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100th Anniversary

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THE WILMINGTON TRAIN STATION

THE ARCHITECT

Frank Furness, who was born in Philadelphia in 1839, studied architecture by working with professional architects in Philadelphia and New York.

When the Civil War broke out in 1861, Furness (pronounced like furnace) joined the 6th Pennsylvania Volunteer Cavalry. As an officer, he was noted for his courage and daring. At the Battle of Trevilian Station in Virginia in 1864, an outpost of his company was cut off and running out of ammunition, so he volunteered to carry cartridges to them across an open field raked by heavy enemy fire. He survived and later was awarded the Congressional Medal of Honor, making him the only American architect to win the award.

After the war, he completed his studies and set up his own studio in Philadelphia, where his talent made him one of the leading architects of his day. Furness was working at the height of the Industrial Revolution, and his designs captured the spirit of a time of robust growth in American business. He designed hundreds of office buildings, museums and homes and made a specialty of designing stations for three of the country's biggest railroads – the Pennsylvania, the Reading and the Baltimore & Ohio.

After his death in 1912, his sometimes outlandish-looking buildings fell out of favor, and many were demolished. But his influence continued to be seen in the work of his student Louis Sullivan, who many consider the father of the American skyscraper, and in Sullivan's most famous student, Frank Lloyd Wright.

Today, Furness' particular genius is again recognized, and his surviving buildings, including the Pennsylvania Academy of the Fine Arts in Philadelphia, are revered as landmarks.

Other surviving Delaware buildings he designed include the Central National Bank at Sixth and Market streets in Wilmington (now the Kumba Academy Charter School) and the Old Library Museum in New Castle.

THE FURNESS RAILROAD DISTRICT

The train station area includes several Furness buildings clustered together – the station itself, the Pennsylvania Building next door, which now houses the Wilmington offices of Internet bank ING Direct, and the Baltimore & Ohio Water Street Station. They are reputed to be the largest grouping of Furness-designed railroad buildings still standing.

An organization called the Friends of the Furness Railroad District is trying to increase awareness of the cultural and historic value of the train station area by advocating for a Furness Railroad District that would include improvements to the train station vicinity. Historical markers at the sites would explain the architectural significance of the buildings and their place in the history of the development of the city of Wilmington.

To learn more go to www.downtownwilmington.com/FFRD.

Sources: Wilmington Train Station, Friends of the Furness Railroad District, Tevebaugh Associates, Michael J. Lewis

An Architectural Gem

Designed by Frank Furness in the Gothic Romanesque Revival style, the station's unique structure and historical significance are a city treasure

By RICK MULROONEY
The News Journal

In the early 1900s, Wilmington's Christina River waterfront was a bustling commercial and manufacturing center. Factories and foundries along its banks turned out train and trolley cars, ships and machinery, while steamships carried cargo and passengers up and down the Eastern Seaboard and beyond.

In those days, the railroads were the primary means of carrying people and freight by land. The Pennsylvania Railroad's main north-south line ran along the Christina through the city, but it had one major problem – the tracks, completed in the 1830s, ran at street – or grade – level, and all traffic to and from the waterfront had to cross them, leading to delays and, not infrequently, accidents as trains encountered wagons and pedestrians.

So in 1901, the railroad began building a three-mile-long viaduct to raise the tracks above street level to eliminate the grade crossings. It was a massive undertaking, taking six years and costing \$9 million (about \$150 million in today's dollars).

To cap it off, a new train station was needed. The railroad turned to Frank Furness. He already had designed hundreds of stations, including the rival Baltimore & Ohio Railroad's Water Street Station. Next to the site, another Furness-designed building was about to rise, the Pennsylvania Building, to house the railroad's local offices, and the architect chose similar materials for both.

Starting on a strong foundation of cut granite, Furness erected a red-brick and terra-cotta station with a distinctive clock tower and window arches in a style called Gothic Romanesque Revival.

The most remarkable feature of the station is the Passengers could hear – and feel – the power of the trains as they arrived and departed. It's believed to be the only station in the country with trains running over the waiting room.

For Furness, the issue was movement, said Michael J. Lewis, a biographer of Furness who teaches at Williams College in Massachusetts. By placing the visitor under the path of the train, he was engaging him in the whole idea of travel. He wanted to make people physically aware of the power of the trains. The interior also shows off Furness' emphasis on strength and power. Look up at the ceiling and you see the massive iron girders supporting the structure. Another architect would have hidden them, but Furness emphasized them and even had the rivets holding the girders together arranged in decorative patterns like sequins, Lewis said.

