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Purpose

MAKING PLACES INSTANTLY MORE VIBRANT

IT'S TIME TO SHINE THE LIGHT ON SHEBOYGAN. Through the subtle magic of light, we can activate outdoor public space and dramatically reveal landscapes, large-scale murals and sculptures in harmony with their natural surroundings. Specifically as it applies to Sheboygan, designed lighting as placemaking projects can:

- Create attractive destinations by illuminating existing buildings, structures, and natural assets
- Define nodes and landmarks
- Define new spaces with a highly cost-effective budget
- · Create more safe, walkable spaces
- Help shops and restaurants define healthy new outdoor spaces to stay open through pandemic response and into the future
- Activate spaces 24 hours
- Help create a visual iconography that helps build and create community pride
- Give quality nighttime visibility to signage for retail establishments and points of interest

The power of lighting as placemaking

LIGHTING ENHANCEMENTS

can instantly make a dramatic difference in area vibrancy.

Designed lighting has the potential to reinvent and define spaces without walls, focus attention, create motion, and instantly transform a place into a whole new venue-much as lighting transforms a stage. Used as a placemaking tool, lighting can create new vibrancy and attract attention, and help boost the economy.





1. ECONOMY BOOSTER

Lighting can add vibrancy and branding to struggling downtowns; this is proving to be a powerful way to make a place instantly identifiable and inviting, as well as attract new investment.

Davenport, lowa's lighted pedestrian bridge and lighted towers in

South Bend connect people with iconic places.



RIVER LIGHTS. Focal point for downtown community, events, and activities. River light and tower colors change to match seasonal and awareness events, Interactive light towers invite participation.

2. ACTIVITY MAGNET

Creative lighting can also be used to draw activity to downtown businesses including restaurants, shops, and entertainment venues. Many businesses are moving into outdoor

spaces to stay viable during the COVID-19 pandemic. Other communities are hosting lighted temporary installations to create a winter buzz. Lighting helps define and make those spaces safe and appealing. Restaurants from Seattle, to Middleton Wisconsin, to New York are reclaiming outdoor spaces using the cost-effective and transformative power of lighting.





3. DESTINATION BRANDING

Destinations can even be made of existing spaces and structures, to help grow new kinds of tourism, and create a visually branded iconography for the community. Milwaukee's Hoan Bridge lighting is a recent example of this transformative phenomenon.

JANESVILLE TOWN

square. Janesville recently reclaimed its riverfront by demolishing a parking structure that spanned the river and creating a new Town Square. Art and creative lighting have made the riverfront and Town Square the new heart of the community.



OALS

GOAL 1: CREATE VISIBLE DISTRICT CONNECTIONS

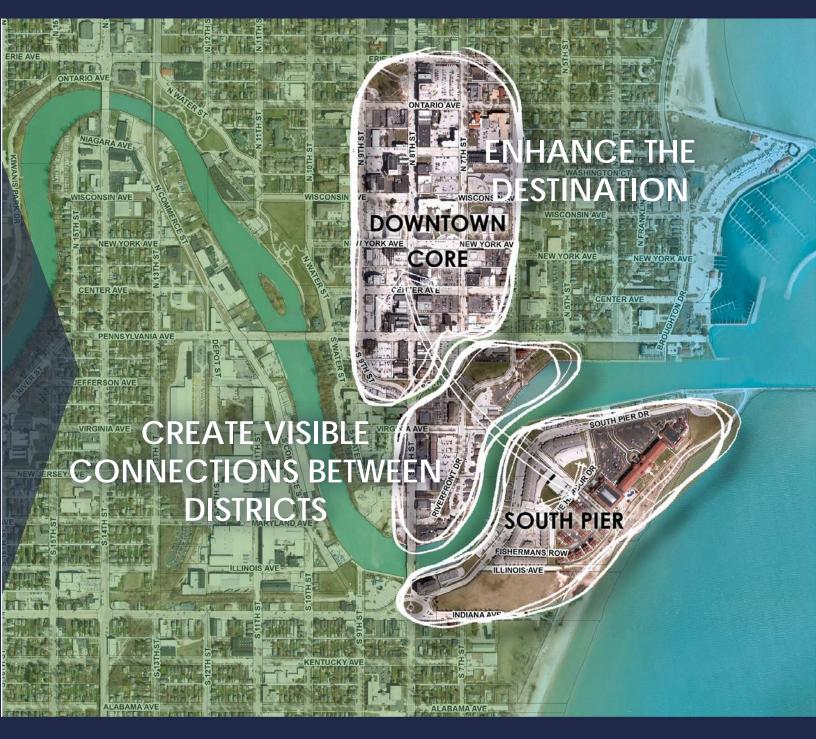
A key goal of this placemaking initiative is to connect the activity and commerce happening at the Harbor and Lakeside Districts (especially the South Pier), and Riverfront to the assets and businesses of the downtown core. Connecting these areas will bring vitality and synergistic benefit to them all.

A walkable connection can currently be made via South Pier Drive and Eighth Street and, in the future, an iconic visual and direct connection could be made via a new pedestrian bridge across the channel from the South Pier pedestrian mall, to a landing in the Riverfront, and up the hill to the foot of the Eighth Street commercial blocks and cultural core.

GOAL 2: ENHANCE THE DOWNTOWN DESTINATION

Over the years Sheboygan has made significant investments in public improvement and cultural assets, augmented by private investment such as the Kohler Art Center, area restaurants and shops. Exquisite building facades downtown frame up a walkable downtown core. Through the additional highlighting and unification that can be achieved in large part by lighting, the Downtown can become a vibrant destination both day and night.

DISTRICT CONNECTION



- · Potential direct connection between South Pier and Downtown
- · Planned bridge across channel
- Pedestrian link to downtown (diagonal pathway up hill and connection to Eighth Street at the south end of downtown)



TRATEGIES & DEFINITIONS

SHINING THE LIGHT ON DOWNTOWN SHEBOYGAN

Inspired by the vision of city staff and the mayor, and informed by their input, multiple site visits, and work sessions, this study identified the following aspirations:

- Connect the South Pier to Downtown
- Unify and strengthen the commercial heart of Eighth Street
- Strengthen the entire Eighth Street corridor as an "organizing spine"
- Develop more impact with the "cultural core"
- Enhance the downtown with additional landmarks and destinations
- Unite and enhance the Sheboygan River corridor

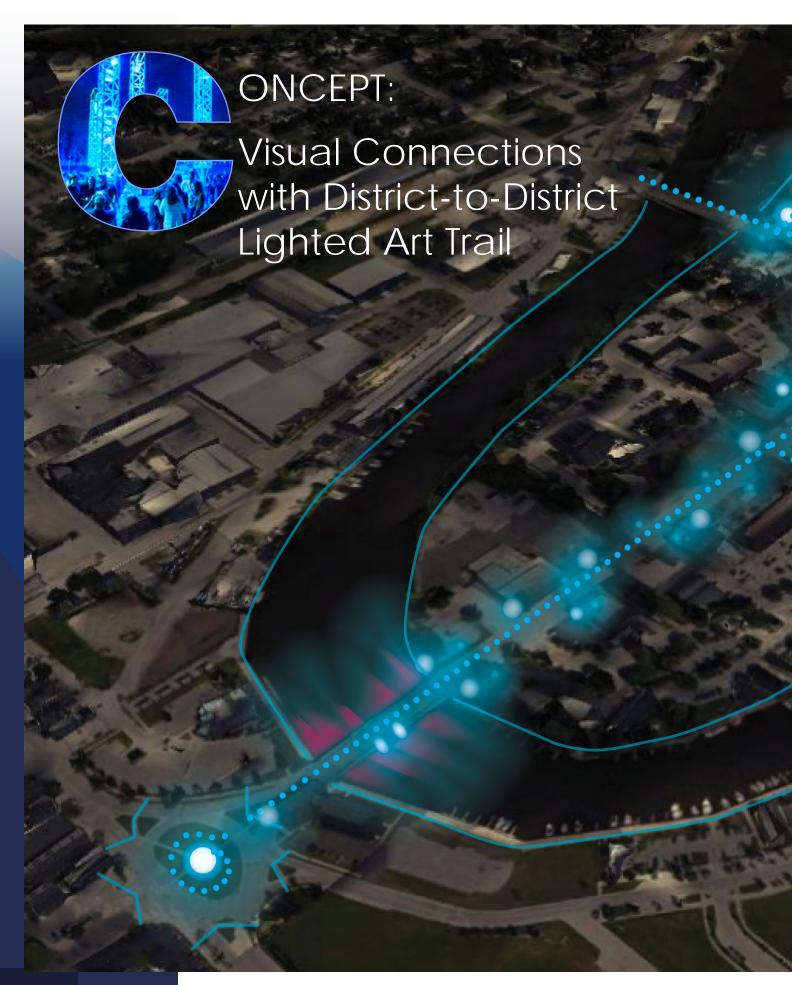


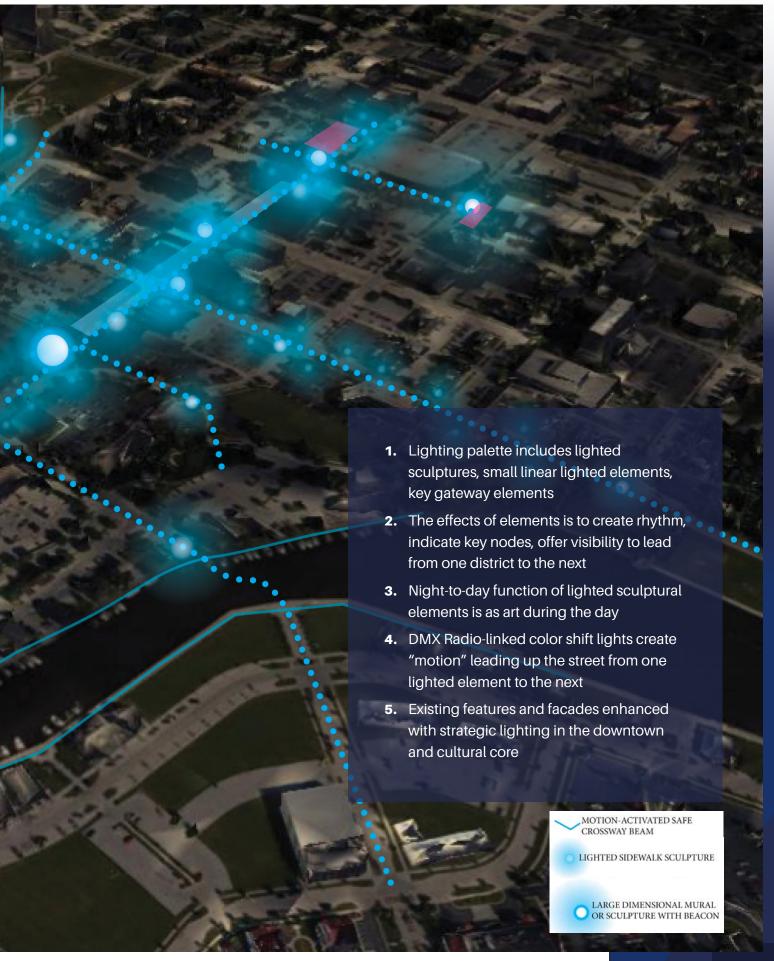
STRATEGIES:

