PARTNERS IN PROGRESS

your conduit for delivering confidence
Faced with funding challenges, regulatory uncertainties, and pressures from stakeholders, public officials need immediate access to reliable, comprehensive services and cost-effective solutions that can be applied to virtually any issue that may be encountered.

*CEC responds swiftly and efficiently to inquiries, challenges, and short- and long-term planning needs, and will work hand-in-hand with municipal, county, state, and federal officials to provide tailored and innovative services that work within spending thresholds.*

*From coordinating access agreements with property owners to engaging in public outreach with concerned citizens groups, CEC is equipped to manage all of the details for public sector projects and problem solving. CEC’s multi-disciplined and integrated approach to planning, engineering, design, construction, and consulting helps public sector clients navigate the challenges of their infrastructure and economic development projects, and allows for proactive solutions that benefit the public.*

*Civil & Environmental Consultants, Inc. (CEC) provides comprehensive market-oriented consulting services that advance the strategic business objectives of our clients. CEC is recognized for its innovative design solutions and integrated expertise in air quality, civil engineering, ecological sciences, environmental engineering and sciences, survey/geospatial, waste management, and water resources.*
THE CEC ADVANTAGE

What sets CEC apart is that we put ourselves in our clients’ shoes and make recommendations from their strategic vantage points. These are the real differentiators:

Insider Experience
CEC understands the nuanced characteristics of public sector work from the inside, having strategically added professionals who previously worked for governments and public agencies to drive us to deliver services from their unique perspective.

Holistic Approach
Projects are viewed at the macro level, with CEC providing broader services and thinking that not only address outlined project needs, but also consider ancillary aspects and multifaceted project pressures like public outreach and funding assistance. This approach also allows for greater flexibility in adapting to unexpected changes.

Advanced Technology
To support a customized approach and provide even greater benefit to projects both large and small, CEC utilizes industry-leading technologies and equipment, such as advanced Geographic Information Systems (GIS) software, 3D laser scanners using terrestrial LiDAR scanning, and small Unmanned Aerial Systems (drones) that capture HD images and video.

Economic Master Planning
CEC identifies and utilizes non-traditional economic and social inputs. By incorporating factors such as market projections, stakeholder engagements, financial models, and governance strategies, the Economic Master Plan becomes a realistic, responsive guideline to move a project forward expeditiously and successfully.

Stakeholder Input
Public projects often have many stakeholders, and a consulting firm should afford enough flexibility in the implementation of a project to listen and incorporate public input. CEC is well versed in seeking and implementing stakeholder input on public sector projects.

Client Advocacy
CEC navigates complex project permitting programs using industry expertise and professional working relationships with local, state, and federal regulators. As an advocate for the client’s vision and project goals, CEC is willing to challenge regulators to think outside the box.
PUBLIC SERVICES

Aging infrastructure in need of repair, updates, and maintenance is top of mind for many state and local governments. Regulatory requirements to correct substandard infrastructure and the pressure to secure the necessary funding for the upgrades are among the challenges public agencies face. Often they do not have resources available to pursue funding sources, such as grants, low- or zero-interest loans, and tax-increment financing plans.

Infrastructure Resources
Support for public service and utility directors includes assisting with grant writing and project funding administration, identifying potential new revenue sources, and developing cost-efficient and effective ways to address infrastructure problems. CEC has a proven performance in obtaining environmental permits and clearances, and ultimately correcting infrastructure deficiencies. CEC strives for its services to meet tightening regulatory controls while minimizing rate increases.

Solid Waste Support
CEC has helped municipal managers of waste and landfill operators with services ranging from addressing airspace issues and performing operational efficiency reviews, to creating equipment replacement plans and maintenance programs. In addition, CEC provides comprehensive landfill design, permitting, and construction services.

Water/Wastewater Support
CEC’s water expertise includes distribution system upgrades to address capacity and pipe degradation issues, intake design, and hydraulic modeling. Wastewater expertise includes collection system I&I evaluations, system design and construction, and treatment process improvements with long-term options for improvements rather than short-term permit variances.

Transportation Support
CEC provides departments of transportation and municipal governments with on-call ecological, environmental, and traffic engineering services to support large-scale traffic and transportation improvement projects, bridge and highway construction activities, and maintenance, streetscape, and green infrastructure enhancements.

TOP: More than 3,000 linear feet of conveyance culvert was inspected to assess structural condition and ability to convey stormwater flows beneath a busy shopping center in Pittsburgh, Pennsylvania.

LEFT: On-site construction quality assurance (CQA) was provided during the liner, soil, and concrete installation at a new oil and gas waste county landfill in west Texas.

