THE ENVISION™ RATING SYSTEM

Floodplain, Stormwater, Emergency Management

Presented by
Karen C Kabbes, PE, CFM, ENV-SP
KEI
What We Are Going to Cover

- Introduce Envision
- How It Helps Communities
- What it Includes
- Why Floodplain & Stormwater Managers Have a Head Start
- What You Can Do to Use it
Sustainability: A set of environmental, economic and social conditions 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 availability of natural, economic and social resources.
Definition of Infrastructure

Oxford Dictionaries define infrastructure as “the basic physical and organizational structures and facilities (e.g. buildings, roads, and power supplies) needed for the operation of a society or enterprise...”
Institute for Sustainable Infrastructure
Founded in 2010 by Three Organizations

ISI is a 501 (c) (3) not for profit organization, structured to develop and maintain a sustainability rating system for civil infrastructure
ENVISION™ Infrastructure Rating System

Joint Collaboration Between

INSTITUTE FOR SUSTAINABLE INFRASTRUCTURE

ZOFNASS PROGRAM
FOR SUSTAINABLE INFRASTRUCTURE

Graduate School of Design
Harvard University
ENVISION™ – Incorporates a New Sustainability Paradigm

- Are we doing the right project?

- Are we doing the project right?
America’s Infrastructure Today
Resource Depletion

1960-2007
- Ecological Footprint

2007-2050, Scenarios
- Moderate business as usual
- Rapid reduction

y-axis: number of planet earths, x-axis: years
Development vs. Impact

Plotted by Irene Dhong, UFL ENV 6932

Figure 6: Human development index vs. ecological footprint by country (Source: Living Planet Report 2006, World Wildlife Fund).
ASCE’s Report Card for America’s Infrastructure

- 15 categories rated
- Overall grade of D
- $2.2 trillion
- Ranked 23rd worldwide
The Future of Infrastructure
That Sweet Spot...
What Types Of Infrastructure Does 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

**INFORMATION**
- Telecommunications
- Internet
- Phones
- Satellites
- Data Centers
- Sensors
Envision™ Is Uniquely Qualified to Address America’s Infrastructure

- Envision™ applies to all civil infrastructure
- Addresses design, planning, construction and maintenance
- Applicable at any point in an infrastructure project's life cycle
- Speaks to the triple bottom line: social, economic and environmental goals
- Designed to keep pace with a changing concept of sustainability
Why Was Envision™ Developed?

- Current rating systems for infrastructure in the U.S. are sector specific
- No U.S. system covers all aspects of infrastructure
- Envision™ is designed to fill the gap
Advantages

DRIVE TOWARD RESTORATIVE PERFORMANCE

Whole System Design
Reduce, reuse, recycle
Phased development
Adaptive
Post-life

EXTEND THE USEFULNESS OF THE PROJECT

Design  Construct  O&M  Reuse  Disassembly

EXTEND PROJECT BOUNDARIES

Team Chartering
Understand/Integrate Community Needs
Deliver as Part of Owner Organization
Partner with Regulators

Technology Advancement
Performance Goals

Restore
Sustain
Improve

Conventional
Project team
Owner organization
Affected stakeholders
Partner organizations
Regulatory bodies

EXTEND PROJECT BOUNDARIES
2050 is being built today

Urgent Issue!
60 Credits in 5 Categories

- Purpose, Community, Wellbeing
- Collaboration, Management, Planning
- Materials, Energy, Water
- Siting, Land & Water, Biodiversity
- Emission, Resilience
Levels of Achievement

QL1.1 IMPROVE COMMUNITY QUALITY OF LIFE

No Negative Impact

Non-linear Scale

Improved Enhanced Superior Conserving Restorative
Envision Sustainable Infrastructure Rating System

Credit List

Quality of Life
13 Credits

Leadership
10 Credits

Resource Allocation
14 Credits

Natural World
15 Credits

Climate and Risk
8 Credits

Purpose
Q1.1.1 Improve Community Quality of Life
Q1.1.2 Stimulate Sustainable Growth & Development
Q1.1.3 Develop Local Skills & Capabilities

