FREIGHTWAY REDEVELOPMENT SITE

PROPOSAL FOR THE VILLAGE OF SCARSDALE REQUEST FOR EXPRESSION OF INTEREST

October 15, 2018

BRP DEVELOPMENT

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RESPONDENT DESCRIPTION

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BRP Companies is a New York based real estate firm that is at the forefront of transit oriented, multi-family and mixed-use development. From the firm's modest beginning in 1998 as a local development company, BRP Companies has successfully evolved into a vertically integrated organization offering a full complement of development, construction, property management, and financial services.

Today, with an experienced staff of 70 responsible for approximately 1.6M SF of completed developments and over 3.3M SF currently in development, BRP seeks to meet the growing demand for mixed use, "walkable" housing by developing high-quality, energy efficient properties in transit-oriented locations throughout the City of New York, Westchester County, Long Island, New Jersey and Baltimore. Many of the company's projects include the latest in energy saving and green technology such as on-site cogeneration plants which capture exhaust heat and convert it into usable electricity, significantly reducing a building's carbon footprint while lowering energy consumption and costs.

In addition to the firm's development and construction services, BRP offers an array of financial products and services through its affiliate BRP CDE, LLC, a Community Development Entity serving the New York, New Jersey, & Pennsylvania metropolitan areas. The company seeks to stimulate economic development by working with strategic partners to finance high impact mixed-use housing, retail, and community facility space in its service area. BRP CDE offers below market rate senior and subordinated loans with flexible terms, real estate advisory services, and innovative solutions.

On March 15, 2012, BRP CDE, LLC, announced that it was awarded a $30M allocation under the federal New Markets Tax Credits 2011 program round administered by the U.S. Department of the Treasury's CDFI Fund. BRP CDE was one of 70 organizations nationwide receiving awards selected from a pool of 314 applicants through a highly competitive process. This is the second award of this kind for BRP, which received its first award of $21M in the 2010 program round. Since 2009, the firm has successfully completed approximately $138M in New Market Tax Credit transactions.

On May 6, 2014, BRP closed on the GS BRP Urban Venture fund. The opportunistic and value-added real estate fund raised total equity commitments of $75M from investors; including Goldman Sachs Urban Investment Group (GSUIG) and a real estate focused family office. The fund was subsequently increased to $150M in January 2018. With leverage, BRP has $500M of combined purchasing power. The Fund's objective is to produce superior risk-adjusted investment returns through the acquisition, development, repositioning, management, and

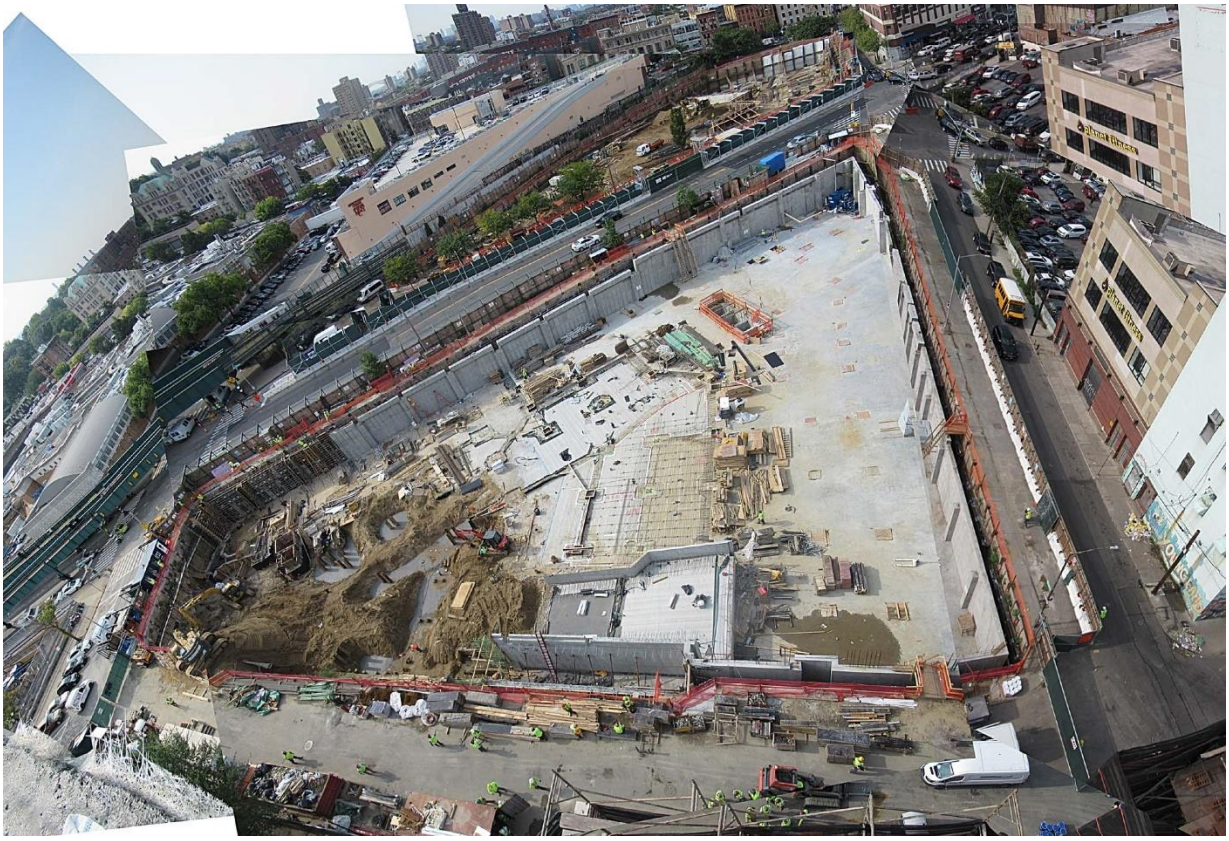
disposition of a diversified portfolio of mixed-use, mixed-income residential properties in New York City, Northern New Jersey, and Westchester County, New York.

SITE LOGISTICS EXPERIENCE

BRP is uniquely qualified to develop Scarsdale's Freightway Development Site as eleven of our developments are located directly adjacent to either New York City Subway (MTA) or Long Island Rail Road (LIRR) lines. Additionally, 100% of BRP's projects are located in logistically difficult locations and, as such, BRP has encountered almost all subgrade conditions, from rock to dewatering. Due to our desire to maximize above grade commercial and residential uses, 90% of our projects include subgrade parking. In the few scenarios where subgrade parking was not feasible (due to utility and transit infrastructure) we were able to locate parking at grade and/or on the second floor. One of BRP's current projects, La Central, includes 496 residential units above a 50,000SF YMCA and below grade parking. The site's water table is at 3 ft, while the cellar is 15 ft deep. In order to mitigate, BRP has worked closely with the Department of Environmental Protection (DEP) on a comprehensive dewatering system.

In addition to working with DEP, BRP has extensive experience undertaking New York State Environmental Quality Review (SEQR). In fact, a majority of BRP projects include an "e" designation, which requires stricter requirements surrounding hazmat, air quality, and noise attenuation.

Due to the tight site constraints of New York City development sites, BRP has extensive experience working with neighbors to maximize development potential. This entails working closely with neighbors early on in the process, typically during pre-construction, to understand neighboring below grade conditions. Doing so allows BRP to maximize new building design while minimizing impacts on neighboring structures.



CASE STUDY—THE CROSSING AT JAMAICA STATION

Our most complex transit-oriented development is The Crossing at Jamaica Station (CJS), which is sandwiched between two MTA lines and the Jamaica Queens LIRR platform/JFK Air Train. The development consists of two new buildings made up of a 30-story high-rise and a 16-story mid-rise building. The overall footprint of the development site is approximately 1.5 acres.

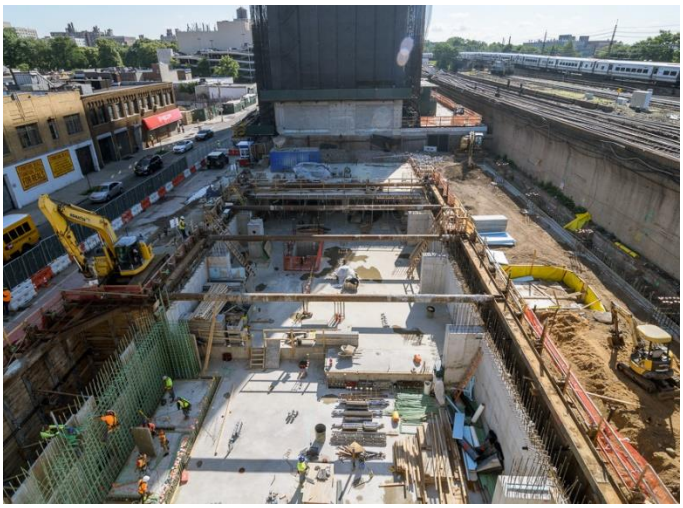
CJS is located at the corner of one of the busiest transportation hubs in Queens, where the JFK Air Train, LIRR, multiple MTA subway and MTA bus lines all intersect. The existing substrate has minimal bearing capacity as it is mostly sand and silt. In addition, the soil is classified as contaminated and hazardous per the New York State Brownfields Cleanup Program and must follow New York City Department of Environmental Protection and New York State Department of Environmental Conservation guidelines for handling and removal. The project's location and existing conditions created unique design and construction challenges.

As a result of the existing conditions of the substrate and, the close proximity of the underground trains and elevated LIRR tracks, a robust Support of Excavation (SOV) system was implemented for the entire development to minimize impact on transit. Overall, the SOE consists of drilled casing for solider piles, timber lagging, whalers, angle braces and struts.

The foundation design for the high-rise consisted of a pile supported foundation including massive pile caps and matt slabs. The mid-rise foundation design is different, as the building is not as tall as the high-rise and the underground subway veers off to the northeast away from the property line. Therefore, the mid-rise foundation is supported by a massive matt slab that bears on top of existing undistributed sand substrate. Only a small section of piles was required to be installed at the MTA influence zone along Archer Ave.

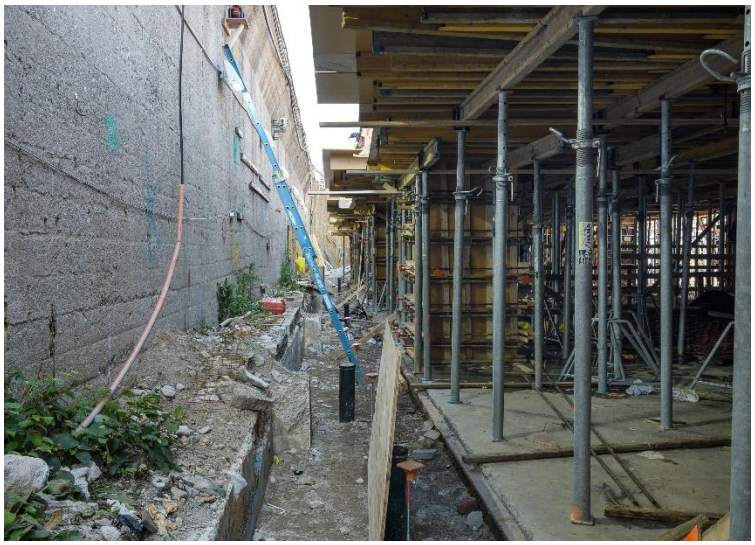
HIGH-RISE

The high-rise foundation began with the drilling of micro piles at the north elevation closest to the MTA. These piles needed to be installed before the SOE solider pile system was installed. All micro piles were drilled with steel casings, not vibrated or hammered in because of the close proximity to the underground subway and LIRR retaining wall. Piles that were in the MTA field of influence were drilled to depths more than 110ft from grade. All piles installed were monitored and inspected by a control inspector. Once the piles were installed, excavation began to pile cut off depth.



Per DEP and DEC, onsite soil was classified by contamination level (5 contamination levels total) and each type was sent to different facility. All excavation operations were monitored and inspected by a control inspector. During excavation, a total of 11 existing oil/gas tanks discovered throughout the site were removed per DEP/DEC requirements. As the excavation was ongoing, the piles were cut to the pile cut-off depth and the concrete operation started for the massive pile caps, some as deep as 7ft. Once the foundation was approximately 75% complete at the west slab on grade area, construction proceeded to the east where the cellar area is located. The solider piles in the cellar area were drilled with steel casings from grade to depths of 37 ft at the same time the piles were being installed at the west section of the site. Once all of the solider piles were installed at the cellar area, the whalers and corner braces were installed. The site was then taken down to elevation 37 ft by excavation. Next all the cellar micro piles were drilled with steel casings and struts spanning across the site (approximately 60 ft long from north to south) were installed to complete the SOE system. The excavation could then proceed to subgrade depths of 18-25 ft below grade between piles. Once all the piles were cut, a vapor barrier was installed and rebar for the concrete matt slab were installed. The matt slab thickness ranged from 5 ft to more than 8 ft deep. The cellar matt slab was poured in one monolithic pour, approximately 2,000 cubic yards were poured over a 12-hour period. The concrete foundation wall formwork, rebar, and concrete followed. As the foundation walls were poured and the concrete reached design strength, the walls were backfilled carefully with a flow fill consisting of a low strength concrete slurry mix at the lower section of the walls, and then backfilled with soil. At the same time, mechanical pipes were installed atop of the matt slab for new electric service and a topping slab was installed. Next, the SOE system was removed in order to allow for the ground floor slab to be installed.

MID-RISE



The micro piles for the mid-rise were drilled with casings from grade along the north elevation. Once complete, whalers, angle braces, and timber lagging was installed onto the solider piles. The site was excavated, and soil was removed following the same process as the High-rise. Struts spanning across the site (approximately 60 ft long from north to south) were installed to complete the SOE system. Once all the piles were cut, a vapor barrier was installed and rebar for the concrete matt slab were installed. The matt slab thickness was 4 ft thick and 8 ft thick at the core. The cellar matt slab was poured in one monolithic pour, approximately 1,200 cubic yards, over a 7-hour period. The concrete foundation wall formwork, rebar, concrete followed. As the foundation walls were poured and concrete reached design strength, the walls were backfilled carefully with a flow fill low strength concrete slurry mix at the lower section of the walls up to elevation 37 and then backfilled with soil. At the same time, mechanical pipes were installed atop of the matt slab for new electric service and a topping slab was installed. The superstructure contractor then poured half of the ground floor slab. Formwork & framing, concrete for the spread footings followed. Once the slab was poured, the walls were framed and poured.

In total, the high-rise and mid-rise foundations consisted of a total of 708 micro piles, a combined total of 42, 470 tons of soil was removed and approximately 6,800 cubic yards of concrete was poured.

FREIGHTWAY PROJECT TEAM

BRP's Freightway team will be comprised of Lessard Design as lead design firm and Langan Engineering as primary consulting engineer and environmental consultant. Additional consultants and engineers will be brought on as we move forward with schematic design. Attached please find firm brochures for both Lessard Design and Langan Engineering.


BRP
COMPANIES

Developers, Owners and Operators of Green, Urban, Transit-Oriented, Mixed-Use Properties

Vertically Integrated Development, Acquisition, Construction and More

BRP Companies is a New York based real estate firm that is at the forefront of mixed-use development and acquisition of urban, multi-family properties. From its modest beginning as a local development firm, BRP Companies has successfully evolved into a vertically-integrated organization offering a full complement of development, acquisition, construction, property management and New Markets Tax Credits financing.

Today, with an experienced staff of over 70, a track record of over 1.4 million SF of completed real estate projects and over 3.5 million SF currently in development, BRP is uniquely positioned to meet the demands of urban housing consumers. The firm is an innovator in developing mixed-use, mixed-income, “walkable" urban housing with high-quality, energy-efficient infill properties throughout the city of New York and beyond.

The company’s current and planned projects all include the latest in energy saving, green technology including on-site cogeneration plants for electricity, heating and cooling. Also, BRP concentrates on locations which are in close proximity to public transportation, encouraging pedestrian activity, decreasing reliance on cars and providing convenient places for residents to live, do business, work and raise families.

Finally, since 2007 BRP has been a joint-venture partner with Goldman Sachs Urban Investment Group which has committed over $500 million in capital to BRP developments.

Distinct Capabilities

- Vertically-integrated real estate firm with subsidiary companies performing development, acquisition, construction, property management and New Markets Tax Credits financing
- $1.7 billion in completed and current transactions, each of which is or was profitable for our investors at the time of exit
- Established 50/50 JV Development Partnership with Goldman Sachs (Urban Investment Group) in 2007
- Proven track record of achieving above-market returns in challenging 2007-2009 vintage transactions
- Award-winning developer recognized by industry groups in Philadelphia and New York City

Proven Strategy: BRP has successfully deployed institutional and high-net-worth capital since its inception in 2003, with $1.3 billion currently in development and $1.5 billion of pipeline deals. Accordingly, the firm takes a disciplined investment approach to urban, multi-family markets with a focus on:

High-Density, Urban-Infill Locations. BRP's concentration on urban markets (with high population density and significant barriers to entry) capitalizes on demographic trends driving increased residency in cities. Moreover, due to its reputation in the market as an amicable investment partner with municipalities, non-profits (including faith-based institutions), local community organizations and private land owners, BRP has unique access to off-market transactions and high-quality, proprietary deal flow throughout the New York City area .

Easy Access to Transportation. BRP focuses on sites which are within a 1/4 to 1/2 mile radius of a transit stop. With these types of locations, BRP strives to adhere to the "smart growth" principals of "development that serves the economy, the community and the environment." Moreover, proximity to transportation has been found to create an 18% to 45% value premium for multifamily condo and rental properties (according to the Center for Transit Oriented Development).

Ground-up Development and Redevelopment. BRP targets opportunities in which it can add value via ground-up development, physical improvements and changes in use. Through new construction, rehabilitation and occasionally historic preservation, the Company creates healthy, energy efficient, market-rate and affordable housing for rent and sale. Moreover, BRP's mixed use properties provide much needed retail and community spaces including organic green grocers, national pharmacy chains and early learning facilities.

Energy Efficiency. BRP is committed to developing high-performance properties with healthy indoor air quality and efficient energy and water usage. This includes green repositioning to enhance the value of acquired assets. For new development, BRP uses the latest in energy saving/green technology including on-site cogeneration (CoGen) plants which capture exhaust heat to convert it into usable electricity and transform waste heat into cooling. This process significantly reduces a building's carbon footprint while lowering energy consumption and costs.

From CoGen and rain water capture to water-saving plumbing systems and appliances, green building is an enhancement to BRP's tenants and unit purchasers who benefit from a healthier living environment and below market energy expenses. The Company has a history of developing properties under the guidelines of the US Green Building Council's LEED standard and has LEED Accredited Professionals on staff.

The Crossing at Jamaica Station

Jamaica (Queens), NY

This 773,000 SF mixed-used project is conveniently located directly across from Jamaica Terminal, a major transit hub servicing more than 250,000 daily commuters through local commuter rail, subway and bus lines, as well as the AirTrain terminal linking directly to JFK Airport. The development will be comprised of 669 rental units, 45,000 SF of community and retail space, and 200 parking spaces. LEED Silver certification is anticipated with numerous “green” elements such as water saving plumbing systems, energy-efficient boiler and green roofs. Construction began in 2016 with expected occupancy in 2019.

Total Development Cost: $407,000,000

Designed to LEED Silver Certification

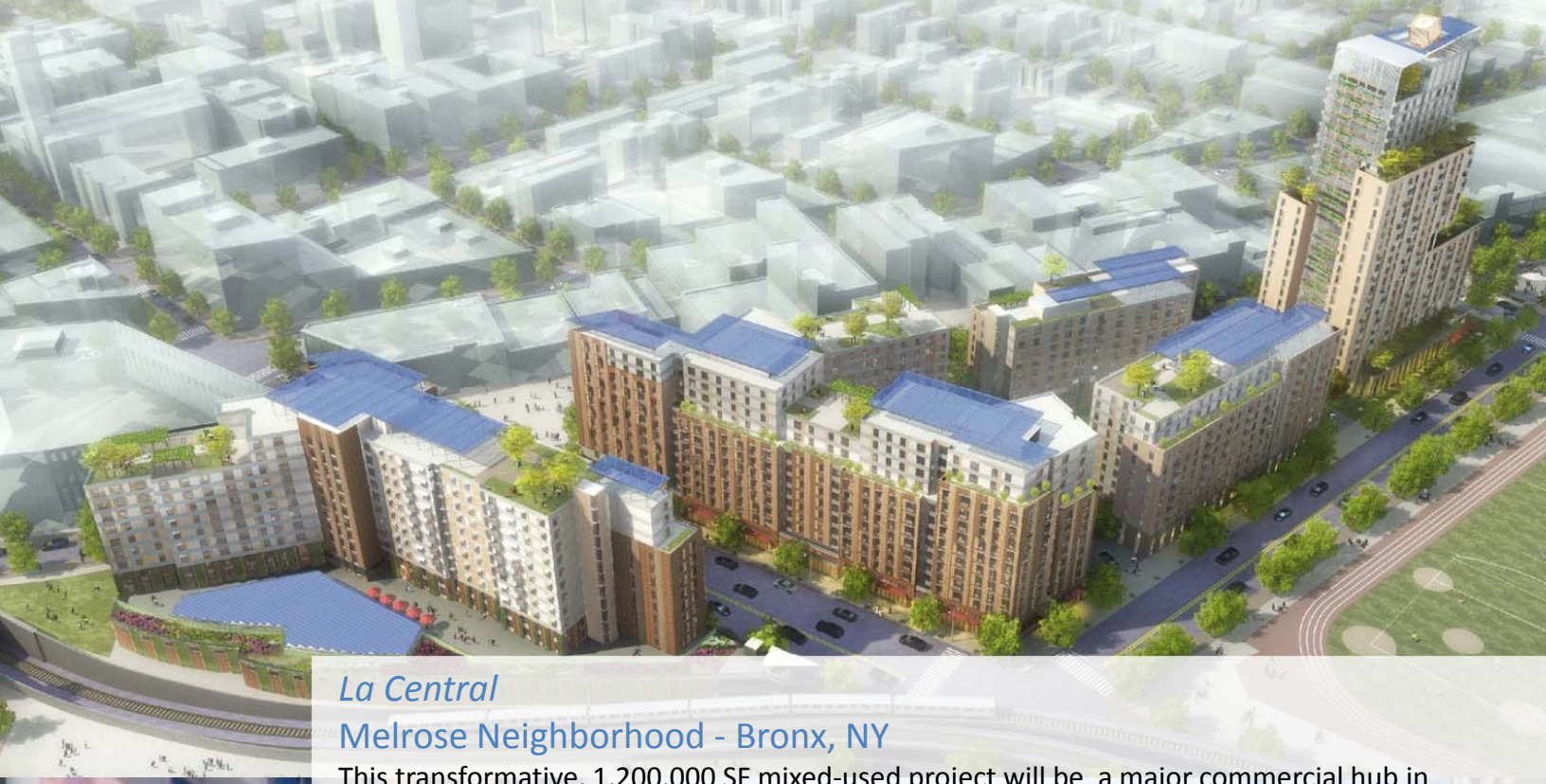
Designed to
LEED for Homes
Certification

Current Projects

L^2 (Livonia Initiative, Phase II)
Brooklyn, NY

This 271,000 SF transit oriented development is comprised of 4 sustainably designed buildings adjacent to a major subway line. With 292 rental apartments and 50,000 sq. ft. of community facility/retail space, the project will revitalize the surrounding community with much needed retail, educational and supportive services. LEED for Homes certification is anticipated with numerous "green" elements such as solar panels, water saving plumbing systems, energy-efficient boiler and green roofs. Construction began in 2016 with expected occupancy in early 2018.

Total Development Cost: $101,000,000

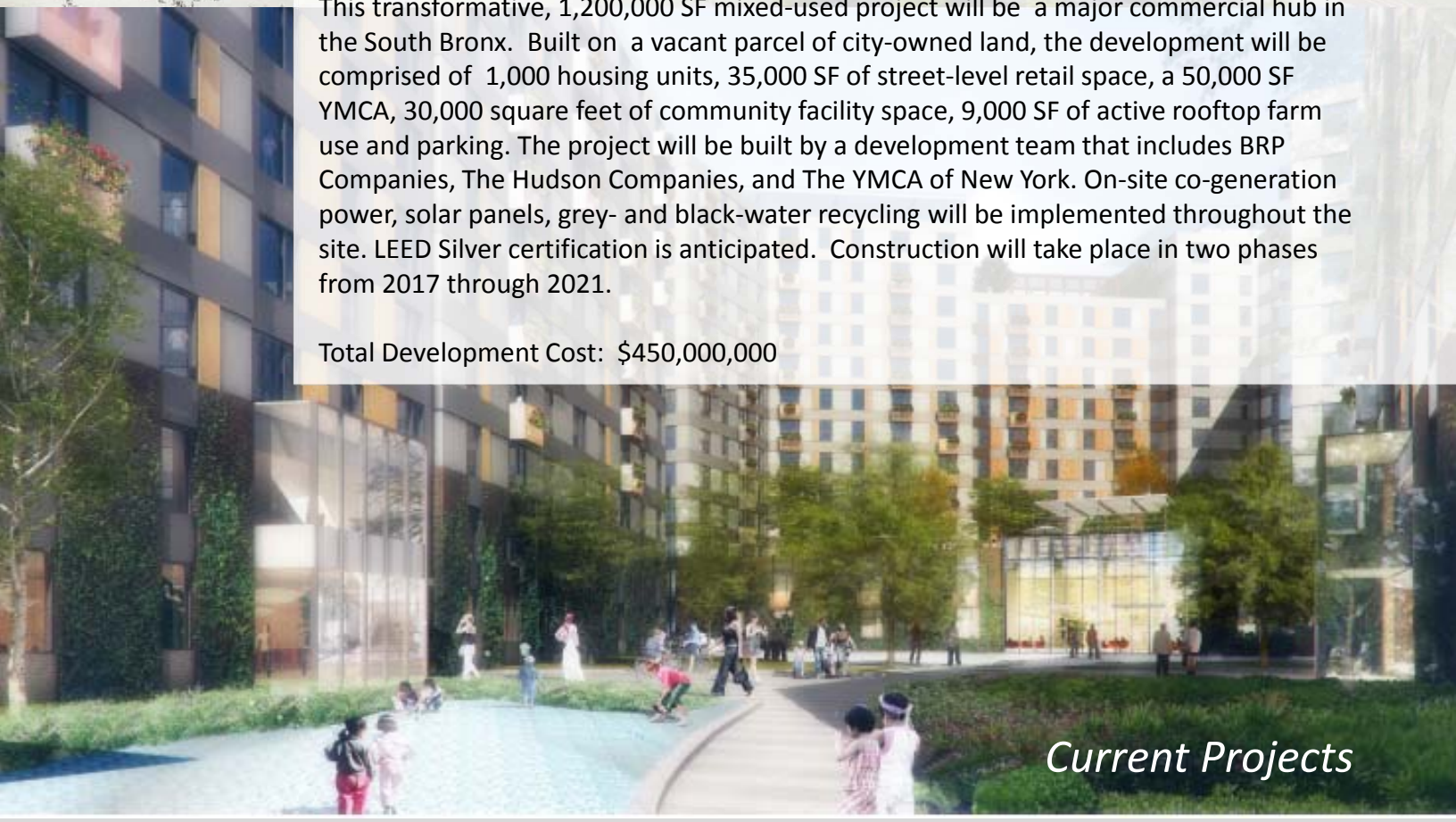


La Central

Melrose Neighborhood - Bronx, NY

This transformative, 1,200,000 SF mixed-used project will be a major commercial hub in the South Bronx. Built on a vacant parcel of city-owned land, the development will be comprised of 1,000 housing units, 35,000 SF of street-level retail space, a 50,000 SF YMCA, 30,000 square feet of community facility space, 9,000 SF of active rooftop farm use and parking. The project will be built by a development team that includes BRP Companies, The Hudson Companies, and The YMCA of New York. On-site co-generation power, solar panels, grey- and black-water recycling will be implemented throughout the site. LEED Silver certification is anticipated. Construction will take place in two phases from 2017 through 2021.