- 1. Create rich destinations and places for gathering and activity
- 2. Make connections in the perceived environment
- 3. Create more visible "landmarks" and "destinations"
- 4. Create linear "trails" that help define and enhance districts at night
- **5.** Create "nodes" visible from other districts that lead people from one district to another
- **6.** Create a sense of energy and intrigue through the placement of sculptures and their lighting
- 7. Enhance existing historic, cultural and architectural features
- 8. Use existing patterns wherever possible
- 9. Add new structures where necessary
- 10. Make blank walls and areas feel more inviting, safe and pedestrian friendly
- 11. Utilize existing electrical whenever possible
- 12. Make existing features of interest visible throughout the day and night
- 13. Enhance night-time safety through appropriate pedestrian lighting
- 14. Use new sculptural forms that also work during the day as art and storytelling
- 15. Draw on the Sheboygan legacy!

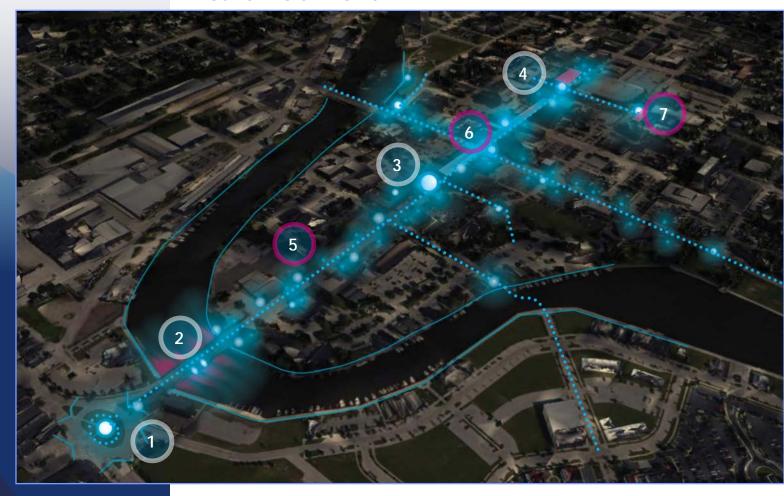
DEFINITIONS

- **DESTINATIONS** Interesting and inspiring places, prominent in people's minds, that attract and gather people and support activities.
- LANDMARKS Prominent and meaningful features in the downtown experience that serve to connect people's awareness to places and stories.
- NODES Focused places in the townscape (and in our mental maps) where connectors and activities meet.
- CONNECTORS Streets and pedestrian and bike pathways that connect destinations, landmarks, and nodes.
- **LUMINAIRE** A complete electrical lighting fixture
- **DMX LIGHTING** A type of radio-controlled, changing lighting fixture





PROJECT LOCATIONS



PRIORITY PUBLIC PROJECTS:

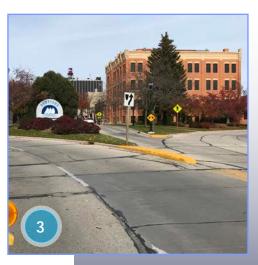
- 1. Roundabout
- 2. Eighth Street Bridge
- 3. Downtown Gateway
- 4. Halprin Fountain

PRIVATELY SPONSORED AND SECONDARY PUBLIC PROJECTS:

- 5. Eighth Street Lighted Art Trail
- 6. Upper Facades of Eighth Street
- 7. Kohler Art Center Facade















Themes, Palette and Materials

STORY OPPORTUNITIES:

HISTORIC MAKERS DISTRICT

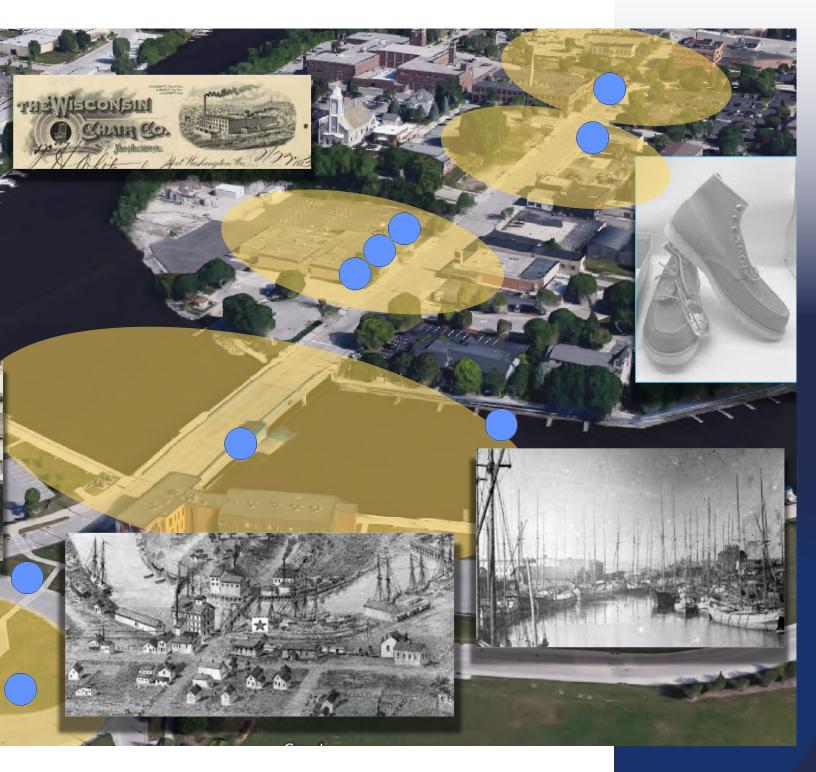
More could be made of Sheboygan's impressive manufacturing history that can still be seen in the form of the city, and in some cases is still hard at work. For instance, once known as the "Chair City," Sheboygan could play that up on the riverfront flanking the manufacturing core by creating a row of colossal historic model chair sculptures. These chairs could tell the story of Sheboygan's big role in US furniture making while providing oversize seating for visitors hoping to repose while experiencing Sheboygan's unique riverfront scene.







Similar opportunities exist to leverage Sheboygan's fishing, shipping, and shipbuilding history, setting the stage with authentic placemaking along the working riverfront that uses historic maritime photos or art in murals or projected imagery.



MALIBU OF THE MIDWEST

Sheboygan also boasts the reputation for being the "Malibu of the Midwest" for its impressive lakefront, a story that is not fully played out anywhere in the city.

OTHER CONCEPTS

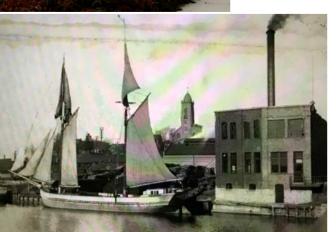
Themes can also be contemporary. Downtown stakeholder led process for concept development.

PALETTE AND MATERIALS

Weathered wood, cream city brick, and metal formed, forged, and hand wrought together offer a consistent palette that is seen throughout the city. These should be core features in the materials palette for future placemaking improvements.



The city gets much of its authentic character from its interesting mix of historic and modern forms. An aspect of these forms that can logically be continued in future art and placemaking improvements is that many of these forms proudly exhibit their utilitarian and structural purpose, rather than being veneered with a purely decorative one. The tremendous influence of art seen throughout Sheboygan gets much of its unique local flavor due to its connection to the craftsmanship inherent in a manufacturing-built city.



While weathered wood and nautical forms dominate the South Pier area, the cultural core of the city mixes it up thoroughly with everything from the thoroughly modern Halprin fountain, to bright and bold murals, to the new City Green. The new shelter utilizes contemporary new forms that still reflect an industrial waterfront feel including



concrete verticals, white tubular structures, sail shapes, and metal structure. As an active contemporary center connecting historic structures, this borrowing and blending feels appropriate and helps to successfully tie the harbor district materials to both the history and current vibrant culture of downtown.



and Eighth Street can take advantage of Sheboygan's prolific and diverse history of making things and driving a creative and industrious community. In addition to Sheboygan's thriving fine art scene, some of the Midwest's and US' most enduring brands were made in and distributed out of Sheboygan: from ships and furniture to enamelware, plumbing fixtures and footwear.



RIORITY PUBLIC PROJECTS

 Indiana Ave./ Eighth Street Roundabout



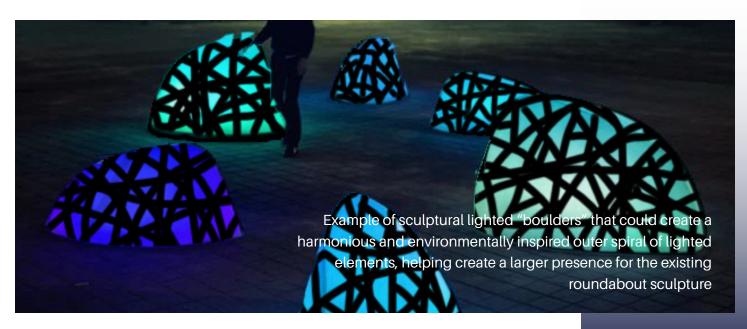


ROUNDABOUT FOCAL POINT

The roundabout presents an opportunity to create a focal node utilizing a central sculptural feature. This can be achieved by replacing or enhancing the existing sculpture in the center of the roundabout with lighting and additional landscape elements. We recommend enlarging its effective presence in the space by enlarging the planting bed around it, and installing additional lighted elements in an outer spiral light existing sculpture in the center of the roundabout.

