

STOCKS D2-3
CLASSIFIED D6-14
AUTO D11

BUSINESS



Stadium - Armory Station

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

A man stands near supports for a canopy over the Stadium-Armory Station of the Washington Metropolitan Area Transit Authority's subway system in Washington, D.C. Part of the support, below the man's left arm, is made in Hazleton.

A supporting role

City firm manufactures parts for Metro stations' canopies

By **KRISSY SCATTON**
Standard-Speaker

There's a piece of Hazleton at subway stations in the nation's capital. It may be hard to find at first, but it's definitely there.

Since 2004, Hazleton Casting has been constructing iron castings to support canopies over escalators at Washington Metropolitan Area Transit Authority subway stations.

The foundry, which has been located on North Cedar Street in Hazleton since 1916 and operated for decades

as Barrett, Haentjens and Co., was first approached about the project two years ago.

"In June 2003, we were asked to provide a quotation for the work," explained Tony Badamo, vice president of operations. "We submitted our pricing and were awarded a contract" by Grunley-Walsh, a Washington engineering company.

Hazleton Casting is under contract to provide 6- and 8-inch cylindrical support structures, which are welded to pipes that hold up the glass canopies over the subway escalators.

After an initial production run, Hazleton Casting made recommendations to improve the quality of the finished product. Grunley-Walsh accepted the suggestions, and Hazleton Casting began work to fill the order.

"We have over a thousand to be shipped," said Badamo. Altogether, the firm will provide castings for 50 canopies.

The process that ends at dozens of busy subway terminals begins in Hazleton with the creation of silica sand cores made from wood patterns.

The silica sand cores provide the molds for the final product, made out of a grade of stainless steel known as 316L. The grade is comprised of chromium, nickel and molybdenum.

Badamo and Tom Morgan, the plant manager, both likened the combination of elements in the alloy to the ingredients in a cake — they have to be just right for the final product to be perfect.

To ensure the proper combination of materials, Hazleton Casting relies

See SUPPORT, D4



Deiter Frei heats metal that will become subway station canopy supports to 2,900 degrees at Hazleton Casting's facility on North Cedar Street.



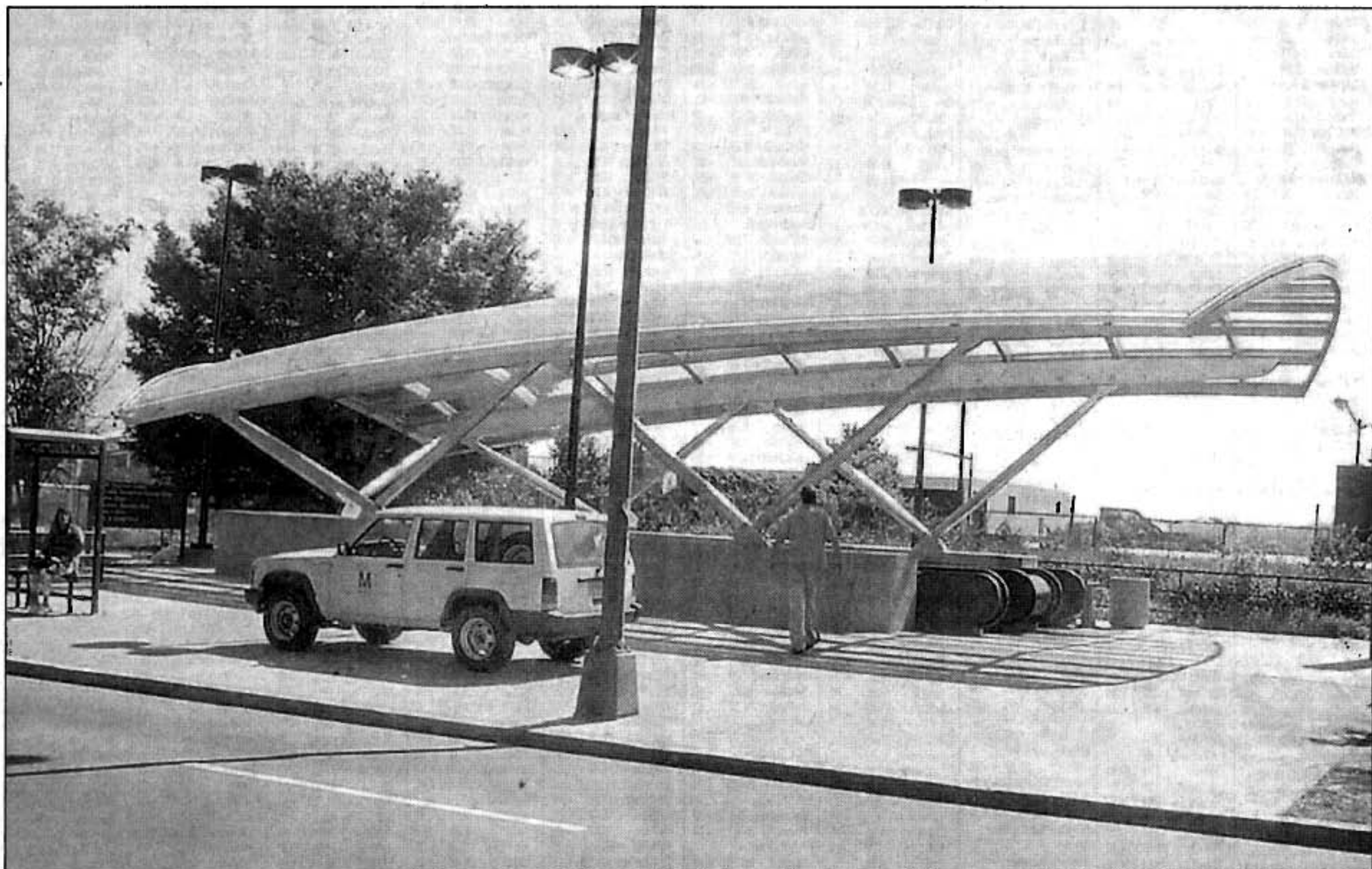
From core box, center, to raw supports at right, and the finished product, left, a display shows stages of supports made at Hazleton Casting.