Wellbeing
Q2.1 Enhance Public Health & Safety
Q2.2 Minimize Noise & Vibration
Q2.2.3 Minimize Light Pollution
Q2.4.1 Improve Community Mobility & Access
Q2.4.2 Encourage Alternative Modes of Transportation
Q2.6 Improving Accessibility, Safety, & Wayfinding

Community
Q3.1.1 Preserve Historic & Cultural Resources
Q3.2.1 Preserve Views & Local Character
Q3.3.1 Enhance Public Space
Q3.0.1 Innovate or Exceed Credit Requirements

Collaboration
L1.1.1 Provide Effective Leadership & Commitment
L1.2.1 Establish a Sustainability Management System
L1.3.1 Foster Collaboration & Teamwork
L1.4.1 Provide for Stakeholder Involvement

Management
L2.1.1 Pursue By-Product Synergies Opportunities
L2.2.1 Improve Infrastructure Integration

Planning
L3.1.1 Plan for Long-Term Monitoring & Maintenance
L3.2.1 Address Conflict/Refining/Regulations & Policies
L3.3.1 Extend Useful Life
L3.0.1 Innovate or Exceed Credit Requirements

Materials
R1.1.1 Reduce Net Embodied Energy
R1.2.1 Support Sustainable Procurement Practices
R1.3.1 Use Recycled Materials
R1.4.1 Use Regional Materials
R1.5.1 Storm Water Green Infrastructure
R1.6.1 Reduce Erosion/Materials Taken Off Site
R1.7.1 Provide for Deconstruction & Recycling

Energy
R2.1.1 Reduce Energy Consumption
R2.2.1 Use Renewable Energy
R2.3.1 Commission & Monitor Energy Systems

Water
R3.1.1 Protect Fresh Water Availability
R3.2.1 Reduce Potable Water Consumption
R3.3.1 Monitor Water Systems
R3.0.1 Innovate or Exceed Credit Requirements

Siting
N1.1.1 Preserve Prime Habitat
N1.2.1 Protect Wetlands & Surface Water
N1.3.1 Preserve Prime Farmland
N1.4.1 Avoid Adverse Geology
N1.5.1 Preserve Fish Habitat Functions
N1.6.1 Avoid Irreplaceable Development on Slope Scape
N1.7.1 Preserve Greenfields

Land + Water
N2.1.1 Manage Stormwater
N2.2.1 Reduce Pesticide & Fertilizer Impacts
N2.3.1 Protect Surface & Groundwater Contaminant

Resilience
C2.1.1 Assess Climate Threat
C2.2.1 Assess Taph & Vulnerabilities
C2.3.1 Prepare for Long-Term Adaptability
C2.4.1 Prepare for Short-Term Hazards
C2.5.1 Manage Heat Island Effects
C2.0.1 Innovate or Exceed Credit Requirements

Biodiversity
N3.1.1 Preserve Species & Biodiversity
N3.2.1 Control invasive Species
N3.3.1 Restore Destroyed Ecosystems
N3.4.1 Maintain Wetlands & Surface Water Functions
N3.0.1 Innovate or Exceed Credit Requirements

Emissions
C2.1.1 Reduce Greenhouse Gas Emissions
C2.2.1 Reduce Air Pollution & Emissions

Climate
C2.1.1 Reduce Greenhouse Gas Emissions
C2.2.1 Reduce Air Pollution & Emissions

Risk
C2.1.1 Assess Climate Threat
C2.2.1 Assess Taph & Vulnerabilities
C2.3.1 Prepare for Long-Term Adaptability
C2.4.1 Prepare for Short-Term Hazards
C2.5.1 Manage Heat Island Effects
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N3.0.1 Innovate or Exceed Credit Requirements
Quality of Life

QL1.1 Community Quality of life
QL1.2 Stimulate Sustainable Growth
QL1.3 Local Skills

QL2.1 Public Health and Safety
QL2.2 Noise and Vibration
QL2.3 Light Pollution
QL2.4 Mobility and Access
QL2.5 Alternative Transportation Modes
QL2.6 Site Accessibility

QL3.1 Historic and Cultural
QL3.2 Views, Local Character
QL3.3 Public Space

QL0.0 Innovation
QL2.4 IMPROVE COMMUNITY MOBILITY AND ACCESS

INTENT:
Locate, design and construct the project in a way that eases traffic congestion, improves mobility and access, does not promote urban sprawl, and otherwise improves community livability.

