Architectural Lighting Design
Creativity | Experience | Collaboration

Aesthetic Lighting for Bridges

WINONA BRIDGE
Visual Quality Review Committee Meeting
October 23, 2013
ILLUMINATION ARTS – Aesthetic Lighting Design

- Aesthetic Lighting of more than two dozen signature structures
- Award-winning Christopher S. Bond Bridge
- Award-winning Biloxi Bay Bridge
- Bridges in urban and rural environments
- Currently working on bridge projects in ten states
ILLUMINATION ARTS – Projects in Minnesota

- Lowry Avenue Bridge – with SRF and TY Lin
- St. Croix River Crossing
- Lafayette Bridge
- Hastings Bridge
Aesthetic Lighting for the Highway 43 Winona Bridge

What the VQRC wants us to achieve

- The beauty of the river and the surrounding environment are paramount.
- The historic bridge takes visual precedence
- Together the bridges create a new Community Icon that focuses on the historic structure
Considerations and Discussion

- Historic Context and Cultural Resources
- Physical and Environmental Context
- What kind of nighttime image does the community want to convey?
- Who is the “audience” for the bridge? From where can the bridge be seen?
- Are there wildlife or environmental concerns?
- Are there vandalism concerns? Safety concerns, whether real or perceived?
- How visible should the bridges be at night?
- How much ambient light is in this area?
Considerations and Discussion

- Note bridge adjacencies
- Note above deck structure and view from new bridge
- Note that many piers are over land in areas where we want pedestrians and bicyclists to feel welcome.
Aesthetic Lighting for the Highway 43 Winona Bridge

What we’re going to look at today

• How you can alter visual focus through lighting of a structure
• Other Historic Bridges with aesthetic lighting
• Other Girder Bridges with aesthetic lighting
• Pedestrian Path Lighting
Changing Visual Focus at Night

Biloxi Bay Bridge
Changing Visual Focus at Night

New I-35W Bridge
Changing Visual Focus at Night

Duluth Bridge
Changing Visual Focus at Night

Shelby Street Bridge
Truss Bridges – Aesthetic Lighting Options

Waibaidu Bridge

Shelby Street Bridge
Truss Bridges – Aesthetic Lighting Options

Langevin Bridge

Sydney Harbor Bridge
Truss Bridges – Aesthetic Lighting Options

Natchez Vidalia Bridge
Truss Bridges – Aesthetic Lighting Options

Tobin Memorial Bridge

Tappan Zee Bridge
Truss Bridge Lighting Options

• Graze Lighting of Outside or Inside Truss Members
• Floodlighting of Structure Interior
• Necklace Lighting at Deck
• Necklace Lighting along Top Member
• Lighting within Truss Members
• Colored, Color-changing or White Light
Box Girder Bridges – Aesthetic Lighting Options

London Bridge

Cypress Avenue Bridge
Box Girder Bridges – Aesthetic Lighting Options

Miami Bridge

Four bears Bridge
Box Girder Bridges – Aesthetic Lighting Options

Hassan II Bridge
Box Girder Bridges – Aesthetic Lighting Options

New I-35W Bridge
Box Girder Bridges – Aesthetic Lighting Options

Lafayette Bridge

Washington Missouri River Bridge
Box Girder Bridges – Aesthetic Lighting Options

Saadiyat Bridge

Biloxi Bay Bridge
Box Girder Bridge Lighting Options

- Continuous or Partial Wash of Fascia
- Necklace Lighting along Fascia
- Uplighting of Underside of Box Girder
- Pier Lighting
- Colored, Color-changing or White Light
### Aesthetic Lighting for the Highway 43 Winona Bridge

#### Truss Bridge
- Graze Lighting of Outside or Inside Truss Members
- Floodlighting of Structure Interior
- Necklace Lighting at Deck
- Necklace Lighting along Top Member
- Lighting within Truss Members
- Colored, Color-changing or White Light

#### Box Girder Bridge
- Continuous or Partial Wash of Fascia
- Necklace Lighting along Fascia
- Uplighting of Underside of Box Girder
- Pier Lighting
- Colored, Color-changing or White Light
Pedestrian Path Lighting Options
Pedestrian Path Lighting Options
Pedestrian Path Lighting Options

- Roadway Lighting also Covers Path
- Handrail Mounted
- Handrail Post Mounted
- Steplights in Concrete Barrier
Blending the Old and the New

Shelby Street and Gateway Bridges