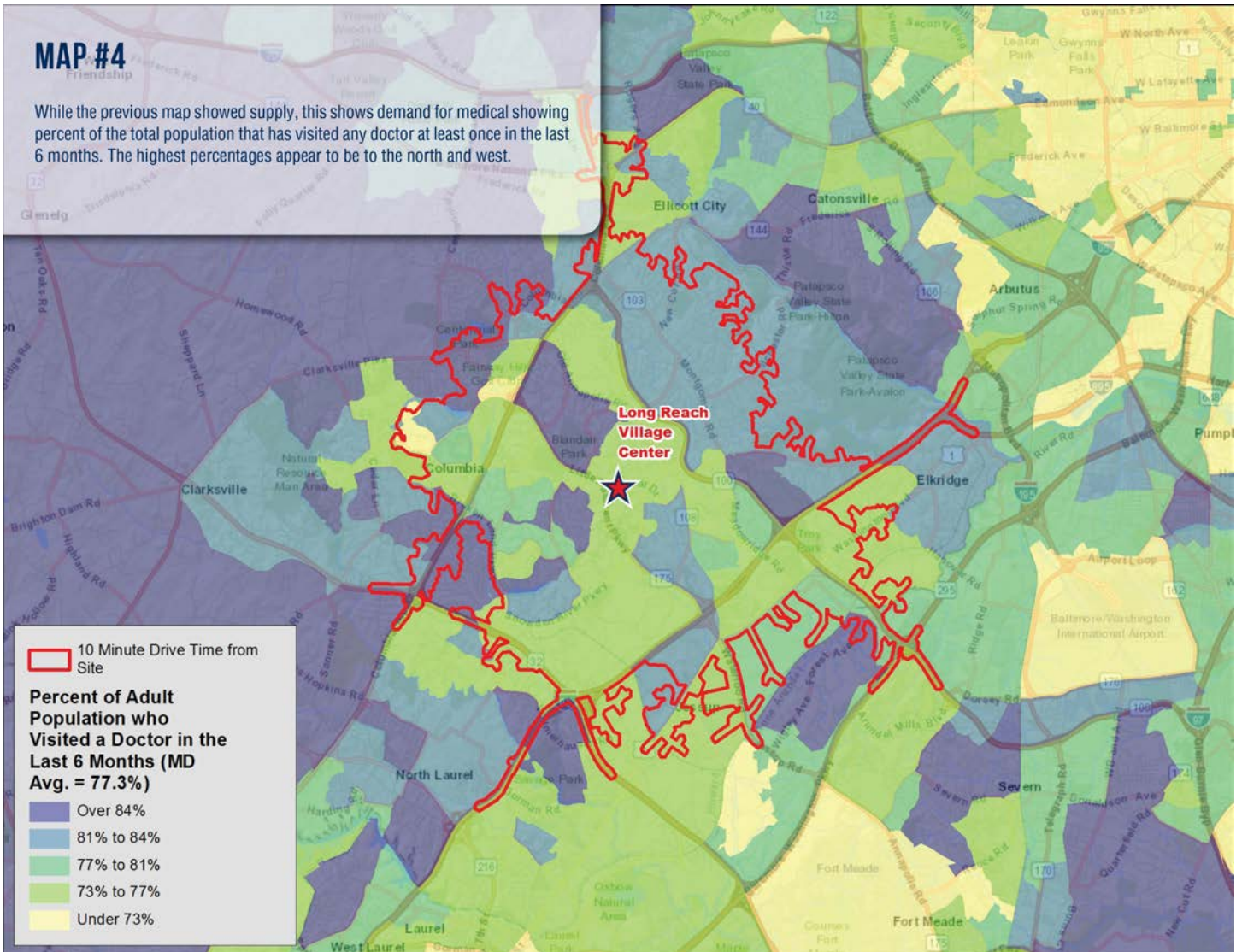
APPENDIX I - COMMERCIAL REAL ESTATE MARKET MAPS



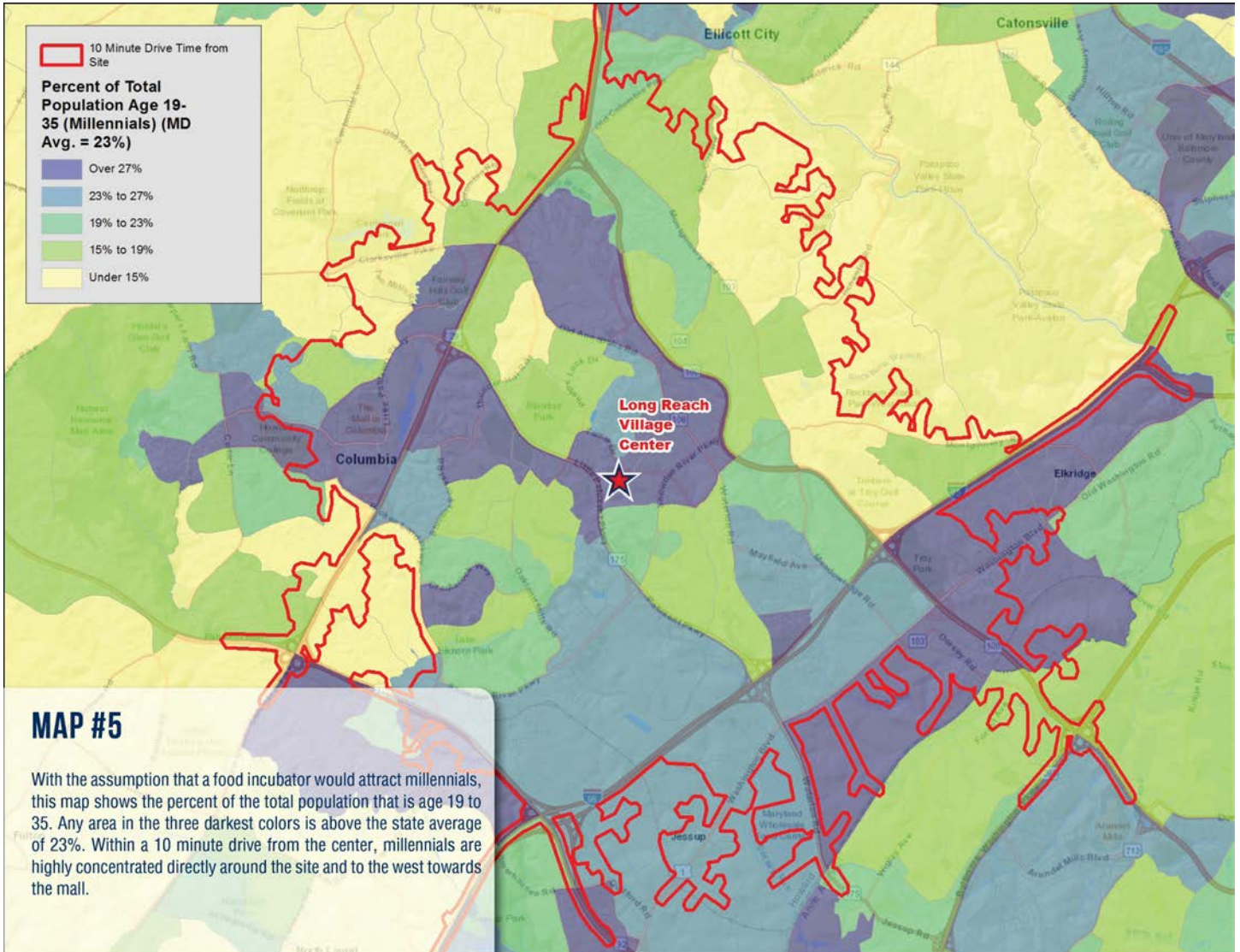


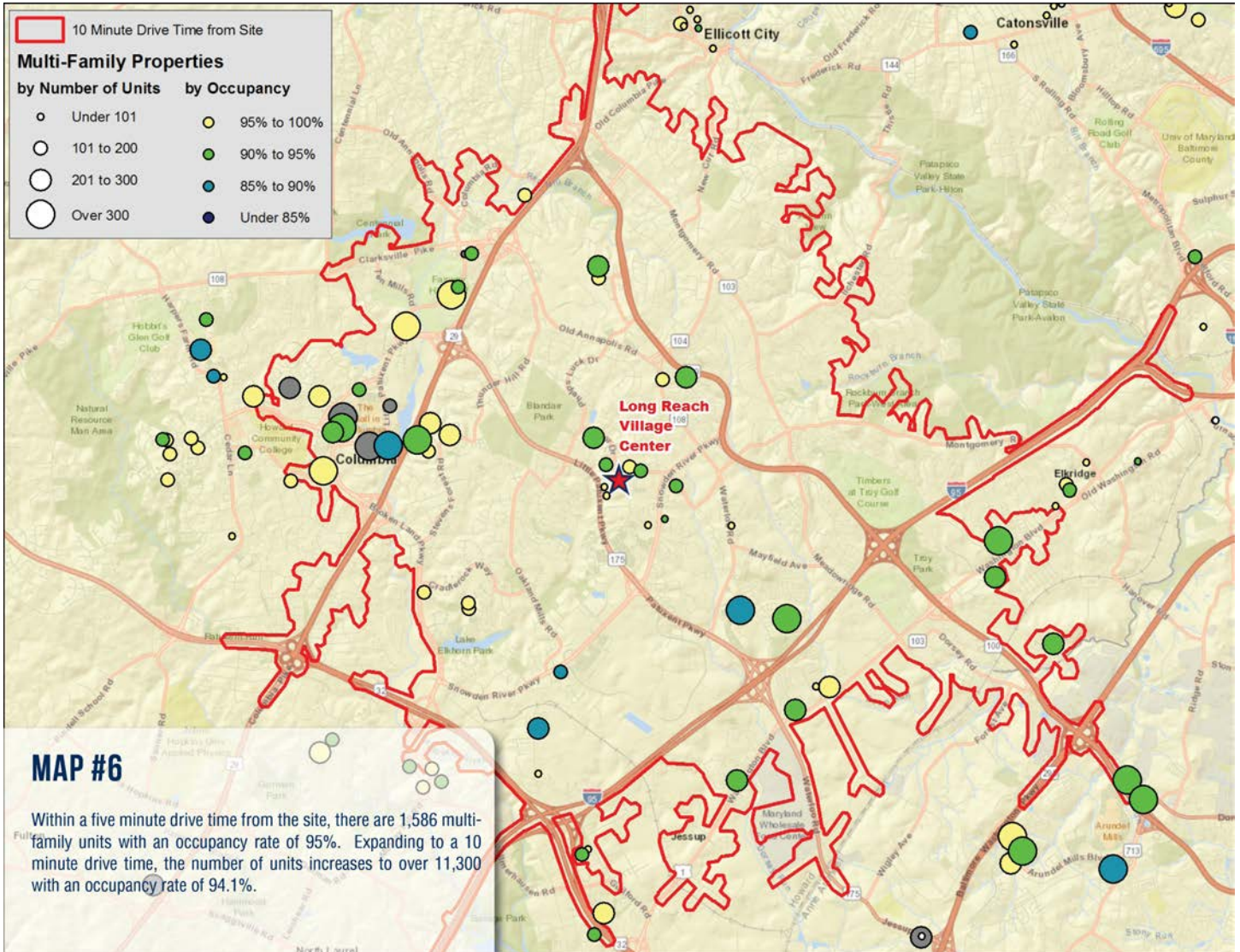
APPENDIX I





APPENDIX I





APPENDIX II - LETTERS OF SUPPORT



10901 Little Patuxent Parkway
Columbia, MD 21044-3197
443-518-1000
MD Relay 711
www.howardcc.edu

February 14, 2017

To Whom It May Concern,

After discussions with the Orchard Development team about their plans for the Long Reach Village Center redevelopment, my staff is confident that the proposed food and technology hub, which includes a workforce training center, will be an asset to the community. Howard Community College (HCC) is eager to explore opportunities with Orchard Development as the food and technology hub could be helpful in supporting the community with job training and skills development.

This new incubator facility, with the latest technology, programming and equipment in the agricultural and technology space, offers an excellent opportunity to enhance the college's existing culinary offerings. The planned incubator could be a resource to assist HCC in efforts to develop noncredit workforce development and continuing education courses in food service and renewable energy.

In conjunction with the Orchard Development and the Power52 team, the college sees an opportunity to provide enhanced learning opportunities for HCC students and training for members of the community workforce. Students could receive mentorship and opportunities for experiential learning.

Being able to work with Orchard Development and the Power52 team on workforce development will be highly effective as the recognition of HCC and the Power52 brand will help to continuously attract many community members looking to build skills and employment in the agricultural and technology sector.

It is with great pleasure that Howard Community College supports Orchard Development's innovative proposal for the Long Reach Village Center revitalization project.

Sincerely,

A handwritten signature in cursive script that reads "Kathleen Hetherington".

Kathleen Hetherington, Ed.D.
President



Achieve with us.

February 1, 2017

County Executive Allan Kittleman
Howard County Government
3430 Courthouse Dr.
Ellicott City, MD 21043

Dear County Executive Kittleman:

It is with excitement and pleasure I send this letter to ask for your support of Orchard Development's plan for the revitalization of the Long Reach Village Center. We, here at The Arc of Howard County, are thrilled about the possibility of partnering with the likes of Orchard Development, Penny McBride, founder of Verticals Harvests and Power52 and certainly Jason Jannati.

As you know, The Arc of Howard County is constantly seeking opportunities to develop partnerships that will enhance the lives of the people we support. We feel very fortunate to have this new prospect that will create employment and training for individuals with disabilities to engage in a vertical farm operation. As you know, it is critical for people with disabilities to be as integrated as possible in the community.

The vision that the Orchard Development team has for the revitalization of Long Reach will offer a diversity of experienced farmers working with entry level individuals in the community and people with disabilities to achieve a common goal. These partnerships will create meaningful employment that is sustainable and key to enhancing the health of the community at large. Not to mention it will offer a community gathering location with healthy food that can be offered locally and/or delivered 365 days a year.