Total Development Cost: $450,000,000



Current Projects

Designed to LEED Silver Certification

90NINETY

Jamaica (Queens), NY

The 624,000 SF, mixed-use 90NINETY development has been designed to contribute meaningfully to the economic success of Downtown Jamaica. In addition to providing approximately 250-450 units of mixed-income housing, the property will maximize street level retail and improve the pedestrian experience and public realm, while supporting the robust, Jamaica arts community. BRP along with its partner, Wharton Properties, will build the project, which will feature housing, retail, parking and an arts-based community facility. On-site co-generation power as well as grey-and-black-water recycling will be implemented throughout the site. Construction is expected to begin in late 2018.

Total Development Cost: $273,000,000

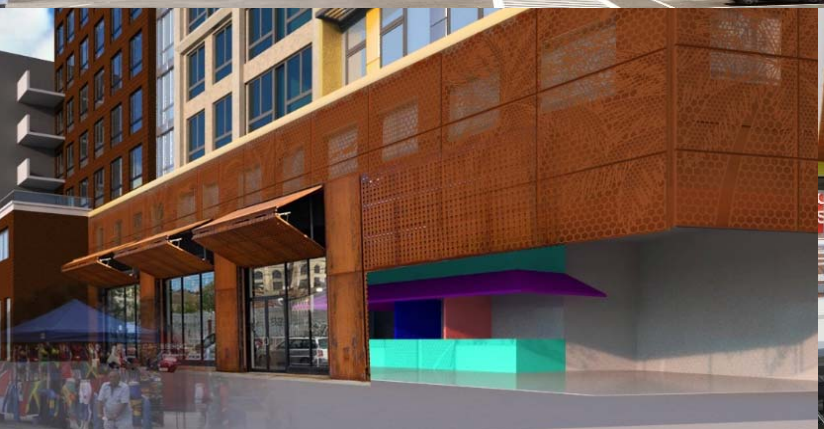
Caton Flats

794 Flatbush Avenue - Brooklyn, NY

BRP's Caton Flats development is designed to transform the intersection at Flatbush and Caton Avenues into a vibrant and diverse retail and residential destination. The existing site contains 2 under-improved lots housing a municipal parking lot and a one story Caribbean vendors market (which provides affordable retail space to former street vendors and micro-entrepreneurs in the area). BRP's new, 279,000 SF, 14 story, mixed-use development will offer 255 mixed-income residential units, 13,000 SF of retail, 75 below grade parking spaces, and 12,500 SF of community facility space, along with a revitalized market and business incubator totaling 9,000 SF. The building has been designed to LEED specifications. The site is conveniently located with easy access to 6 subway lines and is 3 blocks from the second most prominent public park in New York City. Construction is expected to begin in 2018.

Total Development Cost: $113,000,000

Designed to LEED Certification

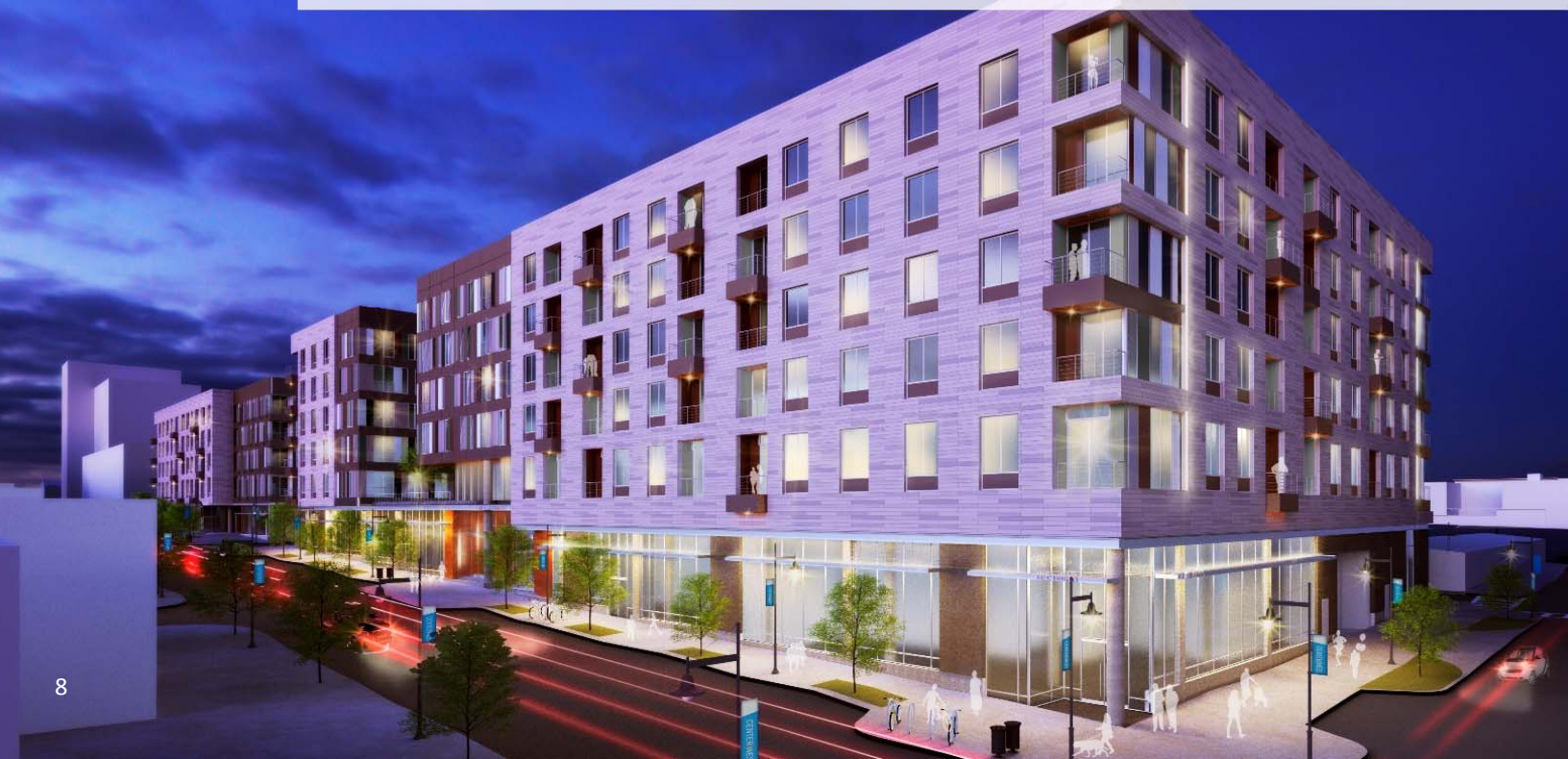


Park Square

Poppleton Neighborhood - West Baltimore, MD

This 227,000 SF property is part of Baltimore's 32.94 acre, Center\West in Southwest Baltimore. The total 3.2 million SF project will result in 1,700 to 1,800 units of rental and for sale apartments and townhomes through four phases of construction. The project will also involve 100,000-200,000 square feet of hotel, shopping center, and office space with ancillary parking, municipal services, and green space. BRP and its partner, La Cité Development, will build Phase IA of the project. This will comprise two Class A, mixed-use, mid-rise buildings with ground floor retail and 262 EnergyStar graded, market-rate, workforce and affordable housing units. The development will also include landscaping and hardscaping improvements, new water management elements and storm drains, fire-water pumps, electric grid upgrades, new sidewalks, street lighting, a dog park and a public park. Construction is expected to begin in 2019.

Total Development Cost: $80,000,000



The Renny

2341-2349 Adam Clayton Powell Blvd - New York, NY

Located in Central Harlem, the development will contain 134 mixed-income residential units; 17,500 SF of retail space; a 24,000 SF community facility (including: conference, event, performance, educational and banquet space); and 67 below-grade parking spaces. The building is expected to receive LEED Silver certification for its cutting-edge environmental design. Planned "green elements" include solar panels, water saving plumbing systems, energy-efficient boiler and green roofs incorporated in the building's landscaping. Construction began in June 2015 and will be completed in early 2018.

Total Development Cost: $75,000,000

Designed to LEED Silver Certification

10 Commerce

New Rochelle (Westchester County), NY

10 Commerce is a to-be-developed, Class A, 172- unit rental property in New Rochelle, Westchester County, NY. The seven-story property will consist of studio, one and two-bedroom units above a two-story parking garage. 10 Commerce will feature luxury amenities including a state-of-the-art fitness center, resident lounge, WiFi and a landscaped courtyard. The property is also walking distance to the New Rochelle Transit Center. There riders are able to take Metro North and arrive in Manhattan's Grand Central Terminal in 34 minutes. Groundbreaking is scheduled for Q4 2018.

Total Development Cost: $55.4 million.

500 Main Street

Current Projects

New Rochelle (Westchester County), NY

500 Main Street is a to-be-developed, Class A, 26-story tower containing 477 rental units in the heart of Downtown, New Rochelle, NY. The property will consist of a mix studio, one and two-bedroom units above a five-story automated parking garage. Upon completion, 500 Main will have luxurious amenities including a state-of-the-art fitness center, a resident lounge, a swimming pool and rooftop amenities. Additionally, 500 Main will be walking distance to the New Rochelle Transit Center, where commuters are able to take Metro North and arrive in Manhattan's Grand Central Terminal in 34 minutes. Groundbreaking is scheduled for Q4 2019.

Total Development Cost: $189.5 million.

Dance Theater of Harlem

841-847 St. Nicholas Avenue - New York, NY

This 33,900 SF, mixed use building is located at the corner of 152nd Street and St Nicolas Avenue in West Harlem. The formerly vacant site was purchased from the storied Dance Theater of Harlem for whom an approximately 700 SF community facility will be built as part of the 39-unit, mixed use, residential property. Units will be available to residents at the 50% and 60% of AMI level. Construction of this anticipated Enterprise Green Communities Certified development is expected to begin in late 2017 with expected occupancy in 2019.

Total Development Cost: $13,000,000

Designed to Enterprise Green Communities Certification

Completed Projects

Aurum Condominiums

2225 Adam Clayton Powell Blvd. - New York, NY

Located in Central Harlem, the development will contain 115 mixed-income residential units; 13,604 SF of retail space; 19,342 SF of community facility space; and 58 below-grade parking spaces. The building is expected to receive LEED Silver certification for its cutting-edge environmental design. Planned "green elements" include on-site cogeneration plant, water saving plumbing systems, energy-efficient boiler and equipment. Construction commenced in 2013 and was completed in 2016.

Total Development Cost: $54,000,000

Designed to LEED Silver Certification

East New York Rental Portfolio

Brooklyn, NY

The East New York Rental Portfolio project consists of 63 buildings comprising 468 units in the East New York neighborhood of Brooklyn. Initially developed in the 1990s under various New York City Department of Housing Preservation and Development (HPD) rehabilitation programs, the portfolio suffered from years of deferred maintenance. For this acquisition, BRP devised a value-added strategy which included rehabilitation and financial restructuring to address the poor physical and financial state of the properties. Construction began in January of 2014 (with tenants in place) and was completed in December of 2015.

Total Development Cost: $95,000,000

Macedonia Plaza

37-08 Union Street- Flushing (Queens), NY

For this 143 residential unit, rental project with 9,000 SF of commercial/community facility space, BRP effectively utilized tax credits from the NYC Department of Housing Preservation and Development. The building is LEED Gold Certified and features an on-site cogeneration plant along with numerous sustainable "green" elements. Construction commenced in the Summer of 2012, and was completed in 2014.

Total Development Cost: $50,000,000

LEED Gold Certified

The Acacia

1560 Fulton Street - Brooklyn, NY

BRP completed this 105-unit rental building in 2012 with 9,700 SF of commercial space and 29 below-grade parking spaces. The project is LEED Gold Certified and features the neighborhood's first on-site cogeneration plant. BRP worked with the NYC Housing Development Corporation (HDC) and the NYC Department of Housing Preservation and Development (HPD) to create an innovative structure which allowed HDC financing to be used in conjunction with New Markets Tax Credits for the first time in New York City.

Total Development Cost: $45,000,000

NYSAFAH

2013 Project of the Year (Downstate)

U.S. GREEN BUILDING COUNCIL LEED GOLD USGBC

LEED Gold Certified

Selected Projects

27 Albany Avenue- Brooklyn, NY
New Development
Completed 2017: $25,000,000

1320 Fulton Street - Brooklyn, NY
New Development , LEED Certified
Completed 2017: $24,000,000

2110 Frederick Douglass Blvd. - New York, NY
New Development
Completed 2010: $25,000,000

150 Clermont Avenue - Brooklyn, NY
New Development
Completed 2008: $33,000,000

20 – 30 North Front Street - Philadelphia, PA
Historic Preservation
Completed 2009: $18,000,000

320 Washington Avenue - Brooklyn, NY
Historic Preservation
Completed 2002: $8,000,000

Uniquely Qualified Management Team

BRP's senior professionals have over 100 years of combined real estate and management experience. The team has been involved in more than $1 billion in real estate investments and $20 billion in other financial transactions during their professional careers.

Geoff Flournoy *(Managing Partner)*

Mr. Flournoy is responsible for overseeing all aspects of BRP's real estate activities including acquisition, finance, development, construction and property management. Mr. Flournoy's leadership has resulted in the completion of approximately $380 million in real estate investments with over $1.4 billion currently in development. Prior to co-founding BRP, Mr. Flournoy was a Vice President in AIG's Global Real Estate Investment Group. During his six year tenure with AIG, Mr. Flournoy was responsible for managing AIG's commercial real estate finance, investments and capital market activities within the Mid-Atlantic region, which included closing more than $500 million in real estate transactions. Prior to AIG, Mr. Flournoy was a Vice President in the Finance Group at CS First Boston, where he was involved in the Firm's $3 billion commercial paper financing program and related funding activities. Prior to CS First Boston, Mr. Flournoy held Senior Associate positions in Finance at Goldman Sachs and Salomon Brothers after graduating from business school.

Mr. Flournoy holds a Bachelor of Science degree in Business Administration from Northeastern University and a Master of Business Administration in Finance and Economics from the University of Chicago Graduate School of Business.

Meredith Marshall *(Managing Partner)*

Mr. Marshall is responsible for executing BRP's investment strategy including deal origination, acquisition, finance and development. He has also led the firm's strategic partnership initiatives such as the firm's decade long partnership with Goldman Sachs Urban Investment Group and BRP's active relationships with all of the New York City Agencies. Prior to co-founding BRP, Mr. Marshall was a Managing Director at Musa Capital Advisors, an emerging markets private equity and financial advisory firm based in New York City. Musa Capital managed a Separate Account for Kingdom Holding Africa, HRH's Prince Alwaleed Bin Talal's Investment vehicle for Sub-Saharan Africa. At Musa Capital, Mr. Marshall was instrumental in executing cross-border transactions including the $37 million development of a mixed-use office complex and mall in Harare, Zimbabwe. Mr. Marshall also led successful investments in the Telecommunications and Financial Services sectors. Prior to Musa Capital Advisors, Mr. Marshall was a Senior Associate at Wasserstein Perella & Co., an investment banking firm based in New York City. While at Wasserstein, Mr. Marshall was an integral member of the firm's Telecommunications and Media, Mergers and Acquisitions practice, where he assisted in transactions exceeding $15 billion.

Mr. Marshall holds a Bachelor of Science degree in Electrical Engineering from Boston University and a Master of Business Administration in Finance and International Business from Columbia Business School.

Steven C. Smith *(Managing Director)*

Mr. Smith is responsible for overseeing BRP's underwriting, financial structuring and related investment activities. Also as Chief Financial Officer of BRP CDE, LLC, an affiliate of BRP Companies, Mr. Smith is responsible for the oversight of BRP's New Markets Tax Credit program. Prior to joining BRP Development, Mr. Smith was a Director at RAK Group, LLC, a private real estate owner of office and multi-family properties. During his five year tenure with RAK Group, Mr. Smith was a Partner in the purchase and disposition of over $250 million of multi-family condo conversion projects throughout Florida. His responsibilities included deal underwriting, managing the due diligence process and overseeing the conversion of 1,800 rental units into condominium units. Mr. Smith was also responsible for asset management of the firm's residential rental portfolio and office properties located in New York, Boston and Dallas. Prior to RAK Group, Mr. Smith held various positions during his six year tenure with AIG's Research and Development Department and Global Real Estate Investment Group. While at AIG's Global Real Estate Investment Group, Mr. Smith underwrote and valued domestic multi-family developments, resulting in the firm's investment of over $100 million in projects.

Mr. Smith holds a Bachelor of Arts degree in Sociology from Hunter College of the City University of New York. Mr. Smith also holds a Master of Science in Social Research from Hunter College of the City University of New York and a Master of Business Administration in Finance from New York University's Stern School of Business.

Mary Serafy, LEED AP *(Managing Director)*

Ms. Serafy is responsible for leading BRP's development activities including planning, zoning analysis, design, coordination, construction administration and LEED Certification. Prior to joining BRP Development, Ms. Serafy was a Project Manager at Danois Architects PC. Ms. Serafy was responsible for the design, oversight and management of projects including the preparation of construction documents and interfacing with clients and consultants. During her nine year tenure with Danois Architects, Ms. Serafy designed, managed and coordinated the completion of more than 1,000 residential units throughout New York City.

Ms. Serafy holds a Bachelor of Arts degree in Architecture from Pratt Institute.

Rashid Walker *(Managing Director)*

Mr. Walker is responsible for sourcing new development opportunities for BRP. Prior to joining BRP, Mr. Walker was a Director at Wood Partners in New York where he led the company's multi-family and mixed use development effort in the New York Tri-State area. Mr. Walker began his real estate career at AvalonBay where he worked on several multi-family transactions throughout the New York region. Mr. Walker also worked at JP Morgan Asset Management as an Acquisitions Officer across all asset types within the Southeast and Midwest markets.

Mr. Walker holds a Bachelor of Arts degree in Economics from Villanova University and an MBA in Finance from Columbia Business School.

Andrew Cohen *(Director, Development)*

Andrew Cohen (Director, Development)
Mr. Cohen is responsible for managing BRP Development's new construction and acquisition rehab transactions. Since 2013, Mr. Cohen has been responsible for over $1B in development comprising over 2,100 units of mixed-income affordable rental housing and over 150,000 SF of commercial space. Mr. Cohen previously held various positions at the New York City Department of Housing Preservation and Development (HPD). Most recently, Mr. Cohen served as the Director of Low Income Housing Tax Credit (LIHTC) Preservation where he oversaw the legal and financial restructuring of over 5,000 residential dwelling units, comprised of over 50 separate transactions. In this role, Mr. Cohen originated over $50M in construction and permanent debt and leveraged over $100M in bond financing, over $80M in equity, $17M in conventional debt, and refinanced over $150M in existing debt.

Mr. Cohen holds a Bachelor of Arts degree in Urban Development from Trinity College and a Master of Arts degree in Urban and Environmental Policy and Planning from Tufts University.

Darlington Brown *(Director, Construction)*

Mr. Brown is responsible for managing BRP Construction Group's general contracting. He has a design background with over 15 years of experience in the field of architecture. Prior to joining BRP, he worked on a variety of projects, domestically and internationally, which includes residential mixed use, commercial, hospitality, retail and high-rise office buildings. His role at BRP seeks to fine tune and to help mend the traditional divide between development and construction by being active in the coordination process with the multitude of consultants, including architects, structural and Mechanical engineers during preconstruction and project design while simultaneously co-managing cost estimates, trade buyouts and contracts. Mr. Brown's position also focuses on the most cost-effective approach and constructability of various building components.

Mr. Brown holds a Bachelor of Arts degree in Architecture from Pratt Institute.

Carrie Reich *(Director, Asset Management)*

Ms. Reich is responsible for overseeing all aspects of asset management at BRP. This includes capital improvements of stabilized properties to maintain the long-term value of rental assets. In addition, she plays an integral part in developing acquisition/repositioning opportunities and transitioning assets for optimal long-term ownership and management. Prior to joining BRP, she was a co-founder and Executive Vice President of C&C Affordable Management LLC, a highly regarded real estate management company with a focus on multi-family housing in the New York metro area. In this capacity, Ms. Reich acquired and/or repositioned $114 million (753 units) of stabilized residential assets. She also transformed C&C (a start- up company with eight employees and 1,400 units under management) to a full-service firm with 45 employees managing 6,000+ units and 300,000 square feet of commercial-retail space. Prior to joining BRP, Ms. Reich was a partner at C&C Affordable Management, a New York-based real estate firm. Before founding C&C in 2004, Ms. Reich worked as an Asset Manager at L&M Development Partners and was responsible for overseeing due diligence, property level financial analysis, marketing and lease up strategies and asset management and planning functions for L&M's residential and commercial portfolio. Prior to joining L&M, Ms. Reich has had a long career in overseeing and managing affordable and market rate, multi-family properties along with motivating and mentoring team development.

Ms. Reich earned her Bachelor of Arts degree from the State University of New York College at Oswego.

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LESSARD DESIGN

Architecture and Planning

lessard
DESIGN

LESSARD DESIGN

is an international architecture and planning firm committed to creating environments that inspire connection, collaboration, community and commerce.

lessard

ABOUT

Lessard Design is an international architecture and planning firm committed to creating environments that inspire connection, collaboration, community and commerce. Headquartered in the Washington, DC Metropolitan area, we have offices in New York, and Ahmedabad, India.

Our award winning designs have been featured in the New York Times, the Wall Street Journal, The Washington Post, Urban Land Magazine, American Builders Quarterly, Design, Builder Magazine, Building Design & Construction, Multifamily Trends, Green Business Quarterly, and Inform Architecture & Design.

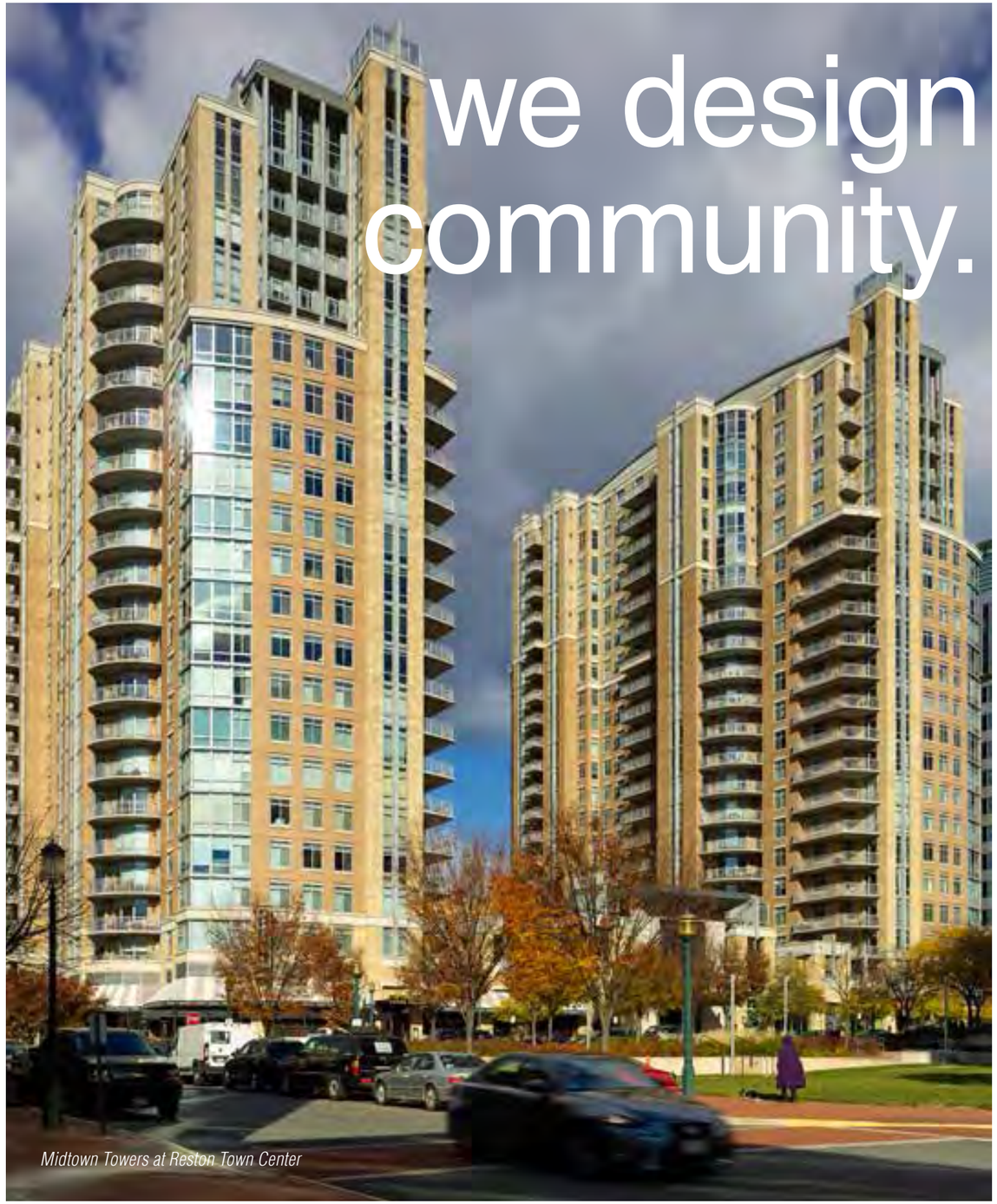
Lessard firm leaders have experience working in nearly 20 countries with projects in the Americas, Europe, Asia and the Middle East. Our understanding of global cultures is translated through design that is sensitive to cultural geographies, communities, traditions and values.