The first train left the unfinished station in January 1907. It was another year before the station was completed. In those days, the main floor was devoted mostly to freight and baggage, and passengers, who arrived by horse and carriage or trolley, entered from Front Street. They took the stairs to track level, where large waiting rooms – separate ones for men and women – sheltered them as they waited for their trains.

Over the years, as automobiles, trucks and airplanes eclipsed trains for travel and freight, the station also declined, but it remained a vital link in the Northeast Corridor line from Boston to Washington. In 1984, Amtrak, which had taken over passenger rail service, completed a \$10.4 million renovation of the station.

The waiting room was moved to the main floor, and many long-vanished details, such as the glass-and-metal canopy surrounding the entrances, were reproduced and reinstalled. The revitalization of the Christina Riverfront in the 1990s brought more improvements to the area. ING Direct, the Internet banking company, restored the Pennsylvania Building and the B&O Water Street Station, and a parking garage that echoes the Furness style was built.

The Pennsylvania Building
Completed in 1905, it is now occupied by ING Direct.

The Wilmington Train Station
The building was completed in 1908.

Parking garage
The parking garage built in 2005 was designed by Tevebaugh Associates to complement the Frank Furness look.

Viaduct
The three-mile-long elevated viaduct was completed at the same time as the train station. It allows city traffic to pass under the tracks on streets leading to the waterfront.

Old station
The Baltimore & Ohio Railroad's Water Street Station was built in 1887.

A DISTINCTIVE LOOK

The station has the characteristic bold Frank Furness look of fiery red brick with arched windows and elegant terra-cotta adornments. Terra cotta is a masonry building material popular in the United States from the late 19th century until the 1930s and is still a common material found in city buildings. It's sturdy, relatively inexpensive and can be molded into intricate ornamental designs. Furness' style for the station is referred to as Gothic Romanesque Revival. The station's arched window treatments, soaring clock tower and ornate details make it an excellent example of his work.

The arched windows are in their design.

The terra-cotta ornamentation can be found on the clock tower's details.

The clock tower, symbol of the station

AN ENGINEERING MARVEL

The Wilmington Station is unique in that the rail bed that carries the trains through the station is above the lobby. Most train stations are built with the train level as a walk-down, not a walk-up. This required the architect, Frank Furness, to design supports strong enough to hold the incredible weight. He accomplished this by using 28 steel columns that support the iron crossbeams. They continue from the train level through the lobby floor and are anchored by huge concrete pyramids, Ron Edwards, Amtrak's district manager for the Wilmington Station, says the construction is strong enough to support a six-story building.

The railbed has three tracks. Two are used mainly for Amtrak, the other for SEPTA's local service.

Closed area
The station's old waiting rooms were made unnecessary by the 1984 renovation. They're seldom used today.

The station room is beneath the railbed.

Twenty-eight iron and steel support columns hold up the railbed.

BY THE NUMBERS

- 11
2006 rank of station among Amtrak's busiest
- 100+
Amtrak and SEPTA trains arriving and departing each day
- 2,000+
Passengers arriving and departing each weekday
- 712,000
Passengers arriving and departing each year
- 1,148
Delawarans employed by Amtrak in 2006

TIMELINE

- 1837: Philadelphia, Wilmington & Baltimore Railroad completes street-level rail line along Christina River through Wilmington.
- 1873: Pennsylvania Railroad begins operations over Wilmington line.
- 1887: B&O Railroad's Water Street Station is built.
- 1901: PRR begins construction of viaduct raising Wilmington train tracks above street level.
- 1905: Pennsylvania Building completed.
- 1907: On Jan. 28, first train leaves unfinished Wilmington station on new viaduct south to Baltimore.
- 1908: Wilmington Train Station is completed. All tracks are raised above street level.
- 1984: Three-year renovation of Wilmington Train Station, now operated by Amtrak, is completed.
- 2006: \$10 million in federal funding is secured for future renovations.

Design and graphics by Dan Garrow



The exposed iron crossbeams are visible in the lobby ceiling.

Brick covers the steel supports.

Glass and metal canopy

Viaduct over French Street

Basement level

Cement base

THE DETAILS

Furness designed the station first for function, then added exquisite detail work for decoration. At right are examples of some of the ornamentation that can be found around the building.



The exposed beams' rivets are arranged in patterns.



The staircase newel posts sport brass pineapples.



The clock tower's roof is patterned terra-cotta tiles.



The step risers on the main staircase are decorated.



The old waiting rooms have decorative radiator screens.



The majestic grand staircase leads to the train level.



Elaborate entrance
The ceramic tiled walls in the French Street side entrance were placed during the 1984 renovations.