SOLUTIONS THROUGH DATA Let's Get Technical

704-70 Arthur Street Winnipeg, MB R3B 1G7



SERVICES

We are solutions-oriented. The services below are just a preview of what we can provide to protect your area. We'd love to walk you through this document and answer any questions you have along the way.

Integrated Municipal Engineering:

- Wastewater Treatment Design & Build
- Drinking Water Design & Build
- Subdivision Design
- Roads Engineering
- Water Distribution Analysis

Water & Waste Management:

- Solid Waste Management
- Landfill Design
- Waste Management Plans
- Landfill Lifespan Studies
- Closure plans

Flood/Drought Mitigation & Water Retention:

- Water Retention/Wetlands Projects
- Drainage
- Flood Mapping

GIS & Geospatial Analysis:

- Digital Cartography and GIS
- Municipal asset mapping
- 3D geo-visualization
- Database integration

Energy:

- Greenhouse Gas Emissions Inventories
- Energy Use Assessments
- Energy Efficiency Improvement Plans
- District Energy Optimization and Design
- Biomass Feedstock Availability Study
- Renewable Energy Options Analysis

Support Services:

- Funding Identification
- Application Writing
- Project Development & Management
- Strategic Action Plans
- Policy Development
- Plans & Feasibility Studies

Community Resilience & Economic Development:

- Energy Use Assessments
- District Energy Optimization & Design
- Asset & Flood Risk Mapping
- Natural Infrastructure Strategies

DEFINITIONS

Advanced water control:

After evaluating the infrastructure of an area, we can propose solutions that better influence the hydraulic and hydrologic systems of the location.

Digital cartography:

Various forms of geographic data compiled to create images of an area.

Elevation modeling/analysis/mapping:

Geographic data used to create models and reports that represent an area's elevations.

Geo-thermal mapping:

Cartography that reflects an area's energy stored within the ground. These sources of energy are important to recognize as they influence the location's temperature.

Geo-visualization:

Also known as cartographic visualization, geo-visualization refers to using visual models to represent a variety of geographic data. At Strategic, we typically use programs such as Blender and QGIS to visualize LiDAR data.

Geospatial Analysis:

Geospatial data is a broad term that indicates when data has geographic information.

GIS:

GIS, or Geographic Information System, refers to software that conceptualizes and analyses geographic data. At Strategic, we use QGIS and Blender to model LiDAR data.

Ground aquifers:

Bodies of rocks or sediments that contain high levels of ground water.

Increased ROI:

We compare cost estimations of various climate events against the costs of adaptation strategies to determine which solutions will provide the best return on investment.

Municipal asset mapping:

We use QGIS (Quality Geographic Information System), a program for visually representing an area's geographic data, to burn in assets on a model. Assets could be trees or culverts, that influence how an area will be affected during various climate events. This makes our predictions more accurate.

Municipal design:

Using geographic data of a municipality to evaluate existing infrastructure regarding its climate resilience against climate predictions, we can propose improvements to the area.

Natural Infrastructure:

Natural, or "green," infrastructure is different from built infrastructure. It refers to elements of a natural landscape that can be used to provide climate resilience. It refers to a variety of adaptation strategies that can establish flood and drought mitigation and procure clean water.

Satellite Imagery:

Images taken of Earth via satellites.

Surface water:

A body of water that is located above ground, such as rivers and lakes. Surface water is different from groundwater in this regard.

Water system:

Broad term referring to an area's water circulations and transfers.

ABOUT US

You'll work with a team of environmental professionals striving to lead the world in cutting-edge technology and expertise. We work locally and internationally to help communities of any size sustain their areas through a variety of clean, cost-effective solutions.

We typically work with various levels of government, interprovincial organizations, and other engineering firms.

REACH OUT