Lessard's diverse mulit-disciplinary team provides the expertise to manage clients through all design phases – from feasibility, strategy and through construction.

Symphony Park Townhomes


Maymount Single Family Homes


The Avant at Reston Town Center


Midtown Towers at Reston Town Center

we design community.

FIRM OVERVIEW

ABOUT US

Lessard Design provides architecture, planning and interior design services for new construction, redevelopment, adaptive re-use, renovation and expansion projects. Lessard's clients have long since learned the value of the firm's depth of services and broad-reaching expertise since Lessard's founding 27 years ago. We have the ability to understand the economic constraints of a project associated with land values, project financing and market conditions that exist today, and assist clients from the very early planning and rezoning stages through to designing an eye-catching, finished interior, and everything in between.

The firm's practice has greatly expanded and today Lessard's experience spans several sectors and project types including all types and scale of residential projects; mixed-use; hotels; resorts, casinos and spas; office; retail/entertainment; automotive dealerships and facilities; military facilities; student housing; green design; urban and town planning. It is this combination that has led to the firm's "one-stop-shop" reputation and many long-standing, repeat clients.

MIXED-USE & URBAN PLANNING

Lessard provides strategic and smart planning for existing and growing communities throughout the world. Our experts work closely with clients to define a broad vision that meets objectives and provides highly functional and aesthetically pleasing environments.

We understand how people live, work, and socialize. Our urban planning and design create destination points with ease of access, public spaces that encourage interaction, and generate relevant context in existing neighborhoods. We plan for expansion, growth, renewal and the future.

RESIDENTIAL DESIGN

The residential landscape is changing. Transit-oriented development delivers the opportunity to live, work, and play close to home, encouraging sustainable lifestyles and environments. Lessard Design works closely with clients to provide a strong sense of community through planning, design, brand, and shared public amenities.

With experience working in nearly 20 countries, the firm and its leaders have designed projects in the Americas, Europe, Asia and the Middle East. Based in the Washington, DC-metro area, Lessard Design's significant portfolio of student housing, military housing, green design and urban and town planning, conveys a commitment to building urban, suburban, and international communities.

Close collaboration with the general public, community organizations, and neighborhood associations ensures welcoming, efficient, and sustainable environments. Lessard has a notable reputation for navigating smoothly through federal, state, and municipal regulations as part of our public project design process.

Our architects and planners support the public review processes as a vital component to achieving objectives. We're industry leaders in residential design. It's apparent in our communication, collaboration, and commitment to clients and community.

SERVICES

- Architectural Design
- Site Planning and Master Planning
- Sustainable Design
- Site Analysis
- Feasibility Studies
- Rezoning and Entitlements
- Real Estate Development Expertise
- HUD Financing Expertise
- Project Financial Analysis

Jefferson at Marketplace — Washington, DC

TRUMP PLAZA

LOCATION

New Rochelle, NY

KEY FEATURES

Urban Design
Commercial and Office
Retail and Parking
Residential
Multiple Building Types/Sizes
Public Use / Common Areas
Sustainable Design Features

Trump Plaza is an iconic component in New Rochelle's comprehensive plan for revitalization, situated on a downtown 1.9 acre site. The project features a 32-story high-rise tower of 149,600 square feet with a total of 181 residential units on 30 floors, street accessible retail located on the first 2 floors and an underground parking facility with 240 spaces for residential use. Parking for the retail space is provided by a pedestrian bridge that connects to an adjacent municipal parking garage. In addition, the building's design incorporates façade treatments, landscaping, building placement and varied building heights to enhance and compliment the character of the commercial area.

TRUMP PLAZA stands as an elegant piece of sculpture, combining large glass planes with two shades of peach and pink precast concrete. The outstanding unit layouts offer incredible views of the city, the river, the sky, and beautiful sunsets. The project has become the place to live in New Rochelle.

The site design features the building as a focal point, symmetrically placed on axis at the end of the main street in the city and also as an iconic element essentially visible from anywhere in New Rochelle. As one city official expressed, "This building is the Empire State Building of New Rochelle."

mixed-use / multi-family

TRUMP PLAZA

TRUMP PARC

LOCATION

Stamford, CT

KEY FEATURES

Multi-Family
Condominiums
Urban Design
Public Use / Common Areas
Sustainable Design Features

Trump Parc is a 35-story, 170-unit luxury waterfront condominium tower developed by Donald Trump and Cappelli Enterprises. The tower offers waterfront views and luxurious living, setting a new standard in the Stamford skyline. Chris Lessard designed both the architecture and the interiors for this development which also includes 6 duplex penthouses and luxurious amenities including a lushly landscaped terrace, indoor swimming pool, full-service health club, party room, library, billiard room and screening rooms. Trump Parc, opened in fall 2009, is the tallest building in Stamford and the second tallest residential building in the state of Connecticut.

An exciting, new building in Stamford, residents enjoy the seventh, amenity-rich floor of the building that includes a landscaped deck, an indoor swimming pool, a full-service health club, a club room, library, a billiard room and screening rooms. This building also offers some remarkable views of Long Island Sound and the location is only a few blocks from the Main Stamford Metro North Train Station.

TRUMP PARC

JEFFERSON AT MARKET PLACE

LOCATION

Washington, DC

Jefferson at Market Place is a 220 unit mixed income property located in the Shaw neighborhood of Washington DC. The project will include 15,000 SF of retail space along 7th street. Metropolitan Development is working with the residents of Jefferson at Market Place to facilitate the redevelopment efforts with the city.

ATLANTIC STATION

LOCATION

Stamford, CT

KEY FEATURES

650 Units

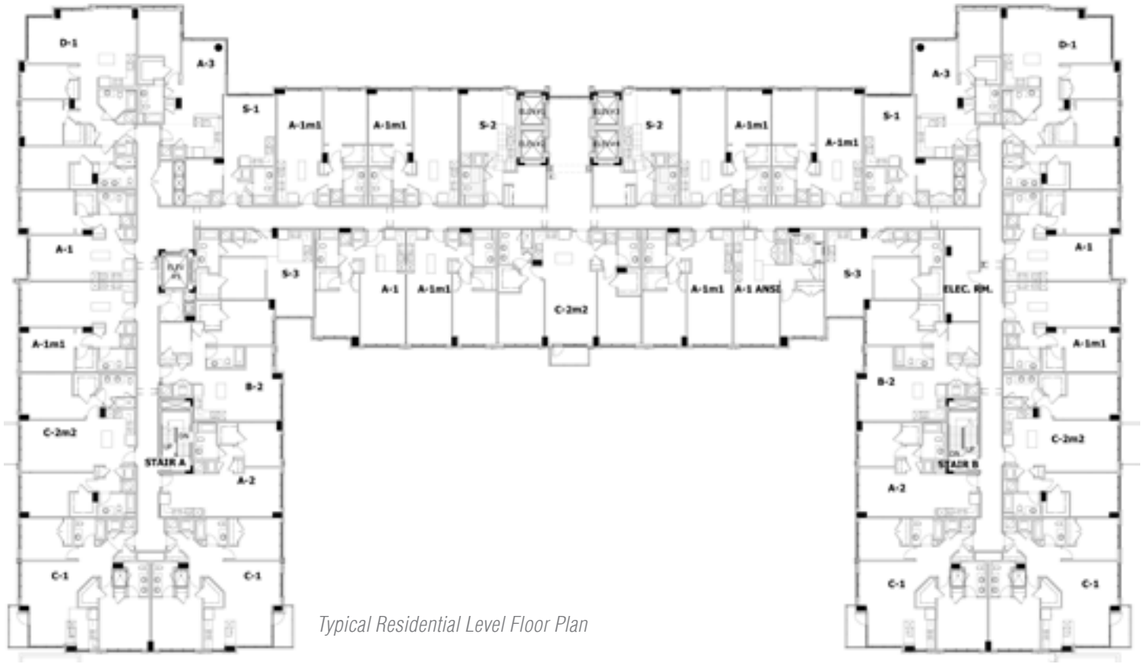
873,400 gross square feet

830,000 gross square feet of residential

43,400 gross square feet of retail

Atlantic Station is located at the intersection of two main arteries of Stamford, CT: Atlantic Street and Tresser Boulevard, in the city's business core area. This mixed-use development encompasses both retail and residential in its two phases of construction. Phase One, the North Tower, will include 26 stories and 325 rental units amounting to 345,000 square feet of residential and 32,000 square feet of retail space plus 12,000 square feet converted to a restaurant. Phase Two, the South Tower, also includes 26 stories and 325 condominium units, and will encompass 485,000 square feet of residential and 16,400 square feet of retail space. Atlantic Station will altogether include 650 units and 873,400 gross square feet.

THE AVANT AT RESTON TOWN CENTER



Typical Residential Level Floor Plan

LOCATION

Reston, VA

KEY FEATURES

359 Units, 15 Stories

28,000 SF of Retail

Fitness Center and Clubroom

Outdoor Pool

6 Levels of Covered Parking

The Avant features 359 units of luxury living right in the heart of the town's retail center. With over 28,000 square feet of retail, residents enjoy the town center just steps away from their spacious units with top-of-the-line appliances, granite counter tops, walk-in closets, luxurious features and amenities including a club room, pool, fitness center, cyber café, and garaged parking.

The surrounding streets are filled with top dining and shopping options, and the building is less than a quarter mile from the future Metro station. The town center also hosts many dynamic community events year-round.

OVATION AT PARC CREST

LOCATION

Tysons Corner, VA

KEY FEATURES

19 Stories

300 Units

345,000 Square Feet

Underground Parking

Fitness Center and Clubroom

Outdoor Pool and Sun Deck

Walking Distance from Grocery

The Ovation is a Class-A apartment community in the Tysons Corner area of McLean, VA. It features 19 floors with 345,000 square feet of space. Its 300 residential units boast such finishes as wood flooring in the living areas, stainless steel appliances and floor-to-ceiling windows. Amenities include an outdoor pool, bocce ball court, party room, gaming area and fitness center. The location is within walking distance of a Harris Teeter and close to Tysons Galleria. The Ovation is the first luxury high-rise in the Tysons area to be certified LEED© Gold by the US Green Building Council.

OVATION AT PARC CREST

Typical Residential Level Floor Plan

MIDTOWN TOWERS AT RESTON TOWN CENTER MIXED-USE

LOCATION

Reston, VA

KEY FEATURES

Residential
Commercial
Office
Hospitality
Urban Design
Multiple Building Types
Multiple Building Sizes
Public Use / Common Areas
Sustainable Design Features
Award Winning

The Reston Town Center is a large, nationally recognized, award-winning mixed-use development including residential, office, hotel and retail uses as well as new streetscapes and public spaces. Lessard worked on the master planning, architecture and interior design of 10 buildings ranging in height from 4 to 21 stories each.

Lessard designed Midtown at Reston Town Center: twin 21-story condominium towers, featuring a two-story amenities building with a conference center, dining facilities, club room and movie theater. The amenities building overlooks a park with an outdoor amphitheater and cafes. Additionally, a landscaped plaza with fountain, pool and jacuzzi connects the 21-story towers.

The bases of the towers include street side restaurants and shops. The site plan incorporates a thru street and pedestrian muse to promote an intimate urban experience, encourage pedestrian flow and social interaction. Based on New York's successful Gramercy Park, its urban, contemporary design integrates existing design elements of the Reston Town Center. Each tower consists of approximately 300 condo units plus 15,000 square feet of restaurant/retail space. The condominium towers are connected to a 2-story main entry lobby, club room facility and other amenities on the upper floor.

MIDTOWN TOWERS AT RESTON TOWN CENTER MIXED-USE

RITZ-CARLTON RESIDENCES, NORTH HILLS

LOCATION

North Hills, Long Island, NY

KEY FEATURES

Ritz-Carlton

Multi-Family

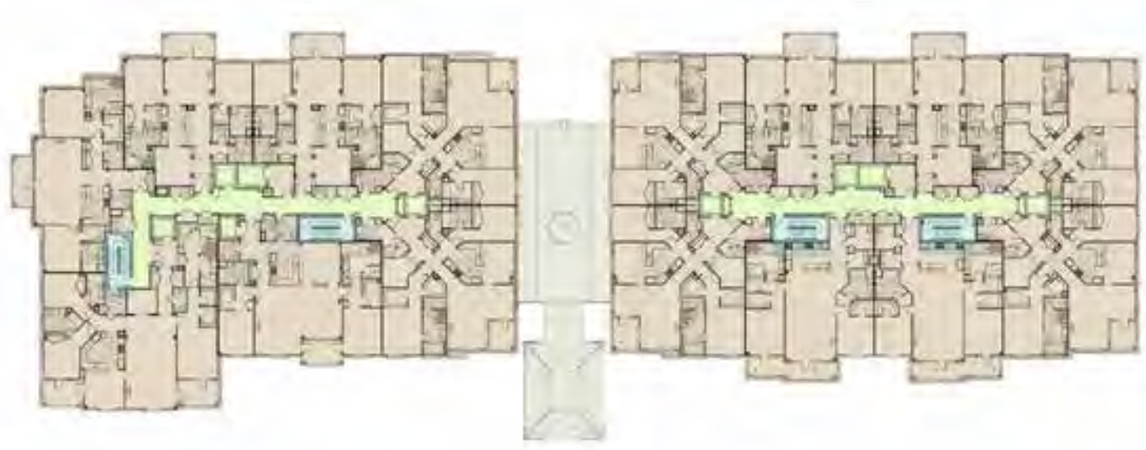
Ballroom

Business Center

Spa

Clubhouse

The Ritz-Carlton Residences, North Hills offers the exclusivity and privacy of a luxurious gated community with the only Five-Star lifestyle on the North Shore of Long Island, just 20 miles from Manhattan. The sprawling residences feature the legendary services of the world-renowned hotel company coupled with a stately 35,000 square foot clubhouse, encompassing world-class interiors a private health spa and fitness center, grand ballroom, wine tasting lounge, private dining rooms a club room, screening theater and board room.



WATERSIDE

LOCATION

Loudoun County, VA

KEY FEATURES

Two Sites, 332 Acres
3,789,000 SF of Office
3,309,000 SF of Residential
1,154,000 SF of Commercial
430,000 SF of Office Flex
300,000 SF of Public/Civic Use

Waterside is split across 2 sites totaling 332 acres. The mixed-use project will incorporate commercial and retail spaces, as well as residential and office areas. 3.79 million SF will be devoted to office space, 3.3 million SF will be residential, and approximately 1.15 million SF will consist of of commercial and retail units.

WATERSIDE

WESTPHALIA

LOCATION

Prince George's County, MD

KEY FEATURES

6,000 Acres

710,000 SF of Retail

15,3000 Residential Units

4,650,000 Employment SF

Multi-use plan covering 6,000 acres. Includes 710,000 retail sq. ft., 15,300 residential units and 4,650,000 employment sq. ft. The major focus of the Westphalia Comprehensive Concept Plan was to provide an updated vision, coordination and detailed guidance for a 6,000 acre high density mixed-use development with a unified, pedestrian-friendly community and significant public infrastructure. Winding through the community is an extensive network of beautiful residential, commercial, educational, and recreational facilities that are combined with natural open spaces, parkways and pathways; linking the community.

RIVERBEND METROPOLITAN WATERFRONT

LOCATION

Sayreville, NJ

KEY FEATURES

430 Acres
Embassy Suites
400 Guest Rooms
Hampton Inn
250 Guest Rooms
Great Wolf Lodge
400 Guest Rooms
Residential Units
Business Center
Conference Facilities
Meeting Rooms
Exhibition Space
Spa
Restaurants
Retail/Office
Marina
Mixed-Use

Riverbend Metropolitan is a unique community boasting a blend of residential, entertainment, sports, shopping and dining. The architectural character of the site optimizes the visual and physical connection to the Raritan River. Primary building orientation will allow view corridors to the river, to distant skylines and regional landmarks.

The riverfront experience is energized with publicly accessible spaces such as the river front promenade, marinas, restaurants, cafes, outdoor pavilions, amphitheaters, bicycle and pedestrian trails connected to pockets of landscaped plazas.

The plans call for the installation of a bulkhead to allow for the required site capping, to protect the redeveloped area from erosion and to ensure that the marsh and ecologically sensitive water's edge be preserved in their natural state. The waterfront experience is extended inland by introducing a marina basin that cuts into a portion of the site allowing access for small boats. The project streetscape is enhanced by wide pedestrian sidewalks with integrated spaces and promenades for retail storefronts and outdoor dining spaces.

RIVERBEND METROPOLITAN WATERFRONT

BRICKYARD STATION

LOCATION

Prince George's County, MD

KEY FEATURES

63-Acre Redevelopment
433 Apartment Units
5,300 SF Retail
13,900 SF Amenity Space
4- and 5-Story Buildings
750,000 SF Commercial Space

Brickyard Station is a 63 acre mixed-use development located in Prince George's County, Maryland. The first phase of construction includes 433 apartment units, 5,300 square feet of retail space, and more than 13,900 square feet of amenity space creating a transit-oriented community. One of the largest developments in Prince George's County, Brickyard Station was designed to support economic development, environmental improvement, educational growth, and safe and clean streets.

The pedestrian-friendly campus also includes walking and biking trails as well as large open green spaces. Ultimately, Brickyard's 4- and 5-story buildings will contain 1,200 residential units and 750,000 square feet of commercial space.

RHODE ISLAND ROW

LOCATION

Washington, DC

KEY FEATURES

275 Residential Units

Transit-Oriented Development

Urban Design

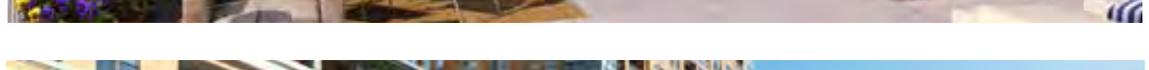
Residential and Retail

Structured Parking

Adjacent to Rhode Island Metro

Rhode Island Metro is a mixed-use, transit-oriented development aimed at creating a unique urban community where people can live, work and play in the heart of Washington, D.C. This vibrant and dynamic development features 275 luxury residential apartment units, retail, and structured parking designed in a main street/boulevard setting. Rhode Island Metro strikes a confident pose and creates an architectural landmark for the Washington Gateway development as a whole.

BELCREST PLAZA (ALTERRA 3350)



LOCATION

Hyattsville, MD

KEY FEATURES

25-Acre Redevelopment

28 Story Residential Tower

Two 17-Story Residential Towers

200,000 sq. ft. of Office Space

40,000 sq. ft. of Retail

Belcrest Plaza is a mixed-use redevelopment project spanning 25 acres and the project will continue the transformation and the revitalization of Hyattsville. It capitalizes on new and recently developed projects as well as the potential energy of this up-and-coming area within an established area of the county. Planned on 8 blocks adjacent to Toledo Terrace and intersecting with Belcrest Road, this property has been planned for mid- to high-rise mixed-use, as well as low-rise multi-family and townhome components, with both rental and ownership opportunities.

The plan carefully balances a variety of residential uses, office, retail and civic places to provide the ultimate living experience. Extensive parks, courtyards, and plazas with several pedestrian walkways and a continuous sidewalk along street frontages assist in unifying the site thematically, compliment the buildings, and provide iconic art settings.

ASBURY PARK TOWNHOMES (VIVE)

LOCATION

Asbury Park, NJ

KEY FEATURES

Multi-Family
Townhomes
Urban Design
Waterfront Community
Multiple Floorplans
Historic Community

Located two blocks from the Asbury Park oceanfront, this new townhome community will blend the finest traditions of the Jersey Shore with contemporary urban living. Asbury Park will feature 28 luxury, two- and three-bedroom townhomes ranging from approximately 1,700 sq. ft. to 2,200 sq. ft. All floor plans will include private entrances and two-car garages. Dramatic, oversized windows, classic balconies, and spectacular private rooftop terraces in each home maximize views, accentuating the community's historic location.

Designed to have the look and feel of a master planned community, Asbury Park is a key element in the continuing redevelopment of the New Jersey waterfront.

ASBURY PARK “SURFSIDE”

LOCATION

Asbury Park, NJ

“Surfside” will blend the energy of urban living with elegance of an urbane modern waterfront. Designed with fresh, contemporary forms, the architectural character integrates materials and color palettes which afford a visual connection to the surrounding neighborhood and boardwalk.

With its adjacency to the Asbury Park waterfront and its views of the Atlantic Ocean and Wesley Lake, “Surfside” offers residents and visitors a palpable sense of where they live. The generous use of glass, multiple balconies and corner bays allows residents to enliven the retail street and courtyard, while giving the design an urban coastal feel.

The exterior design features a combination of fiber-cement cladding, metal panels, and energy efficient glazing. Fiber-cement cladding gives the look of wood panels, but provides greater weather resistance, longevity, and insulation. The façade is layered with modern, but coastal elements such as shading trellises, and French doors. The roof deck design incorporates wood composite flooring and landscape-edged pathways, echoing the sense of an elegant boardwalk.

PORTSIDE AT PIER 7

East Pier 7 is a five-story, $67 million luxury mixed-use & residential complex on the East Boston Waterfront. Phase One of this mixed-use development will include 150 market-rate and 26 affordable apartments. Once complete, East Pier 7 will include 550 luxury apartments and 70,000 square feet of ground-floor retail and public space. In addition to the spectacular views of the Boston skyline, the development will include a parking garage, theater space, fitness center, business center, and concierge service. The construction of Portside will contribute to East Boston's renaissance and improvement as Boston's next boomtown.

LOCATION

Boston, MA

KEY FEATURES

176 Residential Units

Avg. 1,081 SF Gross Per Unit

17 Studio Units

85 One-Bedroom Units

54 Two-Bedroom Units

6 Extend Stay Studio Units

DOMAIN AT COLLEGE PARK (UNIVERSITY OF MARYLAND)

LOCATION

College Park, MD

KEY FEATURES

408,000 SF Development
260,000 SF of Residential Space
Resort-Style Outdoor Pool
Fitness Center
Outdoor Fireplace and Pit
6 Levels of Covered Parking
Coffee and Tea Bar
Business Center
Adjacent to the UMD Campus

The site plan and architecture for this new student housing development is designed to serve the University of Maryland student population. Across the street from UMd's School of Business, this 408,000 SF development includes 256 apartments totaling 260,000 SF; 10,260 SF of retail; and a 2-level parking garage for 380 cars. The building is comprised of 5 floors above ground and 1 level below ground. Parking is located underground and the first floor.

EDGEWATER

LOCATION

Edgewater, NJ

KEY FEATURES

Redevelopment
Adaptive Re-Use
Urban Design
Repeat Client
Multiple Building Types and Sizes
Public Use / Common Areas
Phased Renovation
Historic Significance
Sustainable Design Features

Edgewater is a phased redevelopment of 23 acres of upland waterfront located across the Hudson River from Manhattan. The program is designed to revitalize this tired and under utilized industrial site with 600,000 SF of mixed-use community buildings, making this area a dynamic living experience. Existing high-bay industrial laboratory buildings will be adaptively reused and renovated into 100 loft condominiums with breathtaking views of the Manhattan skyline. Approximately 400 additional units of affordable and market-rate residential and 100,000 square feet of commercial/retail will be constructed along a new retail main street.

The project includes schematic design through construction documents and the use of Revit software. All services were completed in compliance with relevant building codes, life safety regulations and ADA measures and required cost estimating, renderings and specifications were provided as necessary.

THE HIGHLANDS AT MORRISTOWN STATION

LOCATION

Morristown, NY

KEY FEATURES

3.6 Acre Site

Surrounding Retail

NJ Transit Railroad

218 Units in a 5 Story Building

8,000 SF Retail Space

The Highlands at Morristown Station is a mixed-use structure on a 3.6 acre site bordered by existing retail, the Whippany River and New Jersey transit railroad in a commercial district of Morristown. The project program consists of a five story building with a mezzanine containing 218 residential units, 8,000 square feet of street accessible retail space, 46,714 square feet of accessory use space and a 6 story subsurface parking garage with a total of 536 spaces for residential, retail and commuter use.

