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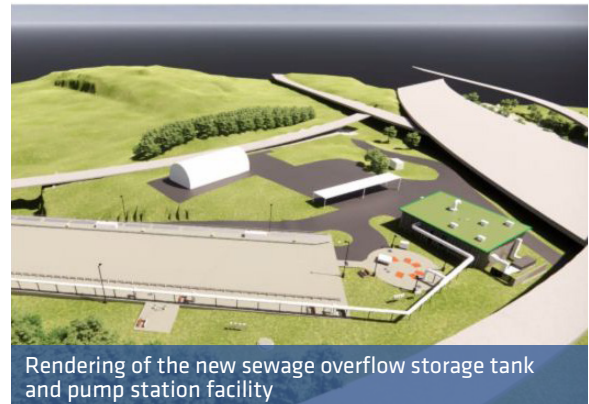
SCHNABEL
PRINCIPLED. PROVEN.

GENERAL CONTRACTOR



BACKGROUND INFORMATION

In 2024, the City of Atlanta began the North Fork Peachtree Creek Storage Tank project to build a large facility with a 15-million-gallon stormwater storage tank. This tank will help improve the current drainage system, which is too small for handling heavy rain. The project includes several tunnels that will connect the tank and a pump station to the existing system. By capturing stormwater during big storms, this project will reduce the risk of sewer overflows, protecting local rivers and communities. It also supports better and more sustainable water management in the city.



Rendering of the new sewage overflow storage tank and pump station facility

SCHNABEL'S ROLE



Drilling into rock below new culvert

Schnabel was contracted by Ruby Collins to handle the shoring and earth retention for the project, which involved using soil nails and shotcrete for vertical excavation, as well as rock anchors at the bottom of the excavation to secure the structure.

For this project, Schnabel drilled more than **90,000 linear feet** and installed over **2,300 soil nails**. Additionally, Schnabel installed over 250 rock anchors across three structures on the site.



REDESIGN TO IMPROVE SCHEDULE & REDUCE COST



Drilling alternating soil nail rows

The project was originally designed as a soldier pile and lagging wall. However, drawing from its extensive experience working with walls in this type of rock fill, Schnabel recognized that installing the soldier beams would be both costly and time-consuming. The process would involve drilling through the rock fill, introducing significant risks to both the project cost and schedule.

To mitigate these challenges, Schnabel leveraged its **in-house design capabilities** and experience in designing and building soil nail walls to propose a redesign, shifting to a soil nail and rock bolt wall with a shotcrete facing.

INNOVATIVE NAILING PATTERN

For the design of the 75-foot-tall vertical wall, Schnabel's design team created an innovative nailing pattern that reduced the total drilling length. The team used a combination of long and short nails for the top half of the wall, with the long nails providing global stability and the short nails ensuring facing stability.

By reducing the number of nails longer than 50 feet, Schnabel was able to **speed up installation and reduce costs for the client**.



Halfway down with the west wall

CHALLENGES



Installing hollow bar soil nails

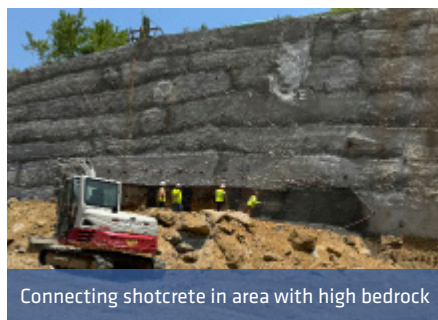
One of the challenges faced on this project was the poor ground conditions caused by boulders and debris beneath the surface.

To address this issue, Schnabel adapted by using a unique hollow core bar technology and implementing new drilling techniques. Additionally, the team strategically placed equipment and adjusted the operation timeline to maximize productivity.

CONCLUSION

Schnabel completed the installation of the shoring and rock anchors, **keeping the project on schedule** and allowing the client to move existing utilities, thereby clearing the way for the new stormwater storage tank.

The overall project is expected to take approximately 2.5 years to complete. Schnabel's shoring and earth retention work will play a key role in supporting the construction of the new facility, which aims to improve the city's drainage system.



Connecting shotcrete in area with high bedrock



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