Sustainable Infrastructure: Using ENVISION® to Plan, Design, and Rate Infrastructure Projects

Andrew Dane, AICP, ENV SP, LEED ND
andrew@neighborhoodplanners.org
920.585.3593

Anthony Kane, LEED AP, ENV SP
kane@sustainableinfrastructure.org
202.218.6748

ASCE | KNOWLEDGE & LEARNING

LEARNING OBJECTIVES

1. Participants will increase their awareness of the ENVISION tool for incorporating sustainability principles into engineering planning and design
2. Participants will increase their knowledge of how to use the ENVISION tool for planning and rating infrastructure projects
3. Participants will be motivated to pilot and test the ENVISION system on their own projects
4. Participants will understand the ENVISION system and how it can relate to different types of infrastructure (water, transportation, etc…)

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AGENDA

- Infrastructure Sustainability
- ISI & Envision
- Case Study
- Q&A

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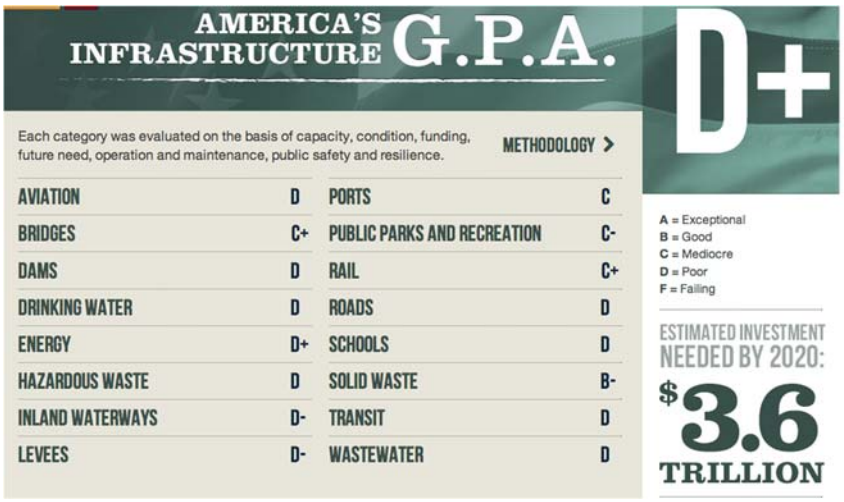
Business Case for Sustainable Infrastructure

✓ Sustainable infrastructure is also infrastructure that can be *sustained*



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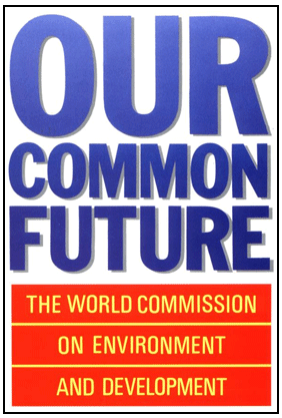
DEFINING SUSTAINABILITY

- 1987 **Brundtland Report** -*Our Common Future*
  - "'development that meets the needs of the present without compromising the ability of future generations to meet their own needs."
- It contains two key concepts:
  - the concept of **"needs",** in particular the essential needs of the world's poor,
  - and the idea of **limitations** imposed by the state of technology and social organization on the environment's ability to meet present and future needs.



(Source: World Commission on Environment and Development. Our Common Future. The Brundtland Report. Oxford University Press, 1987, p. 43.)

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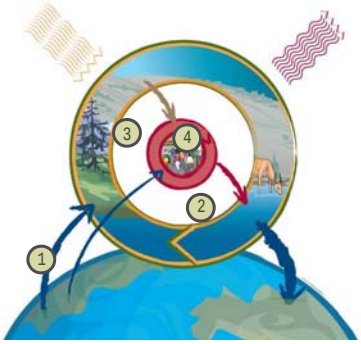
DEFINING SUSTAINABILITY

In a sustainable society, nature is not subject to systematically increasing:

The Natural Step (TNS)



1. **concentrations of substances <u>extracted</u> from the earth's crust**
2. **concentrations of substances <u>produced</u> by society**
3. **<u>degradation</u> by physical means**

and, in that society…

4. **<u>people</u> are not subject to conditions that systematically undermine their capacity to meet their needs.**

Source material from TNS Canada

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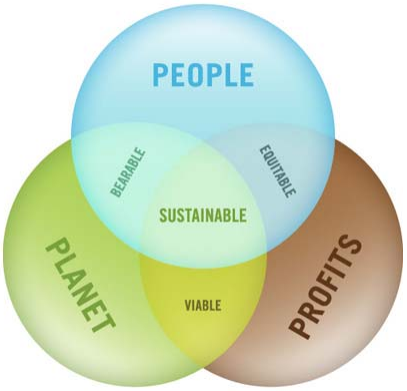
DEFINING SUSTAINABILITY

- **The "Triple Bottom Line"**
  - "three-pronged fork of profitability, environmental quality, and social justice."
- ICLEI Local Governments for Sustainability
  - "Triple Bottom Line is an integrated decision-making toolkit that assists policymakers to embed sustainability priorities in their planning process, and to take social, economic and environmental concerns into account."



The triple bottom line model suggests that business should be accountable on three measures: social stewardship (people), environmental stewardship (planet), and the ability to maximize profits. Photo credit: http://mattress.springintoactionnyc.com/ socialmission/the_triple_bottom_line_model

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DEFINING SUSTAINABILITY

- **The "Triple Bottom Line"**

Sustainability Supplier Assessment Questions

Energy and Climate *Reduce energy costs and greenhouse gas emissions*	• 1. Have you measured and taken steps to reduce your corporate greenhouse gas emissions (Y/N) • 2. Have you opted to report your greenhouse gas emissions and climate change strategy to the Carbon Disclosure Project (CDP)? (Y/N) • 3. What are your total annual greenhouse gas emissions in the most recent year measured? (Enter total metric tons CO_2e, e.g. CDP 2009 Questionnaire, Questions 7-11, Scope 1 and 2 emissions) • 4. Have you set publicly available greenhouse gas reduction targets? If yes, what are those targets? (Enter total metric tons and target date, e.g. CDP 2009 Questionnaire, Question 23)
Material Efficiency *Reduce waste and enhance quality*	• Scores will be automatically calculated based on participation in the Packaging Scorecard in addition to the following: • 5. If measured, please report total amount of solid waste generated from the facilities that produce your product(s) for Walmart for the most recent year measured. (Enter total lbs) • 6. Have you set publicly available solid waste reduction targets? If yes, what are those targets? (Enter total lbs and target date) • 7. If measured, please report total water use from the facilities that produce your product(s) for Walmart for the most recent year measured. (Enter total gallons) • 8. Have you set publically available water use reduction targets? If yes, what are those targets? (Enter total gallons and target date)
Nature and Resources *High quality, responsibly sourced raw materials*	• 9. Have you established publicly available sustainability purchasing guidelines for your direct suppliers that address issues such as environmental compliance, employment practices, and product/ingredient safety? (Y/N) • 10. Have you obtained 3rd party certifications for any of the products that you sell to Walmart? If so, from the list of certifications below, please select those for which any of your products are, or utilize materials that are, currently certified.
People and Community *Vibrant, productive workplaces and communities*	• 11. Do you know the location of 100% of the facilities that produce your product(s)? (Y/N) • 12. Before beginning a business relationship with a manufacturing facility, do you evaluate their quality of production and capacity for production? (Y/N) • 13. Do you have a process for managing social compliance at the manufacturing level? (Y/N) • 14. Do you work with your supply base to resolve issues found during social compliance evaluations and also document specific corrections and improvements? (Y/N) • 15. Do you invest in community development activities in the markets you source from and/or operate within? (Y/N)

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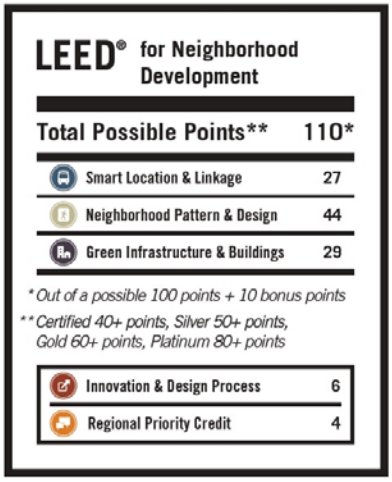
DEFINING SUSTAINABILITY

- **LEED ND V 4 2014**



- Neighborhood Development
- Rating System
- CNU, NRDC, USGBC collaborated in development

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DEFINING SUSTAINABILITY

- **ASCE defines sustainability:**

"A set of environmental, economic, and social conditions – the "Triple Bottom Line" – in which all of society has the capacity and opportunity to maintain and improve its quality of life indefinitely, without degrading the quantity, quality or the availability of natural, economic, and social resources."

