



Real People. Real Solutions.

## Other Water Resources Engineering Services

- Stormwater Planning & MS4 Management
- Hydrologic & Hydraulic Modeling
- TMDL Assistance & Implementation
- Best Management Practice & Water Quality Improvements
- Stormwater Reclamation & Reuse Design
- Floodplain Assessment & Mapping
- Culvert & Waterway Analysis
- Wetland Services
- Agricultural Drainage

Chloride is a top pollutant of concern in most cold climates and deicing salt is the main culprit. For decades, winter maintenance professionals have been trained to reduce the amount of salt in winter operations; however, they cannot solve this problem alone. Realizing help is needed, we developed LSiD™—a set of design guidelines focused on improved winter performance. These design concepts can be easily incorporated into all infrastructure projects, saving your bottom line by reducing winter maintenance effort, salt costs, infrastructure damage, and environmental impacts.

## **Low Salt Design Strategies**

Low salt design strategies were established by listening to winter maintenance professionals and understanding their challenges.

Roads, parking lots, sidewalks, intersections, bridges, ramps, underpasses, and other critical salted surfaces can be designed to perform better with significantly less salt.

We are designing easier to plow surfaces with better snow storage capabilities. By directing meltwater away from critical braking and pedestrian zones, outsmarting the winter wind, and using the sun to our advantage, we take pride in advancing sustainable solutions for our communities. Our LSiD<sup>TM</sup> strategies offer cost savings, improved safety, and reduced environmental concerns for all seasons.



## **Cold Weather Mindset**

Bolton & Menk is integrating low salt design into all cold climate projects. Our low salt design training and resource library help our team of planners, landscape architects, engineers, and other experts see design through the lens of winter conditions. We understand your winter maintenance concerns; our custom designed and retrofit strategies will save you money and improve public safety.

LSiD