

ENGINEERS &
ARCHITECTS

**O&S: Designing Tomorrow,
Engineering Excellence –
Your Blueprint for Success**



O&S is a full-service architecture and engineering consulting and design corporation. We are an MBE firm with over 100 Engineers and Architects.

We have provided architectural and engineering services to both public and private entities around the country for hospitals, residential buildings, office parks, schools, airports, industrial buildings, shopping centers, and warehouses.

Our services include building envelopes, façade restoration, façade law inspections, roofing, windows, plazas and public spaces, parking structures, waterproofing, fire protection, lighting design, paving and site civil restoration, HVAC assessments, energy studies and retro-commissioning.



Multi-Disciplinary

Structural, Architectural, Mechanical, Electrical, Plumbing, HVAC & Civil



Satisfied Clients

Serviced Over 1,200 Clients of Both Private and Public Sectors



Industry Leading Execution

Performs A/E Services on Over 200 Projects Per Year with Construction Value Over \$150 million



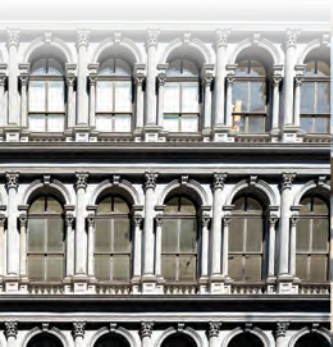
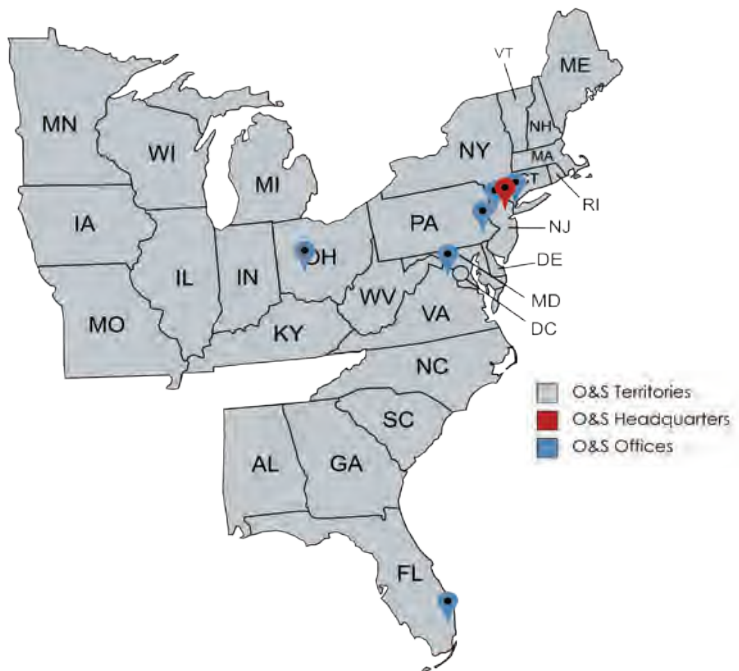
Sustainability

A leader in the fields of sustainability and climate change resiliency



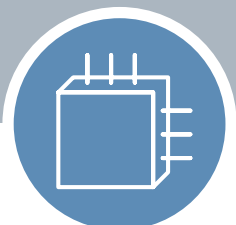
Proven Reputation

"Their diligence, energy, and consistency as our project engineer also made them a standout, so we recommend them very highly."





OUR SERVICES



Structural

- Parking Structure Design & Restoration
- Structural Condition Assessments
- Façade/Structural Inspections
- Transition Studies
- Reserve Studies
- Construction Cost Estimating
- Vertical Expansion
- Seismic Retrofit
- Forensic Analysis



Architectural

- New Building Design
- Parking Structure Design
- Interior Design
- Curtain, Window Wall & Window Replacement
- Zoning Analysis
- Expansion/Additions
- Owner's Agent
- Peer Review
- Lighting Design
- Wayfinding Signage



Civil

- Paving & Parking Lot Design & Rehabilitation
- Stormwater Quality & Quantity Analysis & Management Design
- Hydrology, Hydraulic Studies & Modeling
- Drainage Improvements
- Site Development, Code Analysis & Permitting
- Soil Erosion and Sediment Control Design & Permitting



Electrical

- Solar (Photovoltaic Cell) Design
- Security & Intrusion Alarm Systems
- AC & DC Motors and Motor Control Centers
- Voice & Data Communications Systems
- ASHRAE Lighting Design
- Computer Rooms & UPS Systems
- Emergency Generators
- Lightning Protection and Grounding