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ISI FOUNDERS & PURPOSE OF ENVISION

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

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What Types Of Infrastructure Will Envision Rate?

ENERGY
- Geothermal
- Hydroelectric
- Nuclear
- Coal
- Natural Gas
- Oil/Refinery
- Wind
- Solar
- Biomass

WATER
- Potable water distribution
- Capture/Storage
- Water Reuse
- Storm Water Management
- Flood Control

WASTE
- Solid waste
- Recycling
- Hazardous Waste
- Collection & Transfer

TRANSPORT
- Airports
- Roads
- Highways
- Bikes
- Pedestrians
- Railways
- Public Transit
- Ports
- Waterways

LANDSCAPE
- Public Realm
- Parks
- Ecosystem Services
- Natural Infrastructure

INFORMATION
- Telecommunications
- Internet
- Phones
- Satellites
- Data Centers
- Sensors

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Envision Categories & Credits

- QUALITY OF LIFE
- LEADERSHIP
- RESOURCE ALLOCATION
- NATURAL WORLD
- CLIMATE AND RISK

QUALITY OF LIFE
13 Credits

1 PURPOSE

QL1.1 Improve Community Quality of Life
QL1.2 Stimulate Sustainable Growth and Development
QL1.3 Develop Local Skills and Capabilities

2 WELLBEING

QL2.1 Enhance Public Health and Safety
QL2.2 Minimize Noise and Vibration
QL2.3 Minimize Light Pollution
QL2.4 Improve Community Mobility and Access
QL2.5 Encourage Alternative Modes of Transportation
QL2.6 Improve Accessibility, Safety & Wayfinding

3 COMMUNITY

QL3.1 Preserve Historic and Cultural Resources
QL3.2 Preserve Views and Local Character
QL3.3 Enhance Public Space

QL0.0 Innovate or Exceed Credit Requirements

LEADERSHIP
10 Credits

1 COLLABORATION

LD1.1 Provide Effective Leadership & Commitment
LD1.2 Establish a Sustainability Management System
LD1.3 Foster Collaboration and Teamwork
LD1.4 Provide for Stakeholder Involvement

2 MANAGEMENT

LD2.1 Pursue By-Product Synergy Opportunities
LD2.2 Improve Infrastructure Integration

3 PLANNING

LD3.1 Plan Long-Term Maintenance and Monitoring
LD3.2 Address Conflicting Regulations and Policies
LD3.3 Extend Useful Life

LD0.0 Innovate or Exceed Credit Requirements

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Envision Categories & Credits

RESOURCE ALLOCATION
14 Credits

1 MATERIALS

RA1.1 Reduce Net Embodied Energy
RA1.2 Support Sustainable Procurement Practices
RA1.3 Use Recycled Materials
RA1.4 Use Regional Materials
RA1.5 Divert Waste from Landfills
RA1.6 Reduce Excavated Materials Taken Off Site
RA1.7 Provide for Deconstruction and Recycling

2 ENERGY

RA2.1 Reduce Energy Consumption
RA2.2 Use Renewable Energy
RA2.3 Commission and Monitor Energy Systems

3 WATER

RA3.1 Protect Fresh Water Availability
RA3.2 Reduce Potable Water Consumption
RA3.3 Monitor Water Systems

RA0.0 Innovate or Exceed Credit Requirements

NATURAL WORLD
15 Credits

1 SITING

NW1.1 Preserve Prime Habitat
NW1.2 Preserve Wetlands and Surface Water
NW1.3 Preserve Prime Farmland
NW1.4 Avoid Adverse Geology
NW1.5 Preserve Floodplain Functions
NW1.6 Avoid Unsuitable Development on Steep Slopes
NW1.7 Preserve Greenfields

2 LAND+WATER

NW2.1 Manage Stormwater
NW2.2 Reduce Pesticides and Fertilizer Impacts
NW2.3 Prevent Surface and Groundwater Contamination

3 BIODIVERSITY

NW3.1 Preserve Species Biodiversity
NW3.2 Control Invasive Species
NW3.3 Restore Disturbed Soils
NW3.4 Maintain Wetland and Surface Water Functions

NW0.0 Innovate or Exceed Credit Requirements

CLIMATE AND RISK
8 Credits

1 EMISSIONS

CR1.1 Reduce Greenhouse Gas Emissions
CR1.2 Reduce Air Pollutant Emissions

2 RESILIENCE

CR2.1 Assess Climate Threat
CR2.2 Avoid Traps and Vulnerabilities
CR2.3 Prepare For Long-Term Adaptability
CR2.4 Prepare for Short-Term Hazards
CR2.5 Manage Heat Island Effects

CR0.0 Innovate or Exceed Credit Requirements

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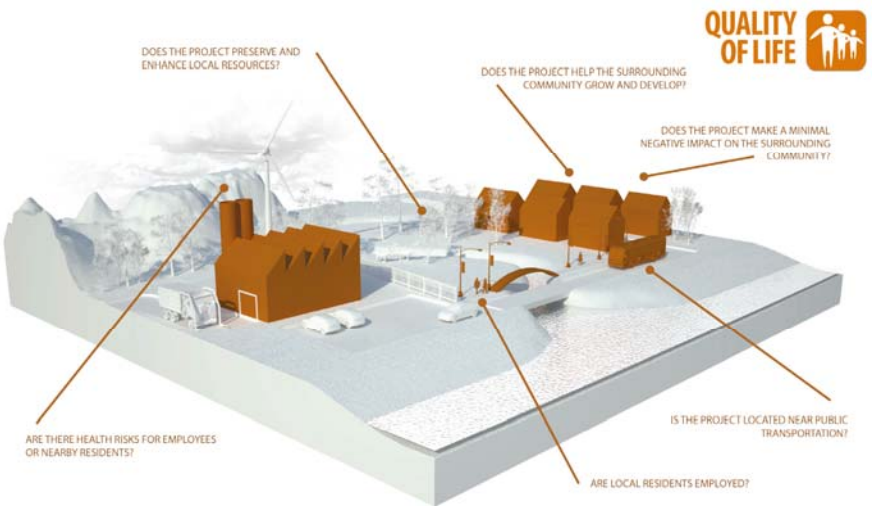
Envision Categories & Credits



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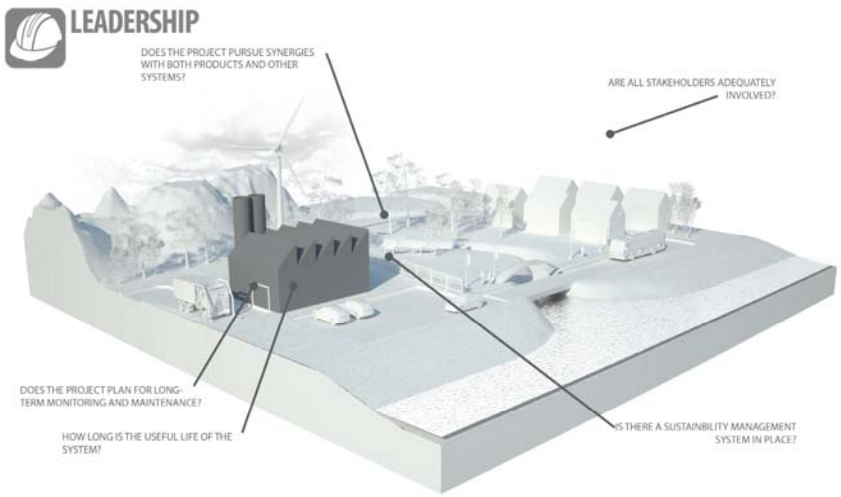
Envision Categories & Credits



