

# Hudson's Site

Detroit, MI



## Re-designing Detroit's Skyline!

For decades, the iconic J.L. Hudson's flagship store occupied the entire 1200 block of Woodward Avenue and stood as the tallest department store/retail building in the world. The building no longer stands but construction is now underway on redeveloping the site as Detroit continues to grow. Just like the old Hudson's building, the new development will also set a record. At 912 feet, it will be the tallest building in Michigan's history. The two below grade levels will be constructed mostly for parking inside the existing walls of the former Hudson's Store and Premier Garage. Retail, commercial, cultural and office space will occupy the remaining floors up to a height of 14-stories for the Block structure. A 62-story high-rise hotel/residential tower housing up to 500 units will stand above the street at the south end of the site for the Tower structure.

The boring logs for the site showed that ground conditions consisted of approximately 120 feet of lean clay underlain by 8 feet of hardpan and a limestone bedrock. Foundations will consist of caissons drilled into the hardpan and limestone bedrock so the aim of the O-cell® test was to provide as much information as possible for these layers.

The O-cell® Test was performed on the test caisson in November 2018. The test used a reduced diameter bottom plate on the base of the O-cell® assembly. By doing so, Loadtest were able to apply the load over a smaller area allowing us to prove much higher unit end bearing values. The engineer was then able to use these values in their design reducing the foundation construction costs by approximately \$500,000.

### Project Info

Owner:	Bedrock Detroit
Drilling	Rohrscheib Sons
Contractor:	Caissons, Inc.
Engineer:	SME
Architect:	SHoP
Completion Date:	Summer 2022
Estimated Project Cost:	\$909 million

### Services Provided

- 1 Single Level O-Cell® "Punch-out" Load Test.
- Load Test Program Design