We are hopeful that this project will move forward and we will all reap the benefits of a sustainable, resilient community model.

Sincerely,

Cindy Parr

OFFICERS

Dorothy Plantz
President
Howard Community College

William Erskine
Vice-President
Ofit Kurman

Pam Guzzone
Secretary
Community Advocate

Jane Padgett
Treasurer
M&T Bank

Ed Wilson
President Emeritus
Constellation

DIRECTORS

Elliott Arditi
Community Advocate

Jeffrey Amiger
BB&T

Alex Barnes
People Power

Cathy M. Cope
*Centers for Medicare &
Medicaid Services*

Joseph R. Geld
PNC Wealth Management

Sarah Hochbaum
Community Advocate

Phil Kiracole
Gooseworks Consulting

Mike Lewis
Orisman Hyundai and Chrysler
Dodge, Jeep & Ram

Michael Muñoz
Howard Bank

Catherine Raggio
Community Advocate

Doreen Shing
Self-Advocate

Kathy Tellis
Community Advocate

STAFF

Cindy Parr
Executive Director

Susan M. Haynes
Assoc. Executive Director of Administration

Deborah L. Wagner
Assoc. Executive Director of Services

THE ARC OF HOWARD COUNTY
11735 Homewood Road
Ellicott City, MD 21042
T 410.730.0638 W www.arcHoward.org

APPENDIX III - DETAILED TEAM CAPABILITIES, RESUMES, EXPERIENCE & ADDITIONAL EXAMPLES OF SUCCESSFUL DEVELOPMENTS



MASTER DEVELOPER

OFFICE LOCATION

5032 Dorsey Hall Drive
Ellicott City, Maryland 21042
(P): 410.964.2334

WEBSITE

www.orcharddevelopment.com

YEARS IN BUSINESS

38 Years

SIZE OF STAFF

45 People

SERVICES

- Development
- Real Estate
- Property Management

Founded in 1979 by L. Earl Armiger, Howard County-based Orchard Development Corporation has developed more than \$1 Billion of residential and commercial real estate in Maryland, Virginia, Pennsylvania, Florida and Washington, DC. In Howard County alone, Orchard has developed 23 residential communities comprising more than 3,500 residential units as well as 150,000 square feet of commercial space. Orchard's capabilities in building and real estate development span the full range of land acquisition & development, project financing and building construction of residential, retail and office projects.

Beginning with its first planned communities, the 118 unit Orchard Hill and the 575 unit Sewell's Orchard, the company has developed land for more than 5,500 residential units over the past thirty-five years. With its affiliate company, Armiger Management Corporation, the focus of the business in recent years has been the development and management of market rate, mixed-income & affordable apartments and senior communities. These projects have been financed through a variety of methods including banks, insurance companies, state and local housing finance agencies as well as FHA insured programs. Notable projects include the Orchard Club Apartments in Elkridge, and Orchard Crossing, Selborne House of Dorsey Hall, Hickory Crest and Orchard Meadows at North Ridge in the Columbia, Maryland area.

Non-residential developments include several projects completed by ODC and members of the ODC team. This includes over 100,000 square feet of office space, strip retail, mixed-use retail and pad site development.

The Company has also successfully partnered with others to jointly develop projects, most notably Chesapeake Realty Partners in the Orchard Meadows at North Ridge in Ellicott City, Maryland and the Howard Hughes Corporation & the Kettler Companies in the \$100M Metropolitan mixed-use project in Columbia, Maryland.

In recent years, Orchard has received national awards for its Selborne House communities from the National Association of Home Builders (twice) and the National Association of Housing and Redevelopment officials, as well as an achievement award from the Home Builders Association of Maryland for its active adult community, Hickory Crest. The company has also received awards for best Apartment Community, from the local builders association, and Outstanding Achievement Award for affordable housing from the State of Maryland.

The most recent award in 2012 was a Certificate of Merit in architectural design and construction for a 22 unit infill project in the historic district from the Borough of Gettysburg. Also, in 2010 Orchard Development Corporation received an Historic Preservation Award from Baltimore Heritage, Inc for the John Manley House. This project featured the adaptive re-use of a former school into affordable senior housing, successfully completed with co-developer Homes for America, Inc.



With its partner Chesapeake Realty Partners, Orchard Development's Orchard Meadows at North Ridge community achieved the Silver Level of green certification from the National Association of Homebuilder's NGBS program. All new Orchard projects will be designed to similar green standards, utilizing best practices, techniques and materials for energy efficiency and environmental standards.

Orchard Development is committed to sustainable development and green building practices. Embracing the six tenants of the National Green Building Standard we will educate our team as we create apartment homes that use energy, water and materials efficiently and provide enhanced indoor air quality. As individuals, and as an organization, we are mindful of future generations by striving to minimize our impact on the environment. A green built apartment home is more comfortable, healthy and cost efficient for its residents.

Living a green lifestyle is more than a frame of mind; it's a commitment to making good choices. Literally every decision we make can be 'green' in one way or another: our food, consumables, household goods, transportation and now – even the apartment homes we rent.

To support this growing desire for a sustainable lifestyle, Orchard Development launched its Green Building Program in 2012 with a National Green Building Certified apartment development at Orchard Meadows at North Ridge, Ellicott City, Maryland. Orchard Development's "green" apartment homes provide the energy and environmentally conscious tenant with healthy, energy-efficient living that is affordable, low maintenance and offers the best in sustainable living.

Following strict National Green Building and ENERGY STAR® standards, Orchard Development's green-built apartment homes are among the first National Green Building Certified available to consumers in Howard County.

For communities in Virginia, Orchard Development is designing to the EarthCraft Multifamily Virginia, which is the country's first multifamily-specific green building program. It addresses both newly constructed multifamily projects and renovations. The result is Multifamily communities that are healthy, operationally cost effective, as well as energy, water and resource efficient. In addition, each EarthCraft Multifamily unit has its own dedicated fresh-air intake for optimum indoor air quality.

APPENDIX III

COMPLETED MULTIFAMILY COMMUNITIES			
COMMUNITY NAME	LOCATION	NO. UNITS	PROGRAM TYPE
Orchard Club Apartments	Elkridge, Maryland	196	Market/ LIHTC
Orchard Crossing Apartments	Columbia, Maryland	187	Market/ LIHTC
Orchard Crossing Townhomes	Columbia, Maryland	36	Affordable
Selborne House of Laurel	Laurel, Maryland	126	Senior/ LIHTC/FHA
Selborne of Dorsey Hall	Ellicott City, Maryland	120	Senior/ LIHTC
Patuxent Square	Laurel, Maryland	80	LIHTC
Orchard Mills Apartments	Dale City, Virginia	280	LIHTC
Maple Avenue Apartments	Purcellville, Virginia	60	LIHTC
Longfellow Arms	Washington, DC	30	LIHTC
Orchard Landing Apartments	Dumfries, Virginia	184	LIHTC
The Carlisle Apartments	Gettysburg, Pennsylvania	22	Market/ FHA
John Manley House	Baltimore, Maryland	30	Seniors/ LIHTC
Orchard Meadows	Ellicott City, Maryland	240	Market
The Metropolitan	Columbia, Maryland	380	Market
TOTAL		1,971	

COMMUNITIES IN DEVELOPMENT			
COMMUNITY NAME	LOCATION	NO. UNITS	PROGRAM TYPE
Artists Flats/New Cultural Center	Columbia, Maryland	200	Mixed-Income
Orchard Ridge	Fredericksburg, Virginia	169	LIHTC
Orchard Overlook	Frederick, Maryland	207	Market/ LIHTC
Orchard Village Center	Kent Island, Maryland	331	Market
TOTAL		907	



**Orchard Crossing
Columbia, Maryland**

- » 187 Units
- » Garden Apartments
- » Delivered 1995



**Orchard Club Apartments
Elkridge, Maryland**

- » 196 Units
- » Garden Apartments
- » Delivered 1992



**Orchard Meadows at North Ridge
Ellicott City, Maryland**

- » 240 Units
- » Luxury Apartments
- » Delivered 2012



**Selborne House of Dorsey Hall
Ellicott City, Maryland**

- » 120 Units
- » Affordable Senior Apartments
- » Delivered 2003



**Hickory Crest
Columbia, Maryland**

- » 88 Units
- » First Active Adult Community in Howard County
- » Delivered 2005



**Patuxent Square
N. Laurel, Maryland**

- » 80 Units
- » Apartments/Retail/Commercial
- » First Mixed-Use Project Under Route 1 Revitalization Plan

L. EARL ARMIGER

CHAIRMAN & CEO | ORCHARD DEVELOPMENT CORPORATION



EDUCATION

University of North Carolina

YEARS WITH FIRM

38

TOTAL YEARS EXPERIENCE

50

PROFESSIONAL AFFILIATIONS

- Home Builders Association of Maryland

Since founding Orchard Development Corporation in 1979, L. Earl Armiger has been the managing general partner in the development of more than \$1 Billion of residential and commercial real estate. Orchard Development and its affiliate company, Armiger Management Corporation, develop, lease, and manage an award-winning portfolio of multi-family communities throughout the Mid Atlantic region. Mr. Armiger's companies have focused on market-rate rentals as well as mixed income housing, of which more than 1,200 apartments have been financed with Low Income Housing Tax Credits. In recent years his companies have successfully completed a wide variety of projects including seniors housing, adaptive re-use, and mixed-use infill projects. Commercial project experience includes both office and retail projects.

Mr. Armiger's commitment to housing is exemplified by his national and local recognition and service. In 1991, Mr. Armiger was awarded the coveted Builder of the Year designation by the Home Builders Association of Maryland. In 2000-2001 Mr. Armiger was the National Association of Home Builders (NAHB) Vice President for the Mid-Atlantic region. Mr. Armiger has served the national builder's association as Chairman of the Seniors Housing Council, Chairman of the Housing Credit Group, Chair of the Multi-Family Council as well as Chairman of NAHB's standing committee on Housing Finance. In this capacity, he participated in the Mortgage Roundtable and meetings with high level government officials on the delivery of financing to the home building industry. Mr. Armiger is a Senior Life Director NAHB's Board of Directors.

In 2007, Mr. Armiger was named Business Person of the Year by the Howard County Chamber of Commerce.

With a Master of Regional Planning degree from the University of North Carolina, Mr. Armiger has lectured in land development at the university level and has presented programs on senior housing, affordable housing, infill development and Smart Growth for numerous organizations. Mr. Armiger currently serves on the Advisory Board of the Master of Real Estate Development program at the University of Maryland, where he is a regular lecturer.

In recent years, Orchard Development has received national awards for its communities from the National Association of Home Builders, the National Association of Housing and Redevelopment officials and local awards from the Home Builders Association of Maryland. The company has also received awards for best apartment community, and Outstanding Achievement Award for affordable housing from the State of Maryland.

In 2007, the National Housing Endowment awarded Mr. Armiger and Orchard Development the Gold Builder Achievement Award for Outstanding Community Service. Orchard donated the \$10,000 first prize to the Columbia Foundation. Most recently, Mr. Armiger was given the Lifetime Achievement Award by the Homebuilders Association of Maryland.

L. SCOTT ARMIGER

PRESIDENT | ORCHARD DEVELOPMENT CORPORATION



Scott Armiger has over 30 years experience in real estate construction, design and development as well as sales and marketing 2004 and has been instrumental in the development of over \$300 Million in real estate development in Maryland, Virginia and Pennsylvania. Over this period he has been responsible for acquisition, feasibility, government approvals, construction and financing for each project. His expertise in construction and development has earned numerous awards for the company. Prior to joining Orchard Development, Scott worked as a project engineer for a general contractor as well as a new homes salesperson.

He is a past president of the Home Builders Association of Maryland (2013) and currently serves on the Board of Directors. While serving on the Board he was able to grow the association and facilitated the merger of the two largest building industry associations' in Maryland. Scott has been named a Life Director for the new entity, the Maryland Building Industry Association. He also serves on the Home Builders Care Foundation Board, which provides quality shelter throughout Maryland for those in need.

Scott holds a Bachelor of Science in Business Management from the University of Maryland as well as a Master of Science in Real Estate Development from The Johns Hopkins University. While attending graduate school at JHU, Scott won the Paul Lee Cordish Scholarship for academic excellence. He is also a licensed Realtor in Maryland.

EDUCATION

University of Maryland,

The Johns Hopkins University

YEARS WITH FIRM

23

TOTAL YEARS EXPERIENCE

30

PROFESSIONAL AFFILIATIONS

- Home Builders Association of Maryland
- Licensed Realtor

ROBERT W. DESANTIS

SENIOR VICE PRESIDENT & COO | ORCHARD DEVELOPMENT CORPORATION



EDUCATION

University of Maryland

YEARS WITH FIRM

12

TOTAL YEARS EXPERIENCE

35

PROFESSIONAL AFFILIATIONS

- Licensed Realtor

Bob's diverse background includes over 35 years experience in land acquisition and development for single-family, townhouse and multi-family residential as well as retail and office projects. He also has hands-on experience in multi-family rehabs, new construction, adaptive re-use as well as leasing and property management.

As a general partner on several projects he has had bottom-line responsibility for negotiating construction and permanent loans with various lenders including banks, insurance companies and government agencies. Bob has also participated in successfully placing debt and raising private and public equity for real estate projects valued at over \$250 million. This includes the Saratoga Court Apartments, a unique \$14 million adaptive re-use of an abandoned warehouse/office building in downtown Baltimore. The building was successfully renovated to house 77 loft-style rental apartments with garage parking, using an FHA-insured construction/permanent loan.

In addition, Bob has held senior management positions with Grady Management and Whetstone Development Partners, and he was on the consulting staff of Coopers & Lybrand's National Housing Group in Washington, DC.

His experience also includes consulting clients in both the both public and private sectors such as the U.S Department of Housing & Urban Development, Maryland National Mortgage Corporation, The Alexandria Housing Authority, Montgomery Housing Partnership and the Housing Opportunities Commission of Montgomery County. These engagements and others have included construction management services, organization studies, feasibility analysis, market evaluations, loan underwriting and operations improvement studies.

