

# Jersey firm fashions the Trade Center's future

## Model of first floor of a steel building rises in Orange

BY HALLEY BONDY  
FOR THE STAR-LEDGER

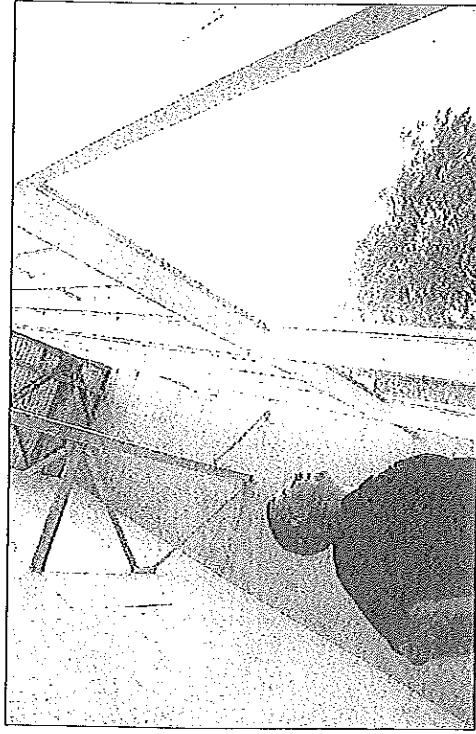
When Jim Murray got the contract to provide steel for the base of one of the buildings planned for Ground Zero, his Orange-based company faced a series of challenging requirements.

The structure must be constructed of steel, but be open and airy.

It must be assembled without a modern crane, using a block and tackle system.

It must pass bomb-blasting tests.

So, over 14 months, his firm Metfab Metals and a partner spent about \$500,000 to build two 50-foot-tall mock-ups of the base of 4 World Trade Center to see



ALEXANDER PAIS/FOR THE STAR-LEDGER  
Jim Murray, owner of Metfab Metals, on Monday looks at a mock-up of the ground floor of 4 World Trade Center that his company built at its factory in Orange.

how it would work.

"There are so many projects on Ground Zero and not a lot of room, so we have to use some rudimentary systems to put this

together," said Murray, owner of Metfab Metals. "That's why we had to test this out."

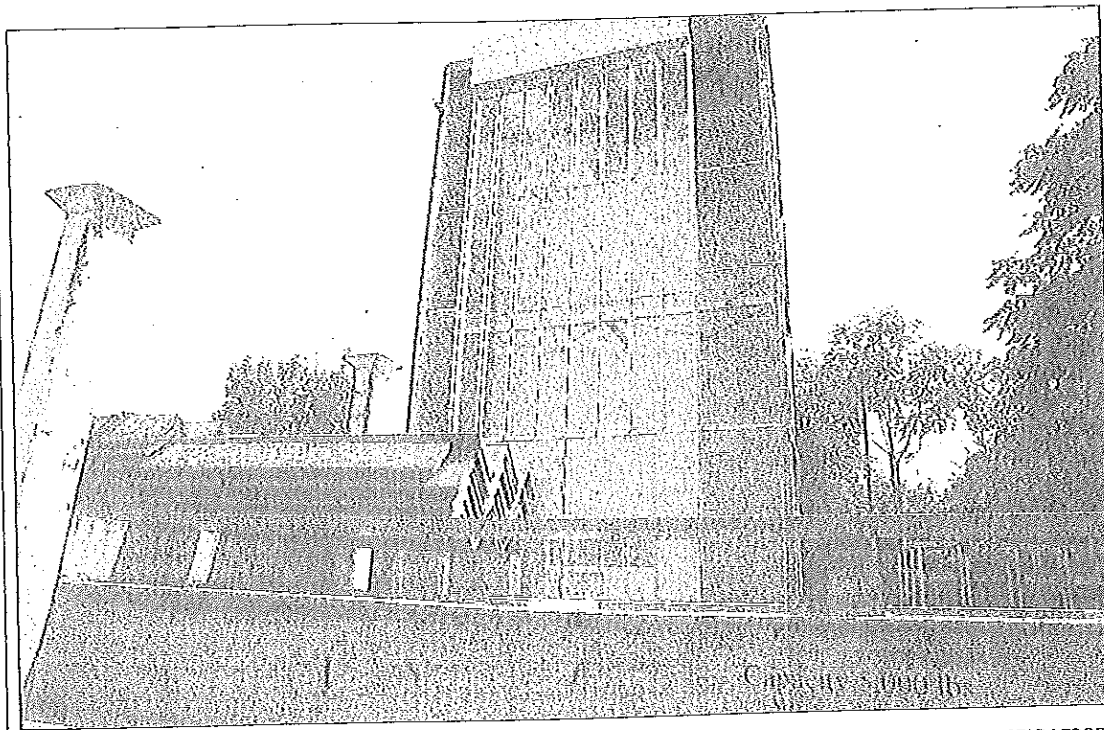
Now, one of the full-size models sits in a lot on Freeman Street in

