



CASE STUDY

1901 L Street
Washington, DC

CHALLENGE

1901 L Street is located in the heart of DC's Central Business District. On a prominent corner of 19th and L Street, the site places tenants in an ideal location.

The plans to transform 1901 L Street into its current, state-of-the-art, Class A office space called for extensive renovation and upgrade.

The generous floor-to-ceiling heights the building exhibits today were not possible with the existing HVAC system, which required significant ceiling plenum height.

The building owner, Meridian Group, aimed to achieve an aesthetically pleasing space, outfitted with high-end finishes and amenities while meeting the demand for sustainable, WELL Building Certified and LEED Certified buildings in DC.

SOLUTION

Boland joined a team of architects, engineers, contractors, and consultants assembled to design and implement an HVAC solution to meet the needs of owners and tenants.

Boland recommended a Dedicated Outdoor Air System (DOAS), which included: two Trane chillers, two dedicated outdoor units, two Viessmann boilers, approximately 150 Trane CoolSense™ VAV Terminal Units, and a Trane Tracer SC Building Automation System (BAS).

The CoolSense™ system design, with its low-profile fan-powered air terminals and reduced-size ductwork, was a key to this project. The increased floor-to-ceiling height this system enabled significantly adds to the building's luxurious and airy atmosphere.

The engineered system solution also eliminated the need for floor-by-floor air handling units. This allowed the building to vertically expand, adding on three additional floors while utilizing the existing eight-story concrete frame.

The building was carefully designed for LEED Gold Certified Status and WELL Building Certification. Some of these features include the new Dedicated Outside Air System (DOAS) HVAC system that reduces energy consumption when compared to a traditional VAV system.

RESULTS

1901 L Street successfully achieved LEED Gold Certification, in addition to WELL Building Certification, the first of its kind in DC.

With 100% outside air circulating throughout, plus sustainable materials used throughout, this Class A office building now ranks as one of the healthiest, most energy efficient, and most luxurious buildings in Washington, DC.