Bob holds an undergraduate degree in Public Administration from the University of Maryland and post graduate studies in the MPA program there as well.

He is a licensed Realtor in the state of Maryland, and is active in a variety of charitable and civic activities, primarily through the Lido Civic Club of Washington D.C., having served two terms as President and as a 20 year member of its Executive Committee.

ROBERT T. WILLIAMS

VICE PRESIDENT & CFO | ORCHARD DEVELOPMENT CORPORATION



Bob's tenure with Orchard Development Corporation as Controller and now Treasurer has spanned twenty years. His responsibilities include every aspect of accounting needs for both Orchard Development Corporation and Armiger Management Corporation. His involvement includes pre-development, obtaining financing, construction period and post management of real estate projects in the portfolio.

Before Orchard Development, Bob held real estate development and property management controller positions with Land Design and Development and First American Management. His experience with Real Estate started with the public accounting firm, Coyne & McClean, Chartered in Towson, Maryland where he provided management advisory services to the entire client base. His specialty in accounting software and computerized accounting systems allowed him to teach in the Loyola College Professional Development Program and the Maryland Association of CPA's as a lecturer.

Bob holds an undergraduate degree in Business Administration-Accounting from Towson University and post graduate studies in the MBA program at Loyola College. When not in the office, he enjoys coaching lacrosse for the last 35 years on the high school and recreation/club levels.

EDUCATION

Towson University

Loyola College

YEARS WITH FIRM

24

TOTAL YEARS EXPERIENCE

30

DESIGN COLLECTIVE

ARCHITECTS & PLANNERS



OFFICE LOCATION

601 East Pratt Street, Suite 300
Baltimore, Maryland 21202
(P): 410.685.6655

WEBSITE

www.designcollective.com

YEARS IN BUSINESS

38 Years

SIZE OF STAFF

93 People

SERVICES

- Architecture
- Urban Design & Planning
- Landscape Architecture
- Interiors
- Environmental Signage & Graphics

CORE COMPETENCIES

- Mixed-Use Multi-Family
- Urban Design & Infill Development
- Commercial Office Buildings
- Workplace Environments
- Student Housing
- Student Life Facilities - Dining & Recreation
- Life Sciences & Research Facilities
- Higher Education Facilities

Founded in 1978, Design Collective has grown from a sole practitioner to a national practice with over 90 employees in Baltimore, Maryland. Design Collective is a multi-disciplinary design firm offering expertise, leadership and design innovation in the disciplines of sustainable planning, architecture, interiors, landscape architecture, environmental signage and graphic design to ensure comprehensive design solutions.

The firm has established an excellent reputation for providing quality, technically sound, cost sensitive and sustainable design solutions for both private and institutional clients. Our work is often highlighted in national journals and professional trade publications, repeatedly recognized for design excellence. The firm was ranked among the Top 100 architecture firms in the United States by Architect Magazine. Our more than 300 awards for design excellence are a testament to the quality of our design and planning philosophy.

MATT HERBERT, AIA LEED AP

PRINCIPAL-IN-CHARGE - ARCHITECTURE | DESIGN COLLECTIVE, INC.



Matt, a Principal with over 17 years of experience, is one of Design Collective's most accomplished technical project managers. He has managed many of the firm's largest and most complex mixed-use, new construction and renovation in-place projects. Matt's extraordinary organization skills and a keen understanding of diverse design and engineering disciplines enables him to effectively coordinate large complex teams including consultants and contractors, where a collaborative approach is key to successful project delivery. Matt has served as project manager for more than \$400 million of built mixed-use projects for developer, university and institutional clients.

He serves as a trusted Design Collective studio leader, managing projects requiring large teams while serving as a technical, BIM, and construction systems resource within his studio. He is exceptionally experienced in a variety of delivery methods, including design-build, CM-at-Risk, and design-bid-build.

EDUCATION

University of Maryland College Park,
Master of Architecture, 2000

University of Maryland, Historic
Preservation Certificate, 2000

University of Maryland College Park,
Bachelor of Science in Architecture,
1998

YEARS WITH FIRM

15

TOTAL YEARS EXPERIENCE

17

REGISTRATION

Registered Architect: MD
LEED Accredited Professional

PROFESSIONAL AFFILIATIONS

- U.S. Green Building Council
- American Institute for Architects

SELECT PROJECTS & RELEVANT EXPERIENCE

CRESCENT OFFICE BUILDING A

Columbia, MD

STADIUM SQUARE

Baltimore, MD

40 WIGHT AVENUE

Hunt Valley, MD

THE KINGSTON

Tysons, VA

HAMMERJACKS

Baltimore, MD

MERKLE CORPORATE HEADQUARTERS

Columbia, MD

ADMINISTRATION BUILDING, UNIVERSITY OF MARYLAND

Baltimore, MD

MAPLE LAWN OFFICE BUILDING 7

Fulton, MD

WEBER PROPERTY

Reisterstown, MD

EASTPORT MIXED-USE DEVELOPMENT

Eastport, MD

ORTHOPAEDIC ASSOCIATES

Catonsville, MD

BALLPARK VILLAGE

St. Louis, MO

ZURICH/KESWICK CAMPUS, JOHNS HOPKINS UNIVERSITY

Baltimore, MD

VISUAL ARTS AND PERFORMING BUILDING, HOWARD COMMUNITY COLLEGE

Columbia, MD

MAPLE LAWN COMMUNITY CENTER

Maple Lawn, MD

MAIN CAFE RENOVATION, NATIONAL AQUARIUM IN BALTIMORE

Baltimore, MD

LIBRARY AND DINING HALL RENOVATION, COMMUNITY COLLEGE OF BALTIMORE COUNTY

Dundalk, MD

CECILY BEDWELL, AICP, LEED AP BD+C

PRINCIPAL - PLANNER AND URBAN DESIGNER | DESIGN COLLECTIVE, INC.



Cecily is the firm's Planning and Urban Design Studio Leader with a specialty in neighborhood revitalization and public engagement. She manages all of the firm's complex planning projects involving market, economic, traffic, transportation, and environmental consultants. A tremendously skilled writer, she has prepared final reports and design guidelines for nearly all of Design Collective's master plan projects. Cecily is exceptionally skilled at facilitating public engagement processes, inspiring charrette and workshop participants, and building consensus from large, diverse stakeholder groups. Over her 20+ years as a professional planner, she has successfully guided numerous public processes by engaging stakeholders in meaningful dialogue, balancing competing interests, and developing contextually-appropriate, supportable master plans. Cecily has extensive experience presenting master plans, plan reports, and recommendations at public hearings, to Planning Boards, and to City/County Councils.

EDUCATION

University of Maryland, Master of Architecture, 1996

Syracuse University, Bachelor of Arts, Architectural History, 1992

YEARS WITH FIRM

19 Years

TOTAL YEARS EXPERIENCE

21 Years

REGISTRATION

Certified Planner
LEED Accredited Professional

PROFESSIONAL AFFILIATIONS

- USGBC
- AICP
- Congress of New Urbanism

SELECT PROJECTS & RELEVANT EXPERIENCE

DOWNTOWN COLUMBIA MASTER PLAN
Columbia, MD

CRESCENT NEIGHBORHOOD DESIGN GUIDELINES & FDP
Columbia, MD

RENAISSANCE SQUARE CHARRETTE & MASTER PLAN
Columbia, MD

WARFIELD NEIGHBORHOOD DESIGN GUIDELINES & FDP
Columbia, MD

CENTRAL WEST BALTIMORE
Baltimore City, MD

DOWNTOWN FREDERICK REVITALIZATION PLAN
Frederick, MD

BROADCREEK
Norfolk, VA

CASCADE VILLAGE
Akron, OH

LARGO SECTOR PLAN & SMA
Prince George's County, MD

ELKTON CHARRETTE AND MASTER PLAN
Elkton, MD

STATE CENTER TOD MASTER PLAN
Baltimore, MD

GLEN LENNOX MASTER PLAN
Chapel Hill, NC

RESIDENCE AT SOUTHPARK
Charlotte, NC

ALSTON-CARY NORTHWEST AREA PLAN
Cary, NC

ABINGTON MASTER PLAN
Abington, PA

PORT ROYAL REDEVELOPMENT CHARRETTE & MASTER PLAN
Port Royal, SC

GREATER UPPER MALBORO MASTER PLAN
Upper Marlboro, MD

BRIAN REETZ, PLA, ASLA

LANDSCAPE ARCHITECT | DESIGN COLLECTIVE, INC.



Brian Reetz serves as Director of the Landscape Architecture Studio at Design Collective. Brian's expertise focuses on the revitalization and creation of complex urban open spaces both locally and nationally. Under Brian's direction each project is thoroughly analyzed, processed and developed with the intent to create meaningful open space that serves to enrich the local community. By combining thoughtful and creative design with a strong technical understanding of the built environment, Brian is able to balance grand vision with sound technical solutions allowing for buildable and achievable ideas.

EDUCATION

University of Wisconsin-Madison,
Bachelor of Science Landscape
Architecture, 2000

YEARS WITH FIRM

8

TOTAL YEARS EXPERIENCE

17

REGISTRATION

Professional Landscape Architect: MD

PROFESSIONAL AFFILIATIONS

- American Society of Landscape Architects

SELECT PROJECTS & RELEVANT EXPERIENCE

CRESCENT OFFICE BUILDING A

Columbia, MD

PARCEL C1 & C2

Columbia, MD

THE METROPOLITAN

Columbia, MD

THE METROPOLITAN PROMENADE

Columbia, MD

6708 ALEXANDER BELL DRIVE

Columbia, MD

40 WIGHT AVENUE

Hunt Valley, MD

STADIUM SQUARE

Baltimore, MD

INMAR TECHNOLOGIES

Winston-Salem, NC

ORTHOPAEDIC ASSOCIATES

Catonsville, MD

PERSEI AT PIKE & ROSE

Rockville, MD

PALLAS AT PIKE & ROSE

Rockville, MD

METRO PIKE CENTER

Rockville, MD

THE ROTUNDA

Baltimore, MD

HANOVER CROSS STREET

Baltimore, MD

CRESCENT FALLS CHURCH

Falls Church, VA

SOLAIRE AT 7100 WISCONSIN AVENUE

Bethesda, MD

EASTSIDE BOND

Pittsburgh, PA

EASTON TOWN CENTER PLAZAS

Columbus, OH

CHARLES VILLAGE MAIN STREET

Baltimore, MD

DOMINO SUGAR OPEN SPACE MASTER PLAN & FEASIBILITY STUDY

Baltimore, MD

NEW HOUSING VILLAGE, UNIVERSITY OF SOUTH FLORIDA

Tampa, FL

LIVING & LEARNING COMMUNITY, RUTGERS UNIVERSITY

Piscataway, NJ

GLW

Gutschick, Little & Weber, P.A.

CIVIL ENGINEER

OFFICE LOCATION

3909 National Drive
Suite250
Burtonsville, Maryland 20866

WEBSITE

www.glwpa.com

YEARS IN BUSINESS

31 years

SIZE OF STAFF

56 People

SERVICES

- Civil Engineering
- Survey
- Land planning
- Landscape Architecture

PROJECT PORTFOLIO

- Enclave at Ellicott Hills
- Wincopia Farms
- Enclave at Ellicott Mills
- Stone Lake
- Gateway Residential

GLW was founded in 1986, to provide land development design services for residential, commercial and institutional projects in the Baltimore-Washington metropolitan area. It specializes in the Maryland counties of Howard, Montgomery and Prince George's.

GLW's services include civil engineering, land planning, landscape architecture and land surveying. GLW is able to take a project from the earliest concept/feasibility stages to permit acquisition. For the specialty disciplines such as geotechnical engineering, traffic, and wetland delineation, GLW has many fine working relationships with the consultants who provide those services. During construction, GLW provides survey layout, as-built, and construction observation services.

GLW's staff of 56 is comprised of civil engineers, land surveyors, land planners and landscape architects, along with designers, CADD personnel, and administrators. The high number of registered professionals assures that well-qualified individuals will be assigned to each project. From the beginning, GLW has believed that the best marketing is to perform well and help its clients accomplish their goals. GLW has proven over the years that it is able to consistently perform at a high level.

Over our 30-year existence, GLW has focused on Howard, Montgomery & Prince George's Counties. In most cases, GLW performed all the site design and survey work, with other consultants providing services for traffic, geotechnical, noise and environmental. In Howard, we have had hundreds of projects of which a sampling is listed above and in the resume provided.

CARL K. GUTSCHICK, P.E.

PRESIDENT | GUTSCHICK, LITTLE AND WEBER



Carl Gutschick has served as Principal-in-Charge on a wide variety of projects in Howard County since the firm's founding. He is recognized for his in-depth knowledge of the processes, regulations and the regulators in Howard County. There is a dedicated portion of the staff that regularly works on Howard County projects, furthering GLW's expertise in that jurisdiction.