RAHEJA ICONIC TOWERS

CLIENT

Raheja Developers

LOCATION

Dharuhera, Haryana (India)

Dharuhera, spread over 4500 acres, has 15 out of 24 sectors reserved for residential use. The increase in residential and industrial development has resulted in the demand for substantial commercial space. Raheja Oma with its unique retail-hospitality-office mix will help provide adequate commercial space for this growing township. Facilities would include shopping arcade, entertainment thrills, large food courts, banks, ATMs and much more.

international

NANJING ZIJIN TECHNOLOGY CORE AREA

CLIENT

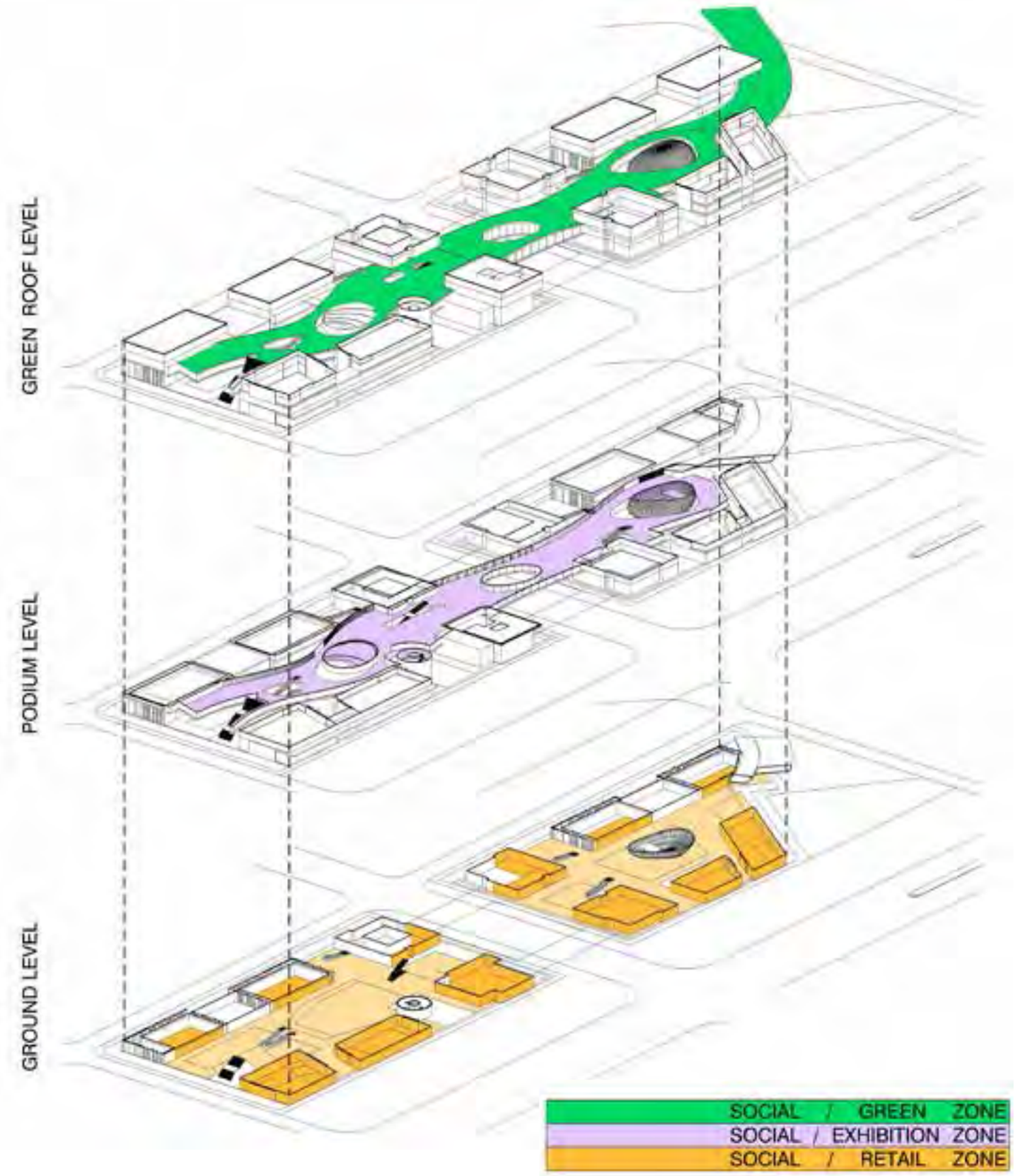
Nanjing Baixia High-Tech Zone
Investment & Development Co, Ltd

LOCATION

Nanjing, China

KEY FEATURES

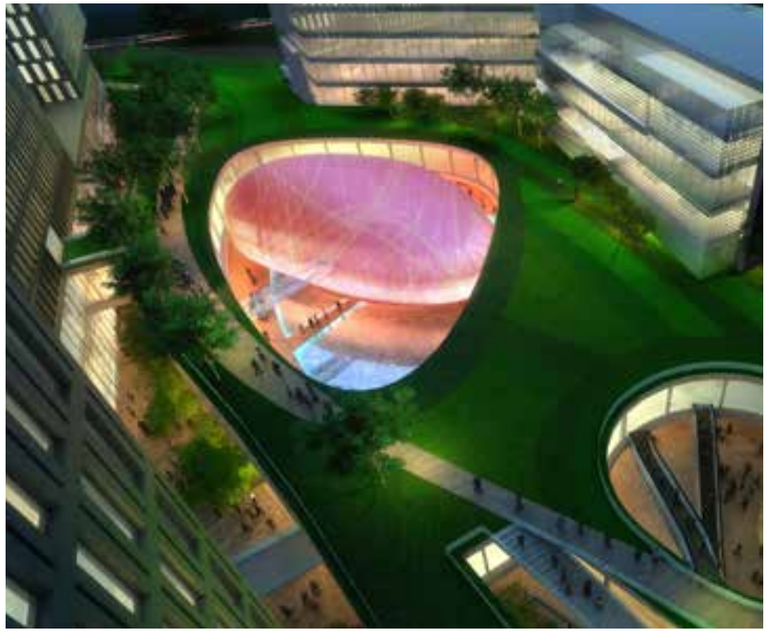
4,280,000 SF site
4 Incubator Office Buildings
4 Corporate Office Buildings
3 Accelerator Office Buildings
1 Hotel Tower with Conference Center
1 Entertainment Media Building
Ground Floor Retail
Street front and Pedestrian Mall



NANJING ZIJIN TECHNOLOGY CORE AREA

Lessard Design, with China based architecture firm CTA, was awarded the design for a 4,280,000 square foot world-class innovation and entrepreneur office complex in Nanjing, China. The 11 buildings, including a 26 story hotel, range in height from 7 to 26 stories. Construction is anticipated to commence in fall, 2013.

The Nanjing Zijin (Baxia) Technology Core will be designed with simple, contemporary forms to create a dynamic and renowned destination for sharing visionary ideas, technologies, creative and public spaces.



NANJING SOFTWARE PARK WEST

LOCATION

Nanjing, China

KEY FEATURES

Commercial Center

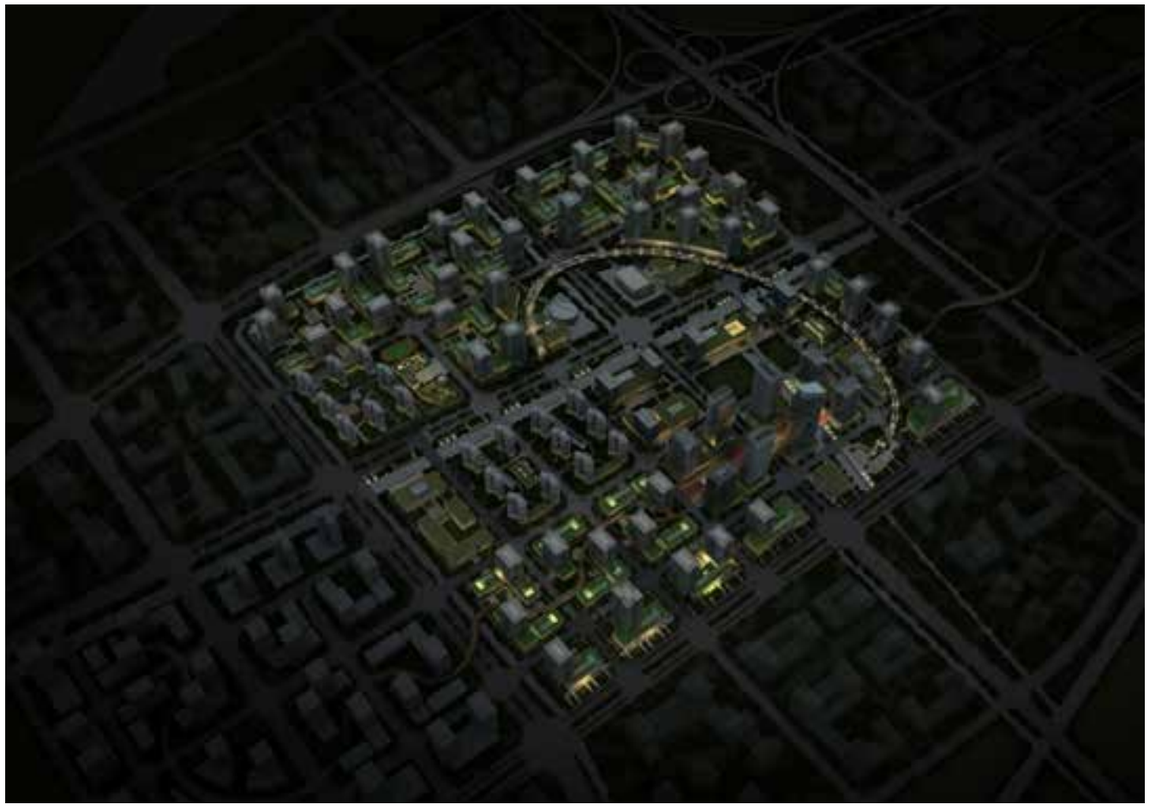
Connected “Life” & “Work” Nodes

Technology Intelligence Center

Nanjing Software Park West is a piece of the community’s emerging software city. The concept of “live, work, & play” has been realized through the creation of overlapping zones for each function. The two main zones are “life” and “work”, which feature offices and retail stores. The outer zones include residential and educational developments as well as transportation and open green space. These overlapping zones allow visitors, workers and residents to achieve maximum work-life balance.

NANJING SOFTWARE PARK WEST

PUKOU INTERNATIONAL CORPORATE R&D PARK



LOCATION

Nanjing, China

KEY FEATURES

Mixed-Use Development

Multi-Modal Transit-Oriented Development

Residential

Retail

Office

Organic Green Pedestrian Pathway

As a wing of Nanjing's developing 4-site, high-tech cluster, the Pukou International Research and Development Park will play a vital role in building Nanjing's brand as China's pioneer software city. This mixed-use development features residential, retail, and office buildings. There are several modes of transportation for the area including bike paths, a subway system, and a pedestrian path. This long and winding path, known as the organic green connector, allows people to move about the site easily going from work to the beautiful lake running throughout the development and to other parts of the park.

NANJING COMPREHENSIVE SERVICE CENTER

CLIENT

NJSP / Nanjing Government

LOCATION

Nanjing, China

KEY FEATURES

27,933 m^2

Total Construction Area (includes basement parking): 538,420 m^2

Total Construction Area above ground: 36,462 m^2

Administrative Office Building

Exhibition & Conference Center

Business Office (leasable/Expansion Office Building)

Reception Center

Fitness Center

Café

Public Park Space

Green space ratio of 44.9%

NANJING ZIJIN (GULOU DISTRICT) TECHNOLOGY CORE AREA

CLIENT

Nanjing Zijin(Gulou District)
Technology Set-Up Special
CommunityConstructing and
Developing Company, LTD.

LOCATION

Nanjing, China

KEY FEATURES

193,373 m^2 of Corporate and
Laboratory Office Space

7,893 m^2 of Commercial Space

8,393 m^2 of Cafe and Exhibition Space

6,250 m^2 of Outdoor / Green Space

PRINCE FAHAD BIN SALMAN CHARITABLE ASSOCIATION

CLIENT

Arriyadh Development Authority

LOCATION

Arriyadh, Kingdom of Saudi Arabia

KEY FEATURES

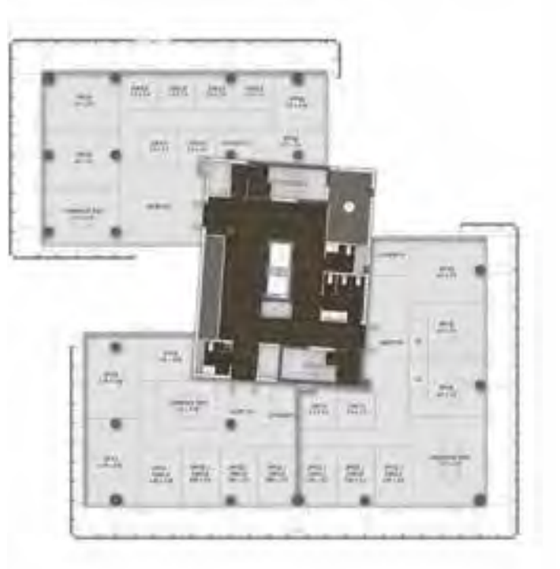
36,450m2 (393,000 SF) of low-rise office buildings on two sites

Institutional and Government Offices

Retail / Restaurant / Cafe Spaces

Commercial Office Space

This project involves the development of buildings on two separate sites within the prestigious Diplomatic Quarter section of the capital of Saudi Arabia. These buildings provide space for several distinct types of tenants: institutional/governmental tenants, commercial office tenants, and retail/restaurant/café tenants. The $27 million development provides space for the consolidation of the personnel and resources of the Prince Fahad Bin Salman Charitable Association for Renal Failure Patients Care. Both sites are being developed by the Arriyadh Development Authority, a prominent agency of the national government. Lessard provided programming, site planning, architecture, interior design, landscape design and interior space planning for these two sites.



FIVE KEY ELEMENTS OF THE MODERN TOWN CENTER

LIVE. WORK. CONGREGATE. In our ever-changing world of distant call data centers and online lives, a trend has emerged from that of isolation within a community, to the desire for a hip and vibrant town center lifestyle, replete with retail, office and residential components. It's the very shift away from the traditional strip mall to online shopping that has sparked an ever-evolving development process and resulted in the Modern Town Center (MTC) - the future of retail. Evidence of this change is everywhere.

resulting in happier employees, safer environments, greater asset protection and escalation in value. Residential demographic trends support this change by showing buyers' increased desire for socialization within their communities. The well-planned MTC incorporates all of these current movements while remaining flexible enough to address future growth or market changes. It is a diverse, 24-hour project that maximizes an area through mixed or multi-use developments, yet remains intimate and life changing

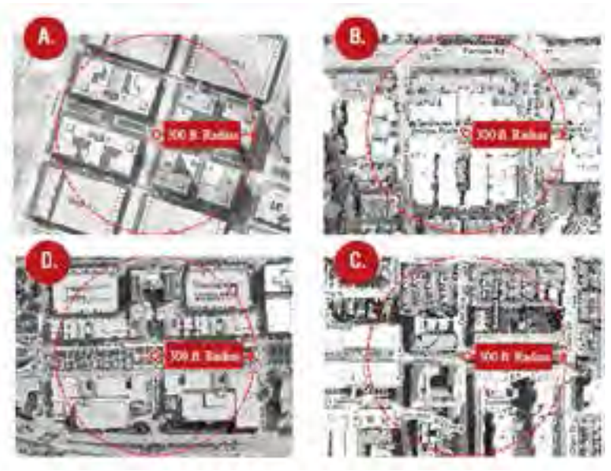
"Programmable public space is the center of any Modern Town Center and enables its 24 hour activity and vibrancy."

mixed-use vs. multi-use

Mixed-use or multi-use developments are no longer just an urban solemnity; they have migrated to suburbs following population shifts. Retail incorporated into public or civic spaces with integrated office and residential has become more successful than retail alone. The stand-alone office and office over retail becomes more of a commodity when integrated into a mixed or multi-use development, through its ability to create a social atmosphere. Successful MTCs have one thing in common; they adhere to 5 key elements that ensure lasting and memorable destinations for years to come.

1 RETAIL- ITS THE HUB OF VIBRANCY

The MTC is an energetic, forward-moving oasis within which people live, work, eat and, most importantly, shop. It is retail that drives much of the MTC's success; therefore, creating a memorable retail zone is critical to the success of the other components as well as the overall longevity of the development. While analyzing the MTC, it is clear that retail surrounding public or civic spaces will be the most diverse and vibrant of experiences - as well as the most lucrative.



PROJECTS DEMONSTRATING THE 300' WALKABLE RETAIL RADIUS

A. National Harbor-Prince George's County, MD

B. Phillips Place-Charlotte, NC

C. Santana Row-San Jose, CA

D. Mizner Park-Boca Raton, FL

To create a solid retail hub, it is important to first dissect the space into a series of retail breaks based upon proven dimensions. All MTC retail cores have a 300' walkable radius where the majority of retail and public uses are situated. This, of course, means that there is an overall dimension of 600' that should be respected and will subsequently become a part of a series of 300' radii for larger, more diverse Town Centers.

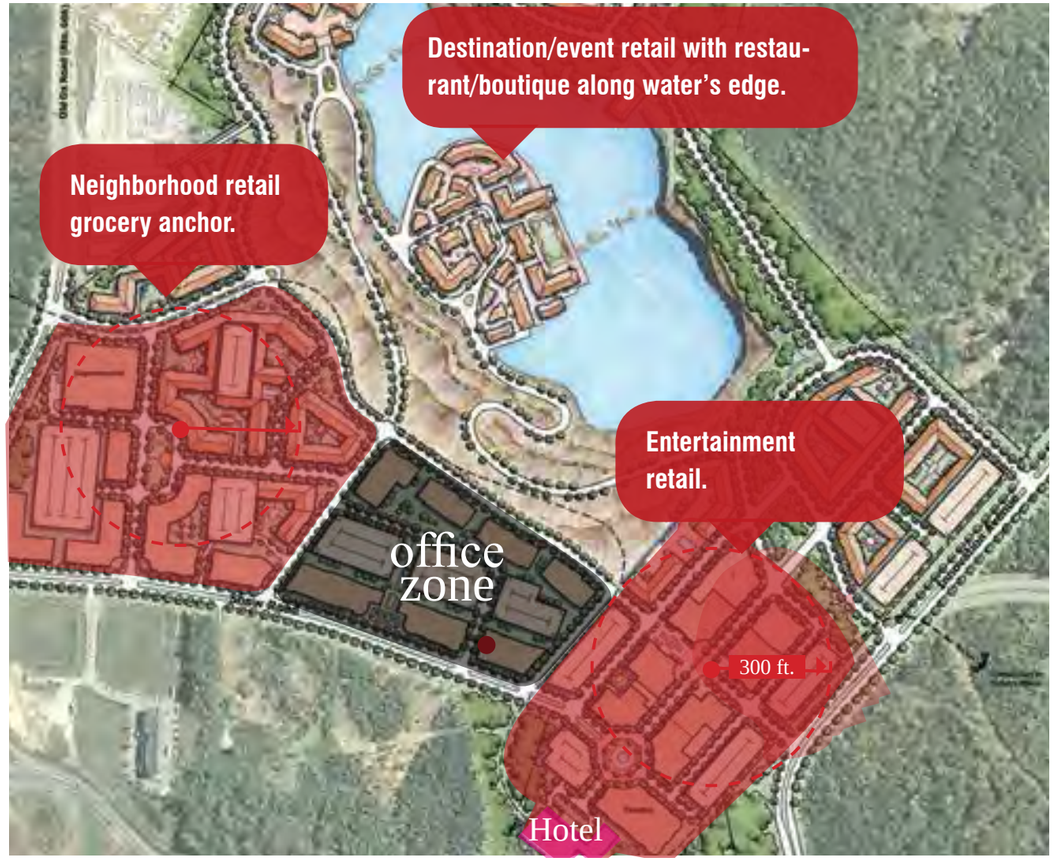
Crucial to the MTC's identity is the retail tenant mix; is it inundated with restaurants, entertainment, or fashion? What audience will it draw and what will be its theme? Determining the right retail mix for the area requires thorough market and trade area studies prior to design. For the project to be a success, it must be memorable and create something no other Town Center has … And that "thing" should be driven off the retail and public space.

"Walkable dimensions for retail cores are essential to maintaining retail Vibrancy and activity."

An important point to consider when determining the retail mix is that retail zones will increase in size by segment. Understanding these incremental size variances is important for the long term success of the retail in your Town Center. The following is a simple guide for determining the ultimate size of a MTC's retail component:

100k-150k sf-neighborhood center size
250k-350k sf-lifestyle center size
550k-600 sf-power center size
800k-850 sf-regional retail center size
1.2m-1.5 sf-super regional retail center size

1 RETAIL- ITS THE HUB OF VIBRANCY



2 MARKET REALITY CHECK (PLEASE)

The appeal of the MTC is obvious. It offers citizens an integrated, livable community with all components within a walkable, diverse setting. However, not all Town Centers are the same and there is no a cookie cutter mix of retail to office to residential that can be replicated around the world. It is through market analysis and studies that the needs for a MTC Development are determined.

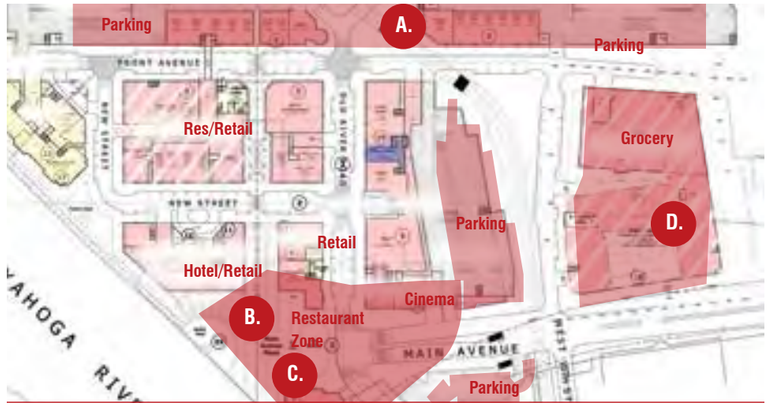
Market research is invaluable in determining the proper component mix and which component will come to life at which time of day. Mixed-use retail is very much driven by the associated vertical components of the development, while office is a large driver of daytime vibrancy, especially the restaurant retail zone. Residential components come to life in the evening and will often stretch shopping hours much later than normal suburban retail.

multi-use

MULTI-USE

A. Traditional Neighborhood Retail with Parking
B. Residential
C. Main Street Boutique/Local Retailers

Retail may be the main driver for the development, but a thorough market analysis will also determine the Residential and Office needs as well as help create a new market for both. The retail components in both mixed- and multi- use developments have different drivers that need to be identified for maximum retail success throughout the 24-hour life cycle.



mixed-use

MIXED-USE

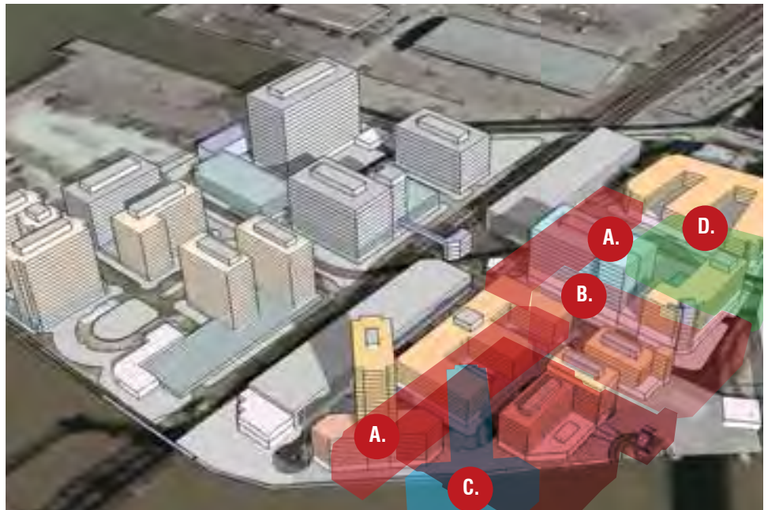
A. Service Retail with Close Proximity Parking
B. Public Node
C. Entertainment Retail Restaurant
D. Grocery with Ground Floor Parking in Front of Entrance.

Multi-use or more horizontal mixed-use developments have a different retail driver from the more traditional setup in that these developments are retail destinations unto themselves rather than being dependent upon the integrated uses of the development. This changes the retail mix to a larger concentration of “service” oriented retail with more automobile access which, in turn, increases the importance of convenient parking to the potential retail mix.

1500-5k sf- in-line retail
4k-9k sf- restaurants
15k-30k sf- jr. anchor retail
45k-75k sf- grocer
50k-85k sf- mid-tier anchor retail
125k-150k sf- anchor retail

3 PHASING THE ROAD TO FINANCE

Projects can succeed or fail in the phasing and financing stages, and seemingly simple components can wildly impact the entire development. Master plans must include a phasing strategy and have the flexibility required to adapt to market changes and zoning requirements. The phasing of the MTC is vital to the initial success and long term viability of the project. Critical mass needs to be generated at the onset so the first phase feels complete and finished.

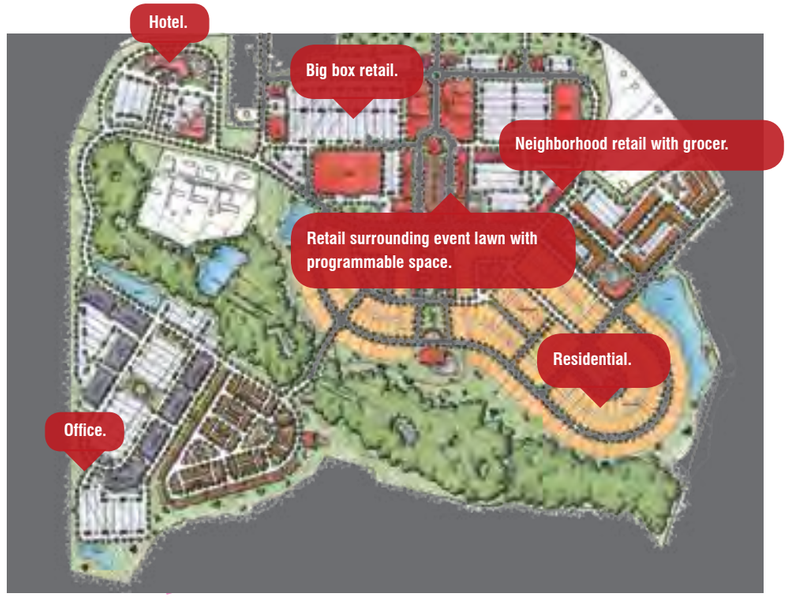


A. Phase I-Critical Mass at Retail Zone
B. Phase II-Office Over Retail
C. Phase III-Hotel
D. Phase IV-Critical mass of Residential

Simply put, retail will not succeed if its surroundings are under construction for 10 years!

The core of the MTC, with its public place and surrounding retail, residential and office, must be self supporting. Financial models often treat individual elements of each phase separately because of the different ways money is generated from them. Finding the right public financing opportunities requires an understanding of the project and an ability to research the local jurisdiction.

Today's landscape of debt turmoil and financial instability demands a structured phasing strategy that addresses both market conditions and the ability to properly finance complex projects. Fortunately, engaging public finance opportunities, such as Tax Increment Financing (TIF), is an option in some areas. TIF allows components such as parking to be financed up front from future development revenues. This option works better in denser, mixed-use projects where parking garages can be implemented.



A. Service Retail with Close Proximity Parking
B. Public Node
C. Entertainment Retail Restaurant
D. Grocery with Ground Floor Parking in Front of Entrance.

