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Press Release

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IMMEDIATE

Second Avenue Subway Construction Set to Get Underway

The MTA Capital Construction Company is poised to take on the enormous challenge of building a new subway line under Manhattan's Second Avenue. The project will take full advantage of the latest, most technologically-advanced construction techniques and employ the most sophisticated equipment available. This project, however, will be performed with as little disruption as possible to the surrounding area.

This will be the first major subway construction job in the City since the opening of the Archer Avenue extension of the E and J Lines in eastern Queens nearly 20 years ago. Second Avenue, however, is Manhattan's first major subway construction project since the Sixth Avenue Line was opened in 1936.

Construction for the first phase of Second Avenue Subway consists of digging a new tunnel between 92nd and 63rd Streets, with new stations constructed at 96th, 86th, and 72nd Streets, and an expansion of the existing 63rd Street station. On the southern side, the first phase of the Second Avenue line will tie in with the existing 63rd Street Crosstown Line. To the north, the tunnel will be extended north to 99th Street, where it will connect to one of three existing tunnel segments that were excavated in the 1970s. Trains will be staged and stored in this segment, which extends to 105th Street.

Construction methods will include a combination of tunnel boring, mining and cut and cover techniques. However, much of the planned seven-year project will be accomplished using tunnel boring, which will be minimally intrusive on the street surface.

"In Manhattan, we will actually have to bore through bedrock," explained Mysore Nagaraja, President of the MTA Capital Construction Company. "We will be using a state-of-the-art Tunnel Boring Machine. The equipment weighs 700 tons, is about 250 feet long and tipped with blades capable of cutting through rock. It's very impressive and it's the standard of underground rail construction around the world."

The tunnel boring machine, which will cost between \$10 and \$15 million, will be delivered early next year as separate components and assembled beneath street level. A marvel of modern engineering, the electrically-powered machine will dig through an average of 50-feet of dirt and rock per day. That is a far cry from the construction of the original subway, which was accomplished largely by pick and shovel.

One of the major goals is to keep noise and vibration levels as low as possible as work progresses within one of the most densely populated areas in the country. Some disruption will be inevitable though at the points where the tunnel boring machine is inserted and withdrawn and where rock and earth are removed from the excavation.

Techniques similar to those used in mine construction will be used to carve out stations and to create areas for the rooms that hold equipment necessary for the subway's operation. The cut-and-cover construction method will be used closer to the surface in order to create station entrances and connections to other underground facilities. The 96th Street Station and the launch box, which will be the entry point for the tunnel boring machine components, will also be excavated using this technique.

In keeping with the MTA's attempt to minimize surface disruptions, four lanes of traffic will be maintained through the work zone. Also, during the project, MTA staff will be on hand to address any concerns raised by local residents and business owners. Throughout the project's development stages MTA New York City Transit's Office of Government Affairs kept local elected officials and Community Planning Board Eight informed.

The contractors for the tunneling project from E. 92nd to E 63rd Street are Skanska USA Civil, Schiavone Construction/ JF Shea JV.