LEVELS OF ACHIEVEMENT

<table>
<thead>
<tr>
<th>IMPROVED</th>
<th>ENHANCED</th>
<th>SUPERIOR</th>
<th>CONSERVING</th>
<th>RESTORATIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Limited coordination. The project team recognizes the need and utility in providing access to adjacent facilities, amenities and transportation hubs. However, the team has not coordinated fully with owners and operators of adjacent facilities, amenities and transportation operators. Design decisions are made internally, within the project team. Despite attempts at coordination, design gaps in mobility and access are still significant. Principles and specifications for reducing negative impacts on mobility and access in the construction phase are limited. (A, B)</td>
<td>(4) Satisfactory access. Project team recognizes the need and utility of providing such access, and seeks input from the operators of adjacent facilities, amenities and transportation hubs. Design decisions are based in part on improved access. Access design decisions based on coordination with operators of adjacent facilities, amenities and transportation hubs. Principles and specifications for reducing negative impacts to adjacent facilities. (A, B)</td>
<td>(7) Exceptional access and flow. Project team expands access considerations to expected traffic flows and volumes, preferred modes of access. Discussions with decision-makers to optimize design choices. Project team works with decision-makers in adjacent facilities and amenities and transportation hubs to determine best modes of access. Designs based on expected traffic flows and transportation choices. Principles and specifications for reducing negative construction impacts emphasize substantially reduced impacts, well beyond construction norms. Construction specifications direct the contractor to consider alternative modes of access, e.g., rail, water, to reduce road traffic. Also, takes into consideration materials to be brought in and taken off site. (A, B, C, D, E)</td>
<td>(14) More livable communities. Project team expands the range of discussion. The team works not only with decision-makers in adjacent facilities, etc., but also with local community officials. Design considerations have moved beyond access issues and now address the reduction of traffic congestion, improvements in walkability in the community, and other key measures of mobility and access. The location of the project has been chosen to utilize and improve the existing transportation infrastructure. It incorporates a community transportation strategy. Principles and specifications for reducing negative construction impacts require strong programs for working with affected community. (A, B, C, D, E, F)</td>
<td></td>
</tr>
</tbody>
</table>
DESCRIPTION

The purpose of this credit is to reduce the negative impacts of the constructed works on transportation, mobility and access, thereby reducing congestion, improving traffic flow and contributing to community livability.

If public access is required and the site and constructed works are not located near existing public transportation, consider creating new links to public transport rather than relying on motorized vehicles providing access.

The use of alternate materials and sources that reduce the need for materials transport should be specified in construction. Alternate means of transportation, e.g., rail, water should be considered in the delivery of construction materials, as well as waste materials needing to be transported off site.

ADVANCING TO HIGHER ACHIEVEMENT LEVELS

Benchmark: Compliance with local laws and regulations regarding construction transport, but no inspection and enforcement programs beyond what's required, if anything. Only conducting conventional impact studies as required by local regulations. No particular efforts in the design to improve access or reduce congestion. Only using conventional design standards for access.

Performance improvement: Broader consideration given to coordination with adjacent facilities, amenities and transportation hubs. Focus on reducing traffic congestion and improving walkability. Net improvement on community livability.

EVALUATION CRITERIA AND DOCUMENTATION

A. Have the impacts of the project on community access and mobility during construction and operation been properly and comprehensively addressed?

1. Assessment studies and reports addressing the effects of the constructed works on access and mobility.

2. Completeness of the assessment studies and reports.

B. Has the project team coordinated with owners and operators of adjacent facilities, amenities and/or transportation hubs to address issues of mobility and access during operation of the constructed works?

1. Reports, memoranda, minutes of meetings with managers and operators covering access to adjacent facilities, amenities and transportation hubs.

2. Decisions made and actions taken.

C. Has the project team considered, and incorporated when feasible, the use of alternate modes of transport?
DOES THE PROJECT MINIMIZE THE USE OF FOSSIL-FUEL BASED ENERGY?

DOES THE PROJECT UTILIZE LOCAL MATERIALS?

HOW IS WASTE FROM THE PROJECT HANDLED?