SELECT PROJECTS & RELEVANT EXPERIENCE

Over our 30-year existence, GLW has focused on Howard, Montgomery & Prince George's Counties. In most cases, GLW performed all the site design and survey work, with other consultants providing services for traffic, geotechnical, noise and environmental. In Howard, we have had hundreds of projects of which a sampling is listed below:

RESIDENTIAL (SINGLE FAMILY HOMES)

- » Hunters Creek Farm
- » Westmount (Doughoregan Manor)
- » Governors Run
- » Walnut Grove

RESIDENTIAL (TOWNHOMES)

- » Dorsey Hall
- » Columbia - Village of Long Reach
- » Riverwalk
- » Brightfield
- » Willowood

RESIDENTIAL (MULTIFAMILY)

- » The Metropolitan
- » Monarch Mills
- » Lyndwood
- » Archstone in Columbia
- » Wyndham
- » Orchard Crossing
- » Parkview at Ellicott City
- » Evergreen at Columbia Mall

RESIDENTIAL (MIXED)

- » Enclave at Ellicott Hills
- » Wincopia Farms
- » Enclave at Ellicott Mills
- » Stone Lake
- » Gateway Residential

EDUCATION

University of Maryland
B.S. 1975 Civil Engineering

University of Minnesota
M.S. 1977 Civil Engineering

YEARS WITH FIRM

31

TOTAL YEARS EXPERIENCE

40

REGISTRATION

Registered Maryland Professional
Engineer (1982)

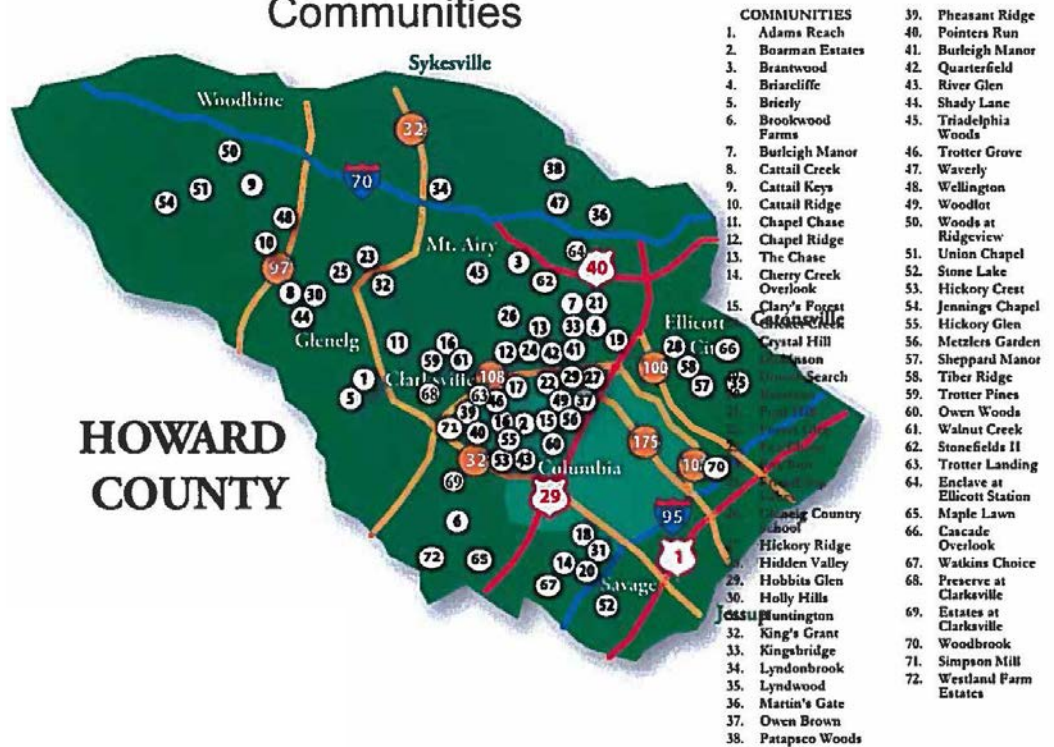
PROFESSIONAL AFFILIATIONS

- Suburban Maryland Engineering Society -Past President
- Home Builders Association of Maryland - Howard Chapter Board Member/Chair of Public Works Committee



HOME BUILDER

Williamsburg's Howard County Communities



Williamsburg Homes is a privately owned builder headquartered in Columbia, Maryland. We were ranked as the 10th ranked builder in the Baltimore metropolitan area by Hanley Wood in 2014; only one other private company was in the top ten. Williamsburg was started in 1983 and has operated successfully for over 30 years. We are known for our wide range of product offerings from modest townhomes to executive townhomes, active adult townhomes and single family homes, and all ranges of detached single family homes. Our products have been recognized by the Maryland Building Industry Association (MBIA) for 33 straight years for excellence in design, livability and workmanship. The Company was started by Chip Lundy in 1983 and was recently turned over to Bruce Harvey, President and Tim Morris, Executive Vice President based upon a 6 year transition plan. Both individuals have been with the Company over 20 years and each has 30 years' experience in the homebuilding business. Our good reputation in the community is demonstrated by our customer survey responses. Over 97% of our customers indicate that they would recommend us to their friends. This is extraordinary in today's tough retail environment.

The Company began as one of the select builders in the new town of Columbia working closely with Columbia's developer, The Rouse Company. Williamsburg has built over 500 homes in the Columbia area. While many of those original builders have closed their doors, Williamsburg has remained viable by branching out to other surrounding neighborhoods and Counties as Columbia became built out. We now operate in 5 different Counties (Howard, Anne Arundel, Montgomery, Carroll, and Baltimore) and have grown to in excess of \$40,000,000 in revenues a year. Financially, the Company boasts a strong balance sheet and has over \$40,000,000 in committed bank financing. The company's bank financial partners are BB&T, Sandy Spring Bank, Howard Bank, Severn Savings Bank, and the Columbia Bank.

In addition to being a strong regional builder, the company has a long history of community involvement above and beyond its building activities. We serve on the Board of our trade association, Maryland Building Industry Association. We served on several of County Executive Kittleman's transition teams and have also served on the County's independent Spending Affordability Committee and the recently completed APFO review task force. Lastly, we have served on numerous nonprofit boards in the Howard County community, currently serving as Chair of the Board of Trustees of the Community Foundation of Howard County as well as serving on the Board of the Howard Hospital Foundation.



Williamsburg is proud to partner with Orchard Development on the Long Reach Village Center redevelopment project. We are planning the development of For Sale townhomes at the revitalized center. We are planning these townhomes to have an urban feel each with a rear entry 2 car garage to limit surface parking needs. The townhomes will incorporate the green building design techniques that allow for maximum energy efficiency and also provide for modern storm water management control. The townhomes will be connected by sidewalks and pathways to the mixed use retail, recreation, office and amenities provided at the renovated long Reach Village Center.

BRUCE HARVEY

PRESIDENT | WILLIAMSBURG HOMES

Bruce rejoined Williamsburg In 2007 and became President of the Williamsburg Group In January 2008. He has over 33 years of experience In the homebuilding Industry. Most recently, he was Division President for Lennar's Maryland Division. Prior to that, he was Chief Financial Officer for Patriot Homes, starting with Patriot In 1992 and helping to engineer the sale of Patriot Homes to Lennar In 2002. Prior to Patriot, Bruce was In key financial roles with The Ryland Group and NV Homes. He started his professional career with Peat, Marwick, Mitchell & Co. and has a Bachelors' Degree in accounting from the University of Maryland.

TIM MORRIS

EXECUTIVE VICE PRESIDENT | WILLIAMSBURG HOMES

Tim has been with Williamsburg Homes since 1989 beginning as Its lead Sales Manager. He became Vice President of Sales In 1997 and has served In that capacity for 20 years now overseeing nearly 1000 new home sales In that time period. He has over 27 years of experience In the home building industry and previously worked for NV Homes as a Sales Manager. Tim holds a B.A. Degree In Business Administration and a B.S. Degree In Petroleum Land Management from the Louisiana State University.

CRAIG WYATT

VICE PRESIDENT/CONTROLLER | WILLIAMSBURG HOMES

Craig has been with Williamsburg Homes since 2007. He has over 15 years of experience In the homebuilding Industry. Prior to Williamsburg, he spent 6 years as a Financial Coordinator for William Douglas Homes. Craig became the controller of Williamsburg In 2010. Craig holds a B.S. in Accounting from York College of Pennsylvania and is currently working on his MBA from Towson University.

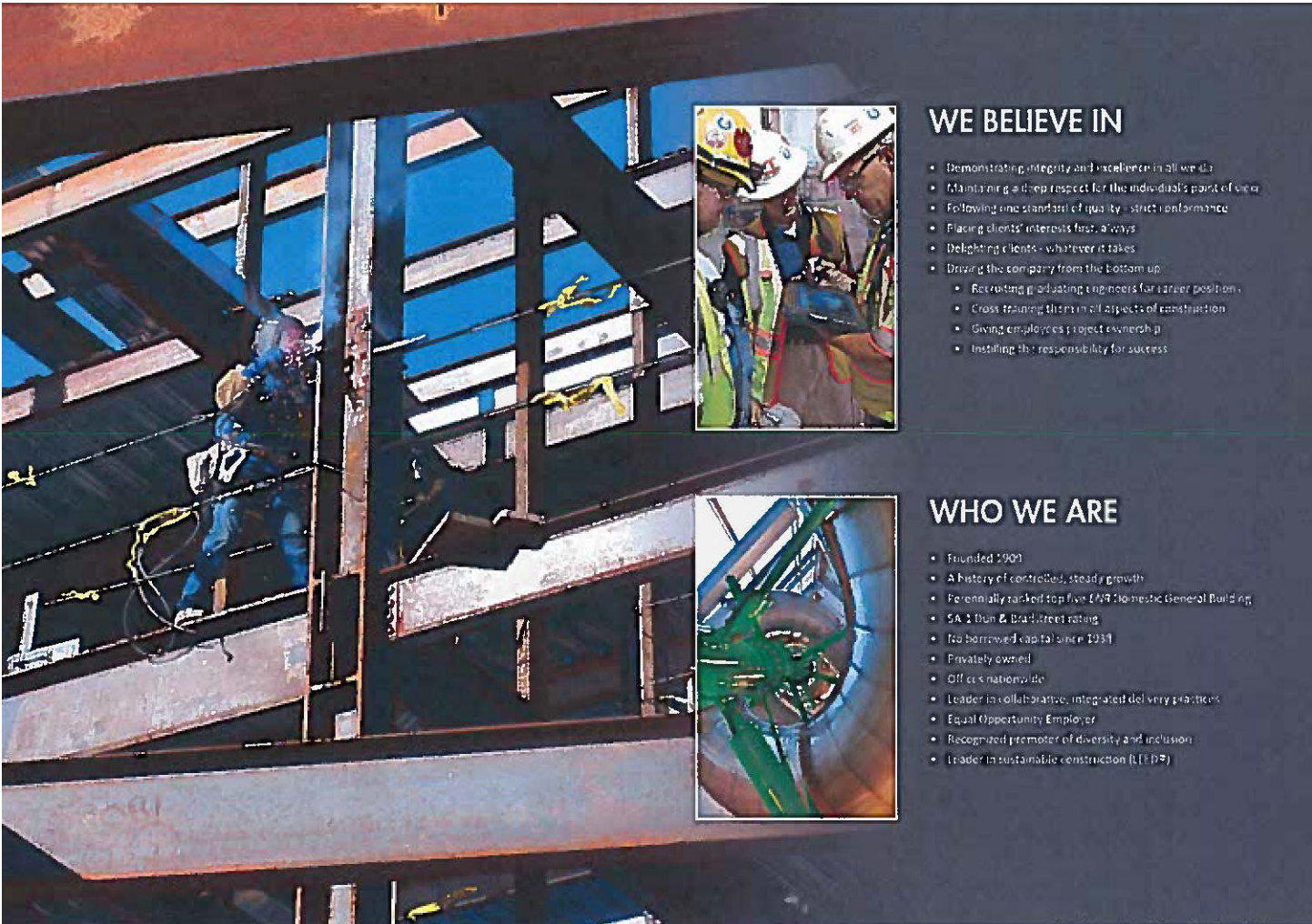
BILL MCBRIDE

PRODUCTION MANAGER | WILLIAMSBURG HOMES

Joining Williamsburg in 1996 as a construction supervisor, Bill has overseen the Company's construction activities for the last 11 years. Previously, he was Senior Project Manager for Ryan Homes. He has been building homes for Pulle, NV Homes, Ryland Homes, Ryan Homes, Craftmark Homes and Williamsburg since 1982. Bill's Construction experience has spanned a breadth of product types from multi-family homes with structured garage parking to multi-million dollar custom homes. He has been Involved In the construction of over 1,700 residential homes in his professional career.

CONTRACTOR





WE BELIEVE IN

- Demonstrating integrity and excellence in all we do
- Maintaining a deep respect for the individual's point of view
- Following one standard of quality - strict performance
- Placing clients' interests first, always
- Delighting clients - whatever it takes
- Driving the company from the bottom up
 - Recruiting & promoting engineers for a career position
 - Cross training them in all aspects of construction
 - Giving employees project ownership
 - Instilling the responsibility for success

