



**CARROLL** ENGINEERING, INC.

## **CAPABILITY STATEMENT**

Carroll Engineering, Inc. (CEI) was established in 1965 by Richard J. Carroll, one of Baltimore's most prominent structural engineers. CEI has been involved in the planning and design of thousands of projects since then including several high-profile projects in the area: Oriole Park @ Camden Yards, Hippodrome Performing Arts Center, Pier 4 Building, National Harbor, Columbia Corporate Park, Bagby Furniture Building, Stevenson University – Owings Mills Campus, Maryland School for the Deaf and UB Student Center. We pride ourselves in our diversity of knowledge regarding all types of construction materials, techniques and site development requirements to complete projects on-time and within budget. Our diverse capabilities include:

### **Civil Engineering**

- *Planning*
- *Land Use Studies*
- *Site Layout*
- *Zoning and Permitting*
- *Clearing and Grubbing*
- *Grading*
- *Earthwork Analysis*
- *Sediment and Erosion Control*
- *Storm Water Management*
- *Sewage and Drainage Systems*
- *Water Distribution Systems*
- *Other Utilities – Pipes & Conduits*
- *Roadways and Walkways*
- *Parking and Traffic Circulation*

### **Landscape Architecture**

- *Planning/Site Layout*
- *Grading*
- *Bio-Retention Areas*
- *Reforestation/Aforestation*
- *Forest Stand Delineation*
- *Landscaping and Hardscaping*
- *Streetscaping*
- *Parks and Gardens*

### **Structural Engineering**

- *Building Foundation, Framing & Connection Details*
- *Deep Foundation Systems*
- *Wood/Steel/Masonry/Concrete Construction Materials*
- *Tilt-up Concrete*
- *Post-Tensioning*
- *Forensic Studies*
- *Historic Preservation*
- *Box Culverts*
- *Retaining Walls*
- *Bulkheads/Boardwalks*
- *Parking Structures*
- *Water/Wastewater Facilities*
- *Bridge & Abutment Structures*
- *Dams/Storm Water Structures*
- *Poles, Signage Attachments, Stanchions*

### **Related Services**

- *LEED Certified Rating Designs*
- *Owner/Lender Building Reports*
- *Seismic Certifications*
- *ADA Reviews and Upgrade Designs*

Our staff utilizes BIM modeling software REVIT along with Architectural Desktop and Civil 3D in a Windows XP environment. Over the years, we have developed an extensive Detail Library to efficiently meet project schedules. All project files are stored on data servers with a redundant back-up system.