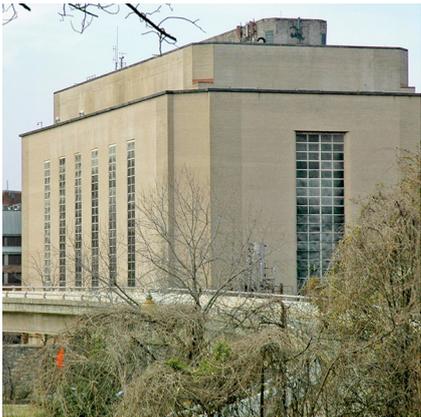


**THE BAINBRIDGE COMPANIES**



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## 19 NINETEEN CLARENDON BOULEVARD

Location: Arlington, VA  
Client: Harkins Builders  
Services: Environmental

### OVERVIEW

Langan was retained to oversee and supervise the removal of two unknown underground fuel oil storage tanks during site development. A characterization investigation followed and a total of 1,373.59-tons of petroleum-contaminated soils were excavated from the site and transported off-site for disposal. Langan is also conducting the monthly testing and monitoring of the on-site dewatering system that was installed after the site investigation.

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## HECHT WAREHOUSE REDEVELOPMENT

Location: Washington, DC  
Client: Douglas Development Corporation  
Architect: Shalom Baranes Associates, Antunovich Associates  
Services: Geotechnical, Environmental

### OVERVIEW

Langan provided geotechnical engineering services to assist in the redevelopment of the historic Hecht warehouse into a mixed-use development. Known as one of the most significant art deco commercial buildings in the region, warehouse served as the company's central warehouse from its construction in 1937 and expansion in 1948. Langan performed a series of geotechnical borings throughout the property to assess the subsurface conditions. The study also included a review of historic foundation drawings for the warehouse structure that was built in 1937 and its 1985 addition.

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## WEST HEATING PLANT

Location: Washington, DC  
Client: The Georgetown Company  
Architect: Adjaye Associates  
Services: Site/Civil, Environmental

### OVERVIEW

The proposed redevelopment of this World War II-era former coal heating plant into a Four Seasons Residences in Georgetown, is both historically and environmentally sensitive. This site was purchased from the General Services Administration as part of the government's effort to minimize the federal footprint by selling unused property. Langan provided preliminary site/civil and geotechnical services and reviewed existing historic documentation for the property. We also conducted several environmental investigations, including mercury and PCB monitoring, lead paint abatement, and asbestos testing.

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## STATION HOUSE

Location: Washington, DC  
Client: Fisher Brothers  
Architect: Hickok Cole Architects, Handel Architects  
Partner: Plaza Construction  
Services: Geotechnical, Environmental

### OVERVIEW

Langan provided geotechnical and environmental engineering services for the Capitol Place mixed-use development project. The project included the construction of 375 residential units, 20,000 SF of retail space, two levels of below-grade parking, and an interior courtyard with garden and eco-pond areas. Located near Union Station, the project demonstrates transit-oriented green development and pedestrian improvements.

### AWARDS

LEED Gold Certification

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## 3535 SOUTH BALL STREET

Location: Arlington, VA  
Client: Camden Development, Inc.  
Services: Geotechnical, Environmental

### OVERVIEW

Located in the center of the Potomac Yards development, Camden Development's residential and retail mixed-use Landbay E development is the shining star of this high-profile brownfield redevelopment project in the Crystal City area of Arlington, Virginia. The building is 12 stories in height, with three-levels below grade.

Langan performed subsurface investigations to identify both the geotechnical and environmental conditions of the fill soils used to reclaim the site area from the Potomac River basin as part of its initial development as a major freight and passenger rail terminus.

