



Transportation Design-Build and P3

Your Partner Throughout the Process





DB/P3

20 Years

85+ Projects

400+ Staff

\$15 Billion

14 States

Cover: SEPTA Crum Creek Viaduct, PA / This page: Volvo Interchange, Berkeley County, SC (Photo Courtesy SCDOT)

With over \$15 billion worth of design-build and P3 transportation project experience, Schnabel consistently delivers cost-saving solutions while efficiently managing resource and schedule demands. We provide critical Alternative Technical Concepts (ATCs) and meet expedited project schedules.

EXPERIENCE YOU CAN TRUST

Schnabel has a deep bench of skilled engineering, design, and investigation staff. We are well prepared to handle design-build and P3 projects as the geotechnical engineer of record, bringing effective local resources and relationships. Additionally, we add value through our expertise in pavement engineering, geostructural and tunnel design, risk management, H&H analyses, geoenvironmental, and construction QA. Select project examples:



Blue Line Extension / Washington, DC
\$310M / WMATA / Geotechnical Engineering

NoMa-Gallaudet Station / Washington, DC
\$103M / WMATA / Geotechnical Engineering



Crum Creek Viaduct / Philadelphia, PA
\$56M / SEPTA / QA



Route 9 Bridge / Edison, NJ
\$100M / NJDOT / Geotechnical Engineering



Wellsburg Bridge / Wellsburg, WV
\$131M / WVDOH / Retaining Wall Design



SR 247 & College St. Railway Bridges / Macon, GA
\$14M / GDOT / Geotechnical; Geostructural



Port of Miami Tunnel / Miami, FL
\$1.5B / INDOT / Tunnel Engineering (P3)



Harry W. Nice Bridge / Newburg, MD
\$463M / MDTA / Geotechnical Engineering

ICC Contracts A & B / Montgomery County, MD
\$1B / MDTA / Geotechnical Engineering; QA



Bronx-Whitestone Bridge Fenders / New York, NY
\$23M / TBTA / Geotechnical; Geostructural

Lower Westchester Bridge Bundle / Westchester County, NY / \$100M / NYSDOT / Geotechnical; Geostructural; H&H



Dulles Transit Silver Line Ph II / Dulles, VA
\$2.7B / WMATA / Subsurface Investigation; Geotechnical Engineering; QA

High Rise Bridge / Chesapeake, VA
\$410M / VDOT / Geotechnical Engineering

I-81 Truck Lanes / Rockbridge, VA
\$80M / VDOT / Geotechnical Engineering

I-95 over Rappahannock River / Fredericksburg, VA
\$208M / VDOT / Geotechnical Engineering

I-66 Outside the Beltway / Fairfax, VA
\$1.2B / VDOT / Geotechnical Engineering (P3)



IH-635 Managed Lanes / Dallas, TX
\$2.7B / TXDOT / Tunnel Engineering (P3)



Express DB Bridges / Multiple Locations, NC
\$40M / NCDOT / Geotechnical; Geostructural



Volvo Interchange / Berkeley County, SC
\$44M / SCDOT / Geotechnical Engineering



OH River Bridges, East End Crossing / Louisville, KY
\$1.5B / INDOT / Tunnel Engineering (P3)



WIN THE JOB

Our creative solutions will help you optimize construction cost and schedule. In addition to bringing some of the best geo-engineering minds in the industry, we maintain an ever-growing archive of innovative-use concepts that spark creative, value-producing ideas to win you the job.

EFFECTIVELY MANAGE RISK

Our experience with local geological formations and their critical geotechnical issues allows us to quickly recognize geo-engineering hazards and screen various risk mitigation alternatives. Therefore, clients can focus efforts on mitigation strategies that provide the highest return on investment.

MEET OR EXCEED SCHEDULE

We coordinate our efforts with design and construction sequencing to deliver test results, analyses, reports and design documents on time so we don't hold you up. We keep geotechnical drilling off of the critical path by navigating site access hurdles along heavily congested interstates, rail facilities, and water crossings.

RECOVER WHEN PROBLEMS OCCUR

Unforeseen events can cause major delays and negatively impact your profitability. Schnabel is committed to expedite recovery efforts to help you get the project back on track as fast as possible.

KNOW SAFETY IS A TOP PRIORITY

Schnabel puts safety first and is dedicated to the health and safety of our workers and subcontractors. Our safety statistics are in excellent standing with a current Experience Modification Rate (EMR) of 0.75, and over 3.5 million hours without a lost time or light duty incident.



ROUTE 29 SOLUTIONS / CHARLOTTESVILLE, VA / \$117M / VDOT

Only 103 days were allowed to construct the Rio Road grade-separated intersection. To meet this challenge, Schnabel devised a top-down construction scheme so that the soldier piles and tie-backs could be installed from grade prior to the roadway excavation. This avoided a 23-foot high cantilevered wall and installation of multiple levels of bracing at night with traffic control, making the project feasible and helping to procure the low bid. The grade-separation was completed in 73 days, resulting in bonus payments to the design-build team.



MLK EXPRESSWAY / PORTSMOUTH, VA / \$2B / VDOT

Schnabel provided geotechnical engineering and construction consultation services on the MLK Expressway portion of the Elizabeth River Tunnels Project. The main challenge for this project was the presence of deep, soft soil strata, prone to long-term settlements. To keep settlements within allowable limits, Schnabel developed techniques for embankment construction using lightweight aggregate and expanded polystyrene fill. Surcharges with prefabricated vertical drains were used in some areas to accelerate primary consolidation and reduce long-term settlement. In other areas, approach embankments were designed as pile-supported embankments.



ICC CONTRACTS A & B / MONTGOMERY COUNTY, MD / \$1B / MDTA

As the lead geotechnical engineer for Intercounty Connector Contracts A and B, Schnabel worked closely with the design-build team to identify geotechnical risks prior to the bid submission. Our work encompassed subsurface exploration, soil laboratory testing, and geotechnical engineering analysis. We saved the project considerable cost and made the schedule attainable by reducing scour depths, drilled shaft lengths, compaction requirements, as well as earthwork and drilled shaft construction time. The projects comprised 14 miles of new, six-lane highway including five new interchanges, 33 new bridges, and seven miles of noise walls.

We'd love to hear from you. Please email us at transportation@schnabel-eng.com.