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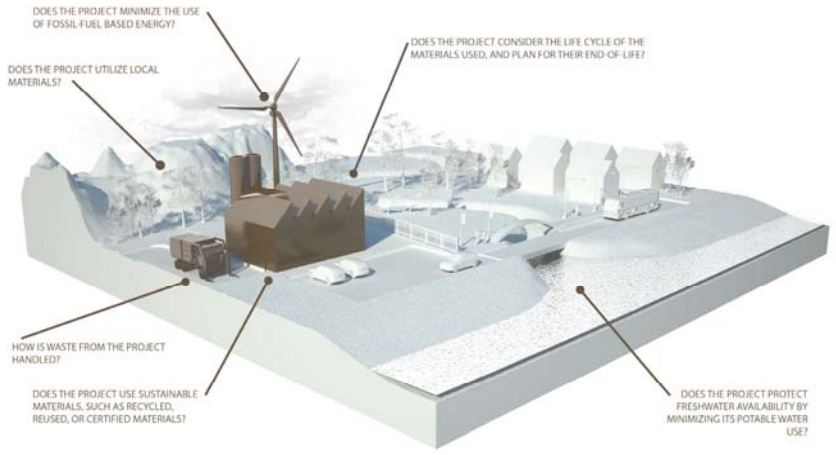
Envision Categories & Credits

RESOURCE ALLOCATION



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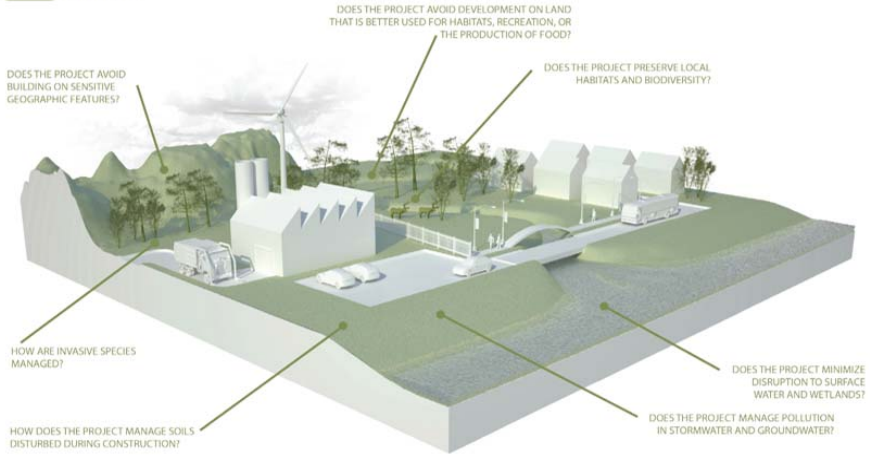
Envision Categories & Credits

NATURAL WORLD



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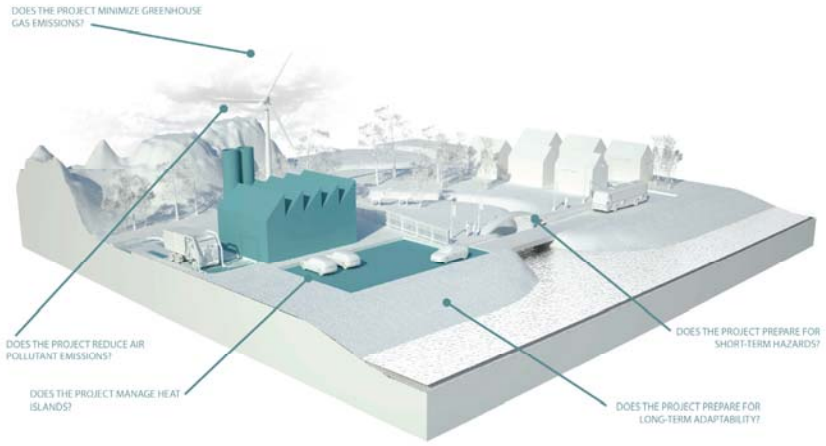
Envision Categories & Credits

CLIMATE AND RISK



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WAYS TO USE ENVISION

- ENVISION can benefit the planning & design process:
  - Link Sustainability Policy to Planning & Design
  - Provide a Framework for Project Teams to Define “Sustainability”
  - Generate Better Alternatives
  - Improve the Process for Comparing Alternatives

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WAYS TO USE ENVISION

- Provides Framework for Project Teams to Define "Sustainability"

ENVISION SUSTAINABILITY CREDIT RATING SYSTEM				INCL?	
	Subcategory			YES	NO
QUALITY OF LIFE	PURPOSE	QL1.1	Improve community quality of life		
		QL1.2	Stimulate sustainable growth and development		
		QL1.3	Develop local skills and capabilities		
	COMMUNITY	QL2.1	Enhance public health and safety		
		QL2.2	Minimize noise and vibration		
		QL2.3	Minimize light pollution		
		QL2.4	Improve community mobility and access		
		QL2.5	Encourage alternative modes of transportation		
		QL2.6	Improve site accessibility, safety and wayfinding		
	WELLBEING	QL3.1	Preserve historic and cultural resources		
		QL3.2	Preserve views and local character		
		QL3.3	Enhance public space		
		QL0.0	Innovate or exceed credit requirements		

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WAYS TO USE ENVISION

- Links Sustainability Policy to Planning & Design

Policies & Programs	Applicable ENVISION Credits (for illustrative purposes only and are not intended to be all inclusive)
Greenroads	QL 1.1; QL 2.4; QL 2.5, QL 2.6;
Zero Waste	RA 1.3; RA 2.2; RA 1.3; RA 1.4; RA 1.5;
ICLEI's Star Program	All credits
The Natural Step	QL 2.1, QL 1.3; RA 1.1-RA 3.3; NW 1.1; NW 1.3; NW 1.7
Climate Adaptation	CR 2.1; CR 2.2; CR 2.3;CR 2.4; CR 2.5
LEED ND	All credits

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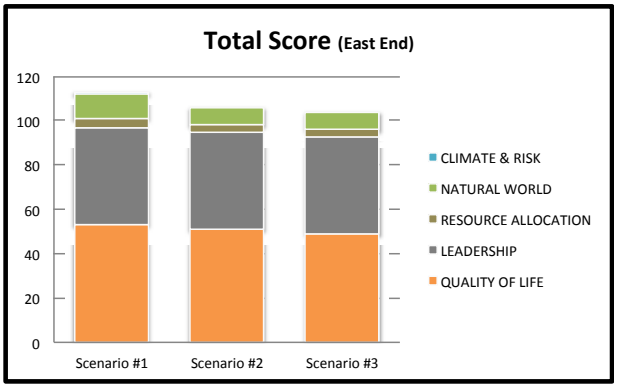
WAYS TO USE ENVISION

- Links Issues & Solutions within Context of Sustainability

KEY ISSUES ADDRESSED			
●	Safety, pedestrians		Parking
●	Safety, bicyclists		Water quality
	Creek access/safety		Road drainage
●	Speeding		Park flooding
	Road geometry		



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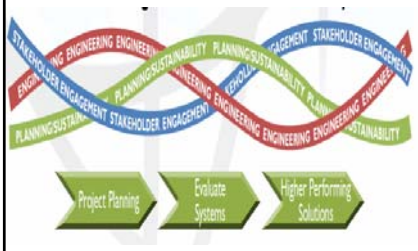
CASE STUDY: EDINA, MN