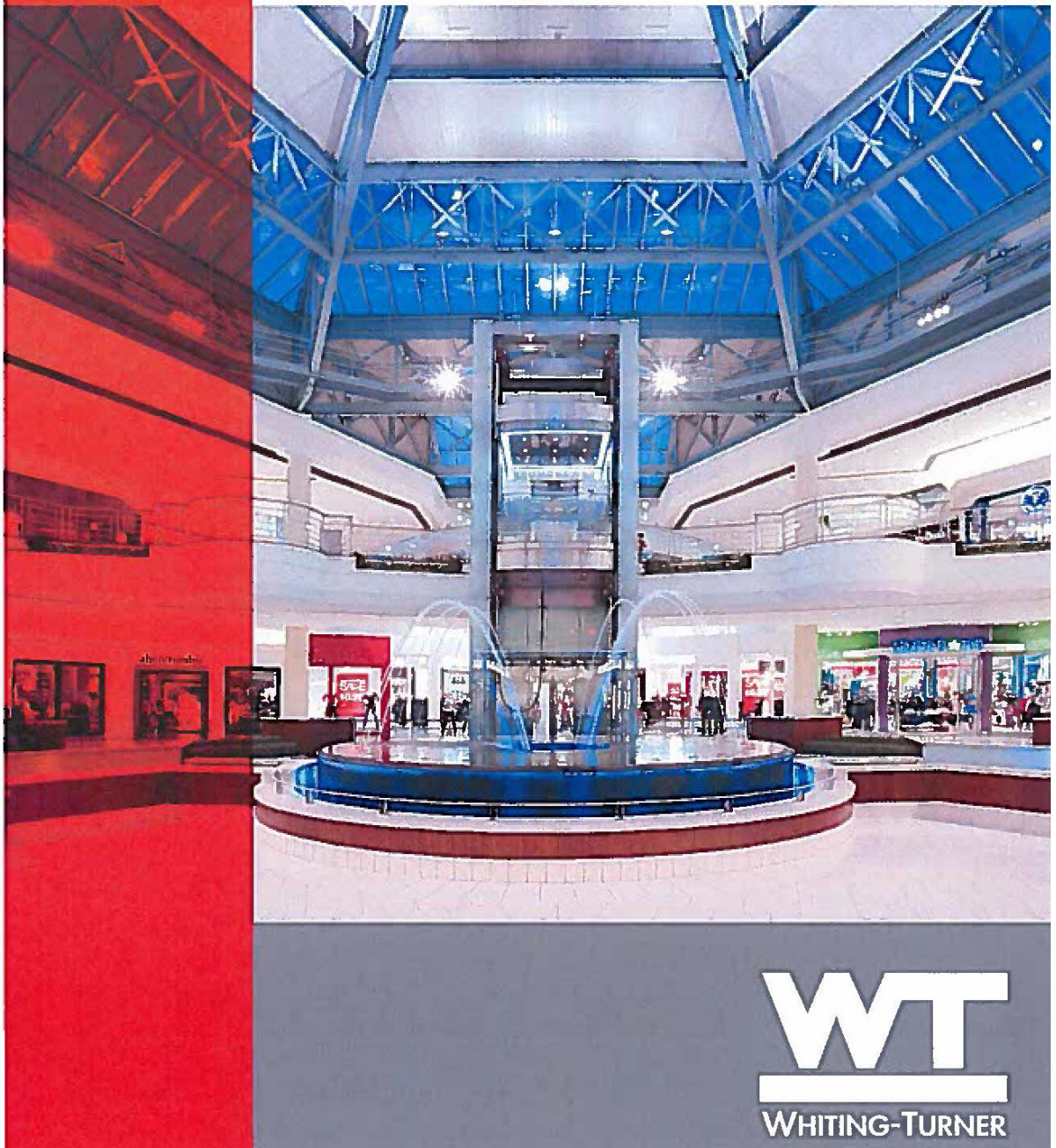
WHO WE ARE

- Founded 1901
- A history of controlled, steady growth
- Perennially ranked top five ENR Domestic General Building
- SA 100 & Best Street rating
- No borrowed capital since 1931
- Privately owned
- Offices nationwide
- Leader in collaborative, integrated delivery practices
- Equal Opportunity Employer
- Recognized promoter of diversity and inclusion
- Leader in sustainable construction (LEED)

RETAIL

Building Community Destinations

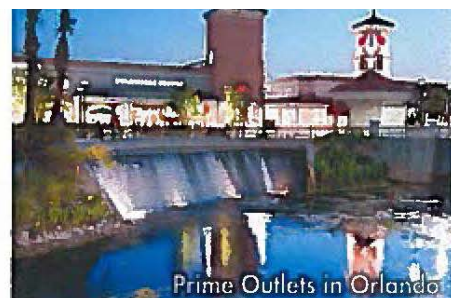
WHITING-TURNER



WT
WHITING-TURNER



Scottsdale Quarter



Prime Outlets in Orlando



Pheasant Lane Mall



Bass Pro Shop



Regal Theater at Westfield Broward Mall



Nike



Kroger



Springfield Town Center

There is a key reason why Whiting-Turner is a perennial leader in retail—we recognize the goal, and we commit to the necessary principles:

- Grand Openings are cast in stone
- Tenants drive the schedule
- The budget is the budget
- It is all about the customer
 - Safe and secure
 - Comfortable
 - Free to shop
- Anchor/tenant contractor activities must be coordinated
- Completed floors and finishes must be protected
- Sustainability/LEED® initiatives must be promoted

We understand that different projects require specific approaches. Our experience spans the breadth of retail construction and renovation:

- Regional centers
- Center overbuilds
- Open air centers
 - Mixed-use
 - Lifestyle
- Power centers
- Community centers
- “Big box” retailers
- Anchor stores
- Tenant interiors
- Grocery Stores
- Movie Theaters & Restaurants
- Outlets

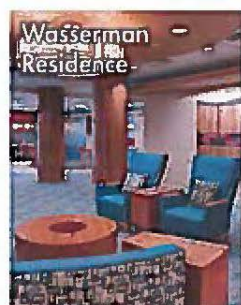
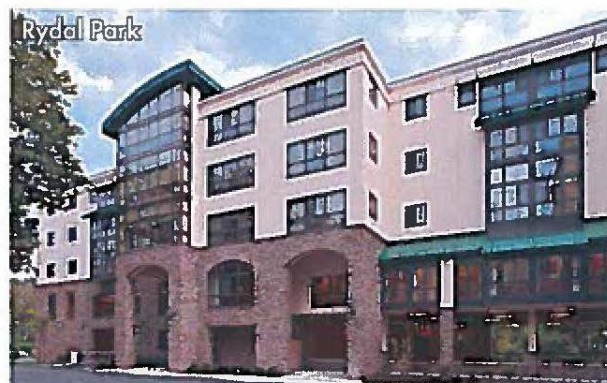
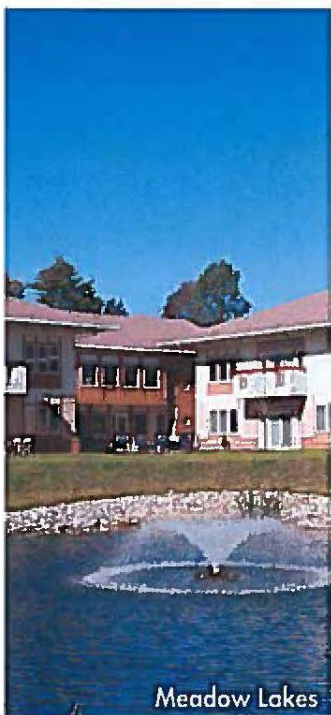
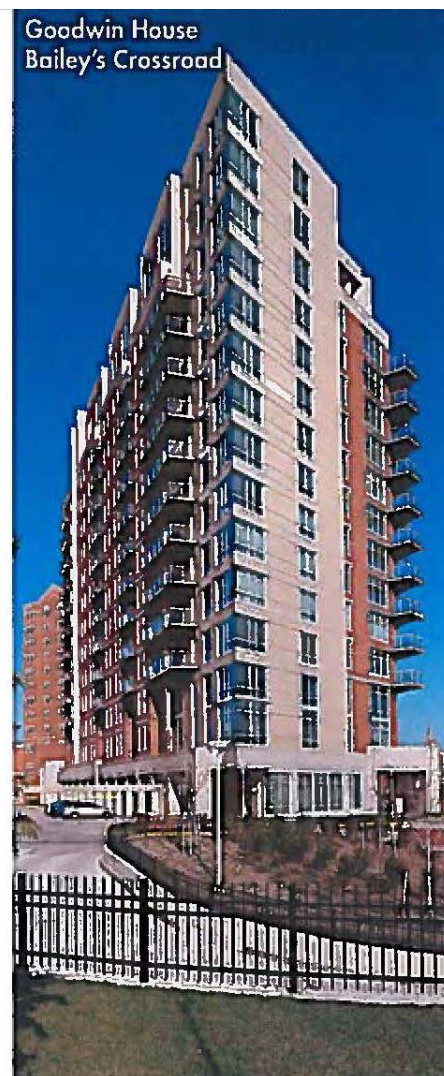
SENIOR LIVING

Enhancing Lifestyles

WHITING-TURNER



WT
WHITING-TURNER



Understanding

Whiting-Turner supports the mission to accommodate the wide range of cognitive and physical senior abilities. Our goal is to construct quality facilities (e.g., CCRCs, assisted living, long-term care, memory support, wellness/dining, independent living) that promote family and community involvement and interaction, as well as maximize the safety, quality of life, independence, autonomy, dignity, choice and privacy of the residents.

Knowledge

Seniors expect and deserve facilities that respond to their individual needs. We understand the need for facility flexibility, and we have the skill to manage the construction of resident options. Whether you are financing your facility through tax credits, HUD, tax-exempt bonds or conventional methods, Whiting-Turner has the experience to meet the specified requirements.

Sensitivity

If you are expanding and/or renovating an existing facility, our rigid and proven construction protocol promotes the safety, security, and continued comfort of your residents. Our many LEED® Accredited Professionals are also attuned to any sustainability initiatives you may establish.

THEODORE F. BORDER, III VICE PRESIDENT OF PROJECTS

KEY QUALIFICATIONS

- Entered industry in 1986.
- Joined Whiting-Turner in 1992.

PROJECT HISTORY

Federal Realty Investment Trust

Mid-Pike Plaza Block 10: A 19-story mixed-use building (residential, parking garage, and retail) that will take place as part of Phase 1 of the overall Mid-Pike Plaza project. Rockville, MD. \$70 million

University of Maryland Baltimore

Towson University Campus Wide Site and Safety Phase 1: A variety of safety, infrastructure and site improvements were completed in the main academic precinct. Project specific components included a new main entrance off Towson Town Boulevard, relocation of University Avenue, new entrance plaza, pedestrian improvements, demolition of a lecture hall ramp and a new bridge between the psychology building and Hawkins Hall. Towson, MD. \$19.7 million

Mercy High School

Science Department Renovation: Interior Renovation to the existing science department facility. Work includes mechanical, plumbing, electrical, lab casework, a sprinkler system, drywall and demolition. Baltimore, MD. \$1.5 million

Loyola Blakefield High School

Wheeler Hall Renovation & Addition: 55,000 SF systemic renovation of Wheeler Hall, which includes classrooms, library and science rooms. Will also include the installation of a fire protection system throughout the building. A three-story, 9,000 SF end cap addition with seminar rooms, elevator and egress stair tower will be added. Towson, MD. \$8.2 million

Calvert Hall College High School

- Multi-phased renovation project including classrooms, offices and gym/locker rooms. Each renovation included new mechanical units, replacement of exterior façade, finishes and interior offices. Baltimore, MD. \$10 million
- Social Studies Wing Renovations: Interior Renovations including mechanical system, and electrical work, sprinkler installation, new ceilings and flooring in all classrooms, new doors and hardware. Exterior renovation included replacement of existing exterior skin with precast panels and glass, and replacement of concrete sidewalks. Baltimore, MD. \$2 million

Exterior Renovation: Replace existing exterior skin with precast panels and glass. Replacement of concrete sidewalks.

Frostburg State University

Lane (Student Union Building): Renovation of existing 65,000 SF building and addition of 10,000 SF to existing Student Union Building. Frostburg, MD. \$13 million

Capstone Development

- Towson University - West Village Student Housing Phase I: New construction of two wood-frame structures totaling 159,000 SF to be utilized as student housing. *LEED® Certified*. Towson, MD. \$20 million
- Towson University - West Village Student Housing Phase II: New wood-frame dorm project that mirrors Phase I. Towson, MD. \$26 million

JAY COUGNET
MULTI-FAMILY
PRECONSTRUCTION /
COST SPECIALIST

KEY QUALIFICATIONS

- Joined Whiting-Turner in 1999. (Started as an intern with Whiting-Turner in 1997.)
- Entered construction industry in 1999.
- Entered senior living industry in 2004.
- Industry Excellence Preconstruction Coordinator in Senior Living
- Extensive senior living experience including preconstruction
- Creator of Whiting-Turner's Residential Options Program

PROJECT HISTORY

Industry Excellence Preconstruction Coordinator in Senior Living

Assembles and records cost data, researches design metrics, and tracks all senior living projects for the company internally. Consults with project groups nationally on current design trends and methods. Develops estimates and benchmarks all project estimates to our national database of completed projects.

Erickson Living

New Providence CCRC: Estimating services for new ground-up CCRC in New Providence CCRC. Performed constructability reviews and developed conceptual, schematic, and design/development estimate for the owner. Final lump sum bid amounts came in within \$8,000 of proposed budgets. \$108 million

Charlestown New Assisted Living Building: Preconstruction and construction services for a new 121,500 SF, 96 unit assisted living facility on an existing campus. Performed schematic and design/development estimates for the owner. \$23 million

On-Call Conceptual Estimator: Develops conceptual through design/development estimating for future projects nationally for Erickson Living. Budgets include greenfield development, master planning, repositioning, and expansion of existing communities.

Springwell Senior Living

The Homestead: Preconstruction services for a new 148,000 SF, 99-unit independent living building on an existing campus. Performed conceptual, schematic and design development estimates for the owner. \$25 million

Daughters of Charity

Provincial House Transformation: Multi-phased 400,000 SF renovation within a fully occupied facility including skilled nursing, 42 independent living, and business functions. Central Plant replacement and upgrades. Emmittsburg, MD. \$27 million

Haven Nursing Home

New 35,000 SF, three-story nursing home including 42 units with a total of 82 beds. Baltimore, MD. \$4 million

Sisters of Bon Secours

Provincial House Renovations: Phased renovations within a fully occupied facility to redevelop an existing provincial house into a retreat center. Project included 70 guest rooms, 25-bed skilled nursing and assisted living, conference spaces, new commercial kitchen, and infrastructure upgrades/replacements. Marriottsville, MD. \$22 million

COMMERCIAL REAL ESTATE

THE MACKENZIE COMPANIES

FULL SERVICE COMMERCIAL REAL ESTATE

For nearly half a century, MacKenzie has been providing commercial real estate services in the State of Maryland, and the Mid-Atlantic region. MacKenzie's expertise and trademark multi-disciplined approach allows us to create insightful strategies for each client, large and small, and implement these strategies with seamless precision. Our collaborative corporate structure and the diverse qualifications of our associates, which includes attorneys, CPAs, developers, bankers, appraisers, and marketing professionals, provides a broad array of skill sets to draw from when preparing strategic initiatives for our clients and their properties.