> "Critical mass needs to be generated from the start to ensure a viable and completely phased project."

Phasing is also important because the ability to finance these complex developments often hinges on phasing strategies and the correct mix of retail to office to residential is important for attaining critical mass at the onset. This is also the opportunity to create a "buzz" about the project by slightly under-sizing the first phase of retail, which will often create demand and is healthy for the long-term viability of the retail components. Phasing strategies must account for seamless growth, especially in the retail zone. Interrupted retail can make future phases of retail hard to lease.

4 PARK IT AND THEY WILL COME

A poorly planned parking program is the death knell for a development. Maximizing space to ensure proper traffic flow and accessibility to all components is paramount to the MTC's future. The savvy planner will use data from the project's market analysis to determine the type and distribution of parking throughout the community in such a way as to allow for current use and future growth.Parking relationships with respect to use and cost are an important part of the MTC dynamic.

"Street parking as well as tucked garage parking allows for diverse retail solutions."

A mix of adequate parking ratios with the ability to use shared parking solutions will allow for the project's future growth while respecting the overall cost constraints. Parking solutions have to be economically viable as well as provide necessary adjacencies to maintain retail and community vibrancy. Additionally, the plan must have a contingency that successfully combats outside stressors such as a required parking ratio dictated by local jurisdictions differing from market reality. Flexibility of the allocated parking fields is critical to the future of the Town Center. Parking fields need to be strategically placed for current phase parking solutions and adjacencies as well as future development flexibility; for instance, parking fields at the perimeter must allow for multi-use growth with the ability for structured parking conversions. These parking fields offer current phases the needed parking for viability and present the most flexible opportunities for changing market conditions and phasing needed for financial capital. Anchor parking and general parking fields need to be safe, open, and well lit to ensure that the patrons will revisit to shop or gather.

On-street parking is important for retail main streets because it animates the retail zone while creating buffers between the sidewalk and the traffic. It also allows for adjacent parking to enhance retail parking ratios and will encourage cars to travel down the retail zone and help in-line retailers' visibility. To maximize this space, the project should use diagonal parking which increases parking ratios at storefronts by 100% over parallel parking.

"Parking solutions are as diverse as the Town Centers they serve. They must be well thought out with an eye to the future."

Parking ratios should be maintained within 500 feet of the retail zone – further distances may hinder peoples' desire to "walk to shop". Town Center retail zones should be designed for a 5/1000 SF retail parking ratio and a 10/1000 restaurant ratio. Shared parking strategies should be incorporated to maximize the parking numbers and minimize development costs. Since the MTC is a 24-hour project, it makes sense that a parking lot utilized by office employees during the day could be used by cinema patrons at night.

5 IT'S ALL CONNECTED

A fully integrated MTC must boast connectivity between components via automobile, public transportation, and most importantly, pedestrian activity. Civic, residential, office, and retail should integrate with parks and public nodes, resulting in a flawlessly interconnected neighborhood. It is through careful placement of the various components that energy is created and sustained. From window shopping to working at an office to choosing a dinner restaurant, a connected approach will feed all components and create a lasting impression on visitors and residents alike.

A. Residential
B. Entertainment Retail (MGM type) with Hotel
C. Entertainment with Hotel
D. Office zone
E. Neighborhood Retail Center
F. Hybrid Regional Mall/ Lifestyle Center
G. Festival Retail

Integrating multiple uses within the same development is the heart of a MTC. It is also the chief downfall of badly designed projects that fail to seamlessly structure the flow and placement of each component while best organizing both vertical and horizontal spaces. Unlike many of its predecessors, the MTC carries its energy throughout the development, preventing a "dead" section in retail and an "undesirable" part of the office or residential components.

While the approach will differ depending on whether the development is based on a vertical or horizontal plan, both types require consideration for each component. Office and retail are successfully mixed by controlling and organizing office entry points. Residential needs must be kept separate and distinct so that residents feel secure and won't have to share parking. Building size will determine future flexibility.

The strategy for designing the more dense vertical development differs from designing horizontally. It requires a great deal of attention spent on addressing each component's needs. And since people shop at "eye level", the retail experience in vertical integration must maintain a "main-street" appeal on the ground floor. The smart developer will provide retailers with the appropriate depths and bay sizes for their needs while recognizing that the use above the retail space can be more important than the retail itself.

"Public space surrounding retail encourages gathering and lingering, thereby extending the retail experience."

"Linear parking and public space extend connectivity along the retail path."

70' deep- in-line
100-150' deep- jr. anchor
150-200' deep- middle tier anchor
200-250' deep- grocer
300-350' deep- anchor

5 IT'S ALL CONNECTED

Vertical development will constitute the majority of the development and finding the right use and quality ensures the long term value of the investment. Horizontal developments, on the other hand, require a more fluid integration of uses that allows for distinct component areas yet does not distract from the overall look and feel of the development.

"The Modern Town Center's retail zone sets the tone for all other sections - residential, office and civic."

It is by nature a less dense form of a MTC that stresses the importance of creating a unifying public space within an integrated, walkable layout. Sidewalk design is critical for the movement and viability of the retail components – and the future of the entire development. The pedestrian experience plays a vital role in the life of a development as both the retail and public node core will rely heavily on large amounts of pedestrian activity. In fact, the experience of pedestrians moving along the retail path is as important as their ability to linger in public spaces. Retail view corridors should be available while public events are occurring. Vehicular traffic should be minimized at the core and a road system should allow for quick access to parking garages or fields. Sidewalk design must accommodate intended retail uses – restaurants need larger areas for outdoor seating.

The width of the sidewalk must provide adequate space for traffic - 10-18 ft. from storefront to curb is typical with 10' for service retail and 18' for restaurant uses. Additionally, restaurant organization will help vitalize the retail corridor as well as provide the crucial link between retail and the public node. Restaurants serve as mini-anchors allowing intermediate in-line retail to thrive, and are often best served grouped together to create activity and liveliness.

"Parking in front of retail store fronts will help create a buffer between the automobile traffic and pedestrian retail traffic."

Organizing restaurants around or near a public node creates a built-in programming for the public space as people like to be around other people in these settings and activity breeds success. Signage must captivate the pedestrian buyer and also be large enough for drive-by-traffic. The scale must not be too overwhelming but needs to be unique to the specific brand. Brand identity animates the retail path and provides the retailer the ability to utilize brand recognition.

5 IT'S ALL CONNECTED

The public place created in Town Centers can take on many forms but is fundamentally an event oriented space that encourages gathering and lingering. The public place serves as a central gathering place and can be as simple as a public green or park or as animated as a restaurant zone where people watching can occur. The ideal space should be flexible to allow for special events such as a weekend farmer's market or a summer night outdoor movie. The space should be programmable for a variety of events all reinforcing the notion of public gathering and community activity.

The size of the public space in the MTC will vary depending on the size of the retail zone and overall project. The type of retail also will help determine the size of the public space. Programming of the public area based on the theme of the town center or retail mix will help determine the size. Under-sizing the public area will greatly damage the viability of the surrounding retail and other uses. The area needs to easily accommodate a large gathering area and can be up to a ¼ of the retail zone's square footage.

The future of retail lies within the MTC and its ability to draw shoppers, residents, employers and public events — a feat that cannot occur successfully without developing a plan that incorporates the 5 Key Elements.

This strategy begins with recognizing retail as the hub around which residential, office and restauran must revolve. From there the type and size of the components are discovered through a detailed and thorough market analysis that will determine the best mix of components for the location. After that, proper phasing will ensure the financial viability of the project by allowing completed sections to thrive while others are under construction. The successful MTC will address parking as a critical part of the project and not an afterthought. And finally, the MTC will integrate of all of its components and connect each piece to the overall theme allowing each of the project components to relate with the others. Strategically incorporating each of the 5 elements into a thought out plan will provide long term success and viability to today's Town Center developments.

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LANGAN

NEW YORK CITY

QUALIFICATIONS AND EXPERIENCE

Technical Excellence | Practical Experience | Client Responsiveness



SUSTAINABLE DESIGN

Langan professionals design solutions that maintain the inherent connections between structures and their natural surroundings. The result - sustainable communities for future generations to live, work and play.

HEALTH & SAFETY

Langan is committed to providing a healthy and safe working environment. Langan's goal is to be SAFE (Stay Accident Free Everyday).


Corporate Summary

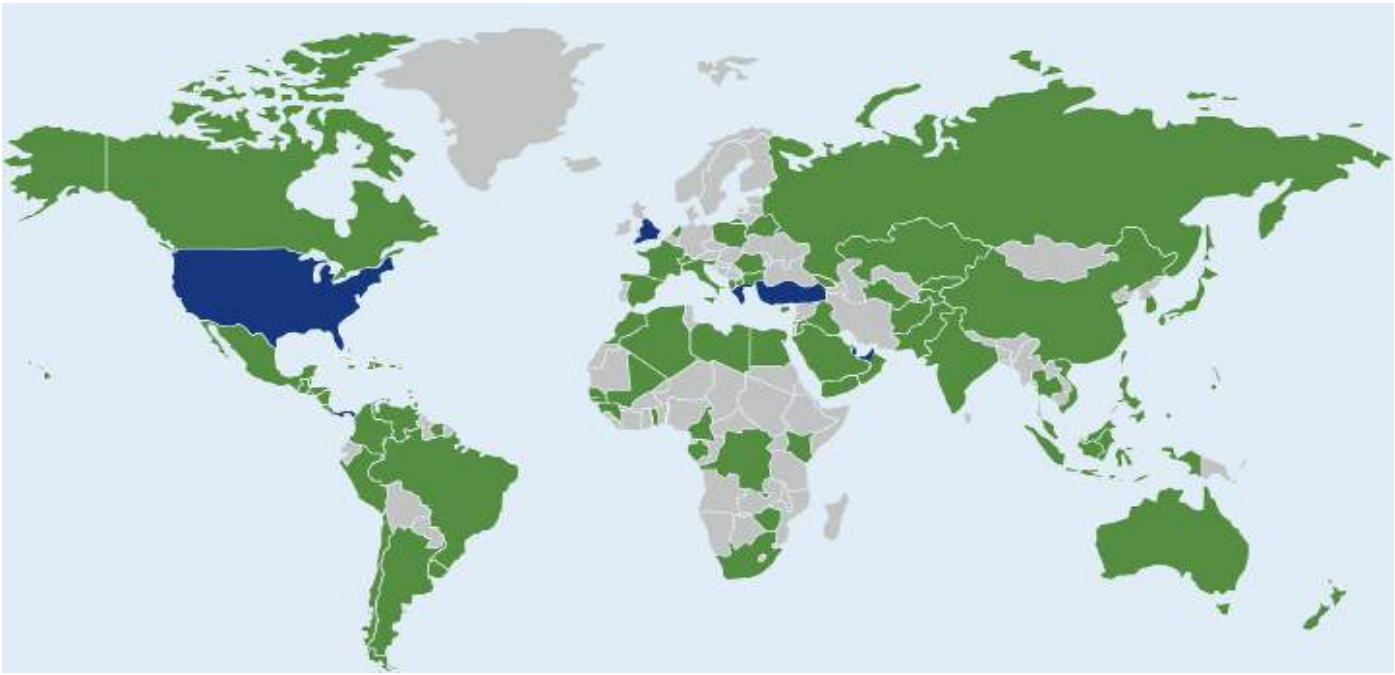
Integrated Solutions. Measurable Value.

Langan provides an integrated mix of engineering and environmental services in support of land development projects, corporate real estate portfolios, and the oil and gas industry. Our clients include developers, property owners, public agencies, corporations, institutions, and energy companies around the world.

Founded in 1970, Langan employs more than 1,000 professionals in its Parsippany, NJ headquarters and among regional offices in:

- New York City, NY
- White Plains, NY
- New Haven, CT
- Lawrenceville, NJ
- Philadelphia, PA
- Bethlehem, PA
- Doylestown, PA
- Pittsburgh, PA
- Bridgeport, WV
- Cleveland, OH
- Arlington, VA
- San Francisco, CA
- Oakland, CA
- Sacramento, CA
- San Jose, CA
- Los Angeles, CA
- Irvine, CA
- Phoenix, AZ
- Houston, TX
- Miami, FL
- Fort Lauderdale, FL
- Tampa, FL

Langan International, the firm's wholly owned subsidiary headquartered in New York City, provides all firm services for projects in the Middle East, Eastern Europe, Latin America, and the Caribbean. Langan International regional locations are in: Abu Dhabi, Athens, Doha, Dubai, Istanbul, London, and Panama.



Green denotes countries where Langan has worked; blue denotes countries where Langan has offices.

Aviation

Helping Airports Take Flight

Langan has provided integrated surveying, engineering and environmental services on a large variety of international and regional aiports across the country. Whether partnering on an airport's expansion or leading pre-construction services for a taxiway/runway, hangar improvements, transit connections, or new facility, Langan is a full-service partner to our clients. Our experience ranges from the Northeast to the Mid-Atlantic and the Southeast to the West Coast.

Our services have supported the following airports:

- Newark International Airport, Newark, NJ
- JFK International Airport, New York, NY
- LaGuardia Airport, New York, NY
- Los Angeles International Airport, Los Angeles, CA
- San Francisco International Airport, San Francisco, CA
- Bob Hope International Airport, Burbank, CA
- Oakland International Airport, Oakland, CA
- Travis Air Force Base, Fairfield, CA
- Lemoore Naval Air Station, Lemoore, CA
- McCarran International Airport, Las Vegas, NV
- Andrews Air Force Base, MD
- Reagan National Airport, Arlington, VA
- Morristown Airport, Morristown, NJ
- Teterboro Airport, Teterboro, NJ
- McGuire Air Force Base, Wrightstown, NJ
- Stewart International Airport, Newburgh, NY
- Westchester County Airport, White Plains, NY
- Miami International Airport, Miami, FL
- Opa-Locka Executive Airport, Miami, FL
- Lehigh Valley International Airport, Allentown, PA
- Philadelphia International Airport, Philadelphia, PA
- Washington Dulles International Airport, Chantilly, VA

Geotechnical

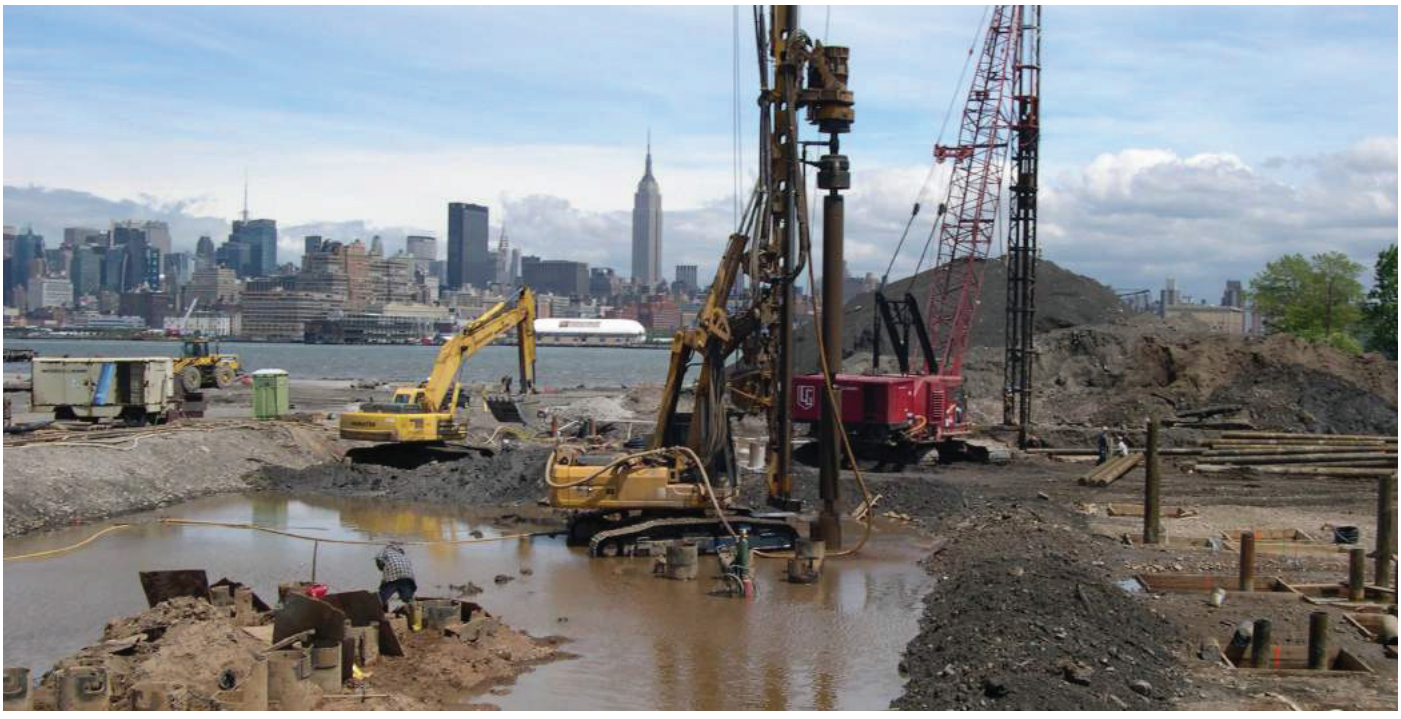
Foundations You Can Trust

Langan was founded as a geotechnical consulting company in 1970, and geotechnical engineering remains a core discipline at Langan today. We work closely with our clients and the design and construction team to engineer cost-effective geotechnical solutions appropriate for proposed structures and site conditions.

Our reputation as a premier geotechnical consultant has been earned by managing hundreds of projects involving complex, technically challenging sites where highly specialized site preparation, foundations, and fast-track engineering solutions are required.

Langan Geotechnical Services:

- Subsurface Investigations
- Foundation Design
- Geodynamics
- Soil-structure interaction
- Materials Analysis
- Soil and Rock Mechanics
- Retaining Structures
- Slope Stabilization
- Soil Improvement/Ground Modification
- Dewatering Design and Permitting
- Subsurface Structure Design
- Excavation Support and Underpinning Design
- Earthquake/Ground Motion Engineering
- Geological Mapping of Rock Slopes
- Hydrogeology
- Earth and Rock Fill Dams
- Tunnels/Microtunneling
- Seawalls, Piers, and Bulkheads
- Dredging
- Vibration Monitoring
- Pre-Construction Conditions Surveys
- Value Engineering
- Construction Documents
- Contractor Support Services
- Engineering Services During Construction
- Forensic Engineering/Expert Testimony
- Cost Estimates



Site/Civil

Responsiveness that Delivers Results

As an integral component of the design team, Langan works closely with the owner to develop conceptual site plans and realistic cost estimates. Our deadline-oriented professionals are available to our clients 24/7 to ensure timely approvals and permits to advance projects toward construction, occupancy, and ultimately revenue. Langan also supports projects with construction inspection and overall project management.

Langan Site/Civil Services:

- Project Management
- Site Feasibility Studies
- Conceptual Planning
- Site Engineering & Planning
- Grading & Drainage Design
- Stormwater Management Design
- Value Engineering
- Sanitary Treatment Plant Design
- Utility Infrastructure Design
- Water Supply/Hydrological Investigations
- Permitting/Regulatory Compliance
- Wetland Delineation/ Mitigation
- Landscape Architecture
- Regulatory Negotiation
- Survey-Boundary/ Topographical/GPS
- Traffic/Transportation Engineering
- Waterfront Systems Design
- Property Acquisition Support
- Conceptual Reuse Planning
- Funding Identification/Grant Assistance
- Regulatory Coordination/ Compliance
- Decommissioning/ Demolition Design
- Construction Management
- Construction Inspection
- CADD/GIS/Computer Animations
- SITEOPS® Optimization Services

Environmental

Technical and Regulatory Knowledge

Langan works with project teams to provide leading-edge, focused, streamlined investigations and risk-based remediation. We excel in promoting and gaining regulatory acceptance of risk based strategies to obtain cost effective site closures. Langan possesses expertise in a wide variety of projects including state Voluntary Programs, Brownfields, RCRA, State and Federal Superfund, Manufactured Gas Plants (MGP) and Storage Tank programs.

Langan Environmental Services:

- Risk-Based Corrective Action
- Brownfields
- Storage Tank Management
- Due Diligence Support
- Environmental Assessments
- Site Characterization
- Permitting/Regulatory Approvals
- Remediation Design/Oversight
- Water Resources/Supply
- Hydrological Investigations
- Wastewater and Stormwater Permitting
- Air Modeling
- GIS/Database Management
- Environmental Impact Statements (EIS)
- Manufactured Gas Plant Remediation
- Asbestos/Lead-Based Paint Abatement
- Management of PCB-Containing Materials
- Indoor Air Quality/Mold
- Demolition
- Waste Management
- Compliance Auditing
- Ecological Risk Assessment
- Human Health Risk Assessment
- Site Feasibility Studies
- Remediation by Natural Attenuation
- Expert Witness
- Exposure Assessments
- Free Product Volume and Mobility Modeling

Environmental Planning

CEQR/ULURP, SEQR, and NEPA

Langan has extensive experience preparing New York City Environmental Quality Review (CEQR), New York State Environmental Quality Review (SEQR), and National Environmental Policy Act (NEPA) environmental review documents for numerous projects. Such experience includes the preparation of environmental assessment statements (EASs) for zoning bulk and use variances for the Avenues School, Abraham Joshua Heschel School, and the Solar Carve building in Manhattan; and an EAS and ULURP application support for disposition of city-owned property to S&L Aerospace in Queens. Additionally, Langan prepared the environmental review documents for the Franklin D. Roosevelt Four Freedoms Park and the Southpoint Open Space projects on Roosevelt Island; a SEQR Environmental Impact Statement (EIS) for Lowe's in Montgomery, New York; and the CEQR Natural Resources Analysis for the EIS for the $1 billion, NYPD Police Academy in College Point, Queens, and is currently preparing environmental reviews for a number of projects across the five boroughs. Langan received one of the New York City Economic Development Corporation's Planning On-Call contracts for which it is currently performing several tasks.

Langan Environmental Planning Services:

- CEQR Environmental Assessment Statements (EASs) and Environmental Impact Statements (EISs)
- Assistance with and EAS support for ULURP applications
- SEQR Environmental Assessment Forms (EAFs) and Environmental Impact Statements
- NEPA Environmental Review Documentation
- NYSDEC Permit Applications
- USACE Permit Applications
- Traffic Planning, Engineering, and Impact Studies
- Natural Resources Analysis
- Archaeological Studies

Earthquake/Ground Motion Services

Stabilizing Developments

Clients throughout California and other seismically active regions around the world count on the ground-motion services provided by Langan. Our engineers evaluate the potential for fault rupture, soil failure, and ground deformation and develop detailed site-specific ground motion criteria for seismic design.

During the planning and/or due diligence phases of projects, we provide seismic hazards evaluations. For final design, we typically are called upon to develop detailed site-specific seismic criteria.

Langan Earthquake and Ground Motion Services:

- Field Mapping of Seismic Sources
- Development of Probabilistic and Deterministic Site-Specific Response Spectra
- Nonlinear and Equivalent-Linear Ground Response Analyses
- Development of Site-Specific Time Histories
- Seismic Stability of Natural and Artificial Slopes, Including Deformation Analyses
- Seismic evaluation of Landfills
- Soil-Structure Interaction Analyses
- Evaluation of Liquefaction Potential and Associated Deformations
- Liquefaction Mitigation Alternatives

Transportation Engineering

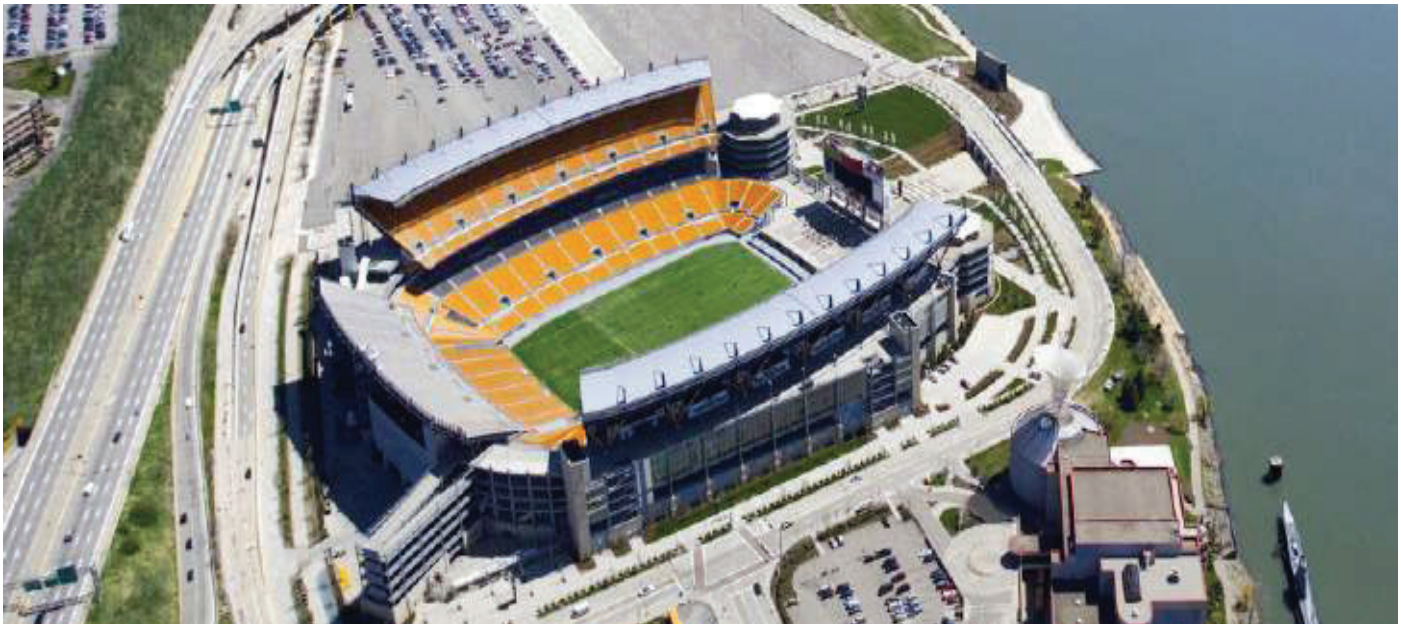
Safe, Efficient, Innovative

Access is critical to any facility and Langan possesses decades of experience in total transportation engineering and planning services. In fact, from hospitals to universities to shopping centers to stadiums, we have developed programs, designs, and creative solutions that enhance access and circulation for facilities and major transportation systems throughout the United States.