West 54th Street Roadway Reconstruction, City of Edina

- Incorporates community's values
- Educates and engages stakeholders
- Builds stakeholder consensus
- Evaluates alternatives
  - Uses sustainability objectives
  - Refines scenarios
  - Reinforces Feasibility Study

Discussion on project elements during planning process

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CASE STUDY: MMSD, WI

Lyons Park Creek Flood Management – Kinnickinnic River Watershed and Milwaukee Metropolitan Sewerage District (MMSD):

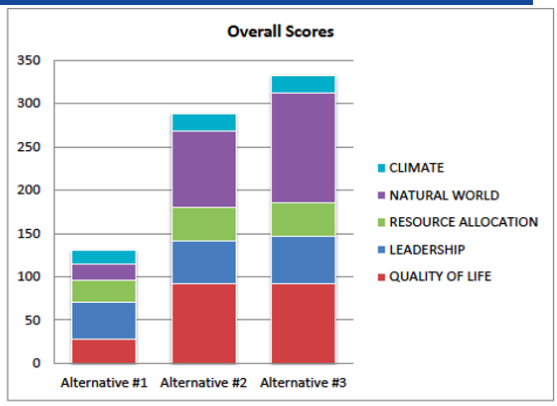
- Compared Envision with MMSD analysis
- Used quantitative and qualitative analysis

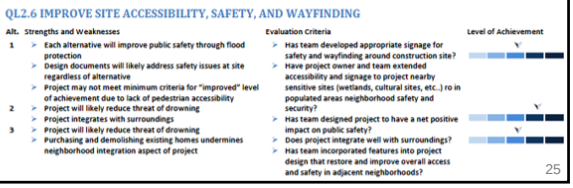
Analyzed three alternatives:

1. Conveyance only
2. Increase storage within existing ROW
3. Acquire properties for additional storage

	STRENGTHS	WEAKNESSES
MMSD WORKSHEET	• Inexpensive • Easy to modify • Developed in-house • Focus on aspects of sustainability most relevant to MMSD	• Little scoring guidance • Narrow focus • Stand alone tool
ENVISION	• Provides recognition • National standard allows for benchmarking comparisons • Comprehensive 3BL decision-making tool • ISI provides continual improvement • 3rd party verification	• Complexity • Cost • Steep learning curve • Value proposition uncertain

Envision rating compared to MMSD worksheet





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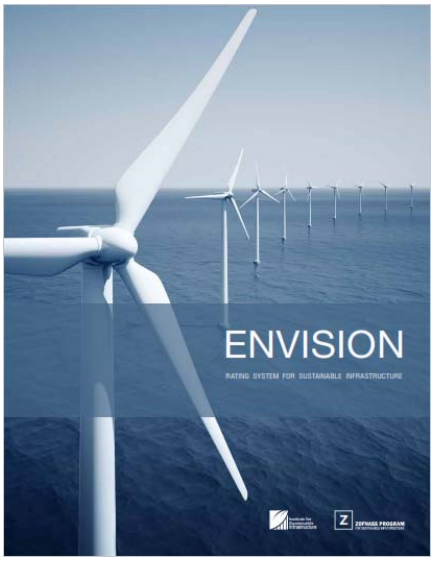
HOW IT CAN BE USED: THE TOOLBOX

- **TOOL #1** - ENVISION PRE-ASSESSMENT CHECKLIST
- **TOOL #2** - ENVISION RATING SYTEM
- **TOOL #3** - ENVISION RATING SYSTEM VERIFICATION & AWARD



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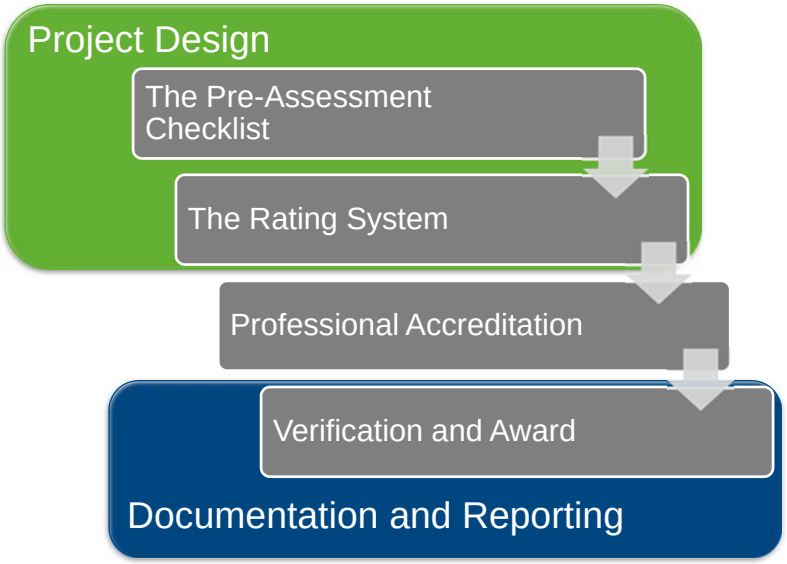
ENVISION IMPLEMENTATION



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THE PRE-ASSESSMENT CHECKLIST

Natural World

1. Siting

NW 1.1 Preserve Prime Habitat

Intent: Avoid placing the project – and the site compound/temporary works – on land that has been identified as of high ecological value or as having species of high value.

Metric: Avoidance of high ecological value sites and establishment of protective buffer zones.

Assessment Questions:	**Yes**	**No**	**N/A**	
Has the project team taken steps to identify and document areas of prime habitat near or on the site?	◉	○	○	?
Does the project avoid development on land that is judged to be prime habitat?	◉	○	○	?
Does the project establish natural buffer zones around all areas deemed prime habitat?	◉	○	○	?
Does the project significantly increase the area of prime habitat through habitat restoration?	○	◉	○	?
Does the project improve habitat connectivity by linking habitats?	○	◉	○	?
	Total	3	of 5	

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ENVISION PRE-ASSESSMENT CHECKLIST

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Does the project avoid development on land that is judged to be prime habitat?	◉	○	○	?
	◉	○	○	?
	○	◉	○	?
	○	◉	○	?
Total 3 of 5				

...es, and waterbodies by

...waterbodies.

	Yes	No	N/A	
Does the project avoid development on wetlands, shorelines, and waterbodies?	◉	○	○	?
Does the project maintain soil protection zones (VSPV) around all wetlands, shorelines, and waterbodies?	○	◉	○	?
Does the project restore degraded existing buffer zones to a natural state?	◉	○	○	?
Total 2 of 4				

35	NATURAL WORLD	SITING	NW1.1 Preserve prime habitat	3	2	0	3 of 5
36			NW1.2 Protect wetlands and surface water	2	1	0	2 of 3
37			NW1.3 Preserve prime farmland	2	2	0	2 of 4
38			NW1.4 Avoid adverse geology	4	1	0	4 of 5
39			NW1.5 Preserve floodplain functions	3	0	0	3 of 3
40			NW1.6 Avoid unsuitable development on steep slopes	0	2	1	0 of 2
41			NW1.7 Preserve greenfields	3	1	0	3 of 4
42		LAND & WATER	NW2.1 Manage stormwater	0	1	1	0 of 1
43			NW2.2 Reduce pesticide and fertilizer impacts	0	0	3	0 of 0
44			NW2.3 Prevent surface and groundwater contamination	3	0	0	3 of 3
45		BIODIVERSITY	NW3.1 Preserve species biodiversity	2	2	0	2 of 4
46			NW3.2 Control invasive species	1	1	1	1 of 2
47			NW3.3 Restore disturbed soils	1	1	0	1 of 2
48			NW3.4 Maintain wetland and surface water functions	4	1	0	4 of 5
			TOTAL	28	15	6	