DOES THE PROJECT USE SUSTAINABLE MATERIALS, SUCH AS RECYCLED, REUSED, OR CERTIFIED MATERIALS?

DOES THE PROJECT CONSIDER THE LIFE CYCLE OF THE MATERIALS USED, AND PLAN FOR THEIR END-OF-LIFE?

DOES THE PROJECT PROTECT FRESHWATER AVAILABILITY BY MINIMIZING ITS POTABLE WATER USE?
Resource Allocation
Does the project avoid development on land that is better used for habitats, recreation, or the production of food?

Does the project preserve local habitats and biodiversity?

Does the project avoid building on sensitive geographic features?

How are invasive species managed?

How does the project manage soils disturbed during construction?

Does the project minimize disruption to surface water and wetlands?

Does the project manage pollution in stormwater and groundwater?
Natural World
NW1.5 PRESERVE FLOODPLAIN FUNCTIONS

INTENT:
Preserve floodplain functions by limiting development and development impacts to maintain water management capacities and capabilities.

LEVELS OF ACHIEVEMENT

<table>
<thead>
<tr>
<th>IMPROVED</th>
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<tr>
<td>(2) Avoid or mitigate impacts. Avoid or limit new development within the design frequency floodplain for waterways of all sizes, unless water dependent infrastructure that must cross or be adjacent to a waterway. Design water dependent infrastructure to minimize floodplain impacts or waterway crossings. Maintains pre-development floodplain storage and does not increase flood elevations. (A)</td>
<td>(5) Maintain infiltration and water quality. Limit or eliminate the use of impervious surfaces to allow for groundwater infiltration. Maintain or enhance the vegetation and soil protection zones (VSPZs). Impacts from overall site development shall not decrease the capacity of the floodplain riparian vegetation and soil protection zone to support the desired vegetation. Take into consideration possible beneficial use of storm water runoff. (A, B)</td>
<td>(8) Enhance riparian and aquatic habitat. Prepare flood emergency plan for floodplain infrastructure. Maintain or enhance the riparian and in-channel physical and vegetative habitat to support threatened and endangered or otherwise desirable species. Emergency operation and/or evacuation plans are prepared for all infrastructure in floodplain. (A, B, C)</td>
<td>(14) Enhance connectivity and sediment transport. Modify or remove structures frequently damaged by floods. The project is designed to not inadvertently trap sediment and allow fish passage through project reach. If repeatedly damaged structures are in project reach they are removed or modified to reduce potential for flood damages. (A, B, C, D)</td>
<td></td>
</tr>
</tbody>
</table>
NW1.5  PRESERVE FLOODPLAIN FUNCTIONS

DESCRIPTION

Impervious surfaces increase storm water runoff volume, increase stream temperatures, and increase pollutant loading on waterways. Some infrastructure projects may not be able to avoid the floodplain (e.g., roadway and utility crossings, wastewater treatment facilities, ports and other water dependent structures). However those structures should be designed to minimize waterway crossings and floodplain impacts. The project is designed to maintain floodplain storage and not increase flood elevations.

ADVANCING TO HIGHER ACHIEVEMENT LEVELS

Benchmark: Floodplain functions are not considered beyond local laws and requirements.

Performance improvement: Shift from avoiding floodplain development to maintaining floodplain functions. Extend to enhancement of riparian and aquatic habitat. Move to considering aquatic habitat connectivity and sediment transport. Shift to consideration of extreme flood events due to climate change and to restore connectivity to fragmented aquatic and riparian habitat and sediment transport.

EVALUATION CRITERIA AND DOCUMENTATION

A. Does the project avoid or limit new development within the design frequency floodplain for waterways of all sizes, unless water dependent infrastructure that must cross a waterway, or is the water dependent infrastructure designed to minimize floodplain impacts or waterway crossings?

B. Does the project maintain pre-development floodplain infiltration and water quality?

1. Documentation of strategies used to maintain pre-development floodplain infiltration, such as amount of impervious surfaces, established vegetation and soil protection zones, and other strategies that allow for natural in-stream infiltration and filtration of pollutants.

2. Estimates of pre-development floodplain infiltration capacity and estimates of post-development floodplain infiltration capacity using above-described strategies.