Orange, and contractors, developers and city officials can walk through it to see a glimpse of what the future at Ground Zero might look like.

The project is one small step in creating development and a memorial at Ground Zero, nearly eight years after the terrorist attack of Sept. 11, 2001 destroyed the former World Trade Center. It may take nearly another decade until all of the construction will be completed.

Murray's model which sits outside his offices is a 50-foot-tall, 20-foot-wide shell of the ground floor of the planned Tower 4, one of five buildings, including the central Freedom Tower, to be constructed on the site. When completed, it will house retail spaces overlooking the Sept. 11 memorial, which will include a grove of trees surrounding two memorial pools.

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ALEXANDRA PAIS/FOR THE STAR-LEDGER

A model of the facade for the 4 World Trade Center building stands in a lot at Metfab Metals in Orange.

## WTC

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The mock-up incorporates 10-foot-tall transparent windows — made by Benson Global of Portland, Ore. — bordered by Metfab's steel. Visitors to the model can walk inside a small alcove and see how the windows will look from within an enclosed room.

Murray said he was asked as part of his \$2 million contract to fabricate and deliver architecturally exposed structural steel, which he described as "steel that doesn't look like steel." The Orange mock-up is a finished version of the final product.

Benson Global installed the mock-up in the Freeman Street yard without using a modern outdoor crane, Murray said, which the company will also have to do on Ground Zero.

George Mow, the project manager at Tishman Construction, the project's general contractor, said he visited the Freeman Street site and that the mock-up is good to go.

Murray said that another mock-

up, without aesthetic touches, was assembled in California to undergo bomb tests. It met the project's blast-testing standards, which are confidential, according to Janno Lieber, the World Trade Center project director for developer Larry Silverstein.

"These buildings are designed with all of the obvious risks in mind, and they should be built to withstand events of real magnitude," Lieber said. "All of our work is subjected to heavy-duty testing and the designs have not been exceeded by buildings in the United States."

Metfab Metals, a 50-year-old family business, has 18 employees and has worked on other projects like the new New York Times building in Manhattan, where Metfab provided the steel skeleton of the building's large windows.

But it is uncertain when the mock-up will be replaced by reality on Ground Zero, where only some underground infrastructure has been built, and the steel columns for the Freedom Tower have been placed.

Earlier this month, the New York Daily News reported details

of a confidential study issued by the Lower Manhattan Construction Command Center that the site will not be completed until 2018, 17 years after the towers were destroyed.

The project has also been beset by feuding between stakeholders. Two weeks ago, Silverstein called the Port Authority to arbitration, saying in a statement that the Port Authority is behind schedule on constructing crucial pieces of the project, including the PATH hub that runs under the site.

Lieber said Monday that he hopes the arbitration will lead to a realistic schedule.

"We're at the point where it's possible that if we don't move forward, the building may be delayed for some time," Lieber said. "That is not great for Metfab, and it's tragic for us because this project is going great."

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