HVAC

- Automatic Temperature Controls (DDC)
- Energy Conservation
- Pneumatic Temperature Control
- Cooling Tower
- Air Conditioning
- Refrigeration
- Noise and Vibration
- Heating Systems (Steam & Hydronic)
- Steam Pressure Reducing Valve System



Plumbing/FP

- Sanitary, Vent & Storm Piping
- Compressed Air
- Clean Rooms
- Laboratory Piping
- Gas Fuel Design
- Sump Pumps
- Specialized Fire Suppression Systems
- Wet & Dry Sprinkler Systems
- Pumps, Standpipes & Hydrants

Knowledge of Local, State & Federal Building Codes

O&S is familiar with all local building codes and Federal building alterations requirements having worked with over 1,100 clients nationwide, including local, state, and federal government agencies; schools, universities, and industrial and institutional clients; parking authorities, healthcare providers, developers, office properties, and attorneys. In addition to working with cities, O&S has handled work performed with the following County, State, and Federal entities:



- United States Government
- Office of Thrift Supervision/ Department of Treasury
- Reagan Building
- Commerce Building
- EPA West Building
- US Army – West Point
- US Airforce
- Cannon Air Force Base (NM) & Tinker Air Force Base (OK)
- US Department of Veterans Affairs (Hospitals throughout US)
- National Institute of Health
- Albany Parking Authority (NY)
- Hoboken Parking Authority (NJ)
- New Brunswick Parking Authority (NJ)
- Springfield Parking Authority (MA)
- Philadelphia Parking Authority (PA)
- Pittsburgh Parking Authority (PA)
- Lancaster Parking Authority (PA)
- Springfield Parking Authority (MA)
- City of Yonkers (NY)
- New Smithtown (NY)
- City of New Rochelle (NY)
- Glassboro Township (NJ)
- City of Morristown (NJ)
- City of Trenton (NJ)
- Township of Cranford (NJ)
- City of Alexandria (VA)
- New York City Housing Authority (NY)
- Nyack Housing Authority (NY)
- Phillipsburg Housing Authority (NJ)
- Asbury Park Housing Authority (NJ)
- Atlantic City Housing Authority (NJ)
- Newark Housing Authority (NJ)
- Irvington Housing Authority (NJ)
- Morristown Parking Authority (NJ)
- Hightstown Housing Authority (PA)
- Montgomery County Housing Authority (PA)
- Housing Authority of City of Elizabeth (NJ)
- Hialeah Housing Authority (FL)
- Morris County (IDIQ Elevator Consulting) (NJ)
- Mercer County (NJ)
- Union County and Montgomery County (PA)
- Maple Heights City School District (OH)
- Seneca County Museum (Tiffin, OH)
- McAllen Independent School District (McAllen, TX)
- Georgetown College (Lexington, KY)



240 Centre Street

Designed by the architectural firm of Hoppin and Koen, the former New York City Police Headquarters building at 240 Centre Street was built between 1905 and 1909 and stands today as one of New York City's most important examples of the Edwardian Baroque style and of the Beaux-Arts principles of design. Being in Tax Map Block 472 and Lot 31, it was designated as a Landmark Building of New York City in 1978. The building structure is five stories high with two cellar levels.

O&S was retained to provide a physical condition assessment of the exterior façade. The observed conditions were evaluated to the extent required to develop a conceptual repair program and estimate the associated probable costs.

