



View from Municipal Affairs

What I've Learned About Construction in the Province.

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OUTLINE

- **INTRODUCTION**
- **CHALLENGES**
 - Clear Problem Identification
 - Municipal Capacity
 - Compliance with Wastewater Systems Effluent Regulations
- **TRENDS**
 - Project Delivery Methods
 - Project Management
 - Sustainable Construction



challenges in municipal infrastructure and construction

Clear Problem Identification

- **Clearly identifying the infrastructure problem requires:**
 - Good data regarding infrastructure age and maintenance activities
 - Understanding of system requirements, function and interconnections
 - Understanding capital and operational financial capacity of the community
 - Understanding community demographic changes, industry growth and changes to infrastructure needs and capacity
- **Uncertain Owner's requirements makes it difficult to define project success.**
- **Problem identification and project description are different.**

Municipal Capacity

- Many communities face significant financial and human capacity constraints.
- Inability to perform regular preventative maintenance to prolong the life of the asset.
- Limited data collection and monitoring to inform infrastructure prioritization and investment.
- Reliance on external consultants to assess and advise on infrastructure needs.



Wastewater Systems effluent regulations (WSER)

- **Registration, Monitoring and Reporting**
- **Wastewater system upgrades to reduce operational and capital costs of wastewater treatment**
 - Combined sewer separation
 - Infiltration detection and repair
 - Residential cross-connections
- **Significant capital funding for wastewater treatment**

Trends in municipal infrastructure and construction



Project Delivery Methods

- **Expansion of design-build project delivery in municipal infrastructure.**
- **Design-Build offers advantages such as:**
 - Risk consolidation
 - Integrated design and construction
 - Early confirmation of price
 - Time compression
 - Reduced owner coordination
- **Consideration of public-private partnerships.**



Growth of Project Management

- Focus on cost, schedule and quality
- Growth of independent project management services to act on behalf of the owner in infrastructure decisions.
- Project management consulting provides the Owner with unbiased representation of the Owner's interest.
- Project management ensures all parties are held accountable for the respective scope of work.
- Provides improved communication, coordination, monitoring and reporting for the Owner



SUSTAINABLE CONSTRUCTION

- **Public is demanding more sustainable designs and construction**
- **Improved building energy efficiency and use of renewable energy systems**
- **Increased use of natural stormwater retention and bioswales**
- **Improved construction methods including sedimentation and control**
- **Use of recycled materials**



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