Founded in 1968 as a development firm, MacKenzie is comprised today of seven firms that provide clients a competitive, full-service platform of offerings in leasing, sales, investment sales, tenant and landlord advisory services, corporate and business consulting, commercial and residential development, general construction, property and asset management, debt and equity capital placement, and market research.

BROKERAGE

Landlord/Owner Representation

Whether you manage a portfolio of offices locally or nationally, our Real Estate Advisors will create and implement real estate strategies tailored to your business objectives and timing needs. Leveraging in-depth local market data and the multi-disciplined background of the MacKenzie Team, our associates help our clients increase the value of their property through aggressive marketing and a competitive leasing strategy, consistently achieving maximum occupancy levels.

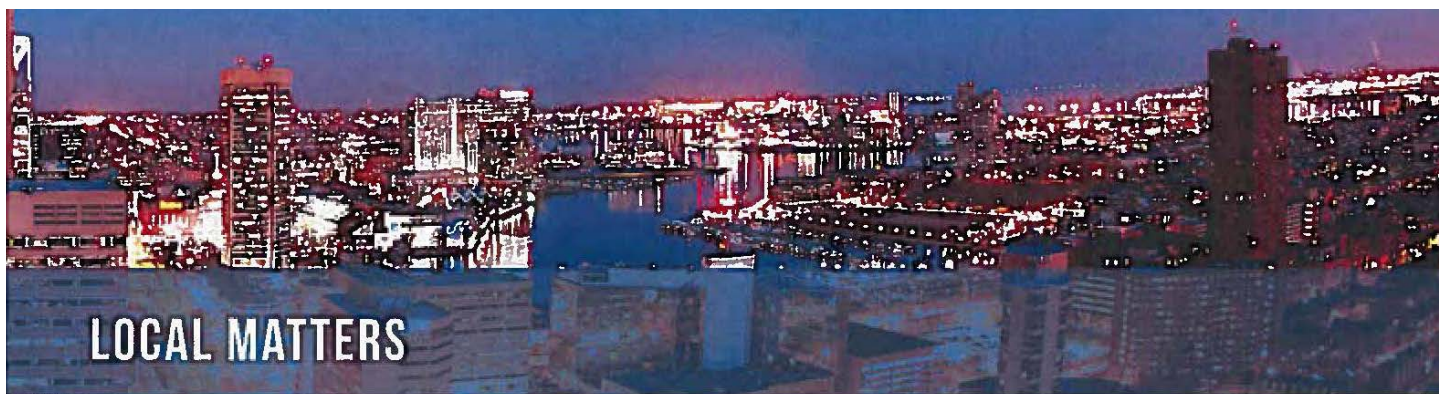
Tenant/Buyer Representation

MacKenzie's experienced Tenant and Purchaser Advisors, often enlisted at no cost to the client, utilize in-depth market data, sophisticated lease and property evaluation tools, detailed comparables, and historical landlord, tenant, and sale transactions to assist tenants and buyers in designing long-term occupancy strategies. Our experienced consultants draw on their thorough knowledge of the market, including present economic conditions, landlord vulnerabilities, and competitive products, to provide our clients with formidable negotiating power.

Investment Sales

MacKenzie is committed to helping investors maximize the value of their commercial real estate portfolio. Our Investment Sales team utilizes sophisticated financial modeling, Argus 14.0 cash flow modeling and comparable sale analysis to maximize values for institutional and local owners. We then tailor a customized approach to meet long-term acquisition or disposition objectives, optimizing financial results and exceeding client expectations. With experience in the purchase and disposition of retail, office, industrial, land, mixed-use properties, as well as 1031 tax deferred exchange transactions, we deliver investment opportunities for your consideration, or market properties to a targeted audience of qualified purchasers.

A long-term participant in Maryland's investment and brokerage communities, our advisors utilize comprehensive databases, established relationships with local and national investors, sophisticated marketing tools, and carefully crafted, property-specific sales campaigns, to present investment opportunities to appropriate purchasers.



LOCAL MATTERS

With more than 175 employees, MacKenzie is one of the largest, non-affiliated full service commercial real estate firms in the Mid-Atlantic. In 2015, MacKenzie completed more than 800 lease and sale transactions, totaling more than 4.5 million square feet, and valued at more than \$350 million. MacKenzie is headquartered in Lutherville, Maryland and has branch offices in Baltimore City (Downtown), Columbia, Annapolis, and Bel Air, Maryland.

MacKenzie has been a Maryland-based real estate firm for nearly 50 years. Our brokers, associates, and employees live in Maryland's communities, and play an active role in the region making us intimately familiar with the market area. Our indigenous full-service experience in Maryland's distinct submarkets, coupled with our state-of-the-art research tools, provides our clients customized strategies, identifying key opportunities that in turn provides them with the ability to make the most informed, profitable decisions possible.

MANAGEMENT

MacKenzie Management Company, LLC, a division of The MacKenzie Companies, is a full-service property and asset management provider specializing in the management of office, medical, retail, industrial, and mixed-use properties. Drawing on nearly 50 years of experience, our organization currently manages more than 105 projects, comprising over seven million square feet of space throughout the Baltimore Metropolitan area.

As owners ourselves, we understand the important role proficient management plays in an investment property. We apply this perspective to every commercial property we manage, integrating planned physical maintenance and improvements, detailed financial analysis and budgeting, and proven tenant retention strategies to maximize investment returns. This proven and proactive "turnkey" approach goes beyond typical property management, giving owners the support they need to concentrate on high-level decision making while insulating them from day-to-day property functions.

115
PROPERTIES

8.5 MILLION
SF MANAGED

1,200+
TENANTS

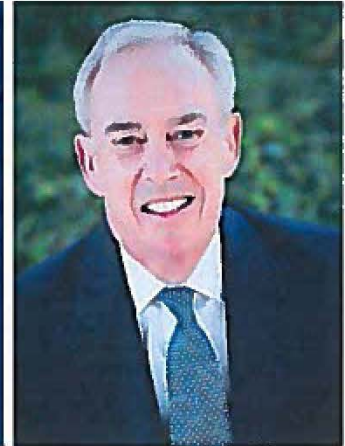
45+
MANAGEMENT STAFF

60+
BUILDING ENGINEERS

JOHN HARRINGTON

SENIOR VICE PRESIDENT/PRINCIPAL

2328 W. Joppa Road, Suite 200
Lutherville, Maryland 21093
410.494.4863
jharrington@mackenziecommercial.com



As a Senior Vice President and Principal of MacKenzie Commercial Real Estate Services, LLC and MacKenzie Retail, LLC, John Harrington specializes in commercial leasing and site selection, as well as bulk land sales and development. He also focuses on the representation of retail landlords and tenants in the Maryland market and directs Mackenzie Retail, LLC. Prior to joining the firm in 1993, John was a regional vice president with Merrill Lynch Realty and spent 11 years as the director of leasing and acquisitions for the DeChiaro-Rachuba Group, a firm that built and owned numerous office buildings, apartments, shopping centers, hotels, and developed thousands of homes and home sites throughout the Mid-Atlantic region. He has over 40 years of experience in all facets of residential development and commercial real estate.

John is a lifelong resident of the Baltimore area and a graduate of the University of Maryland, College Park.

Transactions

- > Redevelopment and Leasing of the Towson Town Center (Lease) \$55 million
- > Baltimore Air Park to Richmond American Homes (Sale) \$19 million
- > Hagers Crossing to NV Ryan & Lennar Homes (Sale) \$38 million
- > Bonnie View Country Club to Beazer Homes (Sale) \$15 million
- > Ambulatory Care Center of UCHS (Lease) \$21 million
- > Redevelopment, Leasing and Sale of Shops at Kenilworth to Greenberg Gibbons Commercial (Lease/Sale) \$30 million
- > Redevelopment & Leasing of Centre at Golden Ring (Lease) \$35 million
- > Meadows of Ellicott City to Orchard Development Company (Sale) \$15 million

Represented Clients

- > Petrie Ross Ventures- Annapolis, MD
- > First Mariner Bank- Baltimore, MD
- > Obrecht Properties, Inc. - Timonium, MD
- > Towne Properties, Inc.- Cincinnati, OH
- > Ryland Homes- Columbia, MD
- > NV/Ryan Homes- Columbia, MD
- > Goodwill Industries of the Chesapeake- Baltimore, MD
- > Hill Management Company- Timonium, MD
- > Planet Fitness - Philadelphia, PA
- > CVS Pharmacies- Woonsocket, RI
- > Starbucks Coffee Co. - Seattle, WA
- > Vanguard Commercial Development - Baltimore, Md
- > Carlson Restaurants/TGI Fridays - Dallas, TX
- > Royal Farms - Baltimore, MD
- > Hamilton Bank - Baltimore, MD
- > Greenberg Gibbons - Baltimore, MD

Industry Achievements

- > Who's Who in Commercial Real Estate, awarded by The Baltimore Business Journal
- > Lifetime Member Realtors Million Dollar Association
- > Graduate- Realtors Institute of Maryland
- > Baltimore's Top Brokers - awarded by the CoStar Group

Professional Memberships

- > International Council of Shopping Centers
- > Homebuilders Association of Maryland
- > Board Member- Greater Towson Committee
- > Board Member- Archbishop Curley High School



JOHN SCHULTZ

Senior Vice President | Principal

2328 W. Joppa Road, Suite 200
Lutherville, Maryland 21093
410.494.4894
jschultz@mackenziecommercial.com



John Schultz, a Senior Vice President/Principal with MacKenzie Retail, LLC, specializes in the representation of local and national retailers and landlords in the Baltimore/Washington market. A member of MacKenzie's distinguished Retail Team since 2004, John's focus includes leasing and investment sales, tenant advisory, and consulting. As a Principal, John is directly responsible for providing guidance and mentorship to junior team members, while maintaining and promoting the MacKenzie brand. In addition to these leadership duties, he continues to provide his clients with superior advisory services through the adoption and implementation of emerging geographic information systems (GIS) technologies. Utilizing this innovative tool to blend corporate data and a deep breadth of commercial market knowledge, John provides his clients the foremost in location analytics.

Prior to joining MacKenzie Retail, John worked for MacKenzie Contracting Company, where he was responsible for managing multiple construction build-outs. Together, his real estate experience and construction background allow him to provide unique solutions and insightful strategies for landlords and tenants. John is a native of Cleveland, Ohio, and attended St. Lawrence University, in Canton, New York.

Tenant Representation Local & Independently Owned Franchises

- > Brick Bodies Fitness*
- > Planet Fitness*
- > Edible Arrangements*
- > Gino's Burgers & Chicken
- > Goodwill of the Chesapeake*
- > Royal Farms
- > Atwaters Cafe
- > Bikram Yoga of Baltimore*
- > Cloud 9 Clothing
- > Corbon Salon
- > Crimson and Clover Floral Designs
- > Lax World
- > Ojas Wellness Center
- > Eddie Jacobs Clothier
- > Express Care of Maryland*
- > Kiddie Academy*
- > Shadowland Entertainment
- > Palm Beach Tan

Tenant Representation National Retailers

- > Calico Corners*
- > CVS/Caremark*
- > Valvoline Instant Oil Change*
- > United Optical*
- > GNC*
- > Select Comfort Corporation
- > Taco Bell

Professional Memberships & Acknowledgements

- > International Council of Shopping Centers
- > Retail Brokers Network
- > CoStar Power Broker, 2006 - 2014
- > 2013 Planet Fitness Broker of the Year, Runner Up

Landlord Representation

- > Stewart Properties
- > Ward Properties
- > Greenebaum & Rose
- > Merritt Properties
- > BTR Capital
- > Obrecht Properties
- > MacKenzie Companies
- > COPT
- > MS Development Company
- > Foulger-Pratt
- > Kettler, Inc.

*Multiple Transactions



ENERGY FINANCING



URBAN INGENUITY

Urban Ingenuity Company Background

Urban Ingenuity is a clean energy finance company that serves as a developer and administrator of innovative energy finance programs, and as the financier of clean and efficient energy infrastructure at both the building and community scale. Urban Ingenuity was founded as a partnership between Urban Atlantic and PEAR Energy (Pollin Energy And Retrofits). Urban Atlantic is a Bethesda Maryland based real-estate developer with extensive experience in structured finance, infrastructure development and neighborhood revitalization. PEAR Energy is an Amherst, Massachusetts based solar energy project development and finance company, who's Founder and President Robert Pollin is a noted economist and member of the prominent Pollin Family of real estate developers. With PEAR Energy, Urban Ingenuity is involved in structuring solar tax equity investments through long-term Power Purchase Agreement contracts and other financial structuring vehicles, with a special focus on low and moderate income households.

Urban Ingenuity served as the lead partner in structuring the financing, technology development, and project implementation for all clean energy infrastructure in the redevelopment of the former Walter Reed Army Medical Center in Washington DC. This project includes a series of Combined Cooling, Heating and Power (CCHP) or "Tri-Gen" energy centers, integrated with extensive solar photovoltaic and solar thermal resources, district heating and cooling, and deep building energy efficiency investments. This micro-grid project is one of the most advanced micro-grid proposals in the country, and is slated to begin construction early in 2017. In this capacity, UI and its partners oversaw all aspects of planning and pre-development, including engineering analysis, energy load modeling, equipment costing, and integrated financial modeling. In addition, UI led a successful design and procurement process including coordinating sensitive partner relationships with local government and utility regulators, site component developers, and the administration of an RFP to select a final energy developer to implement and own the district energy system for the site.

Urban Ingenuity lead a team that completed a detailed siting analysis and market study of microgrid potential across the District of Columbia, and is now receiving grant funding from DC government to provide "microgrid extension services" providing technical assistance to large scale real estate development projects across the District, assisting site developers in understanding the economic and technical potential for district energy as part of their developments. In addition, Urban Ingenuity is advising several other regional district energy projects that are in earlier stages of development and helping to support financial structuring of debt and equity into clean energy projects. UI's focus on resilient energy installations also includes large scale solar plus battery storage projects for property owners ranging from sports stadiums to public housing authorities, to universities and community based non-profit institutions providing supportive services to low income residents. In this work, UI has worked closely with many non-profit affordable housing developers and debtstructuring partners including Enterprise Community Partners and the National Housing Trust. With Enterprise, UI has completed several pieces of analysis on resilient energy infrastructure for the New York City Mayor's Office of Recovery and Resilience.