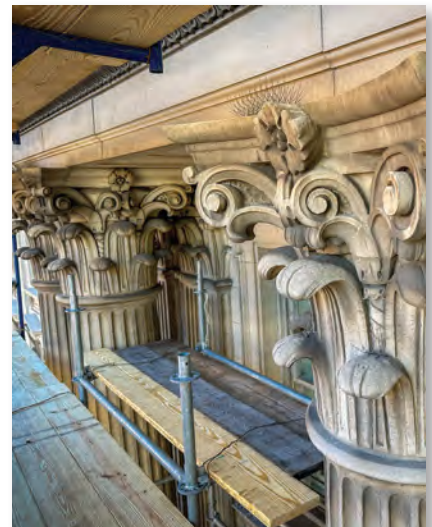
Façade Physical Condition Assessment



Edwardian-
Baroque Style



Former Police
Station



Constructed in 1905



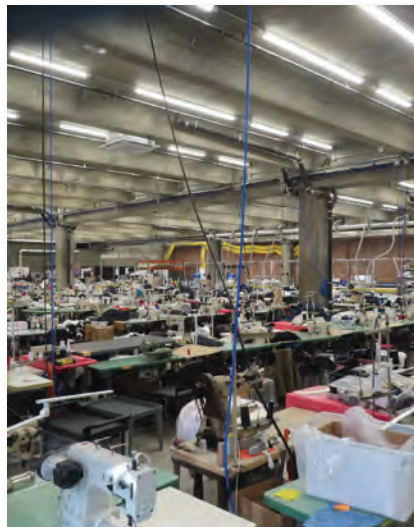
Ferrara Manufacturing Garment Building

O&S was sought to design the new manufacturing building. Using the One Stop Shop concept, we provided Architectural, Structural, and MEP/FP design of a new 4-story garment manufacturing building in Queens, NY. Ferrara is a domestic manufacturer with contracts with DoD, GSA, and U.S. Olympic Team. Design includes offices, manufacturing areas, parking, and a roof deck for gatherings and fashion exhibitions. Space planning required the seamless integration of workers and automated production.

Envelope & Building Improvements



New Design



Garment Manufacturing



Roof Deck Design



Lincoln Center for the Performing Arts

O&S was contracted to investigate persistent leaks in an underground pipe access tunnel from the Central Mechanical Plant to the Juilliard School, requiring state-of-the-art solutions for water infiltration. The project, involved concrete repairs and gel injection while maintaining occupancy. Additionally, O&S handled façade inspections and restorations for the Lincoln Center Rose Building and the Juilliard School Building, addressing issues like granite, limestone, and travertine repairs, with projects costing \$3 million and \$6.8 million respectively, and phased construction to meet compliance and owner requirements.

Façade & Tunnel Repair



Juilliard School
Façade Repair



Tunnel
Waterproofing



Rose Building
Façade Repair



105 Madison Ave

The owners, A and R Real Estate, Inc., desired to comply with the New York City Façade Inspection Safety Program (Local Law 11/98) regarding exterior wall inspections for buildings over 6 stories. A Cycle 9 FISP observation was performed by another A/E firm in accordance with the requirements of the NYCDOB Local Law 11/98 to identify the condition of the exterior walls. The previous A/E firm left the project after bidding and a GC was selected. O&S was then selected to continue the work by reviewing the previous observations, file the project with the NYC DOB, provide construction administration services, perform close-up observations, evaluate the existing wall construction, and adjust quantities of repair and repair methodologies as necessary.

FISP (Local Law 11/98) Compliance



Terra Cotta



Masonry



Windows



New York City Housing Authority

Over 13 years, O&S has serviced over 300 buildings, addressing exterior wall repairs, roofing, hazardous materials testing, and more, significantly improving building conditions and energy efficiency for NYCHA's low-income residents. In 2010, NYCHA engaged O&S for a 5-year IDIQ contract to provide AE services. The first task involved restoring façades and roofs of 80 buildings, ranging from 5 to 25 stories, with various façade systems. The scope included inspections, cost estimates, specifications, drawings, and construction observation, with strict adherence to HUD requirements. Efficient procedures were developed to manage the large volume of work, leading to subsequent 5-year contracts in 2016 and 2019.

Façade Restoration & Building Improvements



Serviced Over 300
Buildings



Multiple 5-Year
Contracts



Low-Income Housing



101 West 56th Street

O&S worked with SP+, one of the world's largest parking garage operators, on the Carnegie House parking garage located at 101 West 56th Street. We provided an assessment for Local Law 126 and filed the report with the NYC Department of Buildings. Some of the observed conditions included column and beam encasement spalls, overhead concrete slab spalls, foundation wall spalls, top-side floor spalls (tripping hazards), debonded waterproofing membrane, and CMU block replacement and repointing. We also provided a leak investigation from the building's boiler room and Duane Reed above.

After providing the report, we drafted the construction documents to address the repairs, bid to contractors, and we are currently providing construction administration for the repairs.