RIGHT: Construction staking, environmental, and CQA services were provided to help TDOT replace an aging truss bridge in north central Tennessee.
Governments strive to identify economic development drivers that create and retain jobs and generate tax dollars to fund infrastructure, schools, parks, public safety, etc. This requires an environment that is attractive to businesses and site selectors making location decisions, which ultimately leads to a high demand for shovel-ready, marketable properties—even in locations where available land is scarce.

**Economic Master Planning**

CEC’s unique brand of planning addresses important factors such as workforce quality, site availability and access, utility infrastructure, tax incentives and inducements, and overall quality of life for incorporation into economic development solutions.

Global economic master planning experience is combined with site development engineering expertise to identify innovative, practical solutions to complex land planning challenges. CEC’s master planning services help identify creative solutions to catalyze the greatest return on each business opportunity in today’s competitive economic environment.

**Direct Involvement**

CEC is engaged at the local level through active involvement with economic development organizations. In addition, CEC assists with marketing properties by communicating critical information about topography, ecological resources, physiographic features, and utility infrastructure. This support includes providing market research and developing conceptual land use plans that help prospects envision the end use of a property.

CEC is also experienced in working with watershed associations, parks and recreation organizations, and nonprofits to improve public spaces and implement sustainable design principles and ecological restoration to improve the overall quality of life.
Civil Engineering
- Dam and Impoundment Design, Permitting, and Inspection
- Hydrologic and Hydraulic Modeling for Flood Routing
- Erosion & Sedimentation Controls and NPDES Permitting
- Pavement Analysis and Maintenance
- Construction Services
- Geotechnical Engineering Services
- Infrastructure Inspection and Repair
- ADA Compliance

Ecological
- Threatened & Endangered Species Assistance
- Cultural Resource Investigations
- Aquatic Ecology Studies (e.g., Benthic Macroinvertebrates, Fisheries, and Mollusks)
- Wetland and Stream Delineation, Impact Assessment, Permitting, and Mitigation Design
- Soil and Revegetation Studies
- National Environmental Policy Act (NEPA) Documentation and Clearances
- Section 4(f) and 6(f) Evaluations
- Public Outreach and Agency Coordination

Environmental
- GIS and Data Management
- Site Inventories for Brownfields Redevelopment
- Phase I and II Environmental Assessments
- Site Remediation
- Property Condition Assessments
- Well Drilling and Abandonment Assistance
- AST and UST Compliance, Maintenance, and Removal
- SPCC Plan Development
- Air Quality Sampling, Testing, and Modeling

Planning
- Economic Master Plans
- Business Attraction Strategies
- Site Selection Studies
- Site Capacity Studies
- Business/Industrial Park Master Plans
- Infrastructure Master Plans
- Facility Master Plans
- Design/Development Guidelines
- Site Reuse Planning
- Corporate Asset Disposition Planning
- Mining Reclamation Planning
- Sustainability Planning
- Stakeholder Engagement

Survey
- Bathymetric Surveys
- Unmanned Aerial Systems (UAS) Inspections
- Volumetric Surveys
- Route Surveys
- LiDAR Scanning
- As-Built Surveys
- Topographic Scanning
- Boundary Surveys
- ALTA/NSPS Surveys
- Highway Surveys

Transportation
- Engineering and Permitting
- Roadway, Bridge, and Intersection Design
- Trip Generation Studies
- Traffic Impact Studies
- Traffic Signal Design
- Traffic Signal and Auxiliary Turn Lane Warrant Evaluations
- Travel Time/Delay Studies
- Parking Design/Studies
- Highway Occupancy Permitting
- Public Outreach and Agency Coordination
- NEPA Clearances through DOT and FHWA Reporting

Waste Management
- Site Remediation and Waste Treatment
- Solid and Hazardous Waste Management
- Landfill Design and Permitting
- Landfill Gas Management System Design and Permitting
- Leachate Management/Treatment Facility Design and Permitting
- Transfer Station Design and Permitting
- Materials Recovery Facility Design and Permitting
- Post-closure Design and Development
- Construction and Demolition Debris Management

Water/Wastewater Resources
- Water Treatability Studies
- Water System Modeling and Distribution Design
- Wastewater Collection and Treatment Facility Design and Construction
- Passive and Active AMD Treatment Plant Design
- Surface and Ground Water Baseline and Impact Studies
- Floodplain Administration Assistance
- Municipal Separate Storm Sewer System (MS4) Permit Compliance Assistance
- MS4 Stormwater Management Program Development, Site Plan Review, and Staff Training
- Capital Improvement Plan Prioritization
- Municipal Engineering Services and/or Supplementation