URBAN INGENUITY

Urban Ingenuity is a national leader in Property Assessed Clean Energy (PACE) financing for commercial and multifamily real estate. Urban serves as the Program Administrator for Washington DC's PACE financing program, working on behalf of the District's Department of Energy and the Environment (DOEEE). In this role, it develops and delivers dedicated financial products and custom capital solutions to commercial building owners in the District of Columbia to fund clean energy retrofits and district energy projects. Through DC PACE, Urban Ingenuity is authorized by statute to issue up to \$250 million of bonds for funding energy efficiency and renewable energy projects in the nation's capital. Through this work, Urban Ingenuity has developed specific expertise in working with nonprofit property owners and developers of affordable multifamily housing, completing the nation's first PACE financing of an affordable multi-family housing project, first HUD approved use of PACE in publically subsidized affordable housing, and the first use of tax-exempt financing for PACE.

Urban Ingenuity is also a member of the team that was competitively selected to administer Montgomery County's Commercial PACE (C-PACE) program. In this role, Urban is a partner to the County's Department of Environmental Protection and Department of Finance, specifically focused on assisting the C-PACE program in serving "CivicPACE" customers in the affordable housing and nonprofit sectors, facilitating project underwriting, lender education and engagement, capital sourcing, and underwriting projects to HUD financial and project development standards. In addition, UI has developed dedicated tools for both PACE secured and traditional solar Power Purchase Agreements (PPAs), specifically designed to meet the financial structures and credit underwriting challenges of non-profit affordable housing developers.

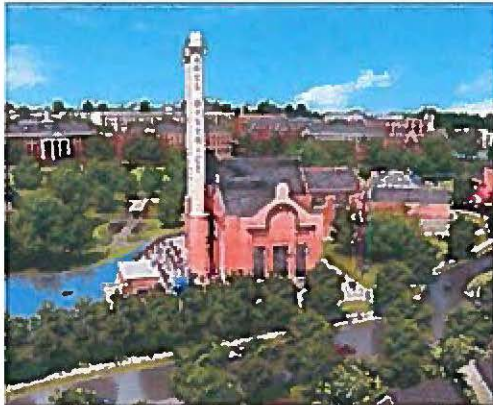
Urban Ingenuity, working with Urban Atlantic, has extensive private capital relationships to bring to bear in exploring the feasibility of micro-grids, resilient energy and battery storage projects, and the aggregation of solar energy projects. Urban Atlantic's financial services work includes six consecutive federal New Market Tax Credit awards, structuring over \$2 billion in financing. It has raised over \$700 million in the past six years from tax credit and market rate investors and lenders. In the past five years, Urban Atlantic has structured financing to implement over 60 acres of infrastructure projects including the redevelopment of the Arthur Capper Carrollsburg property and Rhode Island Row town center re-development in Washington DC, and master development of the New Carrollton, Maryland transit oriented development project, with projects across the mid-Atlantic region.

The Urban family of businesses is expert in creating public-private finance structures that maximize public funds and enhance community impacts. The firm has financed over a Billion in community developments utilizing New Markets Tax Credits (NMTC), Low Income Housing Tax Credits (LIHTC), FHA debt, Tax-Increment Financing (TIF), Payment-in-Lieu-of-Taxes (PILOT), taxable and tax-exempt bonds, state and local debt and grant programs and conventional debt and equity. Most recently, in the midst of one of the greatest economic crises in decades, the firm was able to close on the \$108 million Rhode Island Station project in partnership with the DC Government, combining a FHA mortgage with NMTC's, a PILOT and a ground lease structure with the Washington Metropolitan Area Transit Authority.



EXPERIENCE

Microgrid Development in Washington, DC - The Parks at Walter Reed



Urban Ingenuity served as the lead energy development partner to the real estate development team for the site of the former Walter Reed Army Medical Center in Washington DC. UI and its partners oversaw all aspects of microgrid architecture, planning, and pre-development including: site planning, engineering analysis, energy load modeling, equipment costing, and integrated financial modeling, and the administration of an RFP to select a final energy developer to implement and own the microgrid and district energy system for

the site. Current project designs include development of multiple co-generation facilities to supply heating, cooling, and electrical energy through a closed-loop district-energy system including an island-able microgrid to 3 million square feet of real estate on a 66+ acre campus in the heart of the nation's capital.

Maryland District Energy System Development

Urban Ingenuity works with the developer of a mixed-used urban site in Maryland to support the deployment of a private district energy system that will serve more than 10 million square feet of new construction. Urban Ingenuity completed regulatory analyses, and is now proceeding to conceptual microgrid design and financial feasibility analysis, along with continued support on legal and regulatory negotiations with the utility and other key players.

***Team:*****Bracken Hendricks | Chief Executive Officer**

As CEO and founder, Bracken leads the implementation of Urban Ingenuity's vision: to finance and develop advanced energy infrastructure projects that speed the clean energy future. Bracken is a proven leader in designing programs that deploy energy efficiency, renewables, and distributed energy within the built environment, working in the private sector and with federal, state and local governments. Bracken is a senior fellow with the Center for American Progress, working on policy solutions at the interface of clean energy and economic development. He has served as an advisor to former President Bill Clinton and the Clinton Foundation on issues of job creation, energy innovation, and resilient urban development, and he helped establish the US Department of Energy's Better Buildings Challenge as well as clean energy portions of the American Recovery and Reinvestment Act. He was a founding Executive Director of the Apollo Alliance for good jobs and energy independence. Bracken holds a dual Master's degree in public policy and urban planning from the Harvard Kennedy School.

Ian Fischer | Chief Operating Officer

As COO and co-founder, Ian leads Urban Ingenuity's organizational structuring, strategic planning, financing programs, and energy performance contracting implementation. Prior to UI, Ian was the Vice President of operations at Clean Energy Solutions, Inc. (CESI), an energy efficiency consulting firm serving municipalities with the design and early implementation of comprehensive energy efficiency, renewables and water conservation financing programs and initiatives. Ian has extensive experience in municipal program design and delivery, clean energy finance, financial modeling, and economic development. Ian holds an MBA from the Yale School of Management and a BA in Biology from Brown University.

Shalom Flank | Microgrid Architect

Shalom Flank, PhD., became the nation's first "microgrid architect" a decade ago, as Pareto Energy's Chief Technology Officer. Dr. Flank has managed all technical and engineering aspects of Pareto's microgrid projects, from initial assessments and conceptual design, through full engineering and implementation. He has also overseen the development of Pareto's proprietary microgrid systems, such as the GridLink nonsynchronous interconnection technology. Dr. Flank was trained at MIT, where he studied energy engineering, economics, and policy. Dr. Flank has been a frequent advisor to commercial companies and public agencies on energy technologies, from helping the National Science Foundation assess the commercial viability of new photovoltaic and fuel cell technologies to working with cutting-edge companies commercializing clean energy and energy efficiency technologies. He served for a number of years as a program manager at the Defense Advanced Projects Agency (DARPA) and as a staff member at Lawrence Livermore National Laboratory and the U.S. House of Representatives, and has held appointments at Harvard and MIT.

ENERGY CONSULTANT



Why Choose BITHENERGY?

BITHENERGY, Inc. offers intelligent strategies and full implementation services for managing energy consumption, smart grid infrastructure build-out, and the development of renewable energy systems. A certified Minority Business Enterprise (MBE) and Disadvantaged Business Enterprise (DBE), BITHENERGY solves complex energy challenges with innovation and bold vision.



SOLAR GENERATION



WIND GENERATION



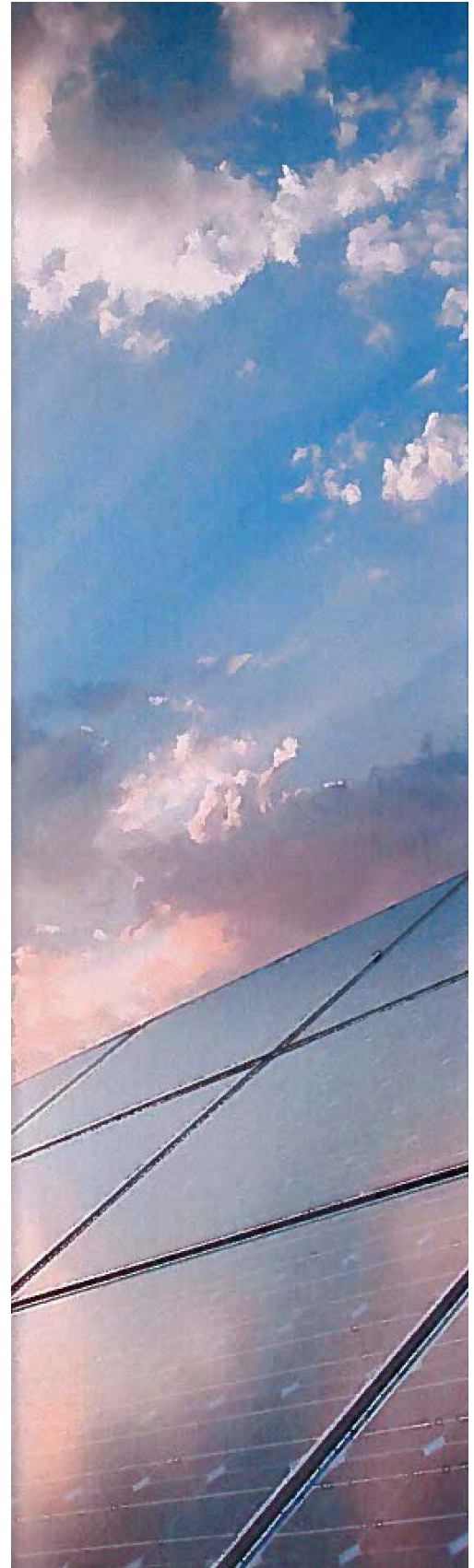
ENERGY INFORMATION SYSTEMS

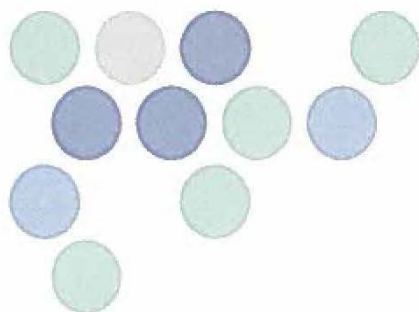


ENERGY CONSULTING

Award Winning Energy Solutions

BITHENERGY, Inc. is an award-winning energy engineering and technical services consulting firm that maximizes the business value and efficiency of each unit of energy produced and consumed. Last year, BITHENERGY was ranked 49 out of 400 Top Solar Contractors, and 8th out of 50 Top Solar Developers, by Solar Power World. We offer our government, corporate, and residential clients intelligent strategies, advanced information systems, innovative technologies, and full implementation services for managing energy consumption, smart grid infrastructure build-out, and the development of renewable energy systems. BITHENERGY solves complex energy challenges with innovation, bold vision and great attention to detail.





Daniel Wallace

VP of Business Development

Mr. Wallace is an energy engineering professional with more than eleven years of relevant experience in energy engineering, renewable energy systems development, program management, financing strategy, systems implementation and integration, and operations and maintenance (O&M). Structuring complex renewable transactions including wholesale to retail and VANM projects throughout the United States and internationally. Mr. Wallace is responsible for managing a team of professionals who provide all renewable energy project development and management under all Bithenergy services, including renewable system financial modeling, construction financing, and debt/equity structures for multiple multi-megawatt utility scale projects. Daniel brings unparalleled experience and international presence to Bithenergy's team.



Relevant Project Experience

Chimes International, Maryland

Bithenergy

Designed a 700kW solar energy system on the Chimes International campus in Baltimore, MD. Chimes International was seeking to stabilize its energy prices and to enhance its "green" image and strategy. Bithenergy completed a ground mount array and three rooftop solar arrays. Bithenergy developed, constructed, and is managing the facility under a 20 year power purchase agreement with Chimes. Services provided include: design, construction, and management of solar energy system.

The Nixon's Farm Solar Incubator / HRES Training Facility, Maryland

Bithenergy

Bithenergy developed a renewable energy project located in Howard County, MD. The project includes: 10 MWAC solar photovoltaic facilities, and a Hybrid Renewable Energy System (HRES) training facility dedicated specifically to green technology training for youths and veterans.

Coppin State University, Maryland

Bithenergy

Coppin State University wanted to add solar to their campus in order to offset their utility bills and become a leader in renewable energy for surrounding universities. Services provided include project management, AC electrical, and DAS monitoring system.

Employee Highlights

- 47MW of renewable energy projects
- Microgrid Specialist
- Community Solar Integrator
- VANM Expert

Project Role

Mr. Wallace is responsible for all renewable energy project development and management, including design, construction, and implementation of multi-megawatt projects

Education

- M.S. in Electrical Engineering (pending)
Johns Hopkins University
- B.S. in Electrical Engineering
Virginia Polytechnic and State University

ROBERT L. WALLACE

BITHGROUP TECHNOLOGIES, INC.