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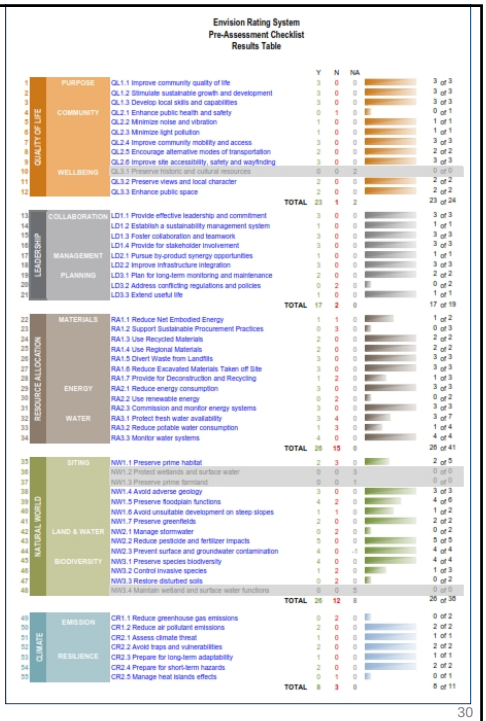
THE PRE-ASSESSMENT CHECKLIST

- Credits
  - Addressed = 17
  - Not Addressed = 34
  - Not Applicable = 4

  } 55

- Results
  - Documents Sustainable Actions
  - Promotes Discussion of Potential Actions



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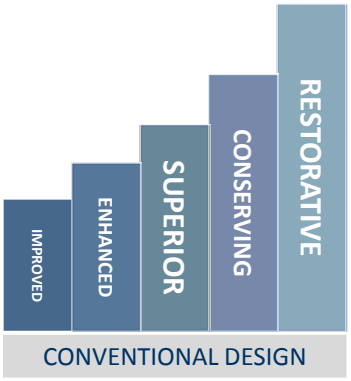
RATING SYSTEM

To what extent did you address each credit?
(select a level of achievement…)



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RATING SYSTEM

NW1.1 Preserve prime habitat

LEVELS OF ACHIEVEMENT

IMPROVED	ENHANCED	SUPERIOR	CONSERVING	RESTORATIVE
		(9) Avoid development. The project has avoided the use of land that is judged to be "prime habitat" including, but not limited to, patches of old-growth forest; land of high ecological value or home to species of high value; national parks, monuments, seashores, and forests; wildlife refuges; wildlife preserves; wild and scenic rivers; and other protected areas. (A)	**(14) Protection of existing habitat.** The project establishes a minimum 300 ft. natural buffer zone around all areas deemed prime habitat. Exceptions are possible if developed sites not within the project scope exist within the minimum distance. (A, B)	**(18) Restore habitat.** Project significantly increases the area of prime habitat and connectivity. This should involve the restoration of habitat, as determined by a qualified ecosystem professional. The habitat produced can be part of a protective buffer zone and can be at the site of the project or adjacent to the site. (A, B, C)

EVALUATION CRITERIA AND DOCUMENTATION

A. Does the project avoid development on land that is judged to be "prime habitat" by a third party (including SFI, FSC, or CSA)?

1. *Narrative describing efforts by an interdisciplinary team to research and document all areas of "prime habitat" near or on the site using local, state, or national prime habitat information.*
2. *Documentation demonstrating no areas of prime habitat are located on-site or within the specified distance of developed areas.*

B. Does the project preserve, at minimum, an appropriately sized buffer zone of undeveloped land or other habitat protection and connectivity according to the specified width around all prime habitat areas?

1. *A site map illustrating a buffer of undeveloped land, fulfilling the requirements above, is preserved (or created if the site is currently developed) around all areas of prime habitat. Provide documentation to demonstrate appropriate size of buffer or other protection.*

C. Does the project significantly increase the area of prime habitat through the restoration of vegetation and habitat connectivity to a degree suitable as habitat (as determined by a qualified habitat restoration professional), either as part of the protective buffer zone or adjacent to the site?

1. *A restoration plan outlining any efforts to restore prime habitat either on the project site or adjacent to the site, including, at a minimum a site map outlining locations of restoration, and a species list of plants used. This documentation must be signed by a qualified natural resource professional who assisted with the restoration and monitoring plan.*