The existing 4 floodlights around the sculpture are currently mostly blocked by shrubs, and should be hardscaped and simplified with gravel, lava rock etc or a low green planting that does not grow more than a foot tall. Keeping in mind the intent to respect the artists' intent of the sculpture, we recommend uplighting the sculpture with spotlights that can give the sculpture a larger presence at night and allow it to become a beacon and focal node that can be seen all the way to the downtown gateway.

Utilize 24 small spotlights for the sculpture.. 8 flooding the bottom, 8 aimed at its
middle and 8 at its top. Through programming, a downward spiral movement of
light could be programmed which could appear to initiate the color changing
shapes on the circumference of the island. These spots could be RGB color, though
it would work strikingly with white light, which would be seen from a great distance.
My instinct is to use white light, but that is up to others.



- A simpler and more cost-efficinet solution would be to employ 8 x spotlights, each lighting 45 degrees of the sculpture, programmed to slowly rotate the appearance.
- Outer circle of new lighted elements creates a larger presence for central sculpture.
- DMX Radio-linked color shift lights create directional "motion" that leads clockwise around the circle and up the street
- Creatively light the façade of the Reiss Coal Company building.

PEDESTRIAN SAFETY ENHANCEMENTS

Providing for pedestrian safety (both perceived and actual) at crosswalks in this connective system is important to the success of this effort to encourage pedestrian use and connection between downtown destinations.

Possible solutions:

- · Widen sidewalks on South Pier Drive
- Adapt lighting techniques at crosswalks. Some examples:
 - Position lights (i.e., in advance of crosswalk approach) to improve visibility of pedestrian
 - Use low-height lighting (i.e. bollards)
 - "Vertical illumination" that creates contrast and reduces visual noise
 - · Use reflectors that define edges of roadways
 - · Place objects that define edges of roadway and walkways
- Keep crosswalks well marked with easily seen paint and reflective material

COST ESTIMATES: See pages 58-59 for detailed cost estimates on alternatives for lighting the existing sculpture, additional hardscape, landscape and lighted elements on pages 58-59.

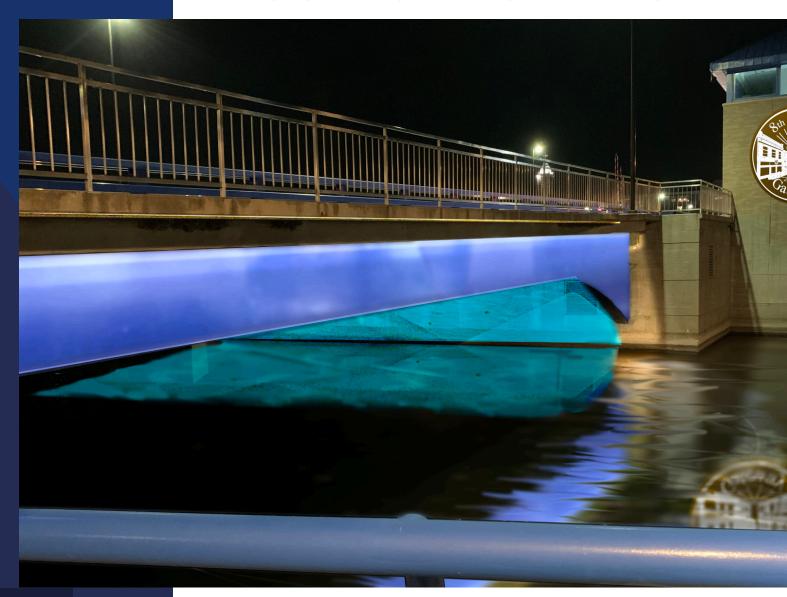


2. Eighth Street Bridge

BRIDGE STRUCTURE AND WATER LIGHTING

Lighting of the Eighth Street drawbridge can be designed to take greatest advantage of water and bridge visibility from adjacent restaurants, public spaces, and riverwalk. Due to elevations much of the lighting effect would not be fully visible by cars or from the street. Additional lighting of the bridge tower and other options such as handrails can bring some of the lighting experience to the bridge roadway and sidewalks.

- To create a dramatic downwash effect on the bridge that reflects into the water, we recommend lighting the blue beams of the lower bridge deck by tucking in a linear line of luminares below the sidewalk. Dimensions of approx. 2.5" x 2.5" x 4' to be installed in a continuous row.
- A color changing version could add programming flexibility to the reflections in the water. However we recommend white light due to the complexity of the desired lighting colors mixing with the existing blue color of the bridge beam.





The under bridge support wall/pier could be a line of fully color-changing lumens washing the wall facade. These 4' units wold be mounted 18" away from the top of the wall, with precise configuration to be designed according to

specific bridge dimensions and clearances.

Coordinate with lighting of the channel pedestrian bridge, if built.



 Lighting along the railing of the bridge and/or riverwalk helps create interest at the street and sidewalk level as well as adding additional reflective interest.

CONTROL TOWER

- Creatively light the east face of the draw bridge control building so that it is visible in and along the channel out to the lake.
- A sculptural lightbox could be designed and affixed to one or both sides of the bridge control tower, announcing the entrance to the Eighth Street historic/art/ makers experience.

COST ESTIMATES: See detailed cost estimates and implementation diagram on pages 60-61.





3. Downtown Gateway

Currently, the area at the top of the Eighth Street hill and at the foot of the downtown commercial core receives a lane of traffic into heart of downtown, but otherwise blocks views into the shops and streetscape, offers little to welcome visitors, offers no indication of a grand entry or space and little amenity to pedestrians.

Changes and additions to this "downtown gateway" area are a great opportunity to redefine this area as a downtown gateway and visual node, as well as strengthen the connections from the Eighth Street Roundabout, Eighth Street Bridge, Harbor

Existing signage and vegetation on Eighth Street
"Island" between Swing Streets

Centre, and South Pier area to the heart of downtown and improve the visitor experience.

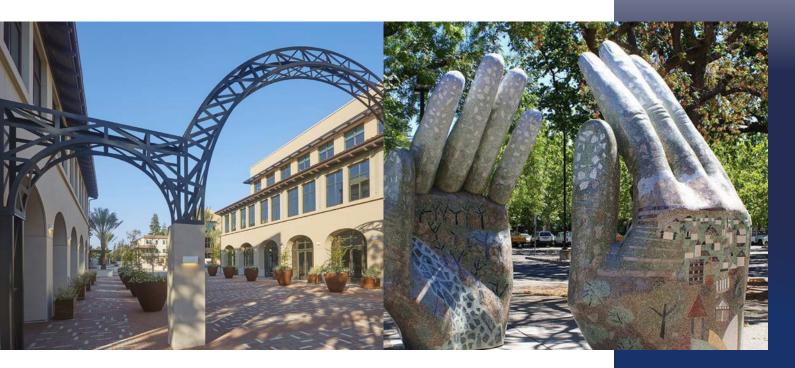
The specific changes, options and additions offered on the next two pages are designed to draw people up the hill to the foot of downtown, welcome and inform them when they get there, create a new public space, and enhance the safety and experience of pedestrians.



VISUAL CONNECTOR/GATEWAY SCULPTURE

Because it is visible from the Indiana Avenue roundabout and the Eighth Street bridge, a large and visible enhancement there could make that a perceptible visual connection to the downtown for the visitor.

A major defining sculptural and/or architectural element, lit at night for additional drama, becomes the focus of this new space. The feature is beautiful and unique and inspiring. It becomes an icon for the downtown and tells a story. Simple landscaping around it provides a visual base and offers low-profile green respite that softens the immediate environment.



Examples of alternative treatments for the lighted artwork at the Downtown Gateway Node include:

- Archway or structural metalwork element framing up the entry to the downtown; this can help announce it is both a pedestrian-friendly and car-friendly gateway. Such structure can have integrated metalwaork letters defining the corridor or can be used to hang banners announcing events.
- Colossal sculpture that can be seen all the way down to the roundabout, creating a bookend; we show hands in keeping with a "maker's district" theme.



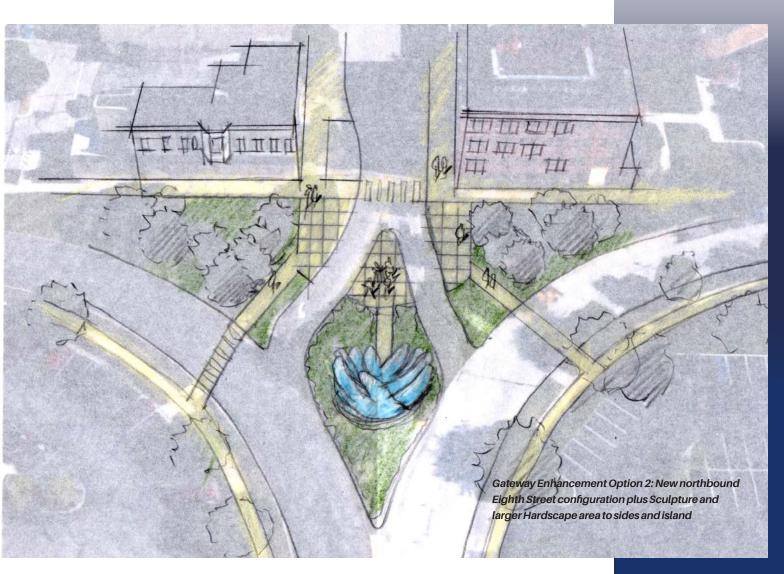
GATEWAY HARDSCAPE PUBLIC SPACE ADDITIONS

As one arrives and experiences this area, the view can open into the activity of this stretch of Eighth Street, welcome the visitor, offer a unique public feature and space, accommodate pedestrians, communicate an image and information about the heart of downtown.

With the dense vegetation removed, the visual connection is opened into the inviting, pedestrian-friendly facades of the downtown. Hardscaped spaces allow pedestrians coming or going from the downtown to hang out, enjoy the new sculpture and views toward the river. Widened walkways welcome visitors and allow groups of pedestrians to move freely while an information kiosk informs them of the Eighth Street offerings.

ADDITIONAL PEDESTRIAN ENHANCEMENTS

Getting to and from this area as a pedestrian feels safe and welcoming with signage, street treatments, features that mark edges of pathways and roadways, widened walkways, and improved lighting that highlights crosswalks and improves pedestrian visibility to drivers.



COST ESTIMATES: See detailed cost estimates for hardscape alternatives, lighting, and art elements on pages 62-63.