Langan's transportation engineering and planning work includes highway and local street design, as well as the design of parking, transit, and non-motorized transportation facilities. For the planning and design of these types of facilities we have provided simulation modeling, master plans, traffic impact studies, operational analysis, signal design, traffic calming measures, signage and wayfinding studies, origin/destination surveys, travel demand modeling, corridor studies, urban transportation plans, transit station and route planning, terminal planning, bikeway planning, and permitting services through counties, municipalities, and the various transportation agencies.

Langan Transportation Services:

- Vehicular Traffic Studies
- Stadium and Event Planning
- Traffic Modeling & Simulation
- Master Planning
- Transit Studies
- Station Planning
- Parking Studies
- Corridor Studies
- Site Access / Site Engineering
- Airport Studies
- Site Feasibility Studies
- Streetscape Improvements
- Traffic Calming
- Value Engineering
- Bicycle & Pedestrian Safety Studies
- Toll Facilities
- Urban Development
- Grading & Roadway Design
- Infrastructure Rehabilitation
- Cost Estimates
- Contract Documents
- Construction Administration & Inspection
- Permit Application Packages
- Technical Specification



Transportation Planning & Modeling

Forward Moving

Langan's transportation planning and modeling services enable our clients to safely and effectively move goods and services that are often frustrated by traffic congestion and delays. Our planners and engineers are known for thinking out of the box and developing creative solutions that apply a mix of conventional solutions with smart growth principles, context sensitive design and traffic calming measures.

Our vehicular traffic studies are conducted on a micro or macro level for a variety of project types for both public and private clients. The purposes and complexities of these studies vary greatly from simple studies with four or five intersections that use SYNCHRO or HCS software to assess performance, to studies that involve detailed pedestrian or vehicular traffic simulation models.

Each study type involves the assessment of existing conditions, background growth, traffic generated by specific projects and system modifications needed to improve existing, sub-optimal conditions. When it comes to transportation planning and modeling, Langan takes great pride in the development of imaginative solutions.

Langan Transportation Planning and Modeling Services:

- Master Planning/Operational Planning
- Transportation Hub/Terminal Studies
- Origin/DestinationStudies
- Stadium and Event Planning
- Hospital and Campus Planning
- Transit Studies/ Transit Alternative Studies
- Intermodal Facilities
- Environmetal Studies
- Supply/Demand Studies
- Shared Parking/Parking Occupancy
- Geometric Design/Traffic Signal Design
- Airport Studies
- Curbside Pick up/Drop-off Studies
- Transportation Policy Review

Parking Analysis & Design

Operational, Functional, Secure

Langan has a broad background in all phases of parking design, revenue control systems, and security design for both open lot and enclosed structures. From conceptual plans for developers, to interaction in the design process with noted architects, to integration of parking design with structural engineers, the goal is to provide complete and innovative designs.

With a background soundly founded on operational standards, Langan can provide the latest in revenue control systems, green lighting systems, advanced security orientation, and safety. Our garage management office plans help integrate all the functioning systems necessary to efficiently run the modern garage.

In keeping up with the latest technology, Langan can provide information and design of a multitude of mechanical, automatic, and robotic garage concepts, enabling the future to be realized today.

Langan Parking Analysis and Design Services:

- Develop Parking Demand Projections
- Conceptual Design Options
- Garage Massing and Layout
- Striping Plans for Existing Environments
- Maximum Garage Density
- Utilization of Self Park and Valet Systems
- Integration with Traffic Environment
- Expert Witness and Testimony
- Effective Revenue Control Systems
- ADA Compliance Design
- Security Systems and Monitoring
- Pedestrian Drop Off and Waiting Zones
- Pedestrian Safety in the Garage Environment
- Vertical Transportation and Connection to Adjoining Spaces
- Green Lighting and Energy Efficiency
- Signage and Way Finding
- Review of Existing Environments for Maximum Usage

Lenders Technical Advisory Services

The Concessionaire's Consultant

As a cutting-edge leader in site development and redevelopment engineering services, Langan has served as Lenders Technical Advisor (LTA) to numerous privately financed and public-private partnerships (PPP) for large infrastructure concession projects both in the United States and overseas. Services provided have included due diligence; Phase I and Phase II investigations; evaluation of designs, construction means and methods, and project schedule and budget; and reporting and approval of loan drawdowns.

In addition, Langan has significant experience in PPP projects in the United States. Specifically, the firm has provided services for the Penn Station Redevelopment, West Side Yards Redevelopment, and Hudson River Park in New York City.

Notable international projects on which Langan has provided technical advisory services to lenders include:

- EKPPT Motorway – Served as LTA for a 2.1-billion Euro, 365-kilometer motorway in Greece. The project reached financial closing in August 2008.
- Rion-Antirion Bridge – Served as LTA for a 750-million Euro, 3.3-kilometer cable-stay bridge in Greece. The project was awarded the 2007 Opal Award, one of the most prestigious honors in civil engineering.
- Ionia Odos Motorway – Served as LTA for a 1.1-billion Euro, 196-kilometer motorway in Greece.
- Chacao Channel Bridge – Served as Design Checker for a $700-million, 2.4-kilometer suspension bridge in Chile.

"As a result of their invaluable contributions on this world-class project, I would highly recommend Langan for any major project."

-- J.P. Teyssandier
Managing Director and Chairman of the Board of Gefyra S.A., a Joint Venture lead by VINCI Group, Paris, France

LANGAN

Surveying/Mapping

Accuracy and Efficiency

Langan's survey group provides rapid response times and flexible schedules to meet client needs and maintain schedules for fast-track projects. Our field crews utilize state-of-the-art surveying equipment including electronic data collectors, global positioning systems (GPS), robotic and prismless total stations, and BIM-compatible 3D Laser Scanning.

Equipped with Internet-enabled laptops, field crews accommodate design changes in real time and download data into Langan's network where it is edited, adjusted, analyzed and plotted. This allows for mapping that accurately reflects existing site conditions and boundary/legal issues, which could reveal potential problems early in a project's development.

Such technology, coupled with the seamless integration with other firm technical disciplines, enables Langan's survey group to save time and money for our clients.

Langan Survey/Mapping Services:

- Boundary Surveys
- ALTA/ACSM Land Title Surveys
- Topographic Surveys
- GPS
- GIS/LIS Data Acquisition
- Deformation/Monitoring Surveys
- Wetlands Location Surveys
- Utility Surveys
- Subdivisions
- 3D Laser Scanning Construction Stakeout
- Hydrographic/Bathymetric Surveys
- Environmental Surveys
- As-Built Surveys
- Photogrammetric Control
- Riparian Surveys
- Highway/Route Surveys
- Geographical Information Systems

Unmanned Aerial System (UAS)

Raising the *Data* Bar

Langan has been actively positioned to provide Unmanned Aerial System (UAS) acquisition and data processing services to support and supplement our clients needs. Utilizing DJI Unmanned Aerial Systems,

Langan can provide aerial imagery products and services that are in compliance with Federal Aviation Administration (FAA) rules and regulation governing the commercial operation of unmanned aerial systems. Langan's UAS Data Collection and Mapping program has been designed to provide aerial video and imagery, orthophotography, digital point clouds, planimetric and topographic mapping products in various levels of accuracy on projects where the geographic size, location, budget or schedule of the project limits the effectiveness of a manned aircraft acquisition. Our UAS acquisition and processing team has the ability to mobilize quickly and efficiently, taking advantage of the nimbleness of the collection platforms. Processing of project deliverables as well as any required field control surveys are performed in-house, while being controlled, registered and projected to the level that satisfies most project requirements and specifications.

Langan UAS Services:

- Construction Monitoring
- Site Reconnaissance
- Site Design
- Aerial Photography/Videography
- Orthophotography
- Planimetric/Topographic Surveys
- Colorized Point Clouds
- GIS/LIS Data Supplementation
- Wetlands Surveys
- Subdivision Surveys
- Campus Mapping
- Environmental Surveys
- As-Built Surveys
- BIM Modeling

LANGAN

GIS/Data Management

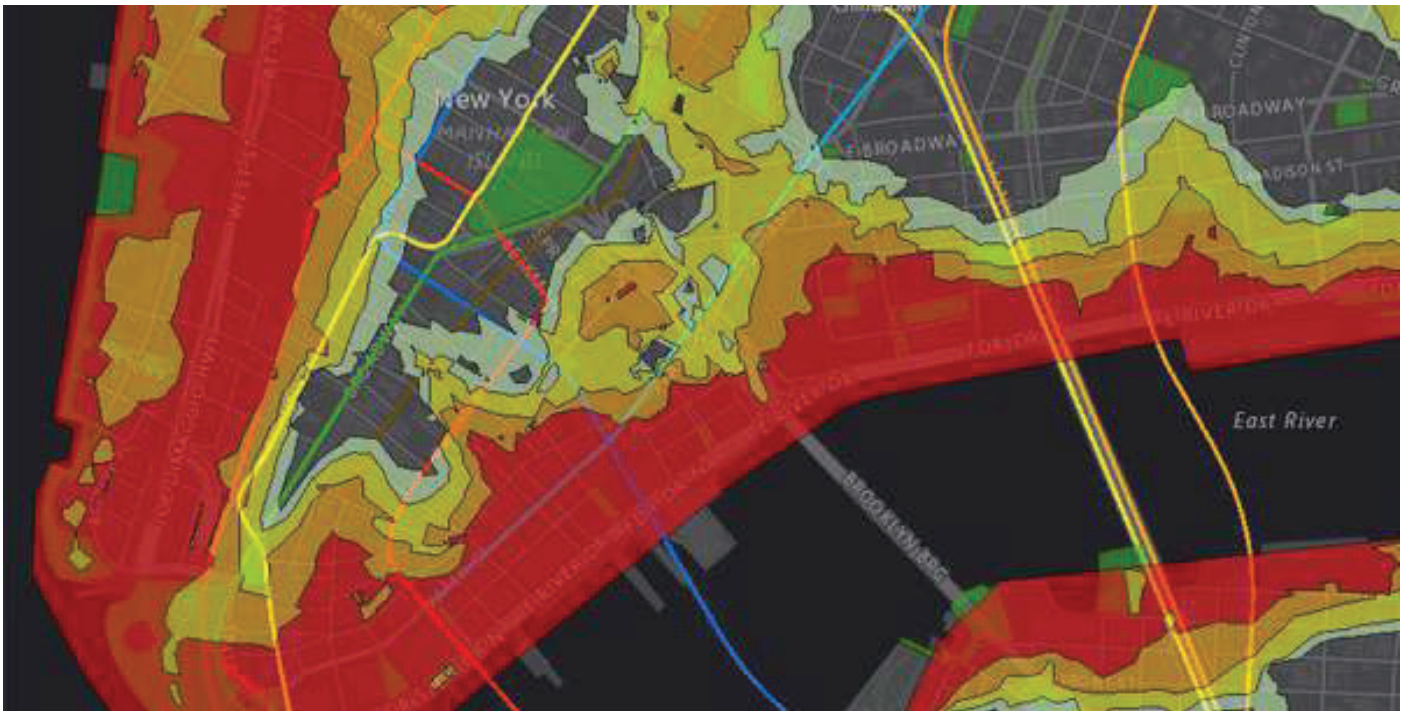
Cutting-Edge Data Visualization

Langan utilizes the latest CADD, GIS, and Data Management software applications to analyze and design cost-effective solutions to our clients' problems. Our CADD-GIS group provides custom training, programming, and technical support to both our staff and to our clients in Autodesk's Map, Land Desktop and Civil 3D, as well as ESRI's ArcGIS suite of applications including ArcMap, ArcEditor, and ArcInfo and their assorted extensions. Langan utilizes SITEOPS software for value engineering and to provide design optimization of land development projects. We use Earthsoft's EQuIS Chemistry and Geology products to manage large datasets for our environmental and geotechnical clients, and use GIS, Rockworks, GMS and EVS to visualize the data. Langan also uses 3D Studio and various post production products to generate computer generated animations of our clients' projects, allowing them to see the virtual design before construction.

Langan provides our clients with easy access to their project data by developing Extranets and Sharepoint data portals that allow for easy data exchanges between all of the project team members. Our Web designers can develop custom Web-based applications using ESRI's ArcIMS and ArcGIS Server to further leverage our clients' data.

Langan GIS/Data Management Services:

- Software Integration and Technical Support
- Custom Programming
- Software Training
- Web Design
- CADD Conversions
- GIS Mapping
- 3D Animations
- Data Entry



High Definition 3D Laser Scanning

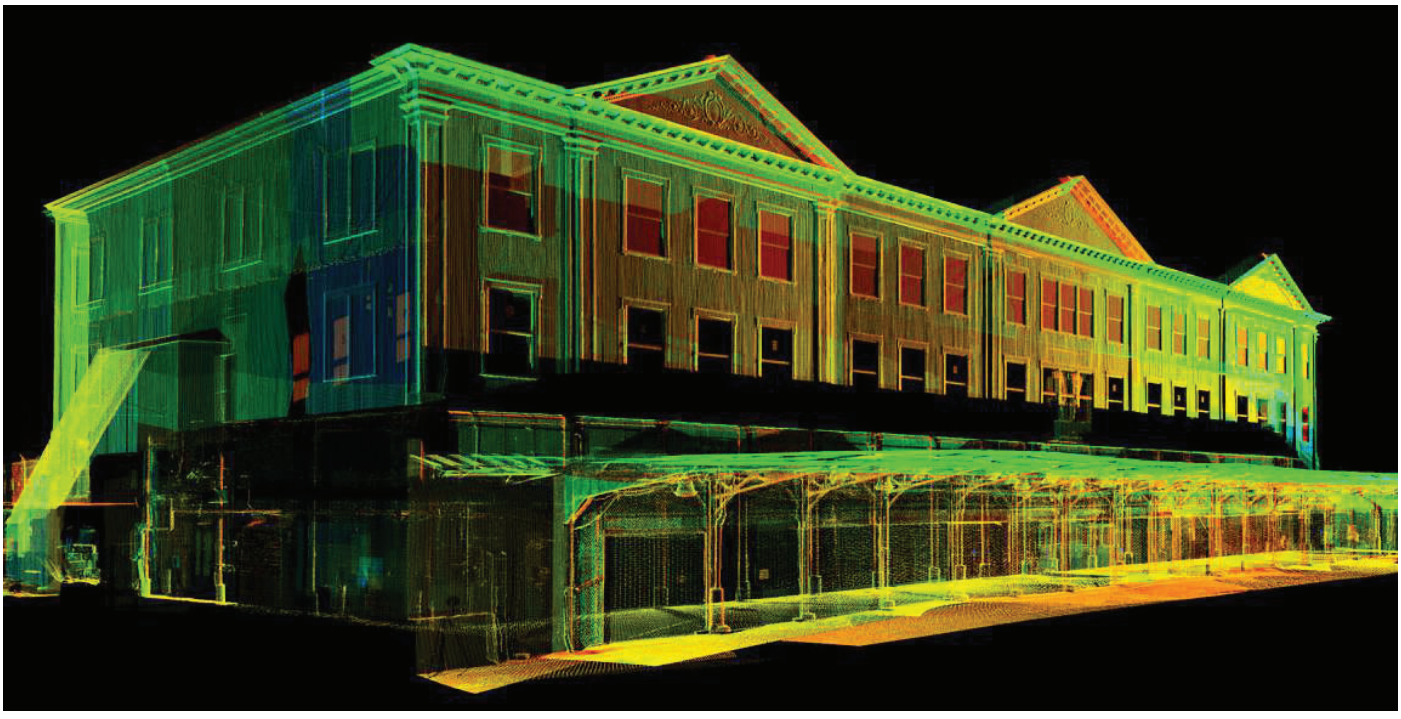
Work in the Data, Not on the Data

3D Laser Scanning is changing the surveying/mapping industry and Langan is leading the revolution. Since the addition of High Definition Laser Scanning services in 2003, Langan has offered the most accurate and highly detailed existing conditions surveys possible. This advanced technology allows for the collection of millions of data points in less time and with lower overall cost than traditional techniques. 3D Laser Scanning equipment allows end users to accomplish project objectives more efficiently and accurately at all stages, in turn minimizing overall project costs and reducing turn around time, while achieving a higher level of detail.

Our ability to offer a combination of High Definition Laser Scanning and conventional surveying methods allow Langan to deliver a complete product. As with all of our surveying services, the scanning effort is overseen by Professional Land Surveyors who bring experience and knowledge of traditional methods to this cutting-edge technology.

In scanning, the data collected is known as a “point cloud” which contains a 3D database of the entire project area and allows the measurement of any surface information that is visible in the cloud to be used during the entire project lifecycle. After processing, the data from the “point cloud” can be utilized to produce dimensionally correct 3D models and/or 2D dimensional plans, with outputs to Microstation, AutoCAD or a host of other platforms. The registered data can also be used as a base to create highly detailed site visualizations or mass models. The end data can be used for BIM support, forensics studies, to determine possible construction conflicts, to validate construction/fabrication dimensions, or even to model major motion picture sets.

With prior technologies the end user had to work on the data. High Definition Laser Scanning allows the end user the ability to work in the data and be “on site virtually” with the push of a button.



LANGAN

An Impact Player on the Team

The engineers and environmental scientists at Langan have vast experience with respect to infrastructure design and consulting. Because of our knowledge and experience, we are an ideal choice for a sub-consultant to construction companies, engineering firms, and architects that specialize in infrastructure programs. Given Langan's nationwide office locations primarily in densely populated urban areas, we are strategically situated to be a local consultant on projects in places like the Washington DC region, New York City and the five boroughs, all of New Jersey, the state of Connecticut, Philadelphia and Eastern Pennsylvania, Miami, and California.

As a result, Langan has been a key player in some of the largest, most significant infrastructure projects both in the United States and overseas, encompassing highways, bridges, rail, major transportation hubs, airports, utilities, port facilities, and flood prevention.

Langan Infrastructure Project Types:

- Rail/Transit
- Bridges/Tunnels
- Port/Marine
- Airports
- Tunnels
- Water/Wastewater
- Roadways
- Utilities
- Energy
- Flood Prevention

Waterfront & Marine

Innovation at the Water's Edge

Langan works with waterfront asset managers such as terminal operators – liquid bulk, break bulk and container – municipal and federal agencies, and developers, to assess and rejuvenate bulkheads, wharves, piers and revetments. Our waterfront engineers have expertise in geotechnical and structural engineering in marine and riverine environments, and understand the staging required to maintain upland and marine operations. We work closely with our clients to understand their operations and funding, developing tailored design solutions that are cost effective over the lifetime of the asset. With offices strategically located near major ports and water bodies, Langan is able to serve clients in coastal regions around the world.

Langan Waterfront & Marine Services:

- Bulkhead, wharf, and pier/platform design
- Structural inspection
- Repair and remediation design
- Shoreline revetment and slope/embankment stabilization
- Flood protection studies and design
- Dredging design and oversight
- Shoreline restoration and bioengineering
- Federal and state permitting
- Wetland delineation and mitigation
- Wildlife habitat assessments and surveys

Hazardous Materials

Safety First

Asbestos

Langan routinely performs buildings investigations for city, state and federal agencies for asbestos-containing materials (ACM). Our ACM surveys typically include review of original design documents, construction records, review of environmental reports for the property, site assessment, and the collection and analysis of bulk samples. In occupied buildings, the survey typically will not include intrusive means of access such as puncturing the walls, ceilings, or core sampling of roofing materials. Samples are typically collected following the AHERA regulations and are analyzed using Polarized Light Microscopy (PLM). Intrusive investigation of concealed spaces is performed only upon receiving written authorization.

Non-friable organically bonded (NOB) materials, such as roofing, Vinyl tiles, etc., which may present difficulty in identifying asbestos by PLM, are re-analyzed using Transmission Electron Microscopy (TEM), in accordance with the State requirements. All sampling is performed by Langan asbestos professionals, who are certified Asbestos Hazard Emergency Response Act (AHERA) inspectors under USEPA and licensed to practice in individual state.

Lead-Based Paint

Lead-based paint surveys are also routinely performed when directed by our clients. Langan utilizes a Niton fluorescence (XRF) Spectrum Analyzer to inspect the buildings for the presence of lead-based paint. The results of the inspection are compared to the federal HUD Guidelines governing lead in paint. The inspections are usually performed to address worker exposure to lead under 29 CFR 1926, and the disposal of demolition/ construction debris under the Federal Resource Conservation and Recovery Act (RCRA).

In addition to LBP screening inspection, we also perform waste characterization study for classification of the demolition debris. The recommended sampling protocols developed by the United States Environmental Protection Agency (USEPA) and those established by the United States Department of the Army's Environmental Hygiene Agency are primarily followed during the characterization study.

Natural Resources/Permitting

Navigating Policy and Nature

Langan has developed strong relationships with federal, state and local regulators through our experience in more than 1,000 wetland and permitting projects. Our Natural Resource staff consists of certified professional wetland scientists, ecologists and wildlife biologists with extensive experience throughout the United States. Our federal and state permitting specialists work closely with our engineers to design a "permittable" project while providing the most economic return to our clients. Our ability to identify critical natural resource issues early in the design process and our in-depth understanding of regulatory programs and policies result in an expedited application and approval process.

Langan Natural Resources/Permitting Services:

- Wetland Delineation
- State Permit Applications to Agencies, including SEQR
- Environmental Assessments / Environmental Impact Statements (EIS)
- NEPA Environmental Review Documents
- Alternatives Analysis
- Wetland Mitigation Design (Creation, Restoration, Enhancement) and Banking
- Coastal/Waterfront Development Permitting and Planning
- Wildlife Surveys and Habitat Assessments
- Threatened and Endangered Species Surveys and Habitat Assessments
- Baseline Ecological Evaluations (BEE)
- Natural Resource Damages Assessments
- Ecological Risk Assessment
- Wetland Functional Assessments
- Streambank Restoration / Bioengineering

Photo: Robert Canfield

Landscape + Planning

Sense of Place

Langan Landscape Architects and Planners understand what makes places work. We shape effective design solutions that range from regional or city scale down to the most intimate courtyards and garden spaces. In every project we strive to identify and enhance the "sense of place," which makes every site unique and memorable. This places us at the forefront of the rebirth of our cities and aging downtowns, guiding their revitalization as destinations where people live, work, shop and play.

Langan Landscape Architecture + Planning Services:

- Site Feasibility and Yield Studies
- High Performance Site Planning
- Land Development Approvals
- Brownfield Redevelopment
- Waterfront Design
- Park and Playground Design
- Complete Streets, Streetscape Design and Traffic Calming
- Landscape Planting and Irrigation Design
- Landscape Restoration Design
- Contract Documents
- Rooftop Garden Design
- Site Lighting Design
- Water Feature Design
- Construction Administration and Inspection
- Expert Testimony and Zoning Reviews
- Community Outreach

Sustainable Design

LEEDing the Way

With more than **100 LEED APs** on staff, sustainable design weaves through all Langan services. Our diverse portfolio of intelligent site planning, design, and engineering coupled with our Brownfield and site remediation expertise places us at the forefront of the sustainable design movement.

Langan has been an instrumental player on dozens of Leadership in Energy and Environmental Design (LEED) and sustainable design projects. Our expertise allows us to make significant contributions in developing sustainable sites with an emphasis on stormwater management, low impact landscapes, brownfield redevelopment, materials recycling, energy conservation, and renewable energy design.

