



# Envisioning Sustainable Infrastructure

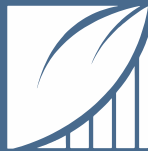


ENVISION™

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CEO and President



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**Institute for  
Sustainable  
Infrastructure**

The Institute for Sustainable Infrastructure is a not-for-profit education and research organization founded by the American Public Works Association, the American Council of Engineering Companies and the American Society of Civil Engineers.



**ZOFNASS PROGRAM**  
FOR SUSTAINABLE INFRASTRUCTURE

 Graduate School of Design  
Harvard University

Envision® was developed in joint collaboration between the Zofnass Program for Sustainable Infrastructure at the Harvard University Graduate School of Design and the Institute for Sustainable Infrastructure.

**ASCE**

**APWA**

**ACEC**

# THE IMPORTANCE OF INFRASTRUCTURE

## THE REALITIES OF THE WORLD WE LIVE IN

## A NEW FACT OF LIFE

Infrastructure provides:

- A basis for public health
- A quality of life worth living
- Economic viability

- Aging Infrastructure
- Population Growth
- Diminished Resources
- Climate Change

It is no longer enough that infrastructure work, that it be constructed on time and within budget, or even that it last. It now must be *sustainable*.



# THE IMPORTANCE OF SUSTAINABLE INFRASTRUCTURE

## REPORT CARDS

## RETURN ON INVESTMENT

- Sustainable development is  
“...development that meets the needs of  
the present without compromising the  
ability of future generations to meet their  
own needs.” *Brundtland Commission  
Report 1987*



Canada:  
Nearly 35%  
of assets  
are in need  
of attention.

- Public sector ROI



# SUSTAINABLE INFRASTRUCTURE TOOLS

SECTOR SPECIFIC

ALL  
INFRASTRUCTURE



ENVISION™



## OUR MISSION

To help infrastructure owners make more informed decisions about the sustainability of their infrastructure projects

## WHAT IS ENVISION?

Envision® is not a decision making tool...  
It is a decision making guide

## WHAT MAKES ENVISION UNIQUE?

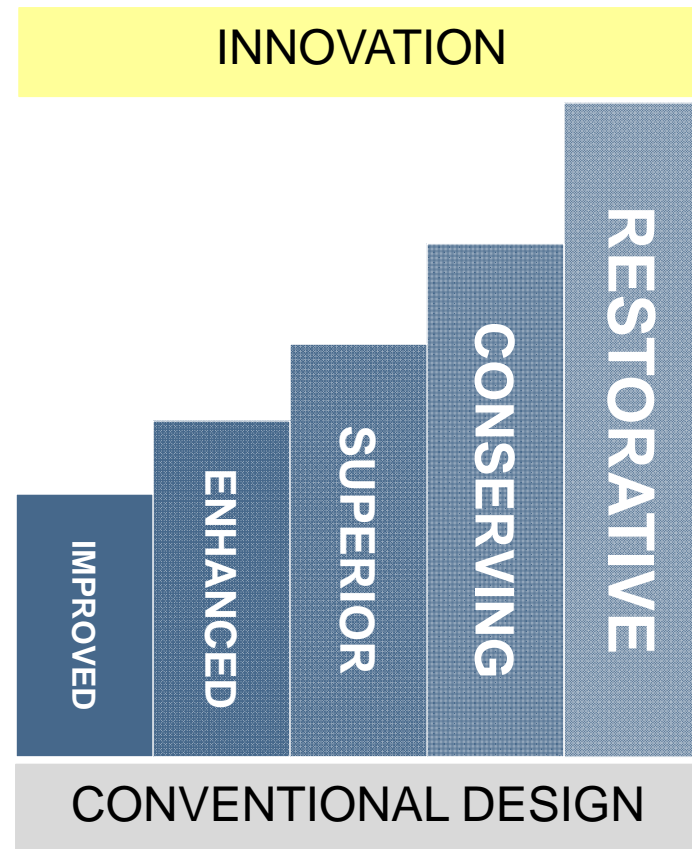
- Envision applies to all civil infrastructure
- Envision applies to all project phases
- Is designed to keep pace with a changing concept of sustainability



## 60 CREDITS IN 5 CATEGORIES



## 5 LEVELS OF ACHIEVEMENT



# ENVISION COMPONENTS

## GUIDANCE MANUAL

## PRE-ASSESSMENT CHECKLIST

## ONLINE SCORESHEET

- A no cost, downloadable guidance manual



- A no-cost, downloadable, self-assessment tool
- An educational tool
- Familiarizes users with sustainability
- A no cost, comprehensive, self-assessment online calculator



