

**Black&McDonald**

# SMART CITY SOLUTIONS

Water





Building a smarter urban environment is not just about leveraging technology to expedite processes, optimize infrastructure and achieve greater efficiency. It's about embracing innovation to create a more resilient, sustainable and inclusive future for the next generation.

Our goal in integrating smart city technologies is to respond more effectively and dynamically to the needs and desires of users while minimizing resource consumption and environmental impacts. We believe in the power of smart technologies to improve the quality of life for communities and people across North America.



## OUR APPROACH

Our integrated team approach is about bringing together the right people, processes and data to provide turnkey smart city solutions. We believe in sitting down at the table with our client on day one to develop a shared vision and working cooperatively throughout the process to deliver each project safely, to specification, on time and on budget.

Our experience in a truly integrated project delivery model—design/build/operate/maintain—gives us the edge in understanding the interactions between citizen, built environment, and urban environment. We've seen first hand how smart city and smart building technologies and strategies reduce overall environmental impacts from cradle to grave.





### **Self-performance**

Our integrated multi-disciplinary team has the expertise and capacity to respond to any volume, scope or complexity of work, from design build through to maintenance and management. Our operational team has extensive experience executing smart projects in diverse sectors, including municipal, commercial, industrial and critical environments.

### **Local Presence across North America**

With teams on the ground across Canada and the United States, we provide an agile, local solution.



## System Integration

Leveraging our expertise in construction, utility, and infrastructure projects, we enable systems and technologies to communicate with one another and bring smart environments to life.

## Innovation

We get excited about new technologies and continuously integrate new approaches into our repertoire of ideas.





## OUR ADVANTAGE

### **Cost Certainty**

With nearly 100 years of lessons learned, we provide accurate scheduling and costing procedures and deliver our projects on time and on budget.

### **Education and Advocacy**

We understand the importance of end-user adoption, and we are passionate about designing and implementing programs to support user buy in.



# OUR SERVICES

## Water

**Clean water is an essential resource for all communities, workplaces, and homes. Smart technologies give us the tools to approach the responsibility of water conservation with the gravity it deserves.**

### **Water Conservation**

With water scarcity becoming an increasing concern worldwide, the responsibility to conserve and protect this precious natural resource lies with each one of us. Our team identifies creative conservation strategies that range from fixing small leaks and replacing fixtures to installing large cooling and district water systems to safeguarding watersheds during the construction phase.





# OUR SERVICES

## Water

### Smart Meters

Smart meters provide a non-invasive method for monitoring water usage at the end use component and detecting leaks in both small and large systems. Our team installs and monitors these technologies and implements corrective measures and programs to promote conservation alongside cost savings.

### Water Quality

The aging water infrastructure in place in many North American cities and buildings can cause quality issues that can lead to public health impacts. We use sensing technologies to monitor water quality, enabling the deployment of technical resources and citizen alerts when issues arise.