ASCE | KNOWLEDGE & LEARNING

VERIFICATION & AWARD

BRONZE

SILVER

GOLD

PLATINUM

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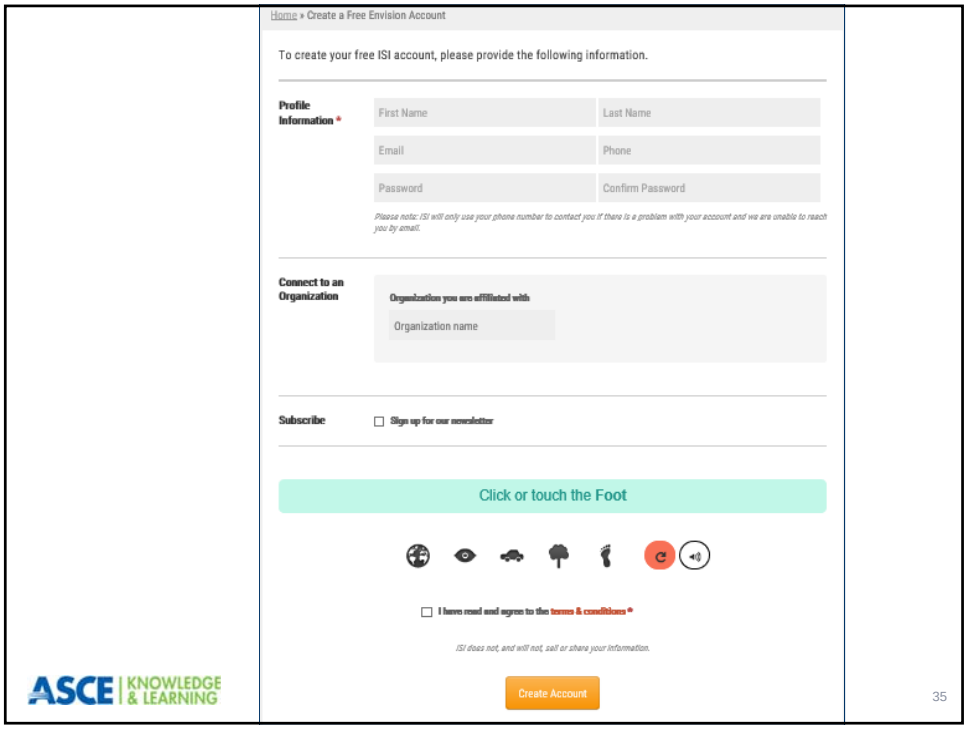
Home » Create a Free Envision Account
To create your free ISI account, please provide the following information.
Profile Information *
First Name
Last Name
Email
Phone
Password
Confirm Password
Please note: ISI will only use your phone number to contact you if there is a problem with your account and we are unable to reach you by email.
Connect to an Organization
Organization you are affiliated with
Organization name
Subscribe
Sign up for our newsletter
Click or touch the Foot
I have read and agree to the terms & conditions *
ISI does not, and will not, sell or share your information.
Create Account
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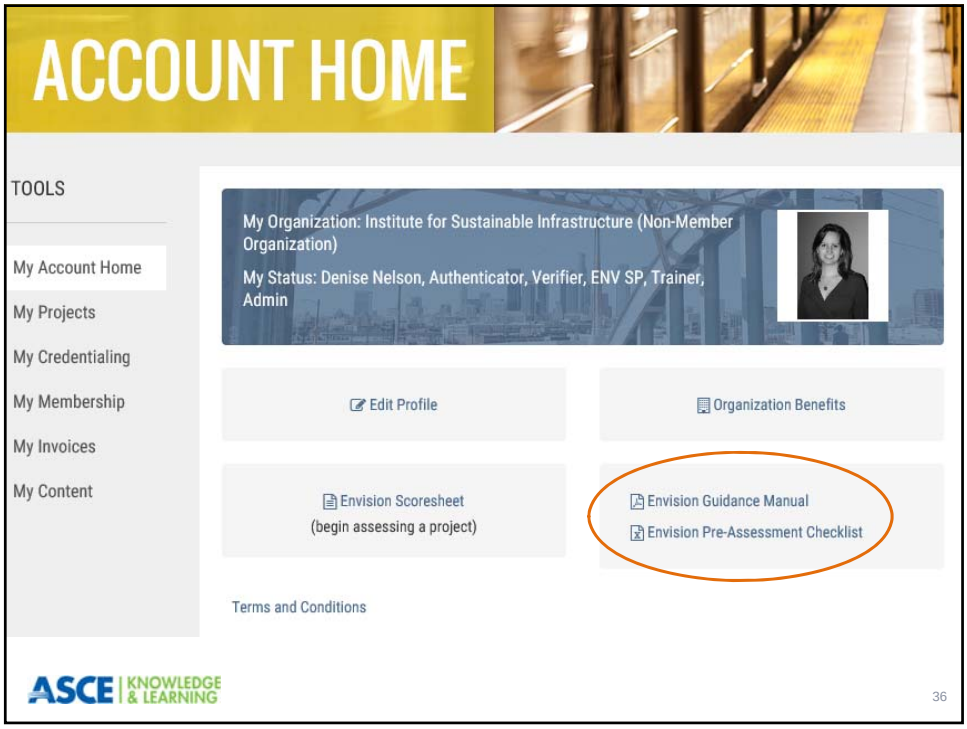
ACCOUNT HOME
TOOLS
My Account Home
My Projects
My Credentialing
My Membership
My Invoices
My Content
My Organization: Institute for Sustainable Infrastructure (Non-Member Organization)
My Status: Denise Nelson, Authenticator, Verifier, ENV SP, Trainer, Admin
Edit Profile
Organization Benefits
Envision Scoresheet
(begin assessing a project)
Envision Guidance Manual
Envision Pre-Assessment Checklist
Terms and Conditions
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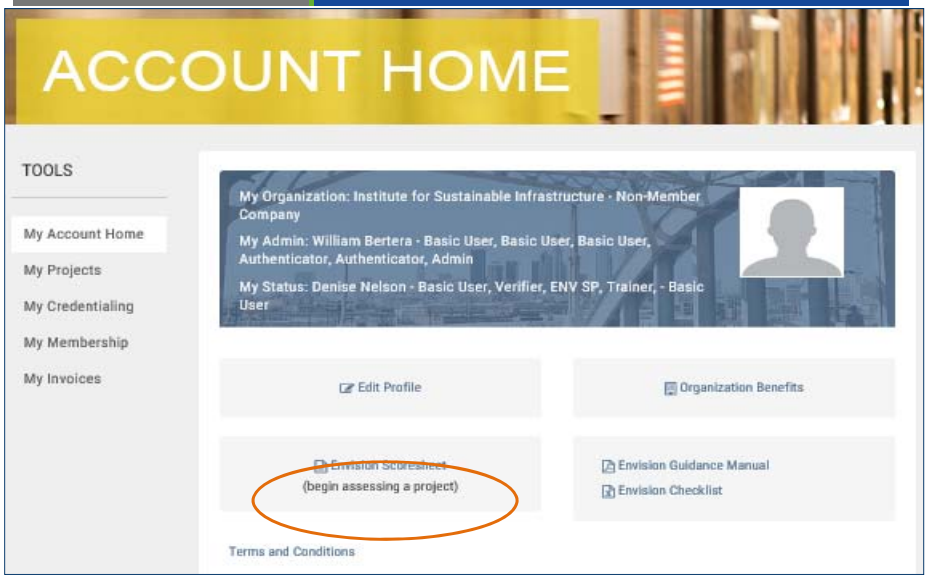
ENVISION PROJECTS



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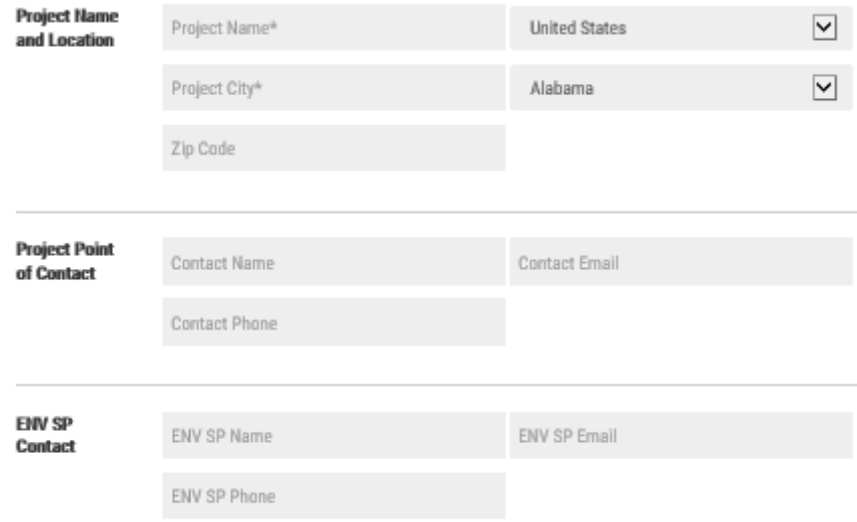
CREATING A PROJECT



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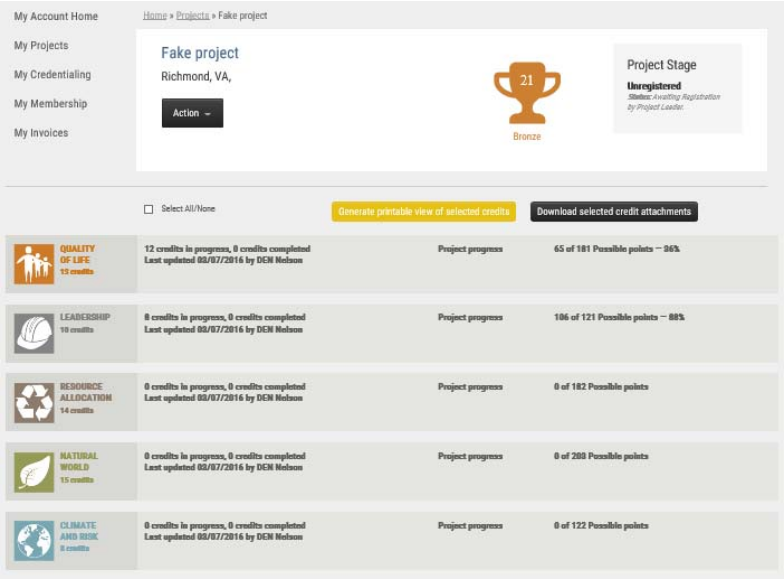
THE ONLINE SCORESHEET



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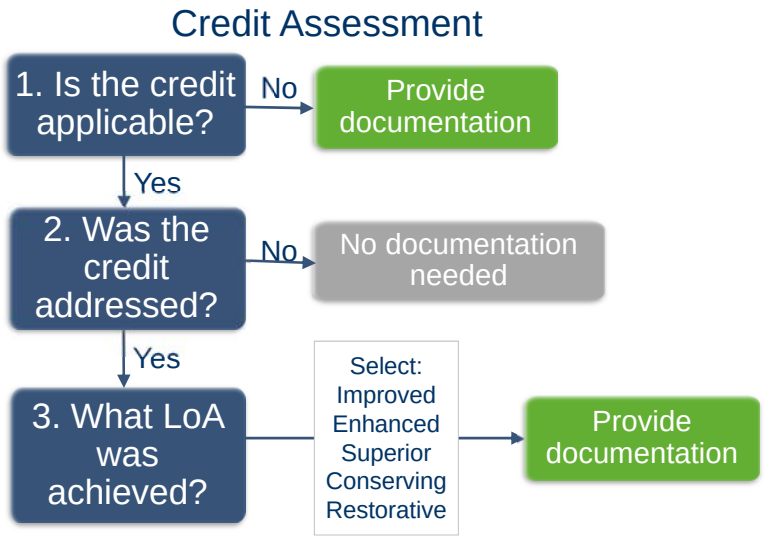
THE RATING SYSTEM



