



CHALLENGE

CONSTRUCTED IN 1871, THE ORIGINAL WATER WORKS BUILDING WAS VACANT AND FACED DEMOLITION WHEN THE DECISION WAS MADE TO RESTORE AND REPURPOSE THIS HISTORIC STRUCTURE.

SERVICES

- Architectural Design
- Bidding Services
- Civil Engineering
- Construction Services
- Electrical Engineering
- Mechanical Engineering
- Structural Engineering

AWARDS



MERIT AWARD FOR CIVIC
IMPROVEMENTS
Youngstown-Warren Regional
Chamber of Commerce

HISTORIC PRESERVATION
AWARD
Mahoning Valley Historical Society

YOUNGSTOWN WATER DEPARTMENT

The restoration of this building represented the first phase in a three-phase project for the Youngstown Water Department, designed to include three separate

buildings situated on a nine-acre campus site just outside of downtown Youngstown.

The original Water Works was constructed in 1871, in the Victorian Romanesque style of architecture. It contained the pumps for the water intake and distribution from the Mahoning River, and had been vacant for many years. The city considered tearing it down to provide a site for a new office building.

ms consultants, following a thorough building assessment, convinced the City of Youngstown to restore the structure to provide new administrative offices for the Water Department. The restoration included outfitting the old pump house building with a new structure to support two new floors, a new roof, new windows, and an ADA-compliant entrance ramp.

The first floor houses the Water Department administrative offices while the basement provides storage space for records and miscellaneous items. The second floor structure and unfinished floor were provided as part of the project, for future expansion.

An addition, formerly located on the rear façade, was demolished and the wall of the original building was

infilled in its place. Brick from the demolition of the addition was used to construct the new wall to ensure a proper color match. The balance of the exterior walls were restored with new brick where necessary, and some color staining methods were employed in order to restore the building to its original color. Additionally, the terra cotta frieze around the building was repaired and cleaned. A matching piece was created from new materials for the portion of new wall.

Phase II, a 10,000-square-foot addition to the Water Works building, provides workshops, parts storage, employee lockers, and a lounge for the meter and hydrant departments.

Phase III of the project includes a 35,000-square-foot vehicle maintenance and storage facility with a paint booth, large washbay, five-bay vehicle maintenance with three lifts for all sizes of work trucks, parts and equipment storage, rebuild engine room, indoor storage for 40 vehicles and nine pull-thru stalls for vehicles with trailers. The maintenance bays have new and used fluid storage and delivery equipment and a motor exhaust system.

MECHANICAL SYSTEMS

New utilities were developed for this site. These included separate water lines for the fire protection and domestic service, natural gas and a gas well. The office building was served by VAV systems with hot water baseboard heat. The service garage has a fume exhaust and make-up air system. The parking garage has a carbon monoxide system to control the ventilation and save energy. New utilities were

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ENVIRONMENTAL ISSUES RESOLVED

As design for this project proceeded, ms consultants was retained to provide engineering and design services for the removal of two USTs (underground storage tanks) at the project site. The engineering services included the development of specifications for the removal and replacement of the departments

fueling station; assisting the city with bidding of the project; and providing oversight during the removal and replacement of the USTs and the associated ancillary piping and new pump-island. During the removal of the USTs a release of petroleum was encountered and a remedial action plan was developed.