Robert L. Wallace, a native of Baltimore, has over 30 years of experience in a broad range of engineering disciplines and strategic information technologies. Mr. Wallace is the founder of numerous companies and is an internationally recognized expert in entrepreneurship development, technology implementation, and urban economic development. He, along with his international team of technology subject matter experts, have built up an impressive track record and background in the following technological areas:

- » Energy Engineering
- » Energy Information Systems
- » Renewable Energy Systems
- » Wireless Engineering and Security
- » Network Engineering and Security
- » Health IT Systems
- » Biometrics
- » IP Telephony

EDUCATION

Dartmouth College,
M.B.A. Master of Business
Administration, 1984

University of Pennsylvania,
B.S.M.E Bachelor of Science in
Mechanical Engineering and Applied
Mechanics, 1978

Sojourner-Douglas College,
Doctorate of Humane Letters, 2000

YEARS WITH FIRM

24 years

BOARD MEMBERSHIPS

- Mayor's Coalition on Supplier Diversity and Inclusion
- State of Maryland Economic Development Commission
- Baltimore Workforce Investment Board
- Central Regional Minority Supplier Development Board
- Kennedy Krieger Institute
- American Association of Blacks in Energy
- Global Vessels, Inc.
- State of Maryland Information Technology Board
- State of Maryland Advanced Technology Commission
- State of Maryland Minority Business Reform Commission
- NMSDC Maryland/Virginia/DC Chapter
- Maryland Liberia Sister Cities
- Columbia Union Adventist Service Industries

Mr. Wallace is an internationally known and respected entrepreneur, business consultant, and published author. He has advised Mayors, Governors, and corporate executives on the issues of technology implementation, enterprise architectures, system development, and strategies for maximizing operating efficiencies and governmental operations via strategic investments in technology. He is the immediate past chairman of the State of Maryland Information Technology Board (ITB), which advises the Governor and the State CIO on information technology matters. He also served as IT Consultant to the Information Technology Board (ITB) of Baltimore City Government. As a member of the Governor's Advance Technology Commission for the State of Maryland, Mr. Wallace helped to chart a framework for the flourishing of the hi-tech economy in Maryland. This commission worked to identify the strengths and weakness of Maryland's business climate, assessing successful initiatives in other pro-business states and submitted detailed recommendations to the Governor for igniting further growth in Maryland's hi-tech economy. Wallace has earned special recognition from local, state, national and international governments for his work in technology implementation and entrepreneurship development.

ENERGY CONSULTANT

ABOUT POWER52

WHY CHOOSE POWER52?

Power52 is a Baltimore based company established to provide technical and development services to create renewable energy projects aimed to reduce the cost of energy for low-income communities and families. Power52 solves complex energy challenges with innovation and bold vision.

The renewable energy projects created allow our organization to offer jobs for low-income individuals in disadvantaged communities that are struggling financially; training for those interested in pursuing a career in the renewable/energy sector as well as scholarships for those individuals unable to attend a trade school or college due to lack of financial resources.

In addition, Power52 is a registered supplier in MD, VA, MASS, NY, NJ, PA, DEL, and parts of NC. As a Power Supplier, Power 52 focuses on supplying affordable clean energy to moderate and low-income households prominently located in distressed communities. By registering to receive clean energy from Power52, our residential customers not only save money, they directly impact the training and job creation programs associated with the construction of community based solar generation facilities.

P52 commercial partners also participate in building community based training and job creation programs. As a commercial partner, your solar generation facility will be constructed and maintained by participants/graduates of the Power52 training program. Jobs for the local community, energy savings for our P52 partners.

POWER52 PROVIDES AFFORDABLE SOLAR POWER TO INNER CITY COMMUNITIES, BUILT BY THE RESIDENTS FOR THE RESIDENTS.



Power52.org | 410.203.1255

SERVICES



SOLAR PRODUCTION

Power52 programs generate 100% solar power exclusively for low income residents. These facilities are built directly in the communities they serve by the residents living there.



TRAINING PROGRAMS

Power52 is not only about providing affordable solar power - it's about educating and training the people it impacts. Much like the power itself, the future and opportunities of those it benefits should be sustainable too.



COMMUNITY RE-INVESTMENT

Power52 transforms abandoned inner city lots into attractive solar facilities which provide training, employment opportunities and affordable power. It creates strong, proud, and invested communities.



CARBON OFFSET

Helping future generations is one of Power52's primary goals and lowering our carbon footprint through clean energy is just one of the many ways the program does so.



JOB CREATION

Creating sustainable community well-being is about jobs, and through Power52's programs there are many opportunities available for the community members involved.

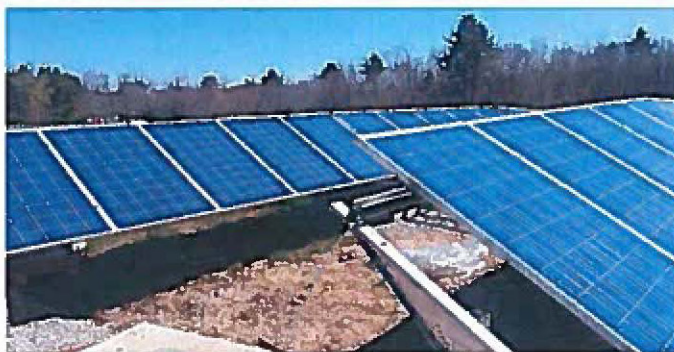
Power52.org | 410.203.1255

PROJECT EXPERIENCE

MASSACHUSETTS SOLAR PROJECTS*

These projects include four separate locations throughout the state. The systems are ground mount solar power plants located across 4 different municipalities, totaling 7.4MW. Each ranging in size from a 400kW system up to a 3.7MW solar module install. The project sites vary from greenfields to landfills. Each project entered into a separate PPA. The team structured the financing for all 4 systems, worked with the developers and the municipalities to finalize and execute the PPAs, and managed the construction of all four sites.

**Projects mentioned were developed by Rob D. Wallace, Director of Technical Sales at Bithenergy*



CHIMES ROOFTOP*

This project consist of a four phase, 3.4 MW solar power solutions for, Baltimore based, Chimes International. The CHIMES portfolio includes four rooftop systems and two ground-mounted system located between Baltimore City, Baltimore County, and Howard county sites. Additionally, after the completion of phase 4 of the CHIMES solar solution, CHIMES International will be one of the first carbon neutral or post carbon economies in the country. The team originated, arranged financing, managed construction, and negotiated/executed the 20 year PPA for CHIMES International.

**Projects mentioned were developed by Rob D. Wallace, Director of Technical Sales at Bithenergy*



Power52.org | 410.203.1255

TEAM AND CONTACT

ROB D. WALLACE

PRESIDENT AND CEO, POWER52 INC.

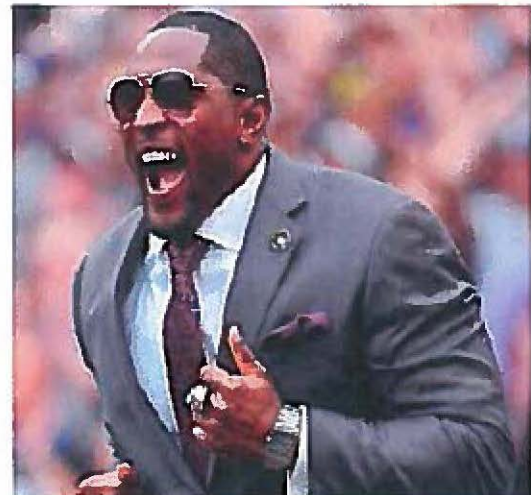
Rob (Daniel) Wallace is the Founder and a Principal in Power52 Inc. and Chairman of the Power52 Foundation board, with over 70MW of solar and clean energy projects under his belt. As both an Electrical & Energy Engineer, project manager and business consultant, Mr. Wallace has over 11 years experience in program management, renewable energy systems design and development, systems implementation, training and technology management. Mr. Wallace also has worked in the power market, focusing on frequency response, energy arbitrage and battery storage.



RAY LEWIS

VICE PRESIDENT, POWER52 INC.

Ray Lewis is a Principal in Power52 Inc. and serves as Co-Chair on the Power52 Foundation board. Ray Lewis was born in Bartow, Florida, in 1975. The oldest of five children, Lewis became a football star at Kathleen High School and was recruited to play at the University of Miami. In 1996, Lewis was a first-round pick of the Baltimore Ravens. He led the team to a Super Bowl victory in 2000, and was named Defensive Player of the Year that same season. In 2013, Lewis led the Ravens to another Super Bowl victory. He retired in 2013.



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SUSTAINABILITY CONSULTANT

JASON S. JANNATI

SUSTAINABILITY AND COMMUNITY DEVELOPMENT DESIGN



Jason's main focus is to redevelop real estate to produce clean power and clean food. By integrating renewable power systems and urban agriculture strategies, society can be revitalized to become more resilient, sustainable and economically viable.

EXPERTISE

- » Renewable Power
- » Development Vertical Farming Policy and Advocacy
- » Team Management
- » Project Management

PROJECTS

FT. MEADE HOUSING

2,700+ energy + water upgrades among base housing

AWARDS

- » Baltimore Sun Top 10 Under 30 to Watch
- » 2011 SBA Young Entrepreneur of the Year.
- » Honorary Resolution by Howard County Council for Job Creating
- » U.S. Chamber Blue Ribbon Small Business Award
- » Impact Too's List of Top Too Entrepreneurs

EDUCATION

Howard Community College,
Columbia, MD - Associate's Degree
September 2004- June 2006.

TOTAL YEARS EXPERIENCE

11

LAND USE ATTORNEY

TODD D. BROWN

ATTORNEY | SHULMAN ROGERS GANDAL PORDY ECKER



Todd D. Brown is well-known for his client focus, detailed knowledge of the people and processes affecting land use and for delivering successful results in a timely, predictable manner. He regularly guides individuals, local, regional and national clients and their technical consultants through complex legislative, master plan, zoning, subdivision and site plan approval processes in Howard County and Montgomery County, Maryland.

With more than 27 years' experience, Todd graduated from the University of Maryland School of Law with honor, has received Martindale Hubbell's AV Preeminent rating (highest level of professional excellence), and is recognized as a Top Rated Lawyer in Land Use and Zoning. He has also been honored with multiple selections on the Maryland SuperLawyers listings, which recognize the top five percent of attorneys in the area.

EDUCATION

University of Maryland School of Law,
J.D., with honors, 1989

University of Maryland,
B.S., 1984

BAR & COURT ADMISSIONS

- Maryland
- District of Columbia

HONORS & AWARDS

- Maryland State Bar Association, 1989-Present
- Montgomery County Chamber of Commerce, Board of Directors
- Howard County Chamber of Commerce
- Salvation Army Advisory Council for Montgomery County
- Greater Bethesda-Chevy Chase Chamber of Commerce, Past Member, Board of Directors
- Greater Silver Spring Chamber of Commerce, Past Member, Board of Directors
- Silver Spring Urban District Advisory Committee
- Maryland-National Capital Building Industry Association, Member
- Legislative Liaison Committee
- Development Review Process Subcommittee
- M-NCPPC Ad Hoc Committee

REPRESENTATIVE MATTERS IN HOWARD COUNTY

- » Downtown Columbia - Drafting and approval of the Downtown Columbia Master Plan, Downtown Redevelopment Zoning Regulations, Adequate Public Facilities Act, and other legislation for the mixed-use redevelopment of the Town Center of Columbia, Maryland. Master Plan and Zoning Authority has been obtained for an additional 14 million square feet of development, including 4.3 million square feet of office, 1.25 million square feet of retail, 6,244 residential units and 640 hotel rooms.
- » Downtown Columbia - Drafting and approval of the Development Rights and Responsibilities Agreement (DRRA) that governs the redevelopment of Downtown Columbia.
- » Downtown Columbia - Area 7 - Crescent Neighborhood - Final Development Plan approval for the New Cultural Center containing 112,346 square feet of cultural uses, including a new 360-seat dinner theatre and two black box theaters (450 seats), and 202 residential units.

VERTICAL FARM ENGINEER

PENNY MCBRIDE

FOUNDER | VERTICAL HARVEST



EDUCATION

Antioch University, 2004

Colorado State University
B.A. Political Science; Sociology
Minor, 1986

YEARS WITH FIRM

13 years

CERTIFICATIONS

- Home Energy Rating Specialist Rater (HERS), 2009
Certified as a HERS Rater to energy model and inspect residential homes to meet the guidelines set by the Department of Energy
- Leadership in Energy and Environmental Design for Homes (LEED-H), 2008
Certified as LEED-H Rater. Oversaw compliance measures with builders, architects and subcontractors to meet United States Green Building Council certification standards.
- Leadership In Energy and Environmental Design Accredited Professional
- Certified LEED-AP by the United States Green Building Council
- Seattle City Light 2003-2004
- Sustainable Building Advisor Certification Program
- Natural Home Building Certificate Program

EXPERIENCE

- » Conceptualized and developed idea of three-story hydroponic greenhouse
- » Raised \$3.8 Million in capital through equity, donations and grants for business start-up and construction capital
- » Managed the business development process with an *LC3 model (see footnote)
- » Fostered community partnerships for fundraising, program partnerships and product development
- » Implemented an integrated employment model to hire citizens with developmental disabilities
- » Established customer base for sale of produce with restaurant, grocery and regional distribution partners
- » Developed product list of produce to be grown at the greenhouse
- » Identified and procured products for sale in on-site retail space
- » Developed start-up protocol for greenhouse staff and production measures necessary to meet start-up goals

MAJOR PROJECTS

GRAND TETON NATIONAL PARK WASTE UTILIZATION STUDY, 2011

Assessment of organic waste in Grand Teton National Park; categorized organic waste sources and outlined methods for processing and utilizing material in a cost effective manner to reduce future fees and impacts of hauling while creating an end product.

ROCKY MOUNTAIN BIOCYC/E CONFERENCE, 2009

Collaboratively organized a multi-day conference focused on the utilization of organic material regionally and nationally. Facilitated workshops, speakers and industry representatives for an overview of existing programs and opportunities.

LEED-H AND HERS CONTINUING EDUCATION UNIT (CEU) COURSES, 2008

Facilitated and organized CEU courses for Realtors, builders and architects focusing on LEED-H and HERS standards.

PROJECT COORDINATOR FOR FOOD WASTE PILOT PROJECT, 2007

Recognized as the New Recycling Program of the Year by Wyoming's Solid Waste and Recycling Organization.

YELLOWSTONE BUSINESS PARTNERSHIP, 2006

Design team member for the Greater Yellowstone Framework for Sustainable Development, a regional framework for sustainable building and development targeting regional issues.