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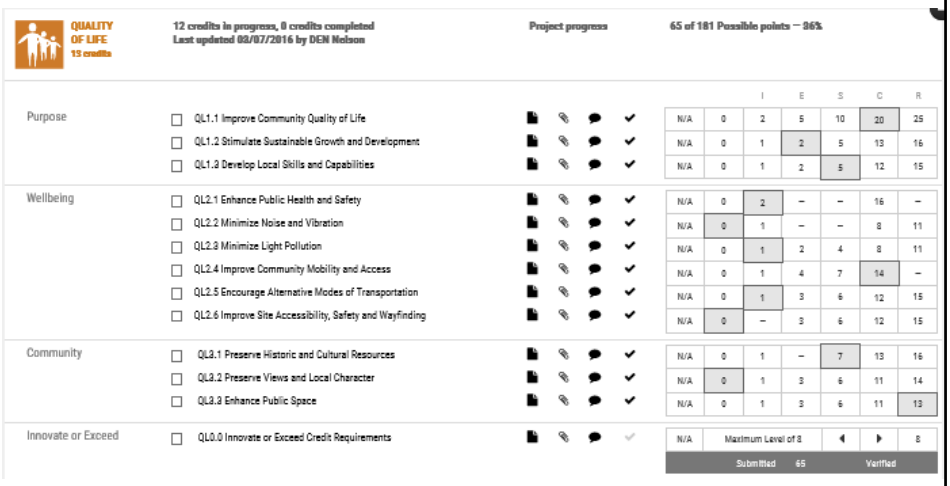
THE ONLINE SCORESHEET



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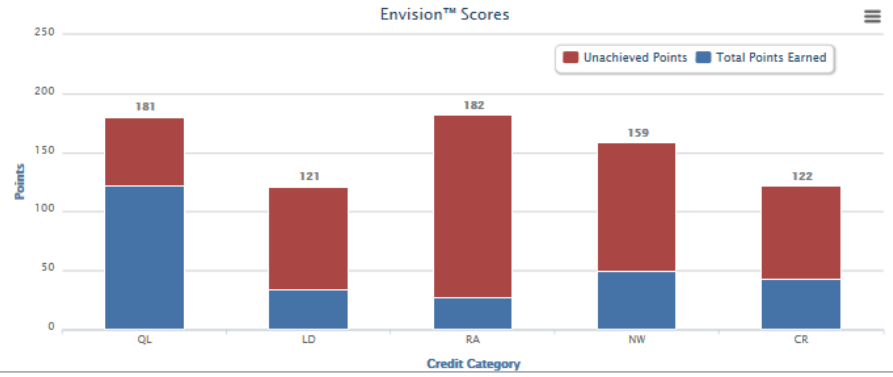
THE RATING SYSTEM

Credit Category	Applicable Points	Points	Innovation Points	Total Points Pursued	Percentage of Available Points
QUALITY OF LIFE	181	122	0	122	67%
LEADERSHIP	121	34	0	34	28%
RESOURCE ALLOCATION	182	28	0	28	15%
NATURAL WORLD	159	49	0	49	31%
CLIMATE AND RISK	122	43	0	43	35%
Total Workbook Points	765	276	0	276	36%



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THE RATING SYSTEM

Credit Category	Applicable Points	Points	Innovation Points	Total Points Pursued	Percentage of Available Points
QUALITY OF LIFE	181	122	0	122	67%
LEADERSHIP	121			34	28%
RESOURCE ALLOCATION	182			28	15%
NATURAL WORLD	159			49	31%
CLIMATE AND RISK	122			43	35%
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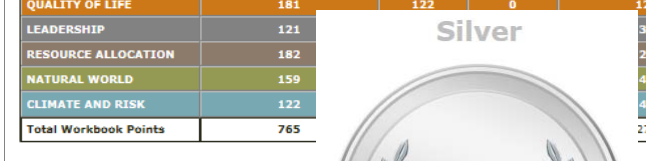

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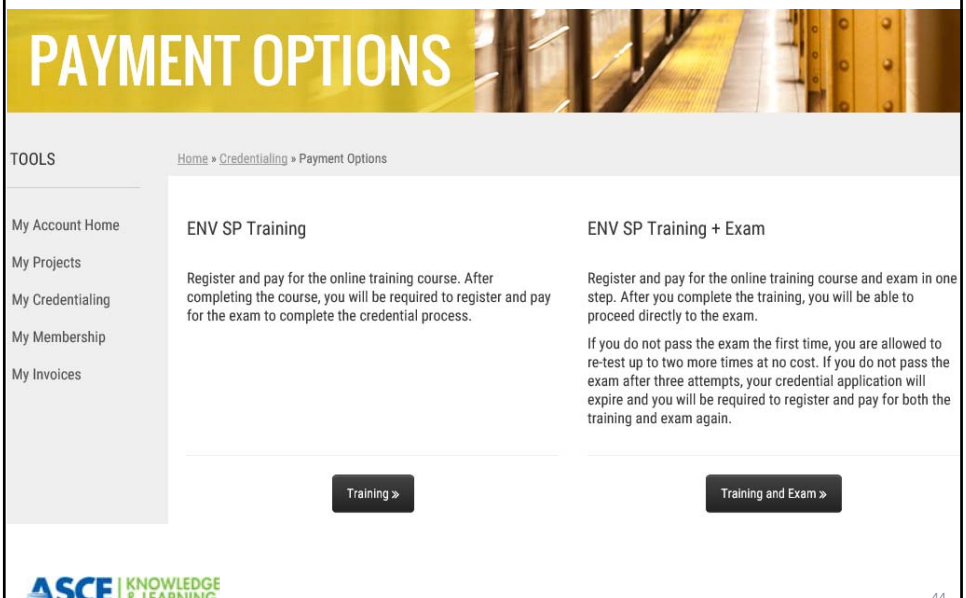
PROFESSIONAL CREDENTIAL (ENV SP)



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PROFESSIONAL CREDENTIAL (ENV SP) – TRAINING

These training modules are designed to educate you on Envision and prepare you to take the exam to earn the Envision Sustainability Professional (ENV SP) credential. You must complete the training modules to be eligible to take the exam.

Module/Status	Date Started
ENV SP Training Module 1 - Complete	11/21/2016
ENV SP Training Module 2 - Not Started	–
ENV SP Training Module 3 - Not Started	–
ENV SP Training Module 4 - Not Started	–
ENV SP Training Module 5 - Not Started	–
ENV SP Training Module 6 - Not Started	–
ENV SP Training Module 7 - Not Started	–

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PROFESSIONAL CREDENTIAL (ENV SP) – THE EXAM

You are ready to go, lets start the exam! Go »

- The accreditation exam is accessible via the internet
- Registration and payment is required
- The test consists of 75 multiple choice questions
- Open book
- 75% is considered a passing grade

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PROFESSIONAL CREDENTIAL (ENV SP)