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## RISE AT FLAGLER VILLAGE

Location: Fort Lauderdale, FL  
Client: Encore Capital Management  
Architect: Cohen, Freedman, Encinosa & Associates  
Partner: CHM Structural Engineers, G.T. McDonald Enterprises  
Services: Geotechnical

### OVERVIEW

Rise at Flagler Village is a luxury apartment rental development located in downtown Fort Lauderdale. The 238-unit development consists of a 30-story tower with an attached 8-story parking garage with roof-top pool and amenity deck, a fitness center, lounge and garden. The development also includes ground-floor retail space. Langan provided geotechnical engineering services including subsurface exploration, geotechnical engineering study and foundation design recommendations, consultations for dewatering, construction administration and oversight during installation and load testing of pile foundations.

Through a value engineering collaborative effort with the design-development team, Langan was able to provide geotechnical engineering recommendations for a small-diameter, high-capacity augercast pile foundation system for support of the tower and garage. Langan carefully design the pile foundation lengths to reduce cost, allow for faster installation, and reduce the differential settlement between the 30-story tower and the 8-story parking garage.

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## 1000 MUSEUM

Location: Miami, FL  
Client: 1000 Biscayne Tower, LLC  
Architect: Zaha Hadid Architects  
Services: Geotechnical, Environmental

### OVERVIEW

1000 Museum will be the first high-rise building in the Western Hemisphere designed by Pritzker Award winner Zaha Hadid. This ultra-luxury residential building will rise 62-stories and ultimately stand out amongst its neighbors at 710- feet-tall. The project fronts historic U.S. Highway 1 in the heart of Downtown Miami. Former uses of the site included a gas station and a pawn shop. Langan provided geotechnical and environmental services in support of the project.

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## GROVE AT GRAND BAY

Location: Miami, FL  
Client: Terra Grove Communities, LLC  
Architect: BIG/NBWW  
Services: Geotechnical

### OVERVIEW

The former Grand Bay Hotel site was replaced by two 21-story luxury residential towers and a three-level podium in Coconut Grove. The varying depth to the towers' bearing layers required that augercast pile foundations vary from intermediate to deeper depths. Langan worked closely with the project design team and the general contractor to understand loading requirements and site constraints caused by former precast pile foundations from the previous development, as well as potential impacts to neighboring properties from the project construction activities. Langan's coordinated geotechnical studies were performed prior to and during demolition of the former building, which resulted in timely foundation designs for the two towers and amenities podium.

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## METROPOLITAN MIAMI

Location: Miami, FL  
Client: MDM Development Group  
Architect: Nicholas Brosch Wurst Wolf & Associates  
Services: Geotechnical, Environmental

### OVERVIEW

Metropolitan Miami is a mixed-use development covering three downtown Miami city blocks on a site previously occupied by the historical Henry Flagler's Royal Palm Hotel. The development includes five towers housing offices, hotels, and residents, as well as a supermarket, several retail spaces, and a cinema. Langan performed subsurface investigations for all structures, as well as observed and monitored the installation of test piles and load tests for all structures. Additionally, Langan performed environmental studies in order to determine the extent of petroleum and creosote impacted soils due to a former marine bulkhead that traversed the property.

### AWARDS

2011 Deep Foundations Institute Special Recognition Award

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## 1501 VOORHIES AVENUE, BROOKLYN

Location: Brooklyn, NY  
Client: AvalonBay Communities  
Architect: Perkins Eastman  
Partner: DeSimone Consulting Engineers  
Services: Geotechnical, Site/Civil, Environmental, Traffic & Transportation

### OVERVIEW

Langan provided multi-discipline engineering services for a 28-story residential tower (236 units), two-story parking garage with a recreational roof, and onsite parking located on approximately 2.3 acres. Numerous challenges arose during the project, including high building loads, strict settlement tolerances, and poor soil conditions. Langan's geotechnical engineers performed a finite element analysis to model subsurface conditions and designed a hybrid foundation system that combined different pile types extending to various depths. Our transportation team conducted a comprehensive assessment of traffic and pedestrian circulation and safety issues, and our environmental team completed a diesel fuel spill closure report. Additionally, Langan's site/civil support included site evaluation, record search, utility and zoning reviews, and a flood plain consultation.