# ENVISION RECOGNITION

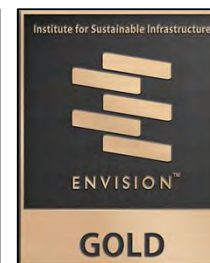
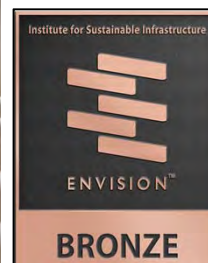
## PROFESSIONAL CREDENTIALING

## PROJECT VERIFICATION AND AWARD PROGRAM

- Envision Sustainability Professional
- Over 4,300 world-wide
- Over 150 in Canada



- Independent third-party review
- Optional with associated fee



# Envision Adoption



# INFRASTRUCTURE OWNERS

## Canadian entities with ENV SPs:

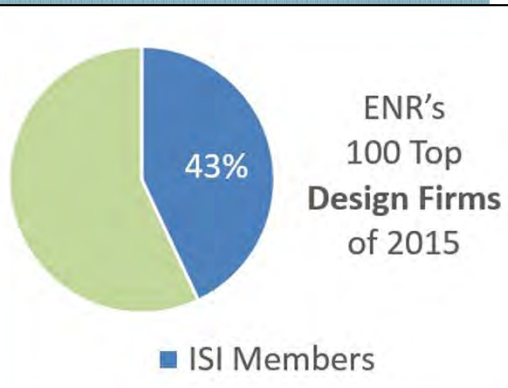
- City of Lacombe
- Metro Vancouver
- Port Metro Vancouver
- Toronto and Region Conservation Authority
- Infrastructure Canada



Madison Metropolitan  
Sewerage District



# INFRASTRUCTURE PROFESSIONALS

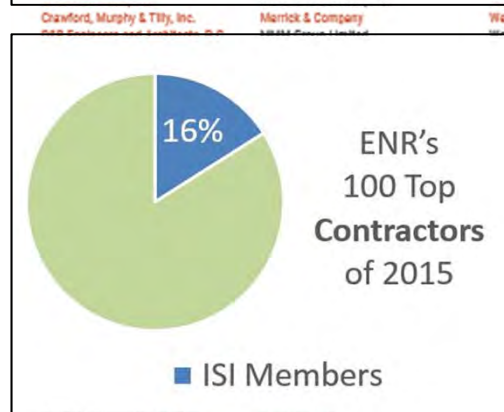


## Envision Qualified Companies

3DOTECH  
3T-Design&Development L.L.C.  
Senghasing, L.L.O.  
Advanced Engineering and  
Environmental Services, Inc.  
AECOM  
AMEC

Hatch Mott MacDonald  
Hazen and Sawyer  
HDR  
Hemera Environmental  
Consultants, Inc.  
HNTB  
Hoffman Construction Company  
JBB Group, Inc.

R.G. Miller Engineers, Inc.  
Ridolfi, Inc.  
R. M. Towill Corporation  
Schnebel Engineering Consultants  
Shive-Hattery, Inc.  
Shockey Consulting Services, LLC  
Short-Elliott-Hendrickson, Inc.  
Stantec  
Stantec & Associates LLC  
Sur la Saint-Laurent a.s.m.c. /  
on the Saint Lawrence p.p.  
USA Civil  
Urban, Inc.  
Urban Reid, Inc.  
Urban  
Associates  
Site Development, LLC  
Connecta, Inc.  
International  
Holder Group  
Strategy Consulting, Inc.  
ma  
Stema Ltd.  
Hansen Brustin, Inc.  
Inc.  
Structure  
IC  
Materials Company  
Moore and Associates  
Weldinger Associates, Inc.  
Wilson Engineering & Surveying  
Parsons Brinckerhoff



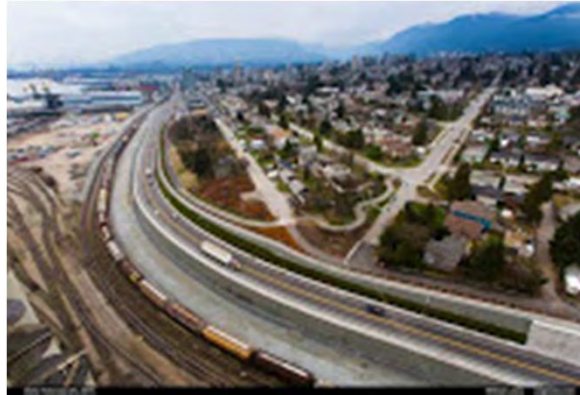
# Project Awards



# Grand Bend Area Wastewater Treatment Facility



## Low Level Road



**Designed by  
Stantec**



## STRATEGIES FOR CHANGING THE INDUSTRY

- Look for opportunities to make incremental improvements in performance on every project
- Use standardized tools and metrics instead of “black box” or proprietary methods
- Document sustainable practices and monitor performance
- Report results and share lessons learned



FOR MORE  
INFORMATION  
ABOUT  
ENVISION®

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