C. Does the project maintain or enhance riparian and aquatic habitat and the maintenance or enhancement of the riparian and in-channel physical and vegetative habitat to support threatened and endangered or otherwise desirable species? Has a flood emergency plan been prepared for all infrastructure in the floodplain accounting for emergency operations and/or evacuation?

1. Documentation of strategies to maintain or enhance habitat, within and along the waterway in the floodplain.
CLIMATE AND RISK

DOES THE PROJECT MINIMIZE GREENHOUSE GAS EMISSIONS?

DOES THE PROJECT REDUCE AIR POLLUTANT EMISSIONS?

DOES THE PROJECT MANAGE HEAT ISLANDS?

DOES THE PROJECT PREPARE FOR SHORT-TERM HAZARDS?

DOES THE PROJECT PREPARE FOR LONG-TERM ADAPTABILITY?
Climate and Risk

CR1.1 Greenhouse Gas Emissions
CR1.2 Air Pollutants
CR2.1 Climate Threat
CR2.2 Traps and Vulnerabilities
CR2.3 Long-term Adaptability
CR2.4 Short-term Hazards
CR2.5 Heat Islands
CR0.0 Innovation
### Scoring

Currently Up to Owner, Engineer and Assessor to Determine What Score Means

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<td>QL2.5 Encourage alternative modes of transportation</td>
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<td><strong>WELLBEING</strong></td>
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<td>QL3.3 Enhance public space</td>
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<td><strong>LEADERSHIP</strong></td>
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<td>LD1.2 Establish a sustainability management system</td>
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<td>LD1.5 Pursue by-product synergy opportunities</td>
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<td><strong>PLANNING</strong></td>
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<td>LD3.1 Plan for long-term monitoring and maintenance</td>
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<td>LD3.2 Address conflicting regulations and policies</td>
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<td>LD3.3 Extend useful life</td>
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<td><strong>RESOURCE ALLOCATION</strong></td>
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<td>RA1.2 Support sustainable procurement practices</td>
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<td>RA1.3 Use recycled materials</td>
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<td>RA1.4 Use regional materials</td>
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<td>RA1.5 Divert waste from landfills</td>
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<td>RA1.6 Reduce excavated materials taken off site</td>
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<td>RA1.7 Provide for deconstruction and recycling</td>
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<td><strong>ENERGY</strong></td>
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<tr>
<td>RA2.1 Reduce energy consumption</td>
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<td>RA2.2 Use renewable energy</td>
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<td><strong>WATER</strong></td>
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<tr>
<td>NW1.1 Preserve prime habitat</td>
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<td>NW1.2 Protect wetlands and surface water</td>
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<td>NW1.3 Preserve prime farmland</td>
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<td>NW1.4 Avoid adverse geology</td>
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<td>NW1.5 Preserve floodplain functions</td>
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<td>NW1.6 Avoid unsuitable development on steep slopes</td>
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<td>NW2.1 Manage stormwater</td>
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<td><strong>L&amp;W</strong></td>
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<td>NW2.2 Reduce pesticide and fertilizer impacts</td>
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<td>NW2.3 Prevent surface and groundwater contamination</td>
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<tr>
<td>NW3.1 Preserve species biodiversity</td>
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<tr>
<td>NW3.2 Control invasive species</td>
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<td>NW3.3 Restore disturbed soils</td>
</tr>
<tr>
<td><strong>NATURAL WORLD</strong></td>
</tr>
<tr>
<td>NW3.4 Maintain wetland and surface water functions</td>
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<tr>
<td><strong>SITE</strong></td>
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<tr>
<td>NW1.1 Preserve prime habitat</td>
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<td>CR1.1 Reduce greenhouse gas emissions</td>
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<td>CR1.2 Reduce air pollutant emissions</td>
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<td>CR2.2 Avoid traps and vulnerabilities</td>
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</tr>
<tr>
<td>CR3.6 Protect wetlands and surface water</td>
</tr>
</tbody>
</table>

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# ENVISION™ Self Assessment Checklist

**Quality of Life**

## 1. Purpose

### QL 1.1 Improve Community Quality of Life

**Intent**: Improve the net quality of life of all communities affected by the project and mitigate negative impacts to communities.

