Michigan Department of Transportation's
Construction and Technology Building

History –

Shortly after the State Reward Law of 1905 established ". . . a State Highway Department," it became evident that some materials used for improving and constructing roads were superior to others. In 1913, the Civil Engineering Department of the University of Michigan established a student course in materials testing, and the results of these tests were incorporated into State road building activities. This was the genesis of the multimillion dollar Materials and Technology (known today as the Construction and Technology) facility completed in early 1978.

As time passed, highway construction increased; the volume of samples became too great to be handled by students alone, and in 1918 the Testing Laboratory was established in Ann Arbor using University facilities and State and University personnel.

A Division of Investigation and Research was established in 1924 to study existing roads, and investigate the conditions under which new roads were to be constructed. In 1933 the department's research activities and testing laboratory were combined under a Lansing-based administrator and for many years was known as the Testing and Research Division of the Highway Department. The dramatic expansion in highway transportation caused the department to increase its research activities in order to determine the effectiveness of materials and methods already in use, as well as to develop new techniques and explore the potential of different materials. Thus, in 1939, a separate research facility was created on the Michigan State University campus in East Lansing to establish a continuing program of research to meet these needs. Like the Testing Laboratory, the Research Laboratory rapidly grew, and the University could no longer accommodate it; thus, in 1962 the Research Laboratory moved into much larger quarters in Lansing.

In 1978, the Research Laboratory and Testing Laboratory moved into the Testing and Research Building from Lansing and Ann Arbor. In 1984, the division director and administrative office personnel moved from the Transportation Building (known today as the VanWagoner Building) in downtown Lansing to the Secondary Complex, thus placing all of the central Testing and Research staff in one building. There were 20 laboratories and related work areas in the building, as well as a library, a graphic arts center, a machine shop, a vehicle preparation area, and an area for field testing equipment storage and maintenance.

The Testing and Research Division was renamed Materials and Technology in 1985. It is essentially a "service organization" for the other divisions of the Michigan Department of Transportation and its region offices, working in close consultation with them on their specialized needs.

In 1997, the Construction Division and the Materials and Technology Division were combined to create the Construction and Technology Division. The department's Construction staff began the transition, moving from the VanWagoner Building to the renamed Construction and Technology Building. With the addition of the Construction staff, the building now includes the

department's staff that provides engineering and technical assistance in the areas of bridge and road construction, construction contracts, FieldManager, technical training coordination, DBE construction assistance, and environmental engineering.

In March 2000, the Bridge Management Unit moved into the building to become part of the Construction and Technology Division's Bridge Operations Section. This unit maintains a hard copy file of plans and load rating calculations for MDOT's 4,500 bridges, and plans for some local agency bridges; maintains a history file for contract work on bridges; performs load ratings for bridges; reviews requests for overload permits; maintains the bridges' database; performs research and development in bridge management to provide decision support to bridge owners; submits the annual National Bridge Inventory data to Federal Highway Administration; and provides technical assistance to local agencies and consultants regarding bridge inventory matters.

The department's Pavement Management staff also joined the division in 2000. While some already worked here, the remaining staff moved into the Construction and Technology Building. This group provides expertise in pavement management, including condition and performance data, design, type selection, and performance trends for specific fix types. They conduct network-wide pavement condition data collection, processing, and analysis, which includes developing and maintaining applicable software; developing pavement designs and serving as project specialist on various pavement design projects, including oversight of research and the Pavement Demonstration Program; conducts, maintains and enhances the pavement selection (life cycle cost analysis) process; conducts performance analysis of various pavement fixes to identify performance trends; ensures MDOT compliance with federal and state requirements relating to these pavement management areas.

In September 2005, MDOT established the Office of Research and Best Practices. While some of the Construction and Technology Division's research staff is now part of this new office, they remain in this building. They continue to work closely with the division's staff that is responsible for technical investigations, investigating new materials and methods, and university research projects.

As we look toward the future, we are excited about the archeologists from MDOT's Project Planning Division moving into one of the laboratories in the Construction and Technology Building.

Building Memorials -

Tony Price – Near the south entrance is a tree planted in memory of Tony Price, along with a rock and plaque. Tony was the supervising technician in the Materials Unit. He started with the Technician Program at Lansing Community College in 1964 and worked in Materials until his death in 1991. Tony was an exceptional friend, and equally exceptional in his knowledge and contributions to MDOT. He was directly involved in developing many of our pavement and bridge repair systems that are still in use today. He raised the bar for all engineering technicians, especially with his involvement on department committees and sought-out input into policy issues. He is missed, but not forgotten by those of us privileged to have worked with him.

Jay H. Mardigian – Near the north entrance is a rock and plaque in memory of Jay Mardigian, next to an apple tree he enjoyed the apples from. Jay started working at MDOT in 1990 as a machinist in the Structures Unit, where he worked until his death in 1998. Cancer took him at the young age of 39. Jay was an excellent machinist that took pride in every detail of any project he worked on, no matter how large or small. His contributions and knowledge still show in this building and around MDOT in the many projects that he worked on. Jay had a passion for softball, playing on three or four teams at the same time. He was also a body builder and former Mr. Lansing winner. Jay's family, church and friends were very important to him. Jay will not be forgotten, but missed by those who had the opportunity to work with him.