### AWARDS

2018 ACEC New York Engineering Excellence: Diamond Award

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## 1535 BEDFORD AVENUE

Location: Brooklyn, NY  
Client: Adam America Real Estate  
Architect: Issac & Stern Architects  
Services: Geotechnical, Environmental

### OVERVIEW

Langan is providing geotechnical and environmental services related to the construction of a 10-story, 28,156-SF residential building in the Crown Heights neighborhood of Brooklyn. Langan performed a remedial investigation that identified a petroleum plume extending to the regional groundwater table, about 130 feet below grade level. Remediation included the excavation of approximately 30,500 tons of soil/fill and the removal of 23 buried tanks, as well as the design and installation of a soil vapor extraction (SVE) system incorporated into the building foundation. Langan also prepared a noise remediation plan that is being implemented to satisfy the noise 'E' requirements. Langan's geotechnical engineers completed a subsurface investigation along with a report that provided foundation design recommendations.

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## 184 KENT AVENUE

Location: Williamsburg, Brooklyn, NY  
Client: JMH Development  
Architect: SLCE Architects, LLC  
Services: Site/Civil, Geotechnical, Surveying/Geospatial

### OVERVIEW

The 184 Kent Avenue project consists of approximately 400,000 SF of residential and commercial uses and waterfront recreation space. The project involved the renovation and restoration of an existing six-story former industrial/warehouse building and the addition of a seventh story.

### AWARDS

2011 Building Brooklyn Award (Adaptive Reuse Category) - Brooklyn Chamber of Commerce

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## AVALON CLINTON

Location: New York, NY  
Client: The Dermot Company, Inc.  
Architect: FXCollaborative  
Services: Site/Civil, Geotechnical, Environmental

### OVERVIEW

Langan provided engineering services for the 677,000 SF, 600 unit residential mixed-use development in the Clinton redevelopment zone. Avalon Clinton consist of two 24-story towers spanning over the depressed tracks of the Amtrak Empire Line and abutting three NYC Department of Transportation (NYCDOT) bridges which created numerous engineering challenges. The soil and groundwater contamination originating from a former gas station on one of the parcels presented additional site challenges.

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## ARO - 242 WEST 53RD STREET

Location: New York, NY  
Client: Algin Management  
Architect: CetraRuddy Architecture  
Partner: Tectonic  
Services: Site/Civil, Geotechnical, Surveying/Geospatial, Environmental

### OVERVIEW

242 West 53rd Street is a 60-story residential tower with two cellar levels in Manhattan's Theater District. Langan is providing geotechnical, site/civil and environmental engineering services throughout the project and completed a topographic survey for the property. Langan is also providing special inspection services for geotechnical and environmental aspects during construction. We provided oversight for soils handling and disposal of contaminated soils and assisted in securing closure for environmental cleanup efforts.

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## THE ELEVENTH (76 ELEVENTH AVENUE)

Location: New York, NY  
Client: HFZ/Six Senses Joint Venture  
Architect: Bjarke Ingels Group (BIG)  
Partner: WSP  
Services: Environmental, Geotechnical, Site/Civil

### OVERVIEW

Langan provided environmental, geotechnical, and site/civil engineering services for the mixed-use redevelopment of a 1.8-acre former manufactured gas plant (MGP) site in Manhattan's Chelsea neighborhood. We provided engineering services in support of obtaining a Certificate of Completion for this project, which was remediated under the New York State Brownfield Cleanup Program.

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## VIA 57 WEST

Location: New York, NY  
Client: The Durst Organization  
Architect: Bjarke Ingels Group  
Partner: Thornton Tomasetti, Hunter Roberts Construction Group  
Services: Geotechnical, Site/Civil

### OVERVIEW

Regarded as a cross between Copenhagen-style residential courtyards and a New York City skyscraper, this mixed-use, 38-story residential building in Midtown West includes 709 residential units and ground floor retail space. A massive outdoor courtyard, cut into the center of the building, adds to the structure's unique pyramid-like shape. Langan performed extensive geotechnical and site/civil work including design of a bioswale; in addition, Langan produced a Stormwater Pollution Prevention Plan.