**Metric**: Measures taken to assess community needs and improve quality of life while minimizing negative impacts.

<table>
<thead>
<tr>
<th>Assessment Questions</th>
<th>Yes</th>
<th>No</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are the relevant community needs, goals and issues being addressed in the project?</td>
<td></td>
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<td>?</td>
</tr>
<tr>
<td>Are the potentially negative impacts of the project on the host and nearby communities been reduced or eliminated?</td>
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<td>?</td>
</tr>
<tr>
<td>Has the project design received broad community endorsement, including community leaders and stakeholder groups?</td>
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<td>?</td>
</tr>
</tbody>
</table>

**Total 0 of 2**
# Checklist Example

**Envision Rating System**  
**Self-Assessment Checklist**

## QL 2.4 Improve Community Mobility and Access

**Intent:** Locate, design and construct the project in a way that eases traffic congestion, improves mobility and access, does not promote urban sprawl, and otherwise improves community livability.

**Metric:** Extent to which the project improves access and walkability, reductions in commute times, traverse times to existing facilities and transportation. Improved user safety considering all modes, e.g., personal vehicle, commercial vehicle, transit and bike/pedestrian.

**Assessment Questions:**

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>N/A</th>
<th>?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Will the project provide good, safe access to adjacent facilities, amenities and transportation hubs?</td>
<td></td>
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</tr>
<tr>
<td>Will the project design take into consideration the expected traffic flows and volumes in and around the project site to improve overall mobility and efficiency?</td>
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</tr>
<tr>
<td>Has the project team coordinated the design with other infrastructure assets to reduce traffic congestion, and improve walkability and livability?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Total** 0 of 3
# Rating System

## 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.
- Details/guidance

<table>
<thead>
<tr>
<th>Required for Project</th>
<th>Level Of Achievement</th>
<th>Score</th>
<th>Objective Available Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>YES</td>
<td>Restorative</td>
<td>25</td>
<td>25</td>
</tr>
</tbody>
</table>

**Notes:**

### QL1.2 Stimulate sustainable growth and development.
- Support and stimulate sustainable growth and development, including improvements in job growth, capacity building, productivity, business attractiveness and livability.
- Details/guidance

<table>
<thead>
<tr>
<th>Required for Project</th>
<th>Level Of Achievement</th>
<th>Score</th>
<th>Objective Available Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>YES</td>
<td>Superior</td>
<td>5</td>
<td>16</td>
</tr>
</tbody>
</table>

**Notes:**

### QL1.3 Develop local skills and capabilities.
- Expand the knowledge, skills and capacity of the community workforce to improve their ability to grow and develop.
- Details/guidance

<table>
<thead>
<tr>
<th>Assessor Decision</th>
<th>Score</th>
<th>Objective Available Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Include</td>
<td>1</td>
<td>15</td>
</tr>
</tbody>
</table>

**Notes:**
### Scoring Summary

#### Section Totals Summary

<table>
<thead>
<tr>
<th>Section</th>
<th>Maximum Possible Score</th>
<th>Section Points</th>
<th>Innovation Points</th>
<th>Total Points Earned</th>
</tr>
</thead>
<tbody>
<tr>
<td>QL</td>
<td>141</td>
<td>91</td>
<td>3</td>
<td>94</td>
</tr>
<tr>
<td>LD</td>
<td>106</td>
<td>66</td>
<td>0</td>
<td>66</td>
</tr>
<tr>
<td>RA</td>
<td>162</td>
<td>71</td>
<td>0</td>
<td>71</td>
</tr>
<tr>
<td>NW</td>
<td>177</td>
<td>118</td>
<td>2</td>
<td>120</td>
</tr>
<tr>
<td>CR</td>
<td>122</td>
<td>40</td>
<td>0</td>
<td>40</td>
</tr>
<tr>
<td><strong>Total Project Points</strong></td>
<td><strong>700</strong></td>
<td><strong>386</strong></td>
<td><strong>5</strong></td>
<td><strong>391</strong></td>
</tr>
</tbody>
</table>

#### Envision™ Section Scores

- **Unachieved Points**
- **Total Points Earned**
envision™ Scoring Allocation

809 total points

- Quality of Life: 22%
- Natural World: 25%
- Resource Allocation: 23%
- Leadership: 15%
- Climate and Risk: 15%
- Total: 809 points
### Award Levels

