

OFFICE BUILDING EXPERIENCE

Accident Fund/Blue Cross Blue Shield Building, New Building and Major Renovations, Lansing, Michigan

A 10 story high rise building, the current Blue Cross Blue Shield Building was originally designed for the Accident Fund Headquarters in 1986 with Matrix principals acting as Lead Mechanical and Electrical Designer. Major MEP renovations were executed by Matrix Consulting Engineers for seven floors from 2002 thru 2008 including Data Center relocation and expansion, 8th Floor Conferencing Center, dedicated outside air system, emergency power systems, HVAC equipment replacement, and lighting upgrades. Matrix also provided a complete MEP building renovation for Blue Cross Blue Shield conversion in 2010 with completion in 2011.

Key Elements in the latest Scope of Work:

- Upgrade and replacement of HVAC systems
- Plumbing renovations for core toilet rooms
- Lighting systems upgrade
- Data wiring and new server room
- Power distribution reconfigured rooms and work stations
- Conversion and expansion of the Building Automation Systems
- Commissioning of new and existing HVAC and lighting systems
- Electrical coordination study and arc flash labeling

General Office Building, Secondary Complex, Dimondale, MI

255,000 square foot project to upgrade the mechanical and electrical infrastructure for the 3 story building. HVAC system consisted of replacing and rezoning 175,000 square feet of office space with new VAV boxes to match the new floor layout. The heating system central equipment was completely replaced, controls valves were replaced in both the heating and chilled water systems and new air handlers were installed. The HVAC system was also installed to eliminate the pressure problems that were occurring in the building. Matrix Consulting Engineers, Inc. responsibilities also included plumbing, fire protection, lighting, power, fire alarm and data.

State of Michigan, Secondary Complex, Operations Center, Dimondale, MI

340,000 square foot project to convert existing warehouse to a two-story office building. HVAC systems consist of VAV with 12 air handlers utilizing central plant chilled water and high-pressure steam. Building is designed with an 8000 square foot computer room and provisions for future mainframe computer room of up to 24,000 sf. Matrix Consulting Engineers, Inc.'s responsibilities included all HVAC, plumbing, fire protection, lighting, power, fire alarm, and raceway systems for data, security, and telecom systems.

USPFO Readiness Center, Lansing, MI

120,000 square foot project which completely retrofits the mechanical and electrical systems of an existing three-story state office building into a multi-military unit readiness center for the Michigan Air National Guard, and Homeland Security. HVAC systems consist of four VAV air handlers utilizing central chilled water from a salvaged centrifugal chiller and new high efficiency condensing boiler for heating and domestic hot water. Six design alternates were included in the project to allow conformance to a strict budget. Matrix Consulting Engineers, Inc.'s responsibilities included all HVAC, plumbing, fire protection, lighting, power, fire alarm, technology, and raceway systems for data, security, and telecom systems, and data wiring.

State of Michigan Mason Hall

The Steven T Mason Building project consists of renovating an eight story building plus basement area that is approximately 253,000 square feet gross area. The HVAC, plumbing, electrical, and fire protection design consisted of evaluating the existing systems to determine the condition of the associated equipment. The mechanical and electrical systems were replaced and upgraded both due condition age and also to assist in achieving LEED silver. The design was performed in Revit with clash detection performed and adjusted as needed.

State of Michigan Constitution Hall

Project consists of renovating-7 stories plus Atrium totaling approximately 500,000 square feet. Mechanical and electrical systems were modified, changed and added to accommodate major floor plan changes to many areas of the building. The design was performed in Revit with clash detection performed and adjusted as needed.

Dart Container Building 5 Office

Project consists of designing a new 150,000 square foot office space inside an existing warehouse. The project will include complete new mechanical heating, cooling, ventilation, kitchen, plumbing, lighting, power, and emergency generator. The design was performed in Revit with clash detection performed and adjusted as needed.