

SRBR ENGINEERS

MEP Consulting Engineers since 1959

OFFICE BUILDINGS

Corporate Office Properties Trust – National Business Park, Buildings 410, 420, and 430, Annapolis Junction, MD

This is a group of Class A, mid-rise office buildings that offer a total of over 380,000 square feet of speculation office space featuring secure communication lines, conveniently located near Fort Meade and NSA Headquarters. SRBR provided complete MEP design that included HVAC systems consisting of packaged rooftop VAV units with energy recovery to meet high efficiency requirements. Special services included the completion of all MEP documentation for LEED Certification. All three buildings are anticipated to achieve Gold Certification. Buildings 410 and 430 completed construction in 2011 and building 420 is projected for completion in 2013.



LABORATORIES

National Institute of Standards and Technology (NIST), Building 222, Gaithersburg, MD

The scope of this project was to convert and completely renovate the existing four story laboratory building totaling 150,000 square feet of space. The originally designed and built laboratory building was converted to office space in the first phase of design and construction. The first floor office spaces were re-converted to Laser Laboratories in the second phase of the project. SRBR designed the HVAC, plumbing, electrical power, lighting, telecommunications and fire alarm systems for the project. Laboratory fume hood exhaust and high efficiency (HEPA) air filtration were designed by SRBR. All field surveys were done by the designers including determining new routes for the ductwork and electrical distribution conduits. SRBR recommended a completely new HVAC concept for the building which, significantly reduced NIST's costs. The project had a very short design schedule and the design included working with the contractor on a design/build basis to meet the critically important completion schedule.

MEDICAL FACILITIES

Healthcare for the Homeless, Baltimore, MD

The project included the programming, budgeting, design and construction of a new 3 story, 51,000 square foot medical office building and medical clinic for the Health Care for the Homeless, a 501(c)3 organization in Baltimore. This organization provides no cost medical care and services to the homeless of Baltimore City and many other areas throughout Maryland. The building incorporated many sustainable design features, including a green roof, water-source heat pump heating/air-conditioning equipment, high efficiency lighting and controls, refrigerant management for cooling, low-flow plumbing fixtures, increased building ventilation, and bacteria control using ultraviolet lamps in the ductwork.



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RESIDENTIAL

The Palisades, Towson, MD

This 400,000 SF residential high rise facility included 357 apartment units configured with one and two bedroom floor plans. The building was constructed to 18 stories over two levels of parking garage with several levels of automated parking to accommodate up to 514 vehicles. The fifth floor features an open plaza with outdoor pool. The mechanical system was designed as a four pipe chilled and heating water central plant system.



K-12 EDUCATIONAL FACILITIES

Dr. James Forrest Career & Technology Center, St. Mary's County, Maryland

St. Mary's Dr. James A. Forrest Career & Technology Center is a multi-discipline educational facility focusing on the development of a wide variety of vocational skills. The project consisted of the redevelopment of approximately 75,000 SF of existing space with the phased addition of 53,200 SF of new space for a combined new building of 129,000 SF. In addition to the expansion and redesign of traditional departments such as carpentry, welding, masonry, automotive technology, allied health, and electronics, new areas of study like manufacturing technology, aviation technology, computer networking, hospitality, and precision machining were provided with state of the art teaching facilities. Many of these new areas of study are critical to providing a future skilled workforce for both governmental and private industry employers. The facility is designed to allow for cluster and group teaching among focused areas of study (such as automotive technology, building trades and computer technology), while creating a physical positioning that encourages "cross pollination" between loosely related disciplines (such as sheet metal and automotive refinishing).



SENIOR LIVING

Ingleside at King Farm, Montgomery County, Maryland

This \$98 million mid-rise Continuing Care Retirement Building is a seven story health care and independent living building and terrace built over an underground parking garage. SRBR designed the mechanical, plumbing, and electrical systems for the landmark project. The central water source heat pump system captures the best of life cycle costs for the project and gives the building occupants and staff a pleasant system to experience and maintain. All other MEP systems typical of CCRC's, including central hot water heating, telecommunications systems, emergency call, security, fire alarm, and power distribution were designed under SRBR's scope of work.



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MILITARY

The Basic School at Quantico USMC Base, Quantico, Virginia

The scope of this specific project is the design/build of a 70,000gsf instructional building. The building includes four large lecture halls, classrooms, sand table room, offices and support spaces. The building incorporated many sustainable design features, including geothermal heat pumps, solar domestic hot water, 31% energy savings below ASHRAE 90.1, high efficiency lighting and controls, refrigerant management for cooling, low-flow plumbing fixtures and increased building ventilation. This project also includes energy enhancements that include ground source heat pumps, photovoltaic array, LED lighting and will be LEED Gold Certified.



In addition to this training facility, SRBR completed design of a New Dining Facility and Barracks as part of an ongoing construction initiative to replace original facilities built in the 1950's. All of the new facilities were designed to meet high energy efficiency and sustainable standards.

RETAIL

Metropolitan Shops at Prince George's Station, Hyattsville, Maryland

This facility is a multi-story retail center with a parking garage adjacent to an existing Washington, DC subway station. Special features of the project include walkway access to the adjacent WMATA station, new residential development on the neighboring project and a pedestrian bridge to connect to existing retail facilities across the highway. The new retail structure included a health and fitness center with an indoor pool. This project was an early example in the design of combining retail, residential and public transportation in a previously commercial property.



HIGHER EDUCATION

Howard University Infrastructure Improvement, Howard University, Washington, DC

The project scope was to survey ten buildings for renovation, prepare a comprehensive scope document, design the renovation of the mechanical, electrical and plumbing (MEP) systems for the buildings and administer the construction of the renovations. The entire project took four years to complete and was conducted while the buildings were occupied. The demo and design documents were prepared to reflect construction phasing and sequencing. SRBR designed new mechanical, electrical, plumbing systems and was the prime Architect/Engineer on the project, retaining the services of the architect and structural engineer. The new design was comprehensive including complex occupied renovations under phased construction. SRBR provided project management and coordination between all design disciplines.



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HOSPITALITY

Holiday Inn & Suites - 17th Street, Ocean City, Maryland

The hotel is a new 14-story high-rise concrete structure with a central heating and cooling plant. The building has 225 guest suites, a 4-story atrium, one indoor swimming pool, two outdoor pools, a restaurant, one commercial kitchen, a meeting room, a conference center, administrative offices and other amenities associated with the hospitality industry.

The project construction was phased to permit accelerated guest room occupancy and initiate revenue to the owner as quickly as possible. An existing two-story frame hotel was razed for this building. Each guest suite includes a bedroom, bathroom, living room and a small kitchen/pantry area. Individual rooms utilize a four-pipe fan coil unit for heating and cooling originating from the building's central plant. Redundancy of HVAC equipment was a design requirement. Noise criteria were also used as a basis for equipment selection.

