



# John P. Picone INCORPORATED

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*Water Tunnels and  
Associated Works,  
Croton Water Tunnel  
Plant, Bronx, NY*

— *Committed to quality, backed by hard work.*



# John P. Picone INCORPORATED

**Project Manager:** Yin Ming Li

**Contract Number:** CRO-313

**General Contractor:** Schiavone/Picone JV

**Agency:** NYC DEP

**Contract Amount:** \$212,000,000.00

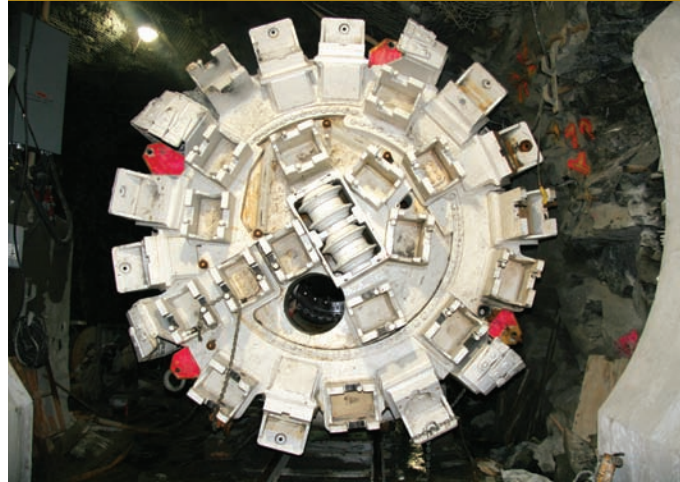


## **Water Tunnels and Associated Works, Croton Water Tunnel Plant, Bronx, NY**

This project involves the construction of three 14.5-foot-diameter tunnel headings: An 854 foot long raw-water connection to the New Croton Aqueduct, constructed by drill and blast techniques; a low level TBM (Tunnel Boring Machine) driven service tunnel, 3,730 feet long, with 400 feet of drill and blast connections; and a high level tunnel, 3,100 feet long, also TBM driven with approximately 400 feet of drill and blast connections. When finished, these tunnels will carry water from the existing Croton Water System to the newly built Water Filtration Plant and from the Water Filtration Plant (after processing the water) to the NYC Water System.

### **Challenges:**

The fractured rock areas will take the most sophisticated methods of grouting and reinforcing of the rock to complete this project. The complicated machinery for the tunnel boring operation requires a high level of maintenance to avoid downtime.



### **Unique Features:**

Both drill and blast and tunnel boring methods of tunneling will be employed on this project; these skills are complicated and unique. This project was re-engineered by the Joint Venture from entirely drill and blast method of tunneling to largely a tunnel boring method of tunneling.