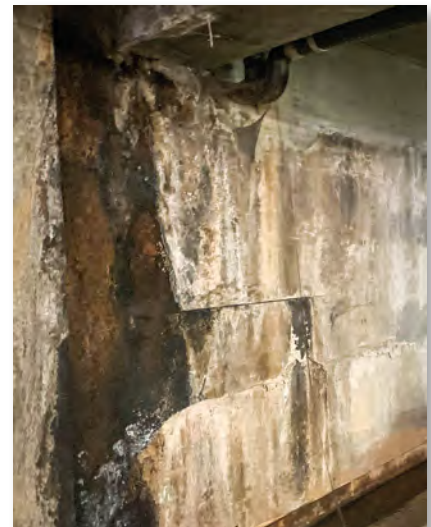
Local Law 126 Parking Garage Assessment



Beam
Encasement Spalls



Water Ponding



Foundation Wall
Leakage



Richmond University Medical Center (RUMC)

RUMC chose O&S to provide a condition estimate of the campus, develop a construction cost estimate, produce construction documents, and provide bidding and construction administration services. O&S designed impact-resistant windows, doors, and curtain walls in accordance with FEMA resiliency standards that exceed NYC code standards to the Main Administration building, Lorraine Bernard (Main Hospital Ward) building, Seton, Spellman, and Cook buildings. In addition to wind resiliency, O&S also designed a stiffening system around the existing windows of Seton to allow them to meet hurricane-resistance requirements, replacement of air conditioning units at fire-stopping at the Lorraine Bernard curtain wall, and repairs to masonry around openings at all buildings.

Medical Building Façade Replacement



590-Spaces
7-Stories



Elevator Design



480V/277V, 3Ph, 4W
Power



JFK Airport, Connie Cocktail Lounge

The project centered around the magnificent transformation of a vintage Lockheed Constellation “Connie” L-1649A Starliner, one of only four remaining worldwide, into a captivating cocktail lounge adjacent to the iconic TWA Hotel at JFK Airport. The meticulous restoration of the cockpit and the navigation system pays homage to the era’s industrial marvels, while a backlit reveal showcases the plane’s structural essence along the entire cabin circumference.

Our team of mechanical, electrical, plumbing and fire protection design engineers were responsible for the design of complete fit-out and utilities infrastructure, including power, water and sanitation, seamlessly integrated with the services provided by the TWA hotel.

MEP/FP & HVAC Design



Showcase of Cabin Structure



Lockheed L-1649 Starliner



Restoration of the Cockpit



125 Broad Street Building

Completed in 1970, this 40-story LEED Certified Silver curtain wall building was constructed adjacent to the existing NYP4 building in lower Manhattan and is home to the law offices of Sullivan & Cromwell and the American Civil Liberties Union.

Due to the location, 125 Broad Street is subject to high wind loads during wind events. The building is designed to move when subject to wind load. The adjacent NYP4 building is more rigid and does not move when subjected to wind loads. A wind/rain event caused 125 Broad Street to bend and twist into the NYP4 building. The impact damaged the curtain wall, dislodging two vertical mullions and shattering glass panels. The owner came to O&S to provide the necessary scope of work, probable construction costs, and ensure the insurance company met their obligations.

Hurricane-Resistant Weatherproofing



Curtain Wall Damage



Leak Investigation



Window Replacements



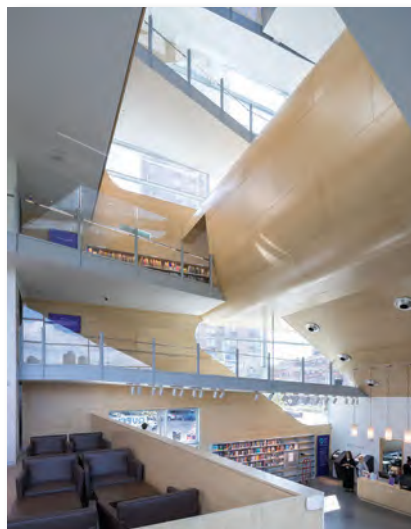
Hunterspoint Library

The project consists of the new construction of a four-story public library, approximately 21,000 SF, located in Long Island City, NY. O&S design included low flow plumbing fixtures, utilizing recycled content and regional materials when possible, minimized construction waste generated, and installed energy efficient HVAC equipment, controls and LEED design. The facility is comprised of offices, library spaces, meeting rooms, workrooms and related spaces such as restrooms, storage, lobbies, kitchenettes, and equipment rooms. The owner's goal is to utilize energy efficient measures to reduce electrical energy use and showcase environmentally friendly measures and building design aspects.

MEP/FP & HVAC Design



Recycled Materials



LEED Silver Certified



AIA NY Design
Award, Merit Award



170 Amsterdam Ave

This new high-end residential building with 215-unit luxury rental apartments features a unique exoskeletal structural framework. Amenities include a fitness center, playroom, billiards, library, game room, and a parking garage. 170 Amsterdam is LEED certified by the USGBC.

O&S was responsible for the design of HVAC, Electrical Power, Plumbing, Fire Protection Systems, and LEED certification services.