### AWARDS

2017 ArchDaily Building of the Year  
2017 Urban Land Institute Awards for Excellence in Development: Housing Development Finalist  
2016 Engineering News Record New York, Best Projects Awards: Residential Hospitality

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2016 New York Times, Best Architecture in New York

2016 Society of American Registered Architects New York, Excellence in Residential Design  
Innovation Award

2015 6SQFT Building of the Year

2012 American Institute of Architects New York, Design Merit Award

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## CELADON

Location: Elizabeth, NJ  
Client: Tem Landing Development, LLC  
Architect: Vijay Kale Architects, PC, Metropolitan United Studio, PLLC  
Services: Site/Civil, Geotechnical, Environmental, Traffic & Transportation, Surveying/Geospatial, Natural Resources & Permitting

### OVERVIEW

Langan provided full engineering site design, environmental, and natural resources permitting services for the Celadon redevelopment project in Elizabeth, Union County, NJ. The redevelopment project proposes to construct 5 to 7 million SF of mixed-use development within low, mid, and high-rise buildings on a 31-acre former municipal landfill adjacent to the Newark Bay. Langan implemented such solutions as flexible building connections, rock anchors and tie-backs, epoxy-coated utilities, and soil surcharging coupled with deep dynamic compaction.

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## PRINCETON JUNCTION TRANSIT-ORIENTED DEVELOPMENT

**Location:** West Windsor, NJ  
**Client:** InterCap Holdings  
**Services:** Site/Civil, Surveying/Geospatial, Landscape Architecture, Geotechnical, Natural Resources & Permitting

### OVERVIEW

Langan professionals worked with a team of planners, architects, traffic engineers, and financial and public relations consultants to create a plan for a mixed-use transit-oriented development. In addition, the team was tasked with creating a visioning plan for a potential off-site Main Street that flanks the train station in West Windsor, New Jersey. The conceptual design for the site and streetscape alternatives was presented to community residents and stakeholders over a series of meetings to provide input during the planning process. Langan was responsible for the design of streetscapes, public spaces, trail connections, innovative stormwater management, roadway design and site lighting for the conceptual design.

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## LA ROCHELLE

Location: New Rochelle, NY  
Client: Newman Architects  
Partner: DSF Group  
Services: Site/Civil, Landscape Architecture, Traffic & Transportation, Surveying/Geospatial

### OVERVIEW

La Rochelle is transit-oriented residential development directly adjacent to the train station in downtown New Rochelle, New York. The project includes the renovation of an existing 25-story residential building, a new outdoor courtyard and amenity space, the design of a new roadway and streetscape design as well as traffic engineering to re-configure vehicular patterns. The Langan civil and traffic engineering teams designed the streetscape to meet the needs of the City of New Rochelle as a pedestrian-friendly entrance to the city as one exits the train. Traffic-calming methods such as speed tables and enhanced cross-walks were employed in order to slow down vehicles for a safer experience. Our Landscape Architecture + Planning group worked closely with Newman Architects and DSF to design the outdoor courtyard spaces in order to better suit the TOD community and upgrade the existing layout.

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Credit: Bruce Damonte

## AVA - 55 NINTH

- Location: San Francisco, California  
Client: Avalon Bay Communities  
Architect: SCB (Soloman Cordwell Buenz)  
Services: Site/Civil, Environmental, Geotechnical, Earthquake/Seismic

### OVERVIEW

AVA 55 Ninth is a 17-story residential building with two underground parking levels in the SOMA district. The building's northern portion has two below grade parking levels while the remaining development has one below grade parking level. Excavations extend up to 25 feet below existing street grade. Amenities include a fitness center and a 10,000 SF courtyard. Langan performed multi-disciplinary engineering services from schematic design through construction. We worked closely with the client and design team to come up with effective and economical foundation, shoring, seismic design, and dewatering systems. The San Francisco Public Utilities Commission (SFPUC) approved our Stormwater Control Plan and the project became one of the first to comply with the City of San Francisco Stormwater Management Ordinance.

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