4. Halprin Fountain (Mead Library Plaza Water Feature)



The Cultural Core is a cultural crossroad with a chain of significant investments. Use light and seasonal features to enliven the City Green on a daily/evening basis and create a more obvious, safe and welcoming connections between the Kohler Arts Center and courtyard, city gathering and performance space, the invigorating Halprin Fountain, and the contemporary library.

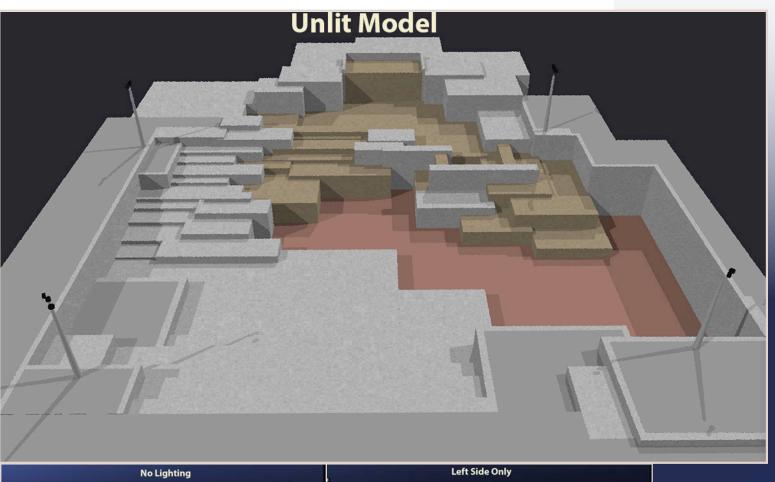


The Mead Library Plaza Water Feature (Halprin Fountain) and the Kohler Art Center's Carnegie Library Façade are two existing downtown landmark amenities with latent potential to enhance the Cultural Core, Eighth Street, Ninth Street, and the City Green. The detailed lighting studies focused on these two assets, using them as canvases to bring them alive and increase their presence.





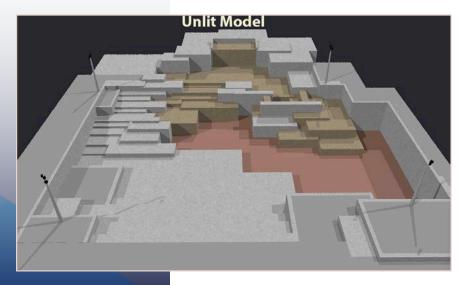
The Halprin Fountain is a community asset and a landscape architectural treasure. Although there are diverse opinions regarding its appearance, it has the potential to be a world-class icon of recharge, energy, and vigor. This lighting concept using its form as a canvas to bring it alive and addresses issues of safety in darkness and its usefulness in fall and winter when it is not operating as a fountain.





LIGHTING

We focused on the main water flows and water falls and rapids as water cascades over the boulders. Tightly aimed sidelight illuminates the inside faces of the "canyon" creating a dramatic effect which highlights the dimensionality of the installation with very little overshoot. Sidelight also emphasizes water ripples, turbulence, and white water. Lighting from the front corners fills in the central shadowed areas.

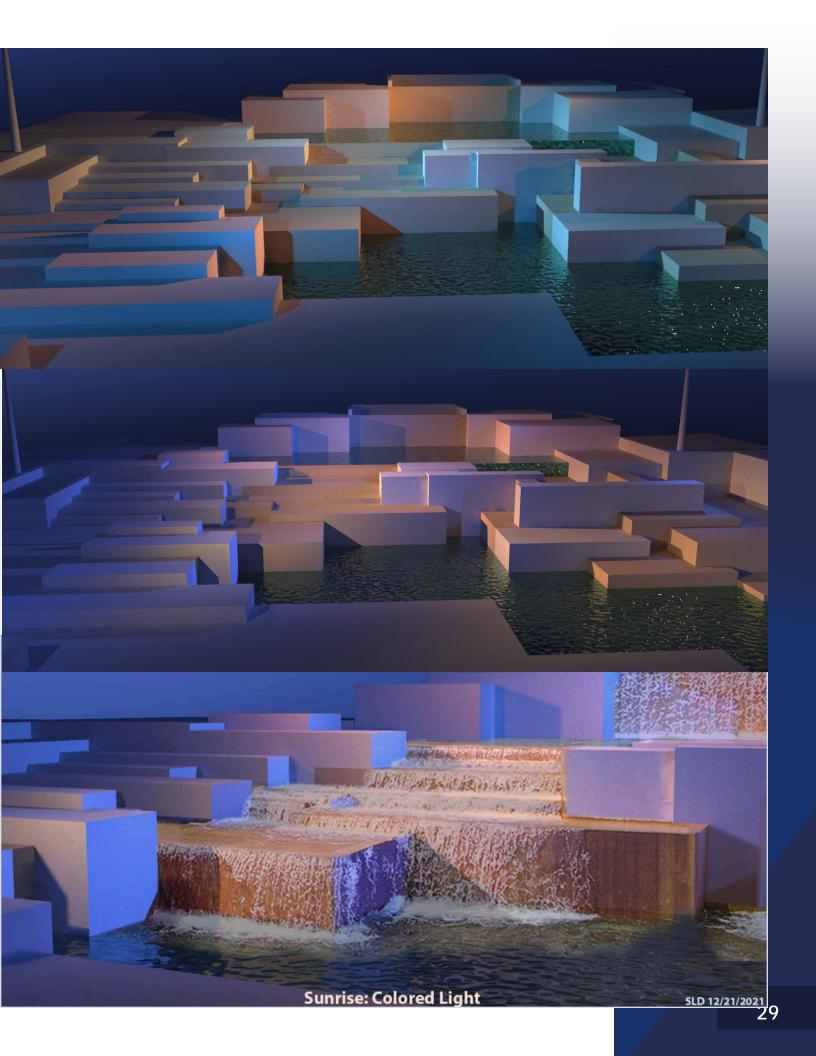


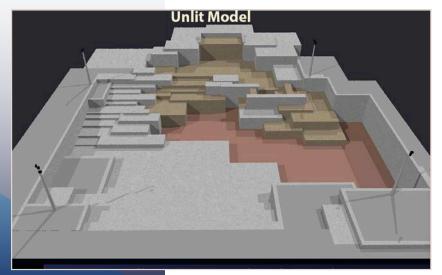
ILLUMINATION STUDY: RGB LUMINAIRES "SUNRISE"

We also explored two studies which incorporate RGBW capable luminaires. These would be programmed to provide lighting sequence which fade and flow very slowly from white light, through a sunrise/sunset flow, repeating every hour or so. Another program would provide a blue/ green ambiance for the winter Christmas display.



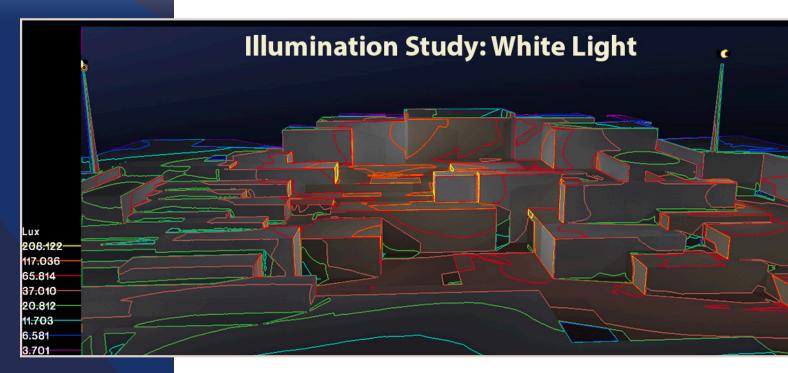
The same pole locations are used but with additional and larger luminaires, more robust poles and a centralized lighting control system. This more complex option can deliver both white and multicolored light with sufficient intensity to have dramatic impact. This approach requires a more sophisticated controller, programmed on site by my programmer and me, taking a night or two to "paint" the scenes. The system would operate automatically every night, and if desired, could be set up to recall presets reflective of the colors of Valentines, 4th of July, etc. An override LCD panel, to switch to winter colors or for special events, would be installed in a locked box in a TBD location.





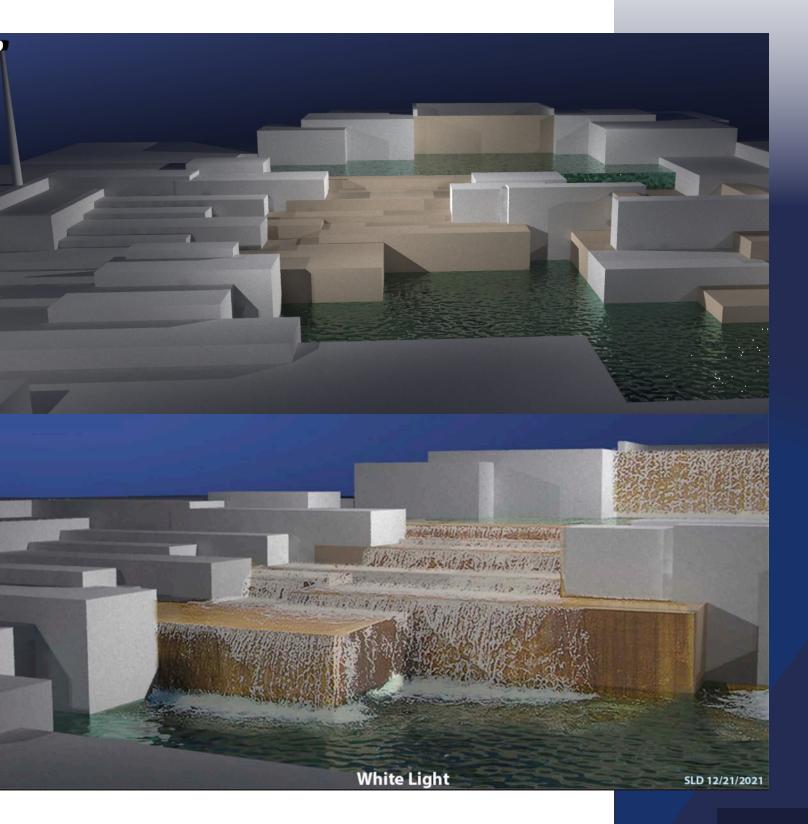
ILLUMINATION STUDY: WHITE LIGHT

We have achieved this objective from luminaires on four ~18' strategically placed poles, located on the perimeter of the site. Their locations also avoid interference from current tree plantings. We have provided an image of our model of the water feature, under general light, and then images which illustrate a white light approach. This system would be simply controlled by an astronomical timer: lights turned on an hour before sunset and off at ~1:00 pm.