Langan Sustainable Design Services:

- LEED Site Feasibility Analysis
- Air Quality Assessments
- Asbestos Assessment and Abatement
- Ecological Wastewater Treatment Design
- Low Impact Stormwater Design / Master Planning
- Brownfield Redevelopment
- High Efficiency Site Lighting and Irrigation Design
- Green Roof Design
- Streambank Restoration and Bioengineering Design
- Baseline Ecological Evaluations
- Wildlife and Habitat Evaluations
- Urban Design and Regeneration Planning
- Geothermal Feasibility Studies and System Design Support

LANGAN

ACEC
American Council of Engineering Companies

PROJECT AWARDS

Nearly 50 Years of Excellence

2017 St. Patrick's Cathedral Restoration, New York, NY
2017 56 Leonard Street, New York, NY
2017 365 Bond Street, Brooklyn, NY
2017 Elizabeth Logistics Center, Elizabeth, NJ
2017 Foundations for the Future – More Than 25 Higher Education Projects in the Garden State, NJ
2016 Hudson Park & Boulevard, Phase I, New York, NY
2016 Slurry Wall Re-Support, National September 11 Memorial & Museum, New York, NY
2016 World's Fair – New York State Pavilion, Flushing Meadows, NY
2015 PortMiami Tunnel, Miami, FL
2015 Goya Headquarters, Jersey City, NJ
2015 New York Police Department – New Academy, Queens, NY
2014 Cooper Medical School of Rowan University and MD Anderson Cancer Center at Cooper, Camden, NJ
2014 Rutgers University Livingston Campus Revitalization, Piscataway, NJ
2014 Barclays Center, Brooklyn, NY
2013 FDR Four Freedoms Park, Roosevelt Island, NY
2013 Duke Farms, Hillsborough, NJ
2013 Al Falah Community Development, Abu Dhabi, UAE
2013 Governors Island Survey, New York, NY
2012 Bayonne Crossing, Bayonne, NJ
2012 Montclair State University Residences, Montclair, NJ
2012 Mott Haven Educational Campus, Bronx, NY
2011 New Meadowlands Stadium, East Rutherford, NJ
2011 Porsche Northeast Regional Support Center, Palmer Township, PA
2011 107-111 Lawrence Street (The Brooklyner), Brooklyn, NY
2011 Mannington Mills Remediation and Wetland Mitigation, Salem, NJ
2011 Herron Park Playground, Philadelphia, PA
2011 30th Street Station: Surveying Keeps a Station on Track, Philadelphia, PA
2010 77 Hudson, Jersey City, NJ
2010 Garfield Education Complex, Garfield, NJ
2009 Jets Training Facility, Florham Park, NJ
2009 J Ponds In-Situ Stabilization/Solidification, Paulsboro, NJ
2009 Federal Hall National Memorial, New York, NY
2009 Pier 17 Redevelopment, New York, NY
2009 Blue Back Square, West Hartford, CT
2008 The Prudential Center, Newark, NJ
2008 IAC/InterActiveCorp Headquarters Building, New York, NY
2007 Science Park High School, Newark, NJ
2007 Riverdale Crossing, Riverdale, NJ
2007 505 Greenwich Street, New York, NY
2007 The Shops at Atlas Park, Glendale, NY
2007 Turnberry Place, Las Vegas, NV
2006 Columbia University Residence – 2700 Broadway, New York, NY
2006 Nolen Greenhouses for Living Collections at The New York Botanical Gardens, Bronx, NY
2006 Former American Standard Trenton Pottery, Hamilton Township, NJ
2005 Rion-Antirion Bridge – Corinthian Straits, Greece
2005 Four Seasons Hotel and Tower, Miami, FL
2005 Solving the Engineering Puzzle for New Jersey's Schools, Multiple Locations, NJ
2004 Engineering the Foundation for New Jersey's Educational Future, Multiple Locations, NJ
2003 St. John's University Master Plan, Jamaica, Queens, NY
2003 Reuters Comes to Times Square, New York, NY
2003 Gateway Center Wetland Restoration, Brooklyn, NY
2003 River Sharks Baseball Stadium, Camden, NJ
2002 Watchung Square Mall Slope Stabilization, Watchung, NJ
2002 Target Store, Plymouth Meeting, PA
2002 PS-6 School Construction, Staten Island, NY
2001 Sotheby's Manhattan Headquarters Expansion, New York, NY
2001 Remediation of a Manufactured Gas Plant, Trenton, NJ
2000 Jersey Gardens Mall, Elizabeth, NJ
2000 Colgate Waterfront Redevelopment, Jersey City, NJ
1999 Redevelopment of New Brunswick, New Brunswick, NJ
1999 Battery Park City, New York, NY
1998 Swiss Bank Complex, Stamford, CT
1997 Scovill Brass Center Redevelopment, Waterbury, CT
1996 Daily News Libertyview Plant, Jersey City, NJ
1995 New York Hospital, New York, NY
1994 Redevelopment of Jersey City, Jersey City, NJ
1993 Liberty Science Center, Jersey City, NJ
1992 Hertz Corporate Headquarters, Park Ridge, NJ
1992 The Waterways, Aventura, FL
1992 Trenton Office Complex, Trenton, NJ
1991 Powder Mill Pond Dam Restoration, Parsippany-Troy Hills, NJ

LANGAN

THE BOATHOUSE AT CANAL DOCK

SERVICES:

- *Waterfront Design*
- *Lead Design Consultant*
- *Boundary, Topographic and Utility Survey*
- *Circulation Master Plan*
- *Site/Civil Design Services*
- *Landscape/Site Architecture*
- *Geotechnical Engineering*

LOCATION:

New Haven, Connecticut

CLIENT:

New Haven City Plan Department

Platform under construction

Langan is the prime consultant for the state and federally funded Canal Dock and Long Wharf Park projects. Project plans include the construction of a 48,000 SF pile-supported platform to support a 30,000 SF community boathouse, the stabilization and reconstruction of over 1,500 LF of shoreline, and the revitalization of Long Wharf Park. Langan is overseeing a multidisciplinary design team, and providing waterfront, geotechnical, and site/civil engineering, surveying, and landscape architecture services.

Our waterfront engineering scope of work included a subsurface exploration program, geotechnical engineering design of the foundation piles, structural design of the pier deck, construction administration, pile installation inspection, and final inspection services.

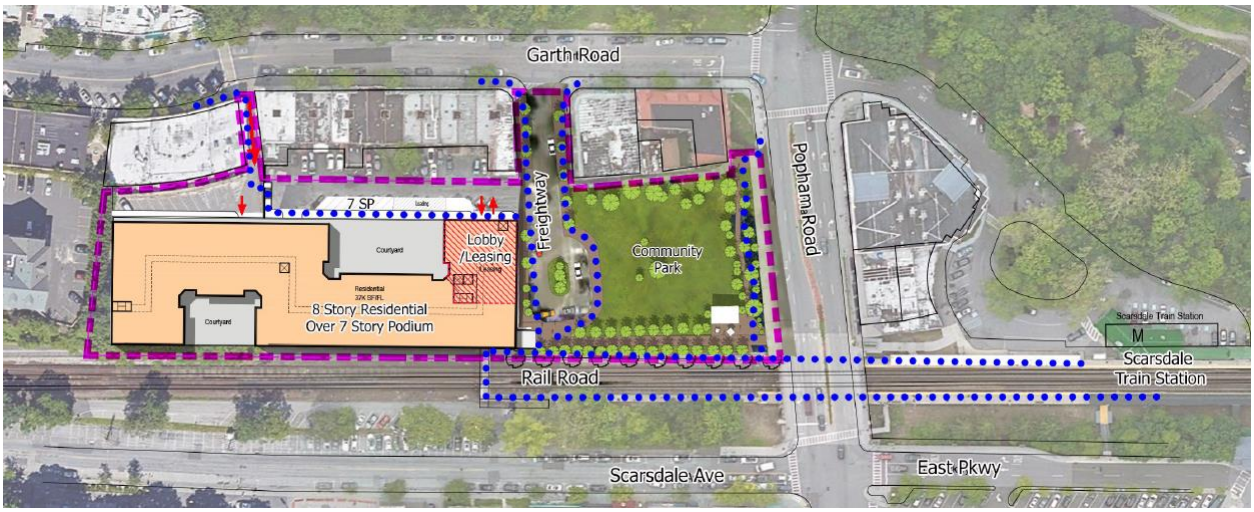
The City of New Haven requested that the platform have a 75-year lifespan. The structure was intentionally designed with top of deck below the design flood elevation due to ADA requirements, which meant that many of the main structural members would frequently be immersed in water. Sustainability design considerations included durability modifications such as increasing the concrete cover for the steel reinforcement, adding an admixture to protect against corrosion, and detailing features to minimize ponding.

Challenges encountered during the design and construction process included: soft compressible silts and loosely consolidated silty sands that required significant pile “setup” time; designing a concrete pier to support design truck and building column loads; coordinating the routing of utilities within the relatively thin cast-in-place slab; and evaluating low-break strength concrete pours.

2.0

PROJECT DESCRIPTION

PROJECT DESCRIPTION



In order to minimize the impact to community parking, and access to parking via the Scarsdale Avenue pedestrian bridge, the proposed development will consist of two phases. Phase I will incorporate a seven-story parking structure and eight stories of residential apartments above, along with a newly constructed pedestrian access bridge connecting the site to Scarsdale Avenue. Phase II will consist of a seasonally programmed public plaza/park on the portion of the site that currently consists of a surface lot bound by Popham Road to the North and the Metro North platform to the East. Prior to demolishing the current parking structure, BRP Development Corporation (BRP), will add a series of 5-level hydraulic parking stackers to the Phase II surface lot in order to accommodate approximately 500 cars during Phase I construction. Upon completion of Phase I, which includes 720 commuter spaces (as described below), BRP will remove the stackers from the Phase II lot in order to facilitate the commencement of Phase II site work.

PHASE I

Phase I will incorporate a fifteen-story mixed use structure consisting of a seven-story parking garage below eight stories of residential apartments, along with a newly constructed pedestrian access bridge connecting the site to Scarsdale Avenue. The parking structure will accommodate 1,005 spaces, 713 spaces dedicated to commuter parking along with 7 surface spaces, totaling 720. The balance of 292 spaces are reserved for the residential tenants. Two access points to the garage are located off Garth Road. Commuters can take an elevator from their parking floor down to the Commuter Plaza and transition along the project's east boundary under Popham Road to the Scarsdale Train Station.

The residential ground floor lobby entry to the apartments is located at the northwest corner of the parking structure, where residents will be transported directly to the lobby, leasing and amenity lounge located on the eighth-floor. Tenants will be able to take an elevator from either the 6th or 7th floor parking, directly to their residential floor. The residential building is serpentine in shape with two open courtyards one facing East and the other facing West. The West facing courtyard (the largest) will accommodate a pool, spa, BBQ's, soft seating, fire pits, landscape and hardscaping, while the second courtyard is passive in design with casual seating, fire pits, landscape and hardscaped areas.

PHASE II

Phase II will consist of the community park and commuter plaza and kiosk. Several programing ideas in consideration include a tree lined open lawn park for community programs, and open air theater seating/steps, these seating/steps will transition the grade difference from the corner of Garth Road and Popham Road allowing for a functional transition to the low-lying park. Additional concepts include a commuter drop-off area located adjacent to the Commuter Plaza. The plaza may incorporate freestanding kiosk serving coffee and quick breakfast meals on the way to the Scarsdale Train Station, along with additional programing ideas from the community at large.

BRP takes pride in working directly with the communities it serves and will work hand in hand with the Village of Scarsdale on both plaza/park programming ideas as well as an overall development design that is complementary to the existing architecture/design within the community.

3.0

FINANCIAL AND LEGAL DESCRIPTION

FINANCIAL AND LEGAL DESCRIPTION

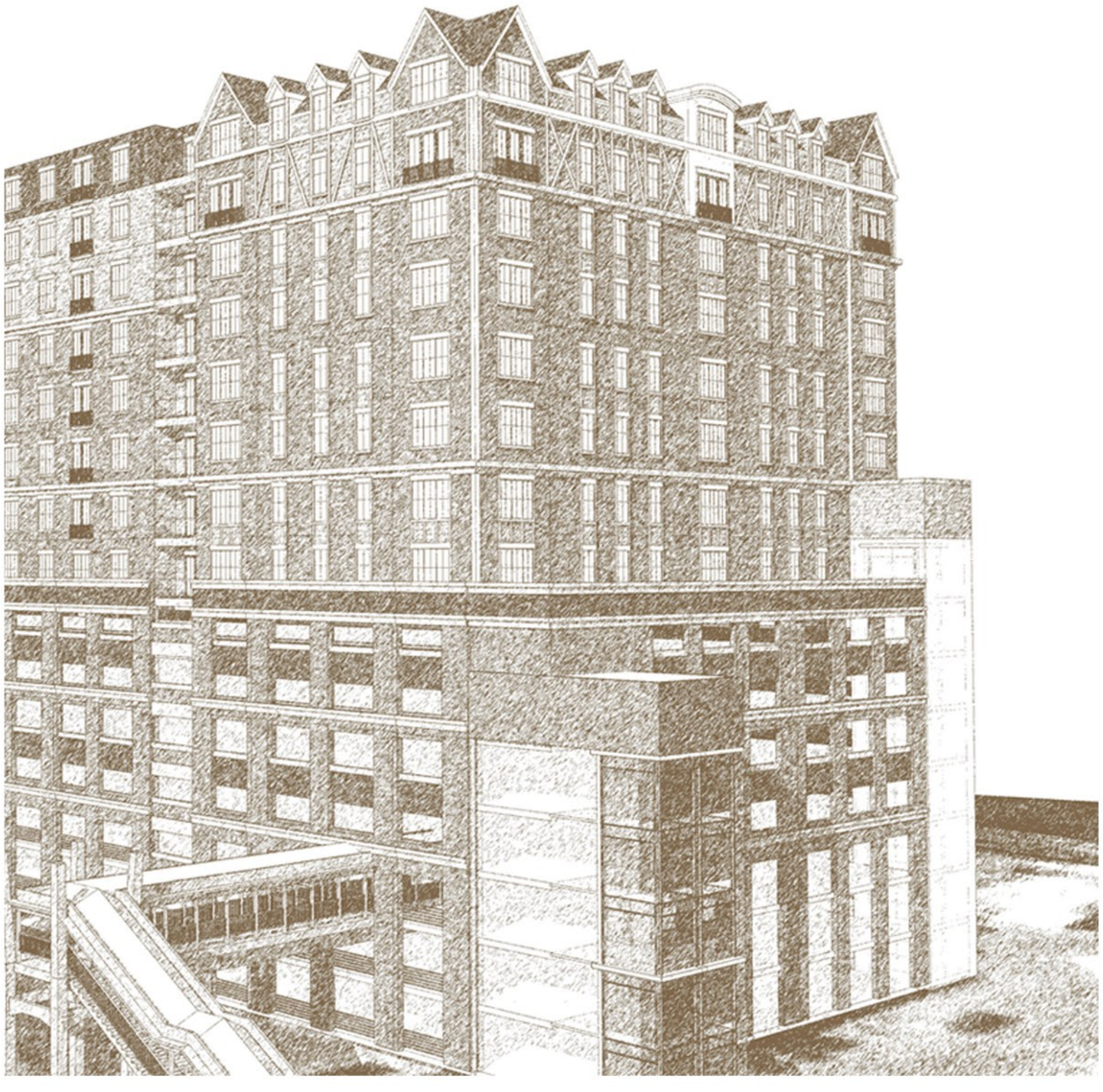
BRP Companies is pleased to offer $15,000,000 in consideration for the Freightway Redevelopment Site. BRP is also prepared to lease the land from the current property owner for 99 years at a lease rate to be determined. In addition to the cash payment, BRP will develop a multipurpose seasonally programmed plaza accessible via Popham Avenue, the commuter rail platform and the newly constructed pedestrian bridge from Scarsdale Avenue for the benefit of the residents of Scarsdale. Also, as described in the project narrative, and in addition to the residential parking, BRP will construct a new commuter parking deck containing 713 spaces, which will be available for public use.

BRP has a strong track record of developing transit-oriented developments in collaboration with public agencies. At present, BRP is developing Jamaica Crossing, a $400 million mixed-use development in New York City. Jamaica Crossing is being capitalized by some of the largest financial institutions in the country, including Citibank, JP Morgan Chase, Federal Home Loan Bank of New York, Freddie MAC and Goldman Sachs. In addition to the aforementioned companies, BRP has worked with Wells Fargo, Santander Bank, Bank of New York and Capital One Bank. BRP has also utilized public financing methods to complete major projects, including bond issuances, various tax credit programs and as well as the New York State Brownfields Cleanup Program.

BRP will utilize a traditional legal structure such as a single member limited liability company where BRP acts as the managing member/general partner of the ownership entity along with a non-managing member/limited partner.

4.0

SITE PLAN AND ARCHITECTURAL DESIGN



VILLAGE OF SCARSDALE
FREIGHTWAY REDEVELOPMENT SITE

DRAWING LIST

CO	COVER SHEET
A01	CONCEPTUAL SITE PLAN - PHASE I
A02	CONCEPTUAL SITE PLAN - PHASE II
A03	SECTION
A04	ELEVATIONS
A05	ELEVATIONS
A06	GROUND FLOOR PLAN
A07	2ND - 5TH FLOOR PLAN
A08	5TH - 7TH FLOOR PLAN
A09	TYPICAL FLOOR PLAN
A10	MASSING
A11	MASSING
A12	MASSING

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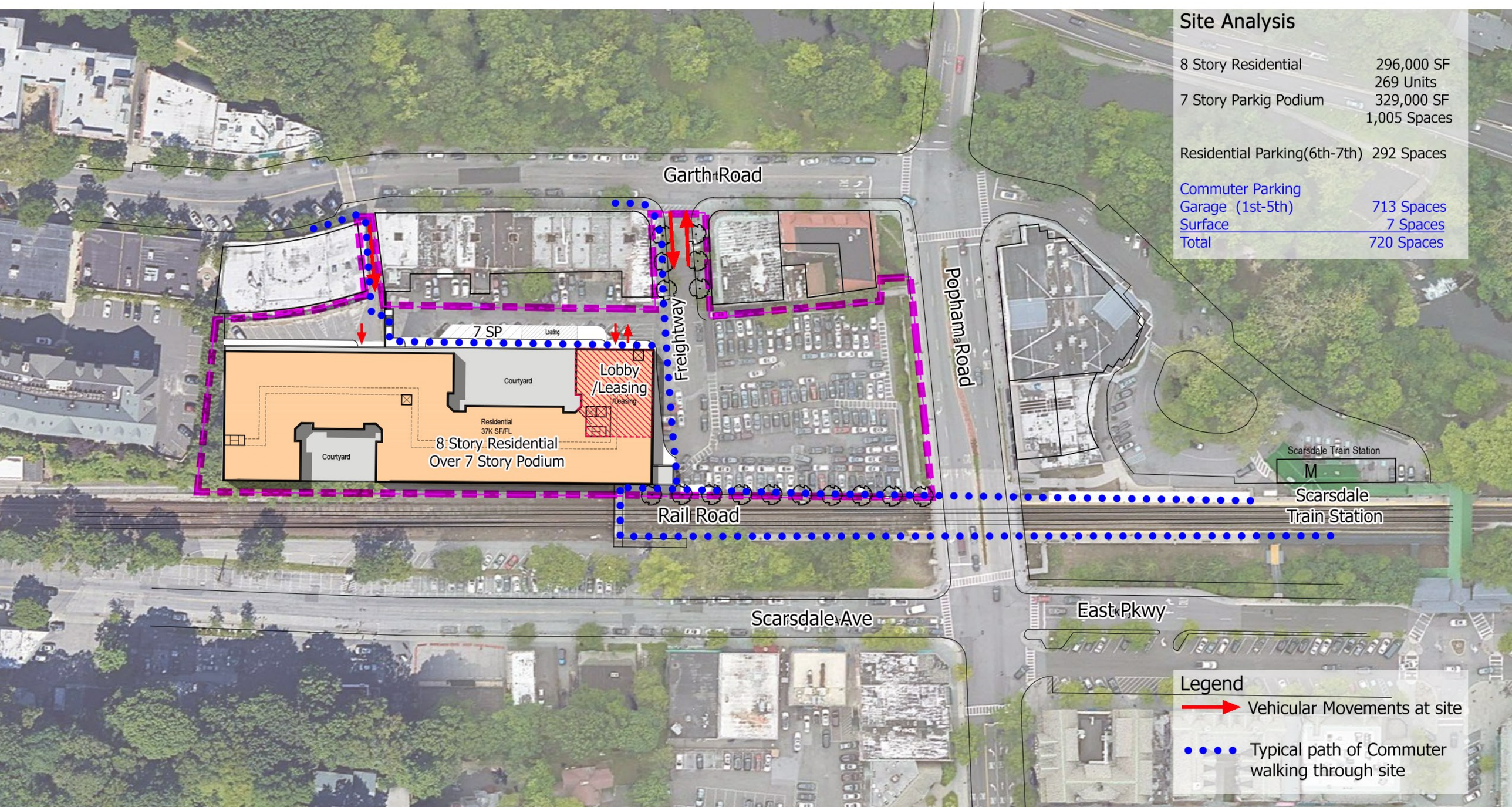


Site Analysis

8 Story Residential	296,000 SF
	269 Units
7 Story Parkig Podium	329,000 SF
	1,005 Spaces
Residential Parking(6th-7th)	292 Spaces
Commuter Parking	
Garage (1st-5th)	713 Spaces
Surface	7 Spaces
Total	720 Spaces

Legend

- Vehicular Movements at site
- Typical path of Commuter walking through site

lessard DESIGN
8521 LEESBURG PIKE, SUITE 700, VIENNA, VA 22182
P:571.830.1800 | F: 571.830.1801 | LESSARDDESIGN.COM

FREIGHTWAY REDEVELOPMENT
WESTCHESTER COUNTY, NY

CONCEPTUAL SITE PLAN

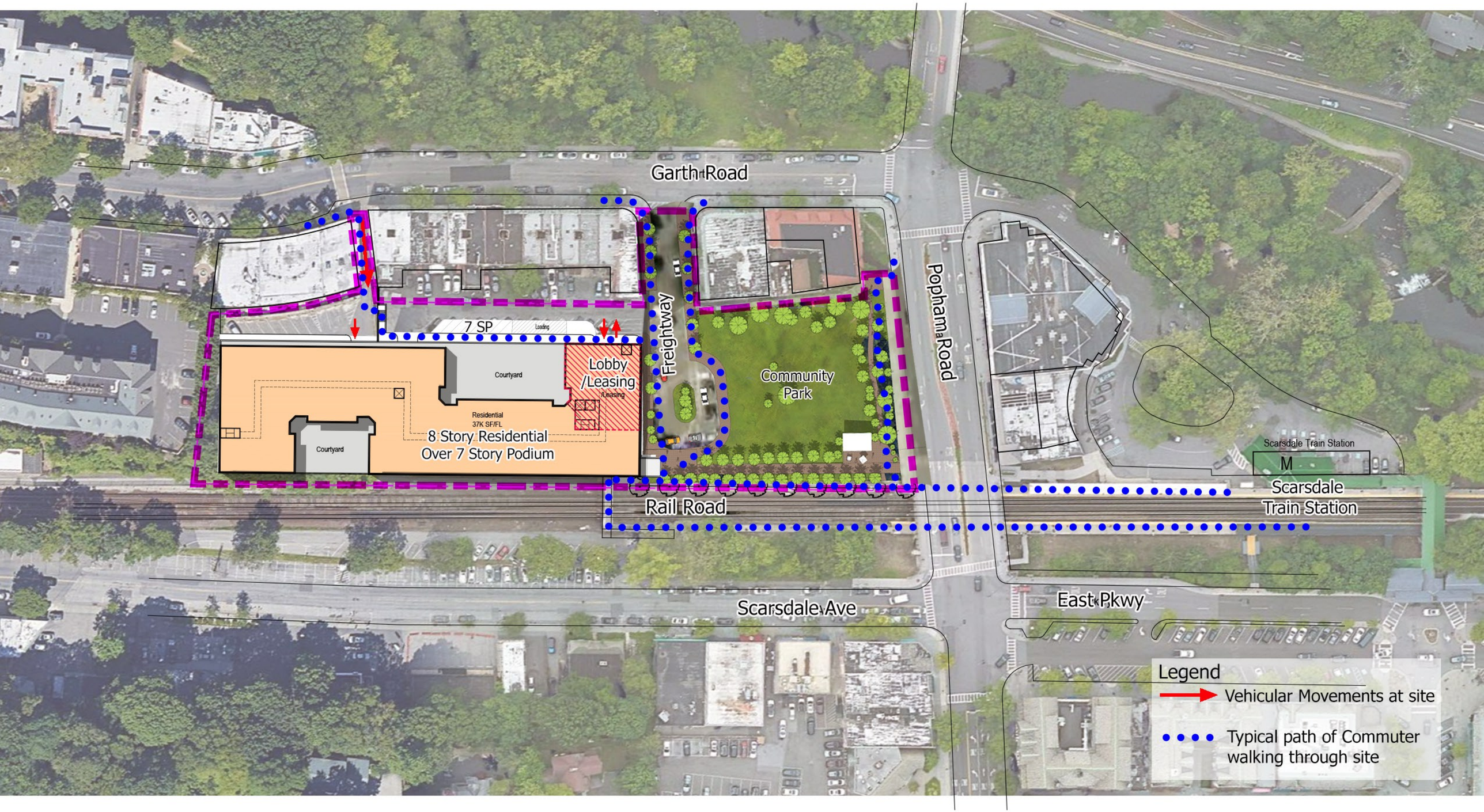
PHASE -1

BRP DEVELOPMENT

OCTOBER 15, 2018
BRP.006B

A.01

0 20' 40' 80'
SCALE: 1" = 80'



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FREIGHTWAY REDEVELOPMENT
WESTCHESTER COUNTY, NY

CONCEPTUAL SITE PLAN

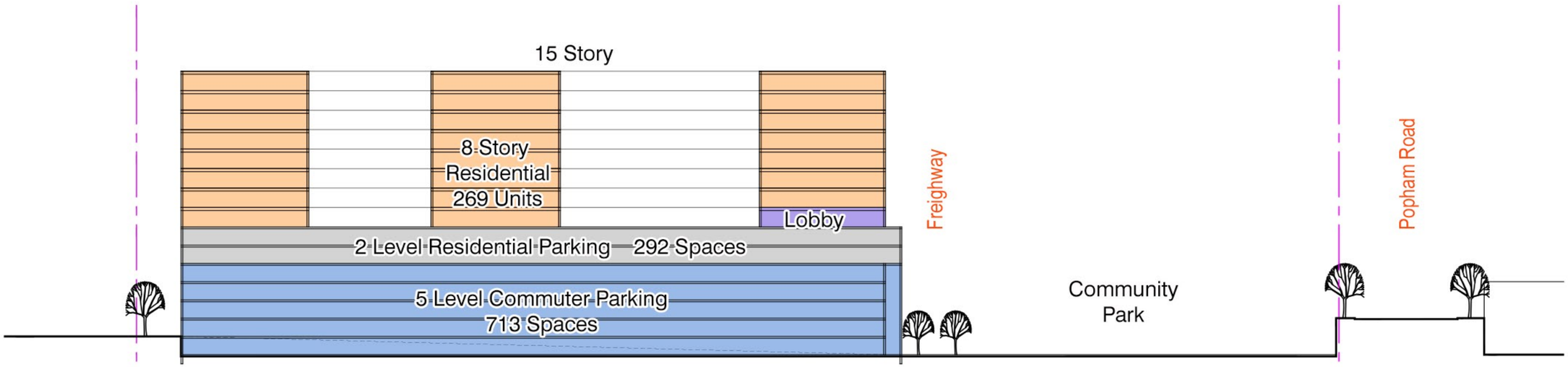
PHASE -2

BRP DEVELOPMENT

OCTOBER 15, 2018
BRP.006B

A.02

0 20' 40' 80'
SCALE: 1" = 80'



Site Analysis

8 Story Residential	269 Units
Residential Parking(6th-7th)	292 Spaces

Commuter Parking

Garage (1st-5th)	713 Spaces
Surface	7 Spaces
Total	720 Spaces

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FREIGHTWAY REDEVELOPMENT
WESTCHESTER COUNTY, NY

SECTIONS

-

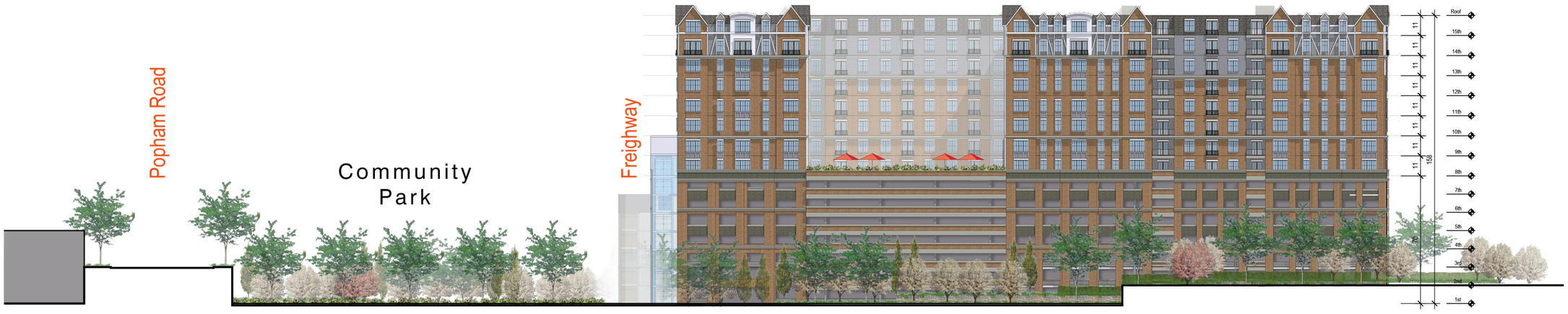
BRP DEVELOPMENT

OCTOBER 15, 2018
BRP.006B

A.03

0 15' 30' 60'
SCALE: 1" = 60'

