

Park Place Corporate Center One

1000 Commerce Drive, Findlay Township Pennsylvania, 15026

Connor Blood | Senior Thesis Project | Mechanical Option



Project Location

Pittsburgh, PA

Owner

DiCicco Development

Architect

WTW Architects

General Contractor

Mellon Stuart

MEP&FP Engineer

CJL Engineering

Structural Engineer

WTW Architects



Project Information

Park Place Corporate Center One was purchased by DiCicco Development in December of 2009. The building was originally constructed in 1982 and is currently undergoing an HVAC renovation due to the change in ownership.

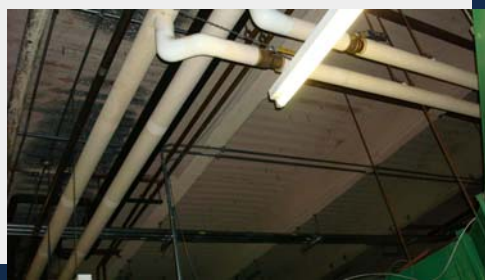
With 99,281 square feet of five occupiable floors, Park Place One is primarily an office building designed for tenant fit out that rests slab on grade.



Mechanical

Two Trane packaged rooftop units (seen to the left are existing to be replaced during renovation) serve the 240 ton load that the building is estimated to have. The interior of the building was fitted with variable air volume

valves that are appropriate for future tenant fit out. These valves allow for the expansion of a variable air volume system to meet the perimeter and interior loads of the building. An interior gas fired boiler is located in the building penthouse and is meant to meet all winter heating loads.

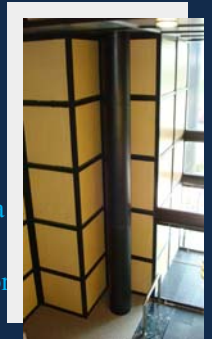


Structural

Beneath the slab on grade first floor lies concrete column footings. These footings support a vast array of steel columns, girders, and beams above. The structure is a steel moment frame with an exterior curtain wall.

Architecture

Park Place One was designed to resemble contemporary office building architecture of the early 1980's. Wrapped completely in a glass façade, the building is completely reflective from the exterior with black mullions separating large pains of grey glass. The interior is nothing short of modern architecture as seen above. The exterior provides a wealth of light to the interior office spaces.



Electrical/Lighting

Power is brought into the building from the north, service oriented side of the building. It is stepped down to 480 and 208 volt, three phase power by a transformer in the electrical room. From there, power is it distributed to a panel-board rated for 1600 Amps.



The lighting in the occupied spaces is handled completely by T8 fluorescent lamps in ceiling recessed luminaires, a typical layout for office buildings.