We considered some up-lighting of the foliage behind the waterfall, but are concerned about luminaire and aiming upkeep. The night we were on-site some young people were frolicking through the installation parkour style. Ground level up-lighting is so hard to maintain and does not belong in playgrounds: note the leaks in the up-lighting for the four tablets in the front of the library. We do not recommend adding this component.

COST ESTIMATES: See detailed cost estimates on pages 64-65.





RIVATELY SPONSORED AND SECONDARY PUBLIC PROJECTS

Eighth StreetCorridor (Art Trail)

To assist in the visual connection of the roundabout to the bridge and entry to the downtown core, a series of lighted sculptures is recommended. These can be placed at strategic intervals to draw the interest and



encourage people to venture from one district to the next. The sculptural examples shown here are intended as conceptual only. They are intended to provide examples of water-jet cut metal sculptures and mounting examples of lighted metal sculptural elements that could become a palette for future thematic and art piece development.

A ROBUST PROCESS OF DEVELOPMENT AND SELECTION OF ART THEMES, SUBJECT MATTER, LOCAL ARTISTS, AND FUNDING IS RECOMMENDED to be led through a collaborative partnership between the City and Kohler Art Center and other invested area stakeholders. This process is is outlined in the Summary and Next Steps Section.

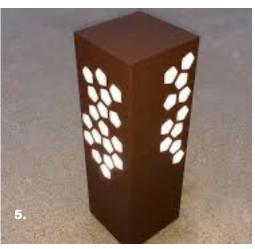
SCULPTURE MOUNT LOCATIONS

A suggested palette of lighted art piece mountings includes:

- 1. Ground-mounted lighted sculptures
- 2. Lightpole-mounted lighted sculptures
- **3.** Wall/building-mounted dimensional sculptures



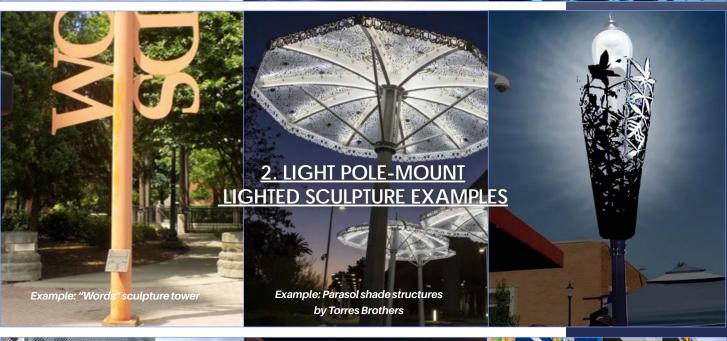


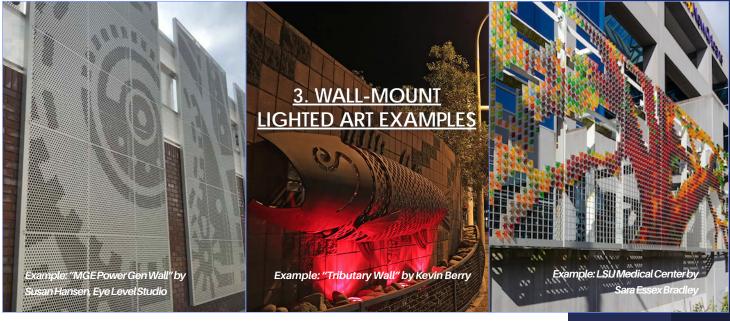


Additional utilitarian lighted elements include pathway definition and pedestrian enhancements:

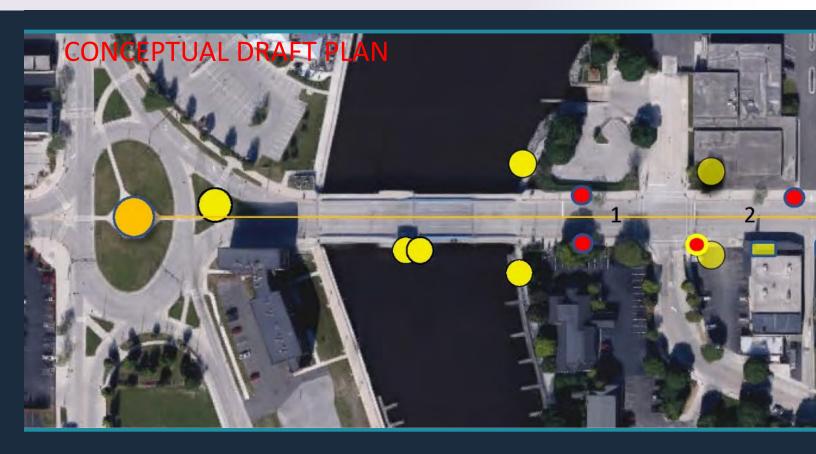
- **4.** Interactive Recessed sidewalk lighting
- **5.** Small bollard fixture pathway lighting







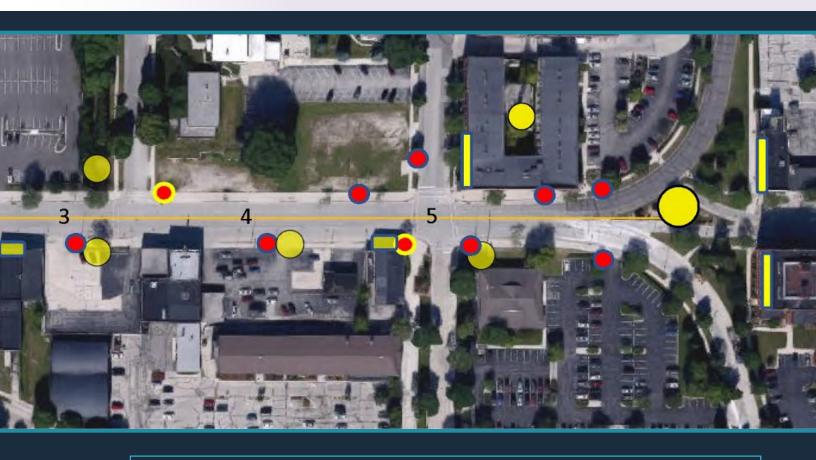
PRELIMINARY LIGHTING EVALUATIONS: EIGHTH STREET CORRIDOR













District Entry Feature



New Lighted Feature or Pole

Existing Light Pole



Lighted Feature on Building Structure





STREET LEVEL EVALUATIONS OF **LIGHTING LOCATIONS** on ground plane, light poles, walls and buildings

SHEBOYGAN VISITORS CENTER SCULPTURAL LIGHTING

The location of the Visitors Center in the heart of lower Eighth Street presents a great opportunity to bridge the gap between the bridge and the downtown gateway. Publicly controlled and already a place where the City connects with visitors, it is highly visible with a strong presence on the street.

Take advantage of the frontage on Eighth Street to make a statement, present a story, add interest, and beautify. Create a block of Eighth Street where visitors find it safe, populated, and interesting to walk.

ELEMENTS

Potential techniques and elements for Visitor Center Frontage:

- Specialty pedestrian lighting and spotlighting of the following elements
- Sculptural elements
- Themed artifacts (i.e., from shipbuilding, factories, etc.)
- · Large graphic images telling a story (i.e., makers)
- · Large words on banners or as sculptur

POTENTIAL THEMES

Themes can be developed in a collaborative process between the City and key area stakeholders. The goal of these themes would be to intrigue visitors to come into the visitors center to learn more about potential destinations, as well as to define a key informational point along the trail.

Examples of sculptural words suggesting visitors' activities:

- Eat
- Play
- · Discover
- Connect
- Shop

Examples of sculptural words suggesting a Makers Heritage / Sheboygan History Trail::

- Makers
- Artists
- Builders
- Creators
- Inventors



Example Light Pole with sculpturla w

6. Upper Façades of Eighth Street

Beginning in the 500 block of Eighth Street are two blocks that form the core of Downtown Sheboygan's commercial and restaurant life and beautiful architectural character.



During the day, this character along Eighth Street is fully visible, with a presence that makes a statement of a community with a vibrant history.

At night however, this important character and cohesion are lost to the shadows.

The lighting studies on the following pages show numerous options to bring this character to life at night and enhance the experience of this vibrant area.

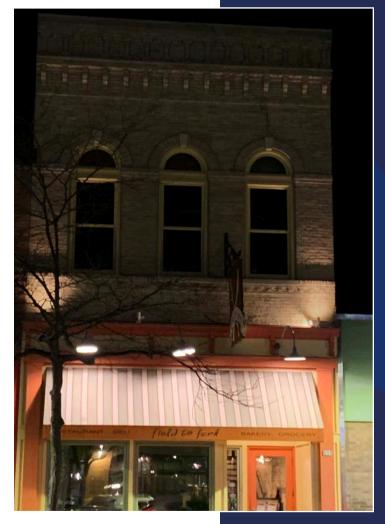


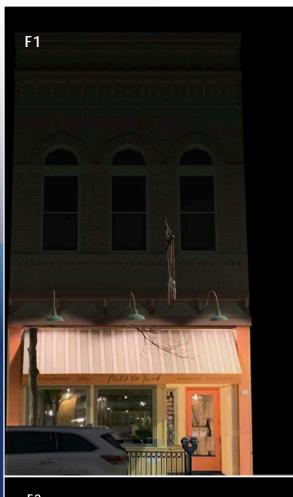
HISTORIC BUILDING FAÇADE EXAMPLE LIGHTING

SOLUTIONS: We would suggest starting with the smaller "period gems" that are scattered along the street, rather than concentrating on one block. Emphasizing smaller period façades first, rather than the large stately structures, enhances the visitor's "village" experience. Also, focusing on one block might be less likely to compel owners on other blocks to contribute to the nighttime visual charm of the district.

We selected a modest period building façade with multiple changes in depth as the canvas to demonstrate the visual impact of various unobtrusive lighting approaches. Each "period" building in this district would be individually designed drawing from techniques shown in the palette.

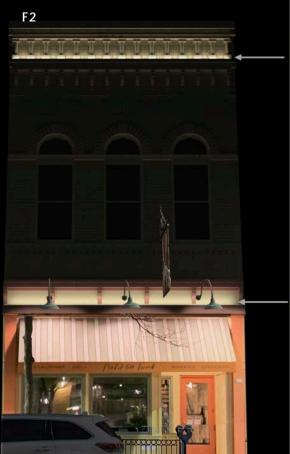
Specific features, such as an eagle on a building top,





Blank Palette Facade Three Small Spots Removed

SLD 2022



Continuous Up-light on Shelf \$600

Continuous Up-light on Shelf \$600

SLD 2022

need to be specifically designed based on available locations to mount and access its lighting and this cannot be illustrated in a generic manner.