<table>
<thead>
<tr>
<th>Recognition Level</th>
<th>Minimum Applicable Points</th>
<th>Minimum in Each Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acknowledgement of Merit</td>
<td>25%</td>
<td>5%</td>
</tr>
<tr>
<td>Silver Award</td>
<td>50%</td>
<td>8%</td>
</tr>
<tr>
<td>Gold Award</td>
<td>60%</td>
<td>15%</td>
</tr>
<tr>
<td>Platinum Award</td>
<td>80%</td>
<td>20%</td>
</tr>
</tbody>
</table>

*Best in Class Award*
# Fee Schedule

Registration Fee: $1000

Verification Fee

<table>
<thead>
<tr>
<th>Project Size ($)</th>
<th>Non-Member Price</th>
<th>ISI Member Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 2M</td>
<td>$3000</td>
<td>$2400</td>
</tr>
<tr>
<td>2-5M</td>
<td>$8500</td>
<td>$7000</td>
</tr>
<tr>
<td>5-25M</td>
<td>$17,000</td>
<td>$14,000</td>
</tr>
<tr>
<td>25-100M</td>
<td>$25,000</td>
<td>$21,000</td>
</tr>
<tr>
<td>100-250M</td>
<td>$33,000</td>
<td>$28,000</td>
</tr>
<tr>
<td>Over 250M</td>
<td>$5000 per 100M above base price of $20,000</td>
<td></td>
</tr>
</tbody>
</table>

Appeals Fee: $500 per credit
Submitting Projects for Rating and Verification

- Just open this month for 3rd party verification
- Rating fees dependant on estimated cost of project.
- Can be rated after planning and/or design phase
- Rating fee is little as $3400 for $2 million or less project (inexpensive advertising for consultants)
ISI Members

- Charter
- Sustaining
- Public Sector
- Academia

Membership benefits
- Discounts on training and professional accreditation
- Discounts on project Verification
- Networking opportunities
- Listing in the member directory
- Opportunities to serve on committees
ISI Charter Members
(as of September 4, 2012)

Charter Members

American Concrete Pipe Association
American Society of Landscape Architects
American Water Works Association
Arcadis
Arup
ASFE/The Geoprofessional Business Association
Asphalt Paving Alliance
Autodesk
Berger Group Holdings, Inc.
Clark-Nexsen, PC
Crawford, Murphy & Tilly, Inc.
Dewberry
Diaz Yoorman & Associates
exp Global
Freese and Nichols, Inc.
Gannett Fleming, Inc.
GHD Inc.
Granite Construction Inc.
Greeley and Hansen

Green Agenda Committee, N. Little Rock, AR
Halcrow
Haley & Aldrich, Inc.
Hanson Professional Services
Harvard University
HDR
HNTB
HR Green, Inc.
J-U-B Engineers, Inc.
Kabbes Engineering, Inc.
KCI Technologies, Inc.
Klotz Associates, Inc.
Ladybird Johnson Wildlife Center
Lawson Fisher Associates
Merrick & Company
MS Consultants, Inc.
MWH
Nitsch Engineering
NV5, Inc.

Pinyon Environmental, Inc.
Portland Cement Association
Power Engineers, Inc.
Pomas
Short-Elliott-Hendrickson, Inc.
Smith Seckman Reid, Inc.
SSFM International, Inc.
Stanley Consultants
Stantec
Strand Associates
The Kelly-Buck Company
Thompson Strategy Consulting, Inc.
U.S. Botanic Garden
University of Florida
University of Texas at Austin
Vanasse Hangen Brustlin, Inc.
Verdunity, Inc.
Walter P. Moore and Associates
Wilbur Smith Associates

from http://www.sustainableinfrastructure.org
Envision SP Training and Credentialing Costs and Criteria

**ISI SP Training**

- Six 1-hour webinars on Envision Rating System
- **Application/Training Fee:**
  - ISI Members $350
  - Non-members $450
  - Government $150

**ISI SP Credentialing**

- Pass 75 questions exam, open book, online
- Passing requires 75% overall and 50% in each category
- **Test Fee:** $200, Free for Gov’t.
Illinois Envision- PV’s

ENV PV Search - Results

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from http://www.sustainableinfrastructure.org
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