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Press Release

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IMMEDIATE

Queens Midtown Tunnel Air System Overhaul

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MTA Bridges and Tunnels will complete the renovation of the original late 1930s ventilation system at the Queens Midtown Tunnel this month. The \$18.8 million upgrade involved replacing 23 carbon steel exhaust fans with new more resilient stainless steel fans, and meeting all modern tunnel standards. The final assembled fans measure 20 feet high and 11 feet long and wide.

"This was a complex project involving the electrical, mechanical and control/communications components for the tunnel's air system, which were reaching the end of their useful life," said Tom Bach, Chief Engineer for the agency. "Fortunately, over the three-and-a-half year work period, there was minimal inconvenience to customers because any required closures took place late at night when lighter traffic could be accommodated."

Opened to traffic in 1940, the tunnel contains two parallel tubes, each serving two lanes of traffic beneath the East River. Average traffic is 86,100 vehicles on a weekday. The tunnel fans are housed in two ventilation buildings, with a total of 16 individual air ducts, 23 supply fans and 23 exhaust fans. The system exchanges air throughout the 6,300 foot length of the tunnel. At full capacity the tunnel fans can move 3 million cubic feet of air per minute, allowing for a full exchange of the air in the tunnel in 90 seconds.

The project also included repair, replacement or relocation of related equipment such as: water drain pipes; damper doors, drives and operators; air-lock doors; steel partition walls; motor and fan bearing pedestal foundations; power feeders; control panels; and structural modification of fan room floors, in order to support the redistributed weight from the relocated motors.

CDE Air Conditioning Co. of Brooklyn was the contractor; LiRo Engineers of Syosset, New York, served as construction manager; and PB Americas, Inc. of New York, NY, did the design for the project.

The modernization of electrical, mechanical and control and communications systems is also part of the tunnel master plan for the QMT, with more upgrades in the planning stage, as well as for the Brooklyn-Battery Tunnel, which opened to traffic a decade later in 1950. The BBT's fans were replaced some years ago; however, other related upgrades are on the horizon.

The Queens Midtown Tunnel serves as a major connection between midtown Manhattan and Queens, as well as the gateway to the Long Island Expressway. The facility crosses between the Murray Hill section of Manhattan and the Hunters Point/Long Island City section.

This project is the latest of a series of important systematic upgrades that will ensure that the Queens Midtown continues to operate safely and efficiently well into the future.



(Photo caption: Worker rigging part of new fan at Queens Midtown Tunnel; the size of each completed fan assembly is approximately 20 ft. in height and 11 ft. in length and width.)

MTA Bridges and Tunnels' facilities, which connect the five boroughs of New York City, are the Triborough, Throgs Neck, Bronx-Whitestone, Henry Hudson, Verrazano-Narrows, Cross Bay Veterans Memorial and Marine Parkway-Gil Hodges Bridges, and the Queens Midtown and Brooklyn-Battery

Tunnels.