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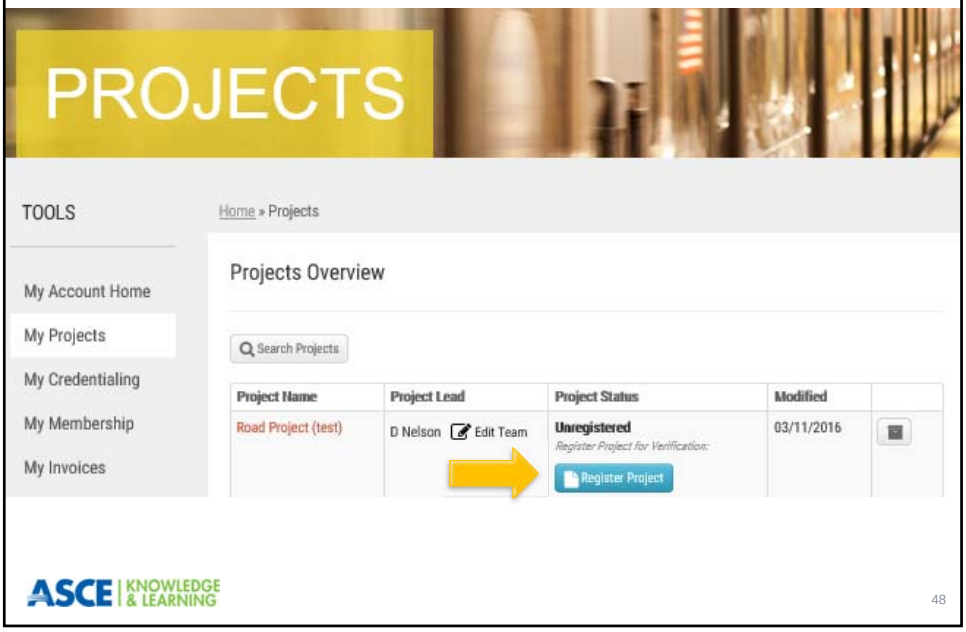
VERIFICATION AND AWARD



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VERIFICATION AND AWARD

Project Size, $	Non-Member Price	ISI Member Price
Up to 5 million	$11,000	$9,000
5 to 25 million	$17,000	$14,000
25 to 100 million	$25,000	$21,000
100 to 250 million	$33,000	$28,000
250 to 500 million	$42,000	$35,000
Over 500 million	Contact ISI for large or multi-phase projects.	

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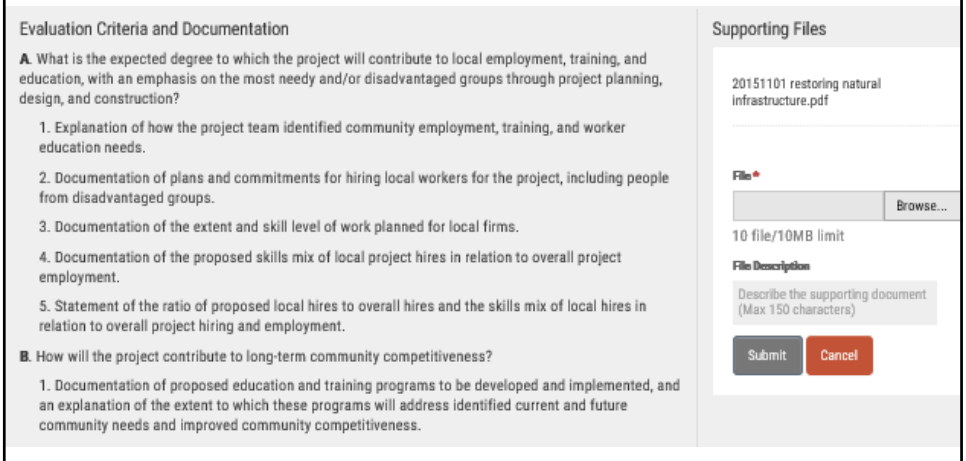
VERIFICATION AND AWARD



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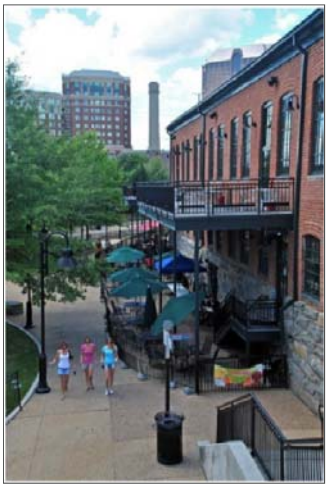
VERIFICATION AND AWARD – SAMPLE DOCUMENTATION

QL1.2 Stimulate sustainable growth and development

RESTORATIVE

(16) Developmental rebirth.
At the early development stages, the project owner and the project team work with the community to identify existing community assets in the natural or built environment which, if restored, would improve the economic growth and development capacity of the community. The constructed works improve attractiveness through restoration of existing infrastructure, including physical, knowledge and social assets. Adaptive to changing conditions. (A, B, C, D, E)



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VERIFICATION AND AWARD – VERIFICATION AND AUTHENTICATION

QUALITY OF LIFE					
QL1.1	Improve community quality of life. Improve the net quality of life of all communities affected by the project and mitigate negative impacts to communities.				
ENV SP INITIAL SUBMISSION	INCLUDE	Conserving (20 / 25)	• QL 1.1 Final_submittal.pdf		Credit Verified?
VERIFIER FEEDBACK		Conserving (20 / 25)	Agreed. Conserving.	AGREE? YES	☑

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VERIFICATION AND AWARD – VERIFICATION AND AUTHENTICATION

LD1.3	Foster collaboration and teamwork. Eliminate conflicting design elements, and optimize system by using integrated design and delivery methodologies and collaborative processes.				
ENV SP INITIAL SUBMISSION	INCLUDE	Conserving (15 / 15)	*See updated submittal attached.* • LD 1.3 Final_submittal.pdf		Credit Verified?
VERIFIER FEEDBACK		Superior (8 / 15)	Disagreed. Superior. To achieve Conserving, provide clear evidence of risk/reward sharing (CM/GC).	AGREE? NO	
ENV SP VERIFICATION RESPONSE	INCLUDE	Conserving (15 / 15)	*See updated submittal attached.* • LD 1.3 Final_submittal.pdf • LD 1.3 FINAL RESUBMIT.pdf		
VERIFIER FINAL FEEDBACK		Conserving (15 / 15)	Agreed. Conserving.	AGREE? YES	

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VERIFICATION AND AWARD

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Grand Bend Area Wastewater Treatment Facility

Grand Bend, Ontario

ENVISION™ PLATINUM

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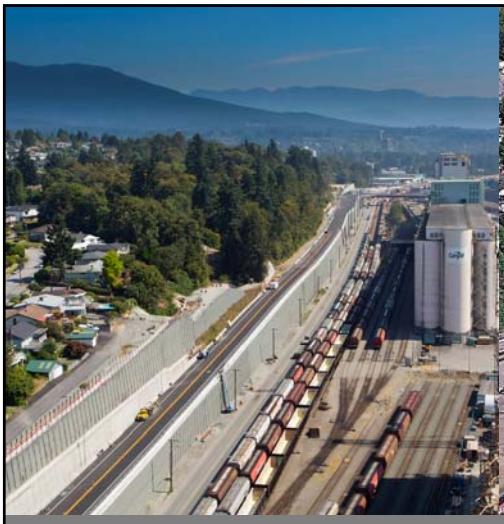

Low Level Road

Vancouver, British Columbia

ENVISION™ PLATINUM

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WHY USE ENVISION?

- Quantify Sustainable Practices with Standardized, Nationally-recognized Metrics
- Comprehensively Evaluate Sustainable Aspects of Projects
- Apply Industry-vetted Definitions of Sustainable Practices for Comparing and Selecting Solutions Case-by-case (e.g. Compare the Impact of a Vegetated Roof to a Roof with Solar Panels)
- Document Level of Sustainability and Inspire Incremental Improvements Toward Sustainable Development

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WHAT CAN YOU DO?

ENVISION™

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- Become Envision Accredited (ENV SP)
- Use the Envision Checklist (Self-Assessment)
- Use the Envision Rating System (Self-Assessment)
- Register a Project for Verification and Award
- Integrate ISI Concepts in Operating Practices, Policies and Design Standards, RFPs

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Sustainable Infrastructure: Using ENVISION® to Plan, Design, and Rate Infrastructure Projects

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Andrew Dane, AICP, ENV SP, LEED ND
andrew@neighborhoodplanners.org
920.585.3593

Anthony Kane, LEED AP, ENV SP
kane@sustainableinfrastructure.org
202.218.6748