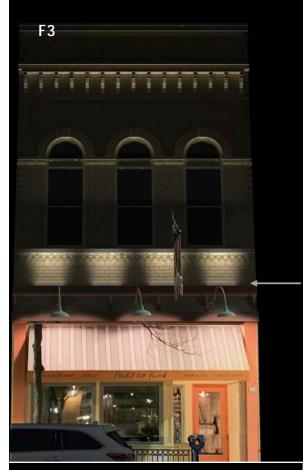
We have also avoided vertical streaks of light which can be visually harsh, and which do not reveal the architecture in a balanced manner. These might have their place on contemporary structures, but not on period façades.

All techniques deploy long lasting, low energy consumption and low visual profile luminaires. For best performance, reduced glare and longevity, we recommend the premium options.

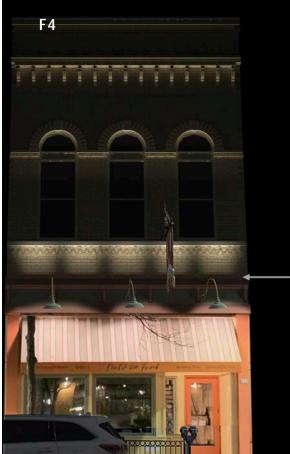
A major consideration is the type

of occupancy behind the upper story(s) windows. If residential, then the façade illumination should keep the window dark to avoid light trespass. If the windows are offices, then this is less of a concern and the whole façade can be illuminated.

An issue to be resolved at the local level is how the lighting is turned on and off. Does the ground floor commercial occupant have a switch? Does it turn off at 1:00 am (requiring timers or networked switches) or stay on all night (photocell controlled).

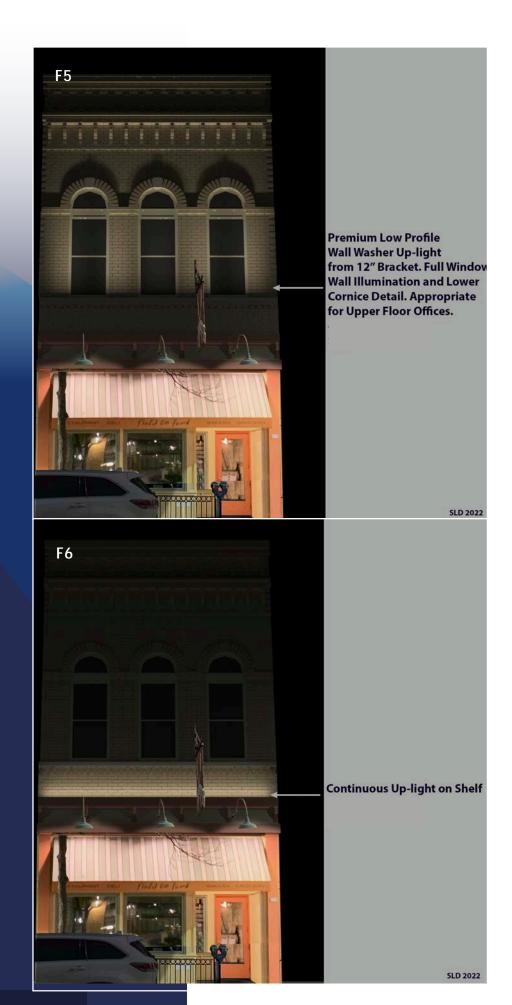


Grazing Lensed Up-light from Shelf. Also Illuminates Upper Window and Lower Cornice Detail. Minimal Light Invasion in Upper Apartment 4 x 2' Lower End Product \$1,500



Premium Low Profile
Grazing Lensed Up-light
from Shelf. Also Illuminates
Upper Window and Lower
Cornice Detail. Minimal Light
Invasion in Upper Apartment.
5 x 2' Product
\$3,000

SLD 2022

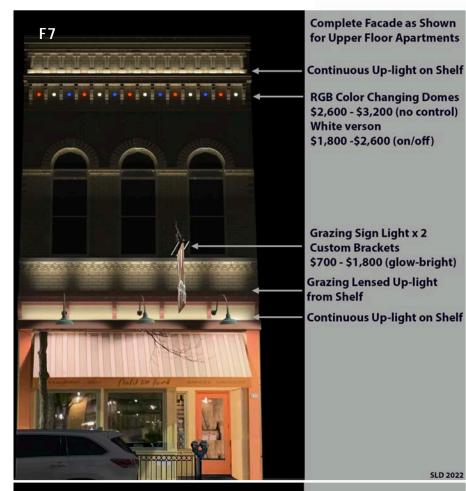


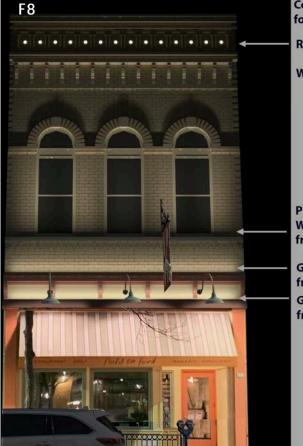
If selective color changing light is applied, it can be controlled via a wireless system; but where would that reside and under whose care? We present color changing 2" domes but the scale/cost of the control system, perhaps with wireless connectivity, is dependent on how many façades would have color changing elements, how many channels of control would be needed, and how distant the luminaires are from the main control box. Estimating this pricing range depends on details which are yet unknown.

The appropriate illumination of street banners and retail signs would contribute to this emerging nighttime destination. Festoons of lights are already deployed, turning a few dark alleys into pleasant meeting places. Additional carefully located "islands" of festoon lights can further enliven the streetscape.

equipment estimates: Façade lighting equipment estimates (shown in the façade renderings) are for 16 linear feet of façade as shown, including ballasts, leader cables, and attachment (installation not included). As every façade is different, the "menu" which I have created will assist lighting design decisions for this structure and others. Components are designed for years of performance, unlike seasonal lighting decorations and inexpensive knockoffs. All have a minimum of 5 years warranty.

When you have chosen several façades to illuminate, we can discuss a strategy and fee estimate for providing you with the luminaire specifications and consultation necessary for implementation.





Complete Facade as Shown for Upper Floor Offices

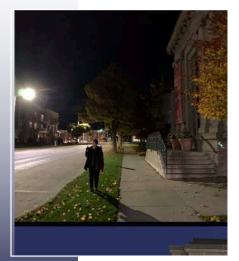
RGB Color Changing Domes

White verson

Premium Low Profile Wall Washer Up-light from 12" Bracket.

Grazing Lensed Up-light from Shelf Grazing Lensed Up-light from Shelf

SLD 2022



Kohler Art Center (Carnegie Library Façade)

The Kohler Art Center Carnegie Library Façade is a landmark for the city, the downtown, the City Green, and the Center itself. While this architectural remnant is beautiful, a connection to past city history and philanthropy, its potential is still unmet. Lighting this canvas will highlight its architectural features, increase its presence and enhance the experience of the whole Cultural Core.

LIGHTING SOLUTION: Our goal was to carefully illuminate the Library Façade, revealing its architectural detail and

banners for nearby and distant viewing. Currently this impressive façade lurks in the shadows at night.



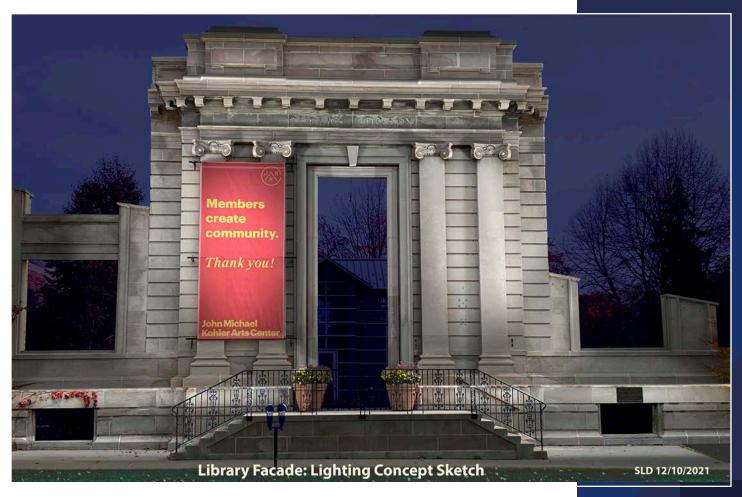




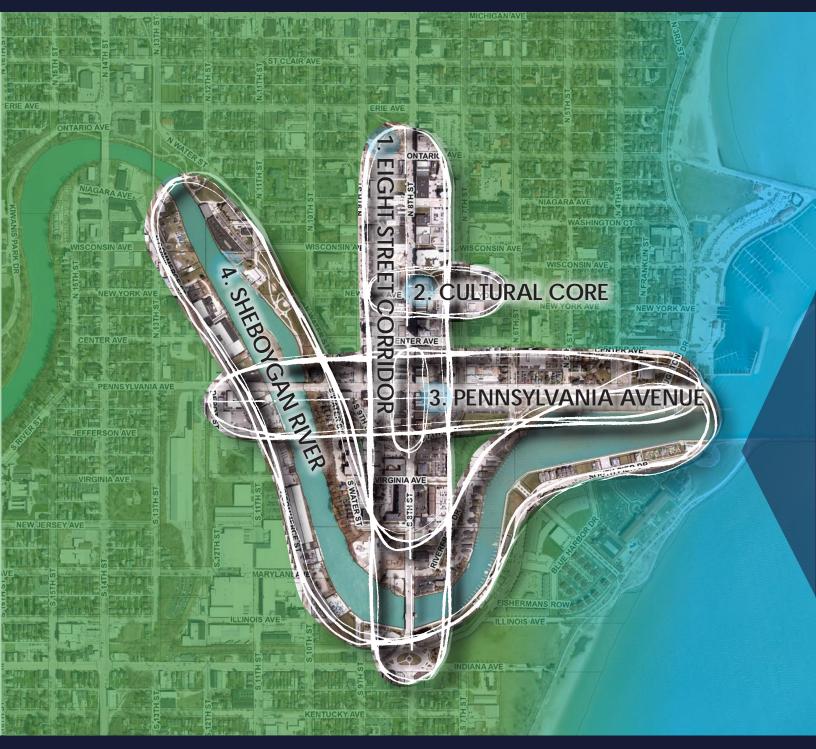
In the concept sketch, it is lit by two spotlights, flanking the main façade, each mounted on a pole located on the verge. Continuous linear LED is concealed in an existing channel above landing height, providing step, some sidewalk and lower façade illumination. Linear continuous up-light LED (less than 3/4" tall), is on the shelf above the columns, illuminating part of upper structure. These lines of light provide good distinction between the top, middle, and bottoms sections. All brightness is modest as the structure is in a very dark zone. Excessive brightness would make it appear harsh and diminish the architectural detail. Tight light beam control and visors minimize glare and overshoot. The banner(s) are clearly visible. The lighting installation would be operated by an astronomical timer.



COST ESTIMATES: Premium low maintenance luminaires with visors, runs of LED in lensed linear extrusions, ballasts, light poles, and timer estimate is ~\$11,000. SLD fee for the layout, luminaire and pole specifications and no site visit is estimated at \$1,200. If needed, additional follow-up will be billed at SLD hourly rate. The installing contractor will determine power access, power runs, ballast locations, and code compliance. **Installation cost estimate by others TBD**.



FRAMEWORK CORRIDORS



- 1.) EIGHTH STREET CORRIDOR
- 2.) CULTURAL CORE
- (3.) PENNSYLVANIA AVENUE
- 4. SHEBOYGAN RIVER



RAMEWORK FOR FUTURE PLACEMAKING PLANS

The Placemaking Framework for Downtown Sheboygan includes three key districts and four corridors with linkages which are key for energizing downtown. This framework provides a roadmap for future investments and coordinated efforts between implementors, decision-makers, and fundraisers. The Framework, its opportunities, and relationships form an important mechanism for invigorating the area as a whole.

FRAMEWORK CORRIDORS

A key part of the framework for the downtown are three corridors and a core around which to build placemaking, special lighting projects, and enhancements. Like a "master plan", it lays out a unified vision, identifiable segments, and place-specific enhancement recommendations that create unified experiences of place in downtown Sheboygan. Creating destinations within them, and nodes where they overlap. Helps them to intersect and feed each other, in effect creating a continuing series of intriguing visitor experiences that invites exploration.

Eighth Street Corridor

The Eighth Street Corridor is the central spine of the downtown, along which people enter and experience the downtown. There are many opportunities for placemaking enhancements from the roundabout entryway at Indiana Avenue to the north edge of downtown at Erie Avenue.

1. EIGHTH STREET STREETSCAPE between bridge and north of Virginia Ave.

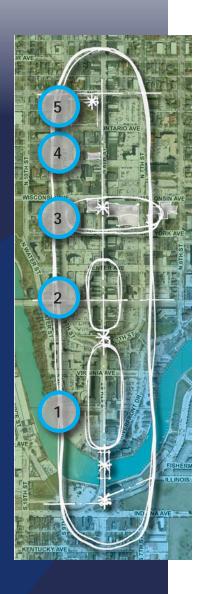
- Add lighting, banners, and benches (especially to the east side) to enhance the
 aesthetic experience and safety of pedestrians walking from South Pier to the
 downtown, especially where private properties don't provide positive walking
 environment.
- Tie into site improvements at the Visit Sheboygan Visitor Center.
- Light the chimney sweep and historic façade of the Henry Jung Apartments.

2. 500 BLOCKS OF EIGHTH STREET

- Continue streetscape enhancements from the Seventh, Eighth, Ninth Street node to the cultural core.
- Enhance nighttime appearance of the two 500 blocks with custom lighting (see Upper Façades of Eighth Street).
- Enhance intersection of Eighth Street and Pennsylvania Avenue.
- Program events and coordinate marketing of this restaurant and retail core.

3. CULTURAL CORE

- Highlight existing landmarks and create a unified public realm around the City Green.
- Creatively light the Halprin fountain and up-light the Kohler Art Center Carnegie Library façade. (See "Priority Projects")



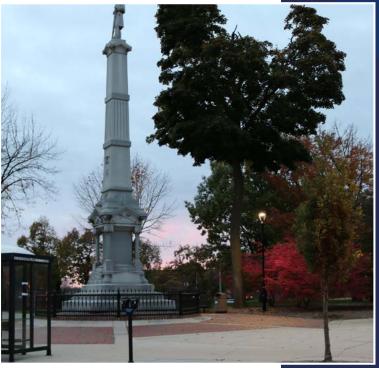
4. ENTERTAINMENT BLOCK between the cultural core and Fountain Park

- Support the Stefanie Weill Center for the Performing Arts and the Children's Museum.
- Enhance nearby architecturally interesting upper facades.

5. FOUNTAIN PARK

 Enhance as the north "bookend" of Eighth Street. Consider a sculptural feature that relates to feature at Indiana Avenue. Restore monuments and unify their arrangement.





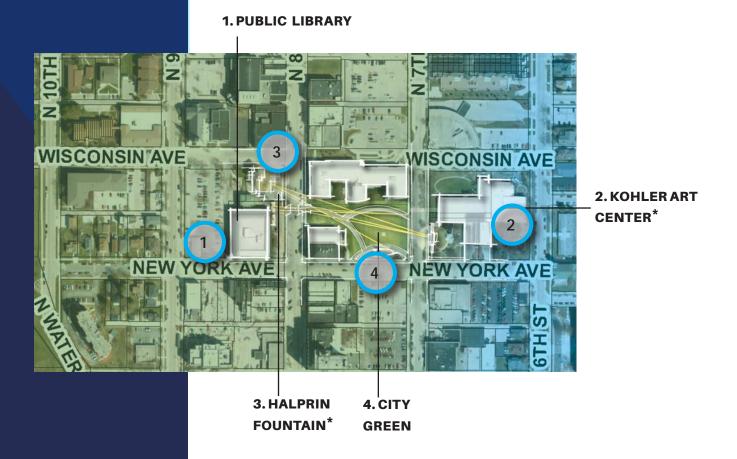
Cultural Core

In the middle of the Eighth Street Corridor, the City of Sheboygan and prominent philanthropists have invested in public facilities, features, and spaces, creating a Cultural Core. Together, these assets create a beautiful cultural center of the city:

- 1. THE LIBRARY AND ITS BEAUTIFUL RELIEFS
- 2. THE KOHLER ART CENTER
- 3. THE LANDMARK HALPRIN FOUNTAIN*
- 4. THE CITY GREEN PUBLIC SPACE AND EVENTS VENUE

Building on these existing investments and using existing architecture and sculptural fountain as canvases, these priority public improvements will strengthen these destinations, become three-dimensional urban art and sculpture, enhance the appeal of the City Green, and provide visual links and aesthetic bookends for the City Green.

(*SEE PRIORITY PROJECTS AND LIGHTING CONCEPTS)





Pennsylvania Avenue/River-to-Lake

Pennsylvania Avenue is the downtown's primary east-west avenue and connects the Up River district and the Lake Michigan waterfront.

- 1. BRIDGE AT SHEBOYGAN RIVER Create a gateway with vertical features at the west end of the Pennsylvania Avenue bridge over the Sheboygan River and relate to enhancements of Goat Island.
- **2. EIGHTH STREET INTERSECTION** Enhance streetscape elements, lighting, and a special feature celebrating the center of downtown where two axes meet.
- 3. TERMINUS AT LAKE MICHIGAN Add a feature that can be seen from Eighth Street. Create a turn around and organized lake viewing parking spaces. Coordinate with improvements and views of the Yacht Club, Coast Guard station, marina, and lighthouse.

BRIDGE AT SHEBOYGAN

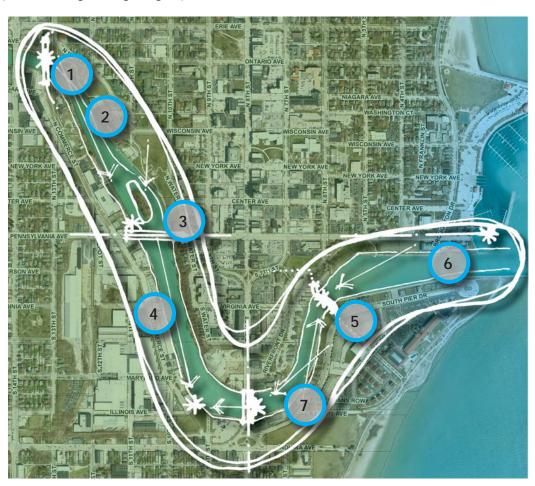
RIVER WISCONSHAVE NEW YORK AVE NEW YORK A





Sheboygan River

The downtown stretch of the Sheboygan River is an amenity with huge potential. Reaching from its mouth on Lake Michigan to the Fourteenth Street bridge, it is a continuous part of the downtown experience. As a continuous feature, it is crossed, paralleled, and seen in multiple locations offering an interconnected canvas for placemaking and lighting experiences.



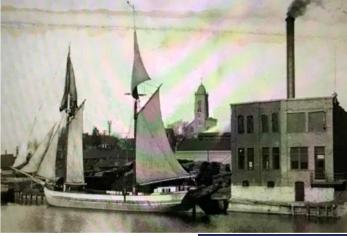
- **1. UPPER PEDESTRIAN BRIDGE** (near Water Street just south of Erie Avenue) Light the bridge so it is visible to river goers, Workers Water Street Park visitors and residents, and trail users.
- 2. RIVER STRETCH NORTH OF PENNSYLVANIA AVENUE Connect the Riverwalk/trail from Pennsylvania Avenue to the upper bridge and coordinate with future redevelopment on the west side of the river. Enhance access to and the appearance of Goat Island including sculptural element and interpretation of manufacturing history (i.e., chair factory).
- 3. PENNSYLVANIA AVENUE BRIDGE Create a gateway with vertical features at the west end of the bridge that can be seen on Pennsylvania Avenue and from up and down the river.

- **4. RIVER STRETCH BETWEEN PENNSYLVANIA AVENUE AND EIGHTH STREET BRIDGES** Locate a prominent feature at the bend in the river, one that can be seen (both day and night) from Pennsylvania Avenue bridge and the Eighth Street bridge. Light the west side of the river edge, encourage riverfront activity, and explore riverwalk sections here. Integrate large images of historic Sheboygan industries (i.e., schooner building, chair making).
- 5. SOUTH PIER PEDESTRIAN BRIDGE Not only does a pedestrian bridge between South Pier and Riverfront offer strong links, but it also has the potential to be a landmark focal point on the channel. It should be sculptural in form, iconic, and creatively lit at night.
- **6. RIVER STRETCH BETWEEN PEDESTRIAN BRIDGE AND LAKEFRONT** Maintain access to the channel edge to create viewing experiences toward the pedestrian bridge and the lakefront.
- **7. BOAT TOURS** could unite the experience, making connections up the river, day and night.











UMMARY AND NEXT STEPS

PHASING

- The Priority Projects comprise a suggested starting point for implementation
 of these placemaking and lighting recommendations. Beginning with
 implementation of the three priority projects that include the Roundabout,
 Bridge, Gateway, and Halprin Fountain.
- 2. As stated previously, the Kohler Art Center façade and lighting of participating historic façades along Eighth Street can be handled individually in accordance with participation from property owners. Eighth Street Art Trail sculptures can be conceived and funded through a separate public-private process (see below).
- **3.** Future projects can be prioritized through use of the Framework, and implemented to fulfill the community's priorities for connecting the downtown to the harbor and riverfront.

PUBLIC-PRIVATE COLLABORATION PROCESSES

EIGHTH STREET FACADE LIGHTING: A voluntary, public-private process will be required to work with downtown and Eighth Street businesses to design, prioritize, fund and implement lighting relative to specific privately-run properties and businesses along Eighth Street. This will help ensure businesses can anticipate and mitigate any unwanted lighting pollution into windows, unsustainable costs, design considerations and other factors. For this reason, lighting of facades will be an iterative process as participation, design progress, and funding allows.

LIGHTED ART TRAIL: In order to ensure that the art trail themes accurately represent goals and image set by the community, a robust process of development and selection of art themes, subject matter, local artists, and funding is recommended to be managed through a collaborative partnership. Sheboygan is already many steps ahead with the development of a collaboration model due to the presence and influence of the Kohler Art Center on the community and its ties to local artisans. Therefore a collaboration between the City and Kohler Art Center and other invested area stakeholders should be launched with the option of including other area businesses such as represented in the as the Downtown Investment Committee in advisory roles.

The City and/or Kohler Art Center may determine to hire Eye Level Studio in implementation of this theme discovery and selection of artists, or may choose to handle the process on its own. If desired, a public call for ideas or a public vetting of ideas can further embed the final concepts into the fabric of the community.

EVALUATION GUIDELINES

Selection of final themes and artworks should be handled through a thoughtful evaluation process that includes:

- RATING OF POTENTIAL OVERALL ART TRAIL THEMES AGAINST STATED GOALS
 for economic development, residents, visitors, talent attraction, and quality of life.
- 2. EVALUATION OF OVERALL ART TRAIL THEME AGAINST COMPETITIVE COMMUNITY POSITIONING and with the general public. Consider how the theme uniquely positions Sheboygan against other communities, and creates a compelling destination for our region. Will the theme draw both visitors and residents? Will it bring them back?
- **3. EVALUATION OF INDIVIDUAL ARTWORK CONCEPTS** on how they fit the theme and materials palette, and what part of the overall "story" do they tell. Are they the right experience "touchpoint" for this section of the overall user experience? Is the artist from the area and does that help enrich the story?
- **4. ASSESSMENT OF BEST LOCATION AND VANTAGE POINTS,** determining where they should be best placed to best "tell the story."
- 5. EVALUATION OF EACH INDIVIDUAL ART PIECE FOR FEASIBILITY AND COSTS by professional lighting and design consultants. Considerations should include whether the piece requires additional electrical, space allocation, or base or hardscape construction.

FUNDING & GRANTS

Keeping an eye on grants made available by State and Federal entities can further help prioritize projects. Relevant grants and applicable funding currently available include:

- CENTRAL BUSINESS DISTRICT GRANTS (CBDG) from HUD as made available
 to Department of City Development may be aligned to help fund individual façade
 lighting improvements that increase nighttime business visibility, highlight historic
 architecture, and create a safer, more walkable downtown at night.
- TIF DISTRICT 17 FINANCING for a future Eighth Street Roundabout revision may be available; while revision of its northern bookend node at the entryway to the downtown core may be able to be financed through the adjacent TID. (For more information on V&A's unique TIF management resources visit www.vandewalle.com/TIF-resources.)

Other grants such as tourism or historic feature preservation grants, while not currently available, do come up throughout the year. Vandewalle & Associates offers a GrantWatch (www.vandewalle.com/grants) service that helps communities keep track of grant changes, prepare projects for funding success, and stay on top of grant deadlines.

PRIORITY PROJECT COST ESTIMATES

1. ROUNDABOUT

Sheboygan Roundabout Sculpture Lighting

Design and Luminaire/control BOM estimate.
SLD LLC July 19 2022

Shipping, travel and luminaire pricing is volatile. Estimate based on today. NOTE addition of 10% contingency.

A. LIGHTING THE EXISTING CENTRAL SCULPTURE, OPTIONS. The following luminaire and frame costing is the BOM for the sculpture. This is luminaire budget pricing, with a controller. A more exotic lighting option includes a "frame" (bottom mid top option 1.) which could be programmed into a rising or descending slow "spiral" effect.

| Version 1. Able to create a visual | Small 28w LP 3500k spotlights | 28 | \$ | 590.00 | \$1 | 16,520.00 |
|-------------------------------------|------------------------------------|-----|------|-----------|-----|-----------|
| spiral effect by x-fading between | DMX controlled. With shipping | | | | | |
| lights aimed low mid and high | | | | | | |
| from 8 directions | Aluminum frames for 3 lights | 8 | \$ | 250.00 | \$ | 2,000.00 |
| | shipping estimate | 1 | \$ | 400.00 | \$ | 400.00 |
| | Power/Data supplies | 2 | \$ | 636.00 | \$ | 1,272.00 |
| | Controller components | 1 | \$ | 1,912.00 | \$ | 1,912.00 |
| | (enclosure and assembly | | | | | |
| | by EC) | | | | | |
| | Manufacture tech commissioning | 1 | \$ | 2,750.00 | \$ | 2,750.00 |
| | SLD Design fee/frame revisions | 8 | \$ | 150.00 | \$ | 1,200.00 |
| | contractor docs | 2.5 | \$ | 150.00 | \$ | 375.00 |
| | Onsite programming and aiming | 1 | \$ | 2,800.00 | \$ | 2,800.00 |
| | by SLD associate designer | | | | | |
| | Sean Smallman, EC electrician | | | | | |
| | and LP tech overlap 3 hours to aim | 1 | | | | |
| 10% contingency | | 0.1 | \$ 2 | 29,229.00 | \$ | 2,922.90 |
| Total estimate without installation | 1 night | | | | \$3 | 32,151.90 |

| Version 2. A simple layout to | Larger 50w LP 3500k spotlights | 8 | \$ 809.00 | \$ | 6,472.00 |
|--------------------------------------|---------------------------------|---|----------------|----------|----------|
| create a visual rotation effect from | DMX controlled. Mounted on smal | I | | \$ | - |
| 8 lights from 8 directiions | concrete footers, priced by EC. | | | \$ | - |
| | Shipping not in price | 1 | \$ 500.00 | \$ | 500.00 |
| | | | | \$ | - |
| | Power/Data supplies | 2 | \$ 636.00 | \$ | 1,272.00 |
| | _ | | | \$ | |
| | Controller components | 1 | \$ 1,912.00 | \$ | 1,912.00 |
| | (enclosure and assembly | | | | |
| | by EC) | | | | |
| | Manufacture tech commissioning | 1 | \$ 2,750.00 | \$ | 2,750.00 |
| | | | | | |
| | SLD Design fee | 6 | \$ 150.00 | \$ | 900.00 |
| | Contractor Docs | 2 | \$ 150.00 | \$ | 300.00 |
| | | | | | |
| | Onsite programming and aiming | 1 | \$ 2,800.00 | \$ | 2,800.00 |
| | by SLD associate designer | | | | |
| | Sean Smallman, EC electrician | | | | |
| | and LP tech overlap 2 hours. | | | | |
| | 1 night | | | <u> </u> | |

Total estimate without installation:

1. CENTRAL SCULPTURE WHITE LIGHT OPTIONS:

Version I. Includes twenty-four (24) white lights LBM (28w) and controller on 8 frames, one on each inside edge of the octagonal upper curb: with a day of commissioning to ensure all are programmable and working after installing contractor completion: Simple crude slow "rotating effect" on small concrete footers.



Version II. Includes eight (8) larger white lights LBL (50w) each lighting the lower, mid and upper 1/8th of the sculpture with a day of commissioning to ensure all are programmable and working after installing contractor completion.

2. CENTRAL SCULPTURE RGB/COLOR LIGHT OPTION:

Includes eight (8) larger RGB lights, each lighting the lower, mid and upper 1/8th of the sculpture with a day of commissioning to ensure all are programmable after installing contractor completion. Simple crude slow "rotating effect" with color RGB (not recommended for this sculpture without agreement by original sculpture artist) on small concrete footers.

B. OUTER SPIRAL DMX (RADIO CONTROLLED) RGB/COLOR BOULDER ELEMENTS:

1. Set of 12 "boulder" sculpted metal light boxes set in a spiral configuration



| • | Artist fees TBD depending on committee selection | TBD |
|---|---|----------------------|
| • | Stainless water-jet cut and contoured shell \$1200 to 1,958 each x 12 | \$14,400 to \$23,496 |
| | DMX CONTROLLED RGB lights x 12 | \$9,648 |
| • | Power/data supplies | \$7,632 |

C. LANDSCAPE AND HARDSCAPE

| | quantity | unit | cost | | S | ubtotal |
|-----------------------------|----------|------|------|-------|----|---------|
| Site Prep/Mobilization | 1 | ea | \$ | 5,000 | \$ | 5,000 |
| | | | - | | - | |
| Pavement (Colored Concrete) | 2,650 | sf | \$ | 6 | \$ | 15,900 |
| | | | | | | |
| Low Shurbs Around Statue | 12 | ea | \$ | 50 | \$ | 600 |
| Perennial Beds | 2,600 | sf | \$ | 10 | \$ | 26,000 |

| Subtotal | \$ 47,500 |
|----------------------------|--------------|
| Design & Engineering (15%) | \$ 7,125 |
| Contingency (20%) | \$ 10,925 |
| TOTAL | \$ 65,550 |