Jason Derr pours molten metal into a mold at Hazleton Casting.

ELLEN O'CONNELL/Standard-Speaker

B U S I N E S S



A canopy covers the entrance to the Stadium-Armory Station of the Washington Metropolitan Area Transit Authority subway system in Washington, D.C. A Hazleton firm is manufacturing parts used in the canopy support.

Support

(Continued from D1)

on technology in its laboratory.

"We use an optical emissions spectrometer to analyze metals," Morgan said. Before heated metal is poured into a mold, a sample is taken and analyzed by the machine.

The spectrometer uses light to determine the voltage in the sample. Different amounts of voltage correlate to different amounts of elements in the sample.

"On the first try we intend to be a little lenient," said Badamo. "There needs to be degrees of freedom for the manufacturing process to occur."

Once the chemistry is correct, the alloy, which is heated to several thousand degrees Fahrenheit, is poured into the mold, and left to cool.

The castings that come out of the molds are barely recognizable when compared to the finished product.

"It has to go to a grinding room, where they cut the excess metal off," Badamo explained. "We recycle all of our returns. All the parts of the castings that are cut off are sent back to the furnace."

Once excess metal is removed, the rough castings are still a far cry from the smooth steel seen under the canopies.

Hazleton Casting subcontracts Allied Machine in Sybertsville to smooth the castings into a sleek, shiny finished product.

When finished, the 6-inch castings weigh 98 pounds, while the 8-inch castings weigh 220 pounds.

"The inches refers to the diameter of the pipe which the castings are fused to," Badamo said.

The castings are then shipped to either Standard Iron in Kentucky or Capco in Rhode Island. Standard Iron and Capco are subcontractors of Grunley-

Walsh responsible for constructing the pipes and welding the castings to the pipes.

From the mold to the shipping bay, the turnaround on the castings is about two days to a week, according to Badamo.

Despite the complex process, manufacturing the castings is only one of many projects currently being handled by the roughly 45 employees of Hazleton Casting.

However, it is the only project of this nature that the firm is doing at the moment. "Our castings are only going to D.C.," Badamo said.

According to Badamo, this project will be ongoing; there is no official end date.

Grunley-Walsh already has installed some of the finished pipes over subway escalators.