EAST ELEVATION - RAIL ROAD SIDE



WEST ELEVATION - GARTH ROAD

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FREIGHTWAY REDEVELOPMENT
WESTCHESTER COUNTY, NY

ELEVATIONS

-

BRP DEVELOPMENT

OCTOBER 15, 2018
BRP.006B

A.04

0 30' 60' 120'
SCALE: 1" = 60'

SOUTH ELEVATION

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FREIGHTWAY REDEVELOPMENT

WESTCHESTER COUNTY, NY

ELEVATIONS

-

BRP DEVELOPMENT

OCTOBER 15, 2018
BRP.006B

A.05

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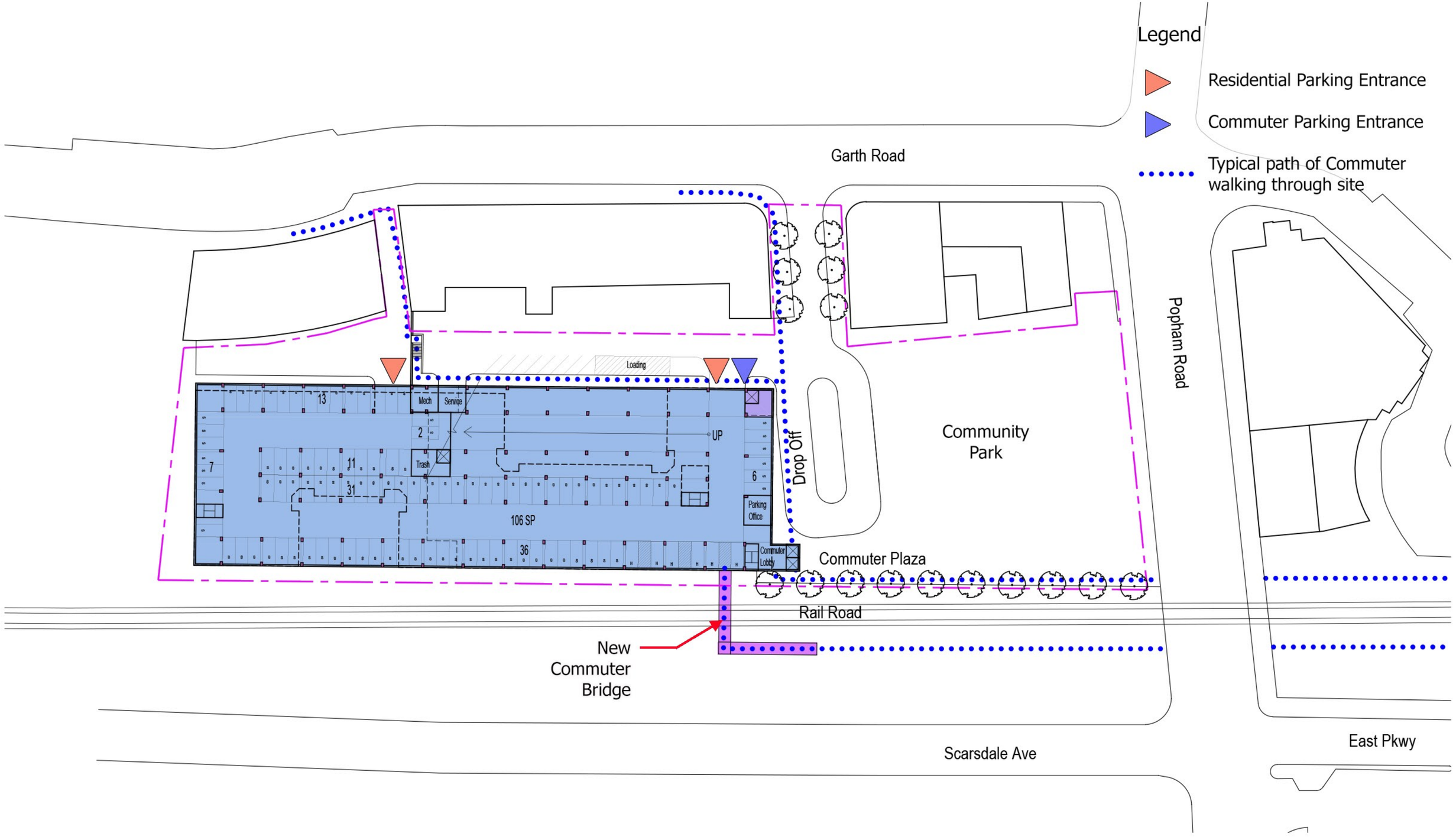
SCALE: 1" = 60'



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FREIGHTWAY REDEVELOPMENT
WESTCHESTER COUNTY, NY

GROUND FLOOR PLAN

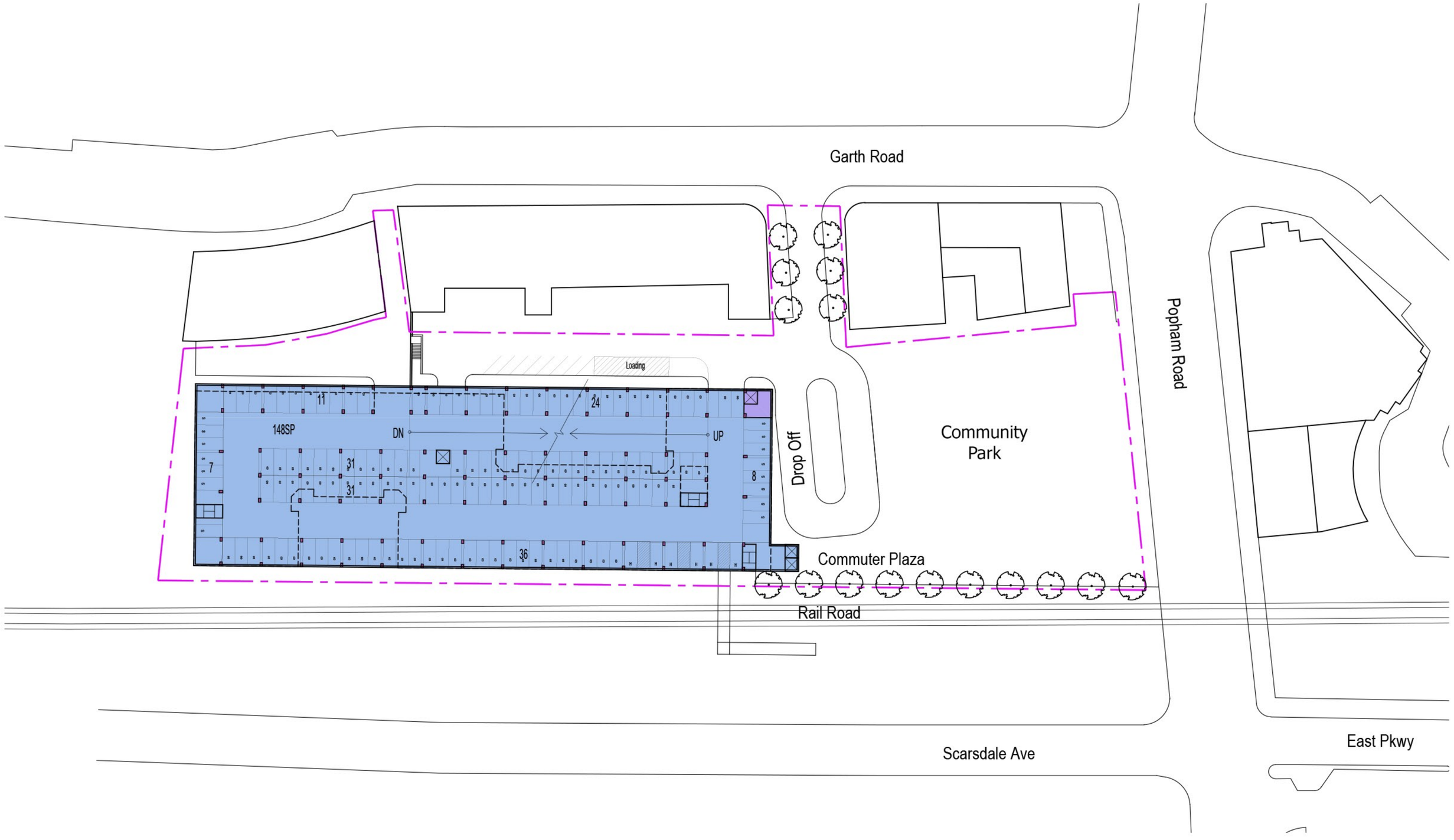
-

BRP DEVELOPMENT

OCTOBER 15, 2018
BRP.006B

A.06

0 15' 30' 60'
SCALE: 1" = 60'



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FREIGHTWAY REDEVELOPMENT
WESTCHESTER COUNTY, NY

2ND-5TH FLOOR PLAN

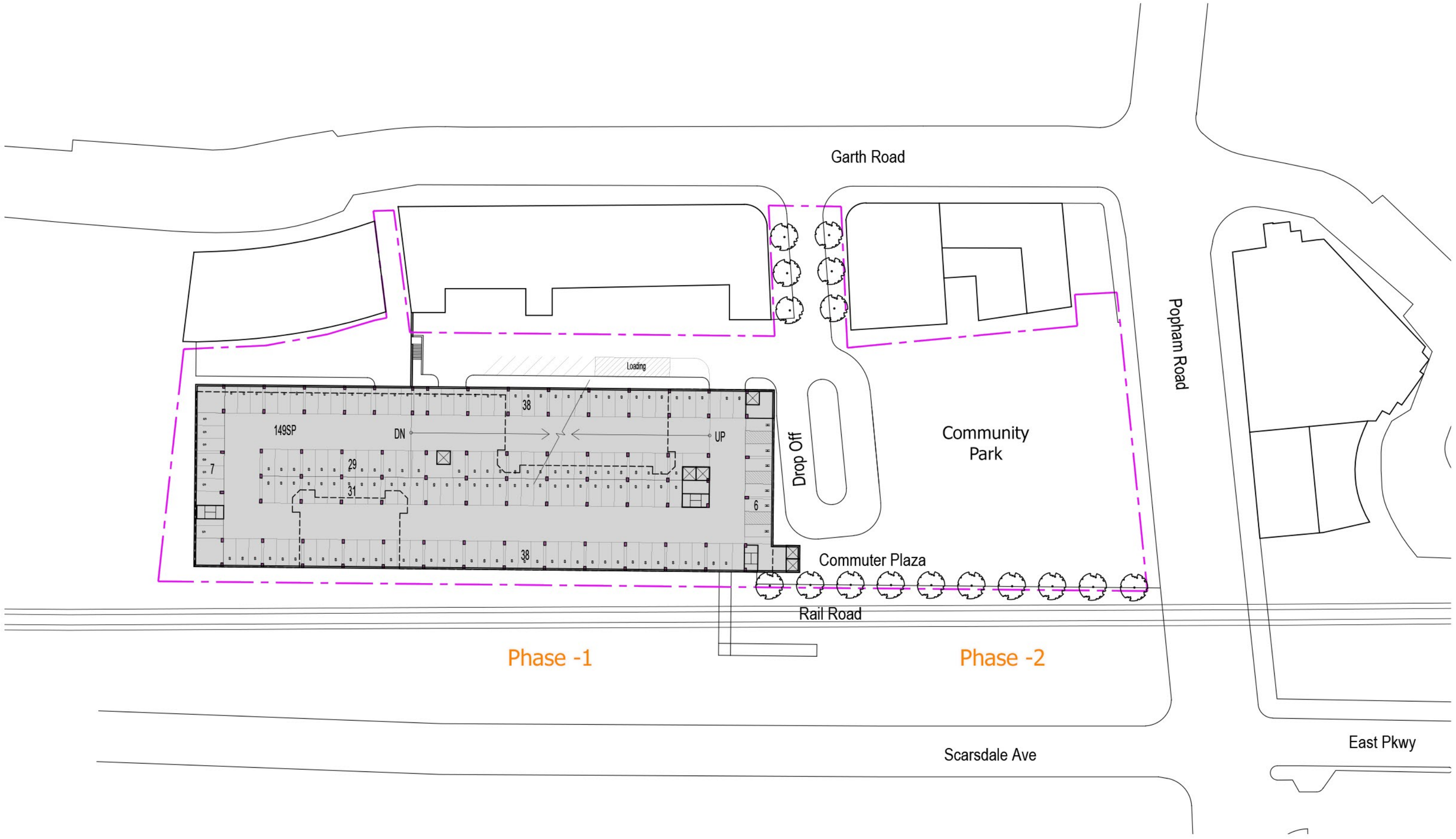
-

BRP DEVELOPMENT

OCTOBER 15, 2018
BRP.006B

A.07

0 15' 30' 60'
SCALE: 1" = 60'



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FREIGHTWAY REDEVELOPMENT
WESTCHESTER COUNTY, NY

6TH-7TH FLOOR PLAN

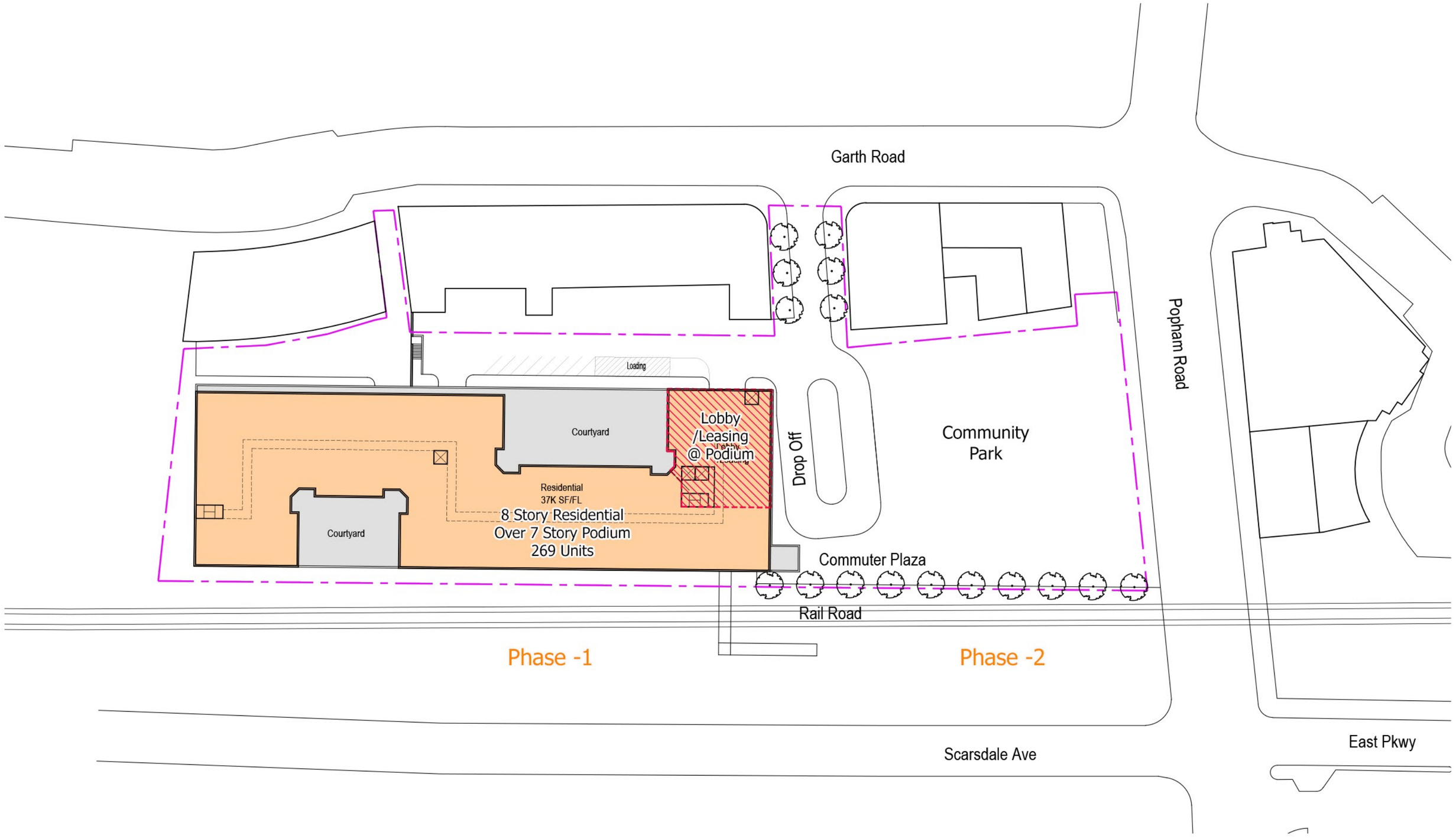
PHASE 1&2

BRP DEVELOPMENT

OCTOBER 15, 2018
BRP.006B

A.08

0 15' 30' 60'
SCALE: 1" = 60'



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FREIGHTWAY REDEVELOPMENT
WESTCHESTER COUNTY, NY

TYPICAL FLOOR PLAN

PHASE 1&2

BRP DEVELOPMENT

OCTOBER 15, 2018
BRP.006B

A.09

0 15' 30' 60'
SCALE: 1" = 60'

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FREIGHTWAY REDEVELOPMENT

WESTCHESTER COUNTY, NY

MASSING

BRP DEVELOPMENT

OCTOBER 15, 2018
BRP.006B

A.10

0 30’ 60’ 120’
SCALE: 1” = 60’

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FREIGHTWAY REDEVELOPMENT

WESTCHESTER COUNTY, NY

MASSING

-

BRP DEVELOPMENT

OCTOBER 15, 2018
BRP.006B

A.11

0 30' 60' 120'
SCALE: 1" = 60'

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FREIGHTWAY REDEVELOPMENT

WESTCHESTER COUNTY, NY

MASSING

-

BRP DEVELOPMENT

OCTOBER 15, 2018
BRP.006B

A.12

0 30’ 60’ 120’
SCALE: 1” = 60’

5.0

ZONING ANALYSIS

ZONING ANALYSIS

VILLAGE OF SCARSDALE
ORDINANCE NO. _____

AN ORDINANCE TO AMEND AND SUPPLEMENT THE
"DEVELOPMENT REGULATIONS AND ZONING ORDINANCE"
OF THE VILLAGE OF SCARSD ALE

Section 1. The Village of Scarsdale Development Regulations Ordinance is hereby amended and supplemented by replacing _____, "Zoning Provisions" in its entirety with the following:

a. Purpose

To provide an opportunity for a transit-oriented development, integrating the architectural vernacular established in the community along with a community park and walkable connectivity to village centers.

b. Permitted Principal Uses

1. Residential multi-family, rental and for sale
2. Retail services, such as coffee shops, fast food, but not limited to
3. In addition, mixed-use development subject to the standards contained herein
4. Community Parks, food vending kiosk, outdoor venues T.B.D.

c. Accessory Uses

Parking and loading areas

1. Residential and guest parking
2. Commuter/Public parking

d. Area and Setback Requirements

1. Minimums

a.	Lot area—acres	2
b.	Lot area—sq.ft.	87,120
c.	Lot width—feet	150'
d.	Lot depth—feet	600'
e.	Front setback	0'
f.	Side setback	10'
g.	Rear setback	10'

2. Maximums

a.	Building coverage	50%
b.	Floor area ratio	2.9
c.	Lot coverage	80%
d.	Building height—feet	160'

e. Provisions for Mixed-Use Development

Mixed-use development shall be permitted subject to the standards set forth below.

1. Tract Area
   The land area required for mixed-use development shall be a minimum of 2 acres.

2. Required Components
   A mixed-use development shall contain the following:
   a. A residential component consisting of one or more multi-family residential buildings with apartment units and associated amenities and services, including but not limited to a pool, fitness center, screening room, golf simulator, business center and concierge.
   b. A retail component consisting of one or more retail uses for the public and project serving.
3. Maximum Development Yield
   a. Notwithstanding any other provisions contained herein, the total number of multi-family residential units within a mixed unit development shall not exceed 300.
   b. Notwithstanding any other provisions contained herein, the total gross floor area of retail use within a mixed-use development shall not exceed 10,000 square feet.

4. Permitted Accessory Uses
   The following accessory uses shall be permitted in a mixed-use development:
   a. Off-street parking, including in a separate structure or within a building (i.e., above and below grade) as permitted herein.
   b. Off-street loading.
   c. Any other accessory uses expressly permitted herein.
   d. Any other use which is subordinate and customarily incidental to one or more of the component uses of the mixed-use development, including but not limited to, leasing/sales/management offices, maintenance and trash collection/recycling buildings and recreational amenities associated with residential development.

5. Development Standards
   a. Maximum Building Height: 160 feet.
   b. Maximum Impervious Surface: 80%.
   c. Maximum Building Coverage: 50%.
   d. Minimum Multi-Family Residential Building setback to Popham Road right-of-way: 100 feet.
   e. Minimum Multi-Family Residential Building setback to Metro North Railroad right-of-way: 10 feet.
   f. Minimum Multi-Family Residential Building setback to the south boundary right-of-way: 10 feet.

g. Minimum Multi-Family Residential Building setback to the articulated west boundary right-of-way: 20 feet.

h. All areas not devoted to buildings or paved surfaces shall be landscaped as deemed appropriate by the Planning Board. An overall landscaping plan shall be submitted indicating the type, size and spacing of all grasses, plants, shrubs, evergreen and deciduous trees and shall include landscaping site details for any other decorative features.

i. Parking for multi-family residential use shall comply with 1 space for each residential unit.

j. Parking replacement of 720 spaces for commuter and public use.

k. Parking for retail uses shall be provid 4 spaces for every 1,000 square feet of retail space.

l. Off-street loading shall be provided in accordance with the approved site plan submission.

6. Building Articulation and Massing

a. Multi-family building façade bulk should be broken down vertically into a façade plane. Individual facades should be defined by a change in material, color, pattern and/or texture; use of columns, pilasters, gutters or expansion joints massing; and/or size and rhythm of fenestration.

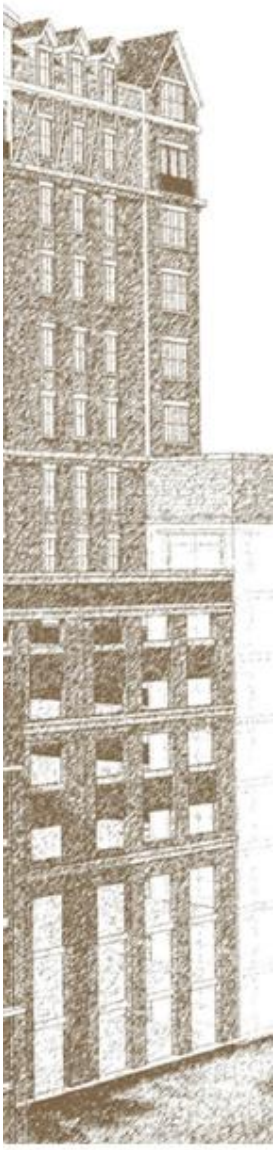
b. Multi-family buildings should be differentiated horizontally into a base, middle and top, as follows:

(i) The base should be highlighted architecturally to visually ground the building. Detailing at the base should be richer than on upper floors. For example, horizontal banding, belt course or larger window openings, as well as signage, lighting and awnings or canopies will help highlight the base.

(ii) The middle should be distinguished from the base and top by horizontal belt courses or cornices, and/or changes in material, texture and fenestration pattern.

(iii) The top floor and/or the roof line should be distinguished from the base and middle with a coping, parapet wall, balustrade and/or cornice, change in material, texture and/or fenestration pattern.

c. Roof shape and mass should relate to the multi-family building massing on the lower levels. Flat, peaked and mansard roof shapes are permitted.



7. Building Façade Detailing
   a. Windows shall occupy at least 25 percent of the façade area.
   b. A change in plane and variation in materials and/or detailing should be provided for any windowless wall area in excess of 20 feet in length.
   c. Any parking within a building that is above grade shall be architecturally screened and detailed to create an attractive and harmonious façade, as follows:
      (i) The parking façade should be designed with a similar level of detail, materials and fenestration pattern as is used on the upper-floor facades.
      (ii) Window openings should be provided in the parking façade, with a similar size, spacing, quantity and enframement as in the building mass above the parking area.
      (iii) Window openings may be open, free of glazing, but shall be covered by decorative metal grilles or grates.
      (iv) Window sizing, placement, glazing and grilles/grates should be designed to minimize headlight glare.
   d. Preferred materials for facades are brick, cultivated stone or other masonry facing; fiber cement siding or backboard; metal panels; metal, and glass. No more than three different materials should be employed as primary materials on a building façade. Within the chosen primary materials, variation in color, texture and pattern may be employed to create further distinctions. The level of materials, detailing and articulation should be consistent along all facades. Materials should be extended around corners and extensions in order to avoid a “pasted on” appearance.
   e. All major mechanical equipment located on any roof of a building should be screened from view from all vantage points with a martial harmonious to that used in the façade of the structure.

Section 2. The provisions of this Ordinance are hereby declared to be severable; should any part, portion or provision hereof be declared invalid or unconstitutional said finding shall not affect any other part, portion or provision thereof.

Section 3. In the event of any inconsistencies between the provisions of this Proposed Ordinance and any prior ordinance of the Village of Scarsdale, the provisions hereof shall be determined to govern. All other parts, portions and provisions of the Development Regulations and Zoning Ordinance of the Village of Scarsdale are hereby ratified and confirmed, except where inconsistent with the terms hereof.