



JACOBSON'S REDEVELOPMENT • Birmingham, Michigan

CHALLENGES

- Safely demolish existing building and large basement while protecting adjacent structures and streets
- Support adjacent streets during demolition and construction of new foundations

SOLUTIONS

- Design a special shoring system to support adjacent streets
- In-depth Building Condition Survey using latest high-definition and 3-D technology to monitor condition of structures surrounding site
- Design foundations for a new underground surrounding site
- Engineer plan to protect remaining adjacent structures during demolition

SERVICES

- Geotechnical engineering
- Foundation design
- Building Condition Survey with high-definition survey and 3-D modeling
- Construction engineering services

G2 helps redevelop high-profile intersection in suburban downtown

G2 Consulting Group provided geotechnical and construction engineering services vital to the redevelopment of downtown Birmingham's vacant Jacobson's store at 325 North Old Woodward

After analyzing the 38,000-square-foot site's subsurface, soil and groundwater conditions in and around the multi-level structure, G2's engineers and scientists used the information to help develop plans to safely demolish the existing building and its large basement while protecting the adjacent structures.

G2 also used the research to design foundations for the new structure, and assisted in the design of a special shoring system that supported Old Woodward Avenue and Willits Street during demolition of the existing building's multiple basements and foundations. G2 provided observation and inspection services during demolition of the existing store and its basements, and during the construction of the new building.

Before demolition and construction began, G2 thoroughly documented the existing condition of the structures surrounding the project site. G2 performed a Building Condition Survey – using video and photographic documentation, visual observation, and crack monitors – and used a High Definition Survey and 3-D Modeling completed by Atwell-Hicks to record existing structural conditions of adjacent buildings.

Bingham Farms-based developer Burton-Katzman and Southfield-based Gershenson Realty & Investments developed a four-story building with first-floor restaurants, two stories of retail and office space, top floor residential lofts, and one level of underground parking. The completed building drew high-profile tenants including Google, Fleming's Steak House and USB, boosting the northern edge of this suburb's downtown principal shopping district.