Awards:

AIA NYS Citation for Design (2015)

SARA | NY Design Award (2016)

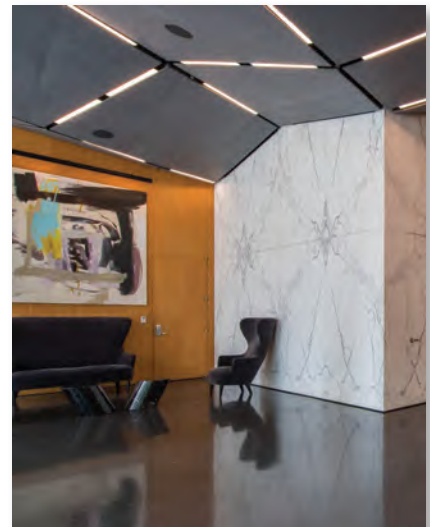
MEP/FP & HVAC Design



LEED Certified



230,000 SF



215 Luxury
Apartments



393 West End Avenue

This project is a conversion and renovation of an existing 17-story multifamily residential rental building into luxury condominiums. The renovation included new amenity spaces including a Lounge, Club Room, Tween Room, Kid's Room, Fitness Room, and Yoga Studio. Also included in the renovation is the expansion of the existing penthouse.

O&S Associates provided the design of HVAC, Electrical, Plumbing, and Fire Protection Systems for the base building infrastructure, as well as fit-out design for the residential condominium units and amenity spaces.

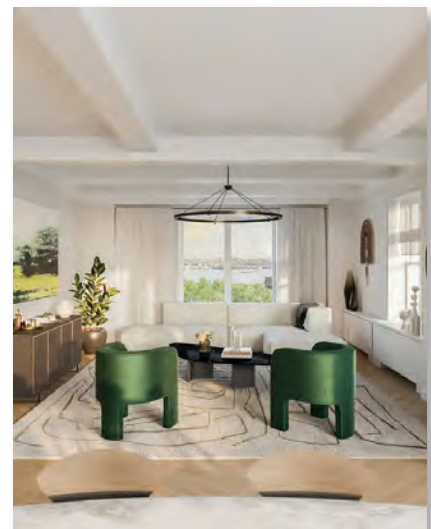
MEP/FP & HVAC Design



110,000 SF



Conversion &
Renovation



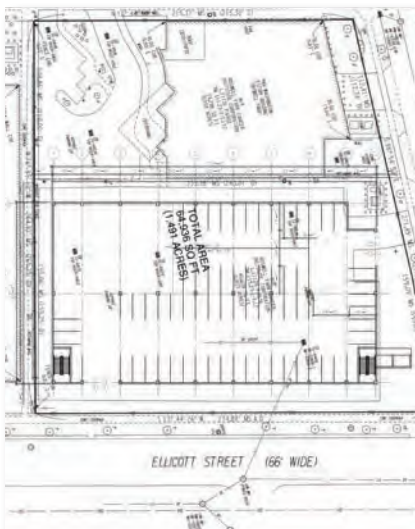
Luxury
Condominium



Roswell Park Cancer Institute West Parking Garage

O&S is the Prime Designer for a 100-year life, 590-space, 7-story, post-tensioned employee parking garage at the Roswell Park Cancer Institute. The garage is located on an approximately 1.5-acre site within Roswell Park in the heart of the 100-acre Buffalo Niagara Medical Campus. The garage contains several architectural and sustainability features including covered bike parking and greenscreens that conceal the precast concrete exterior. In addition to the greenscreen, the architectural façade is broken up with openings made possible by the use of vehicular barrier cables in parking areas and glazing in pedestrian areas. A hydronic snow melt system is designed for the roof to allow for parking during inclement conditions that frequent the Buffalo area.

Healthcare Parking Garage



590-Spaces
7-Stories



Elevator Design



480V/277V, 3Ph, 4W
Power



Buena Vista Parking Garage and Office Space

O&S, in collaboration with GRAD Associates, designed and supervised the construction of the 602-car Buena Vista Parking Structure and 5,000 square feet of office space for the City of Yonkers, achieving a 14% project savings. The \$9 million facility features long-span, column-free bays and an exterior façade that blends with the historic waterfront area. O&S also provided value engineering to reduce construction costs by \$1.5 million.

O&S was retained 5 years later to assess the feasibility of expanding the garage by one or two levels, potentially increasing capacity to 854 spaces, while ensuring the facility remains operational during construction.

Mixed-Use Parking Garage



Brick Masonry Inlay
Precast Concrete



Reduce cost by
\$1.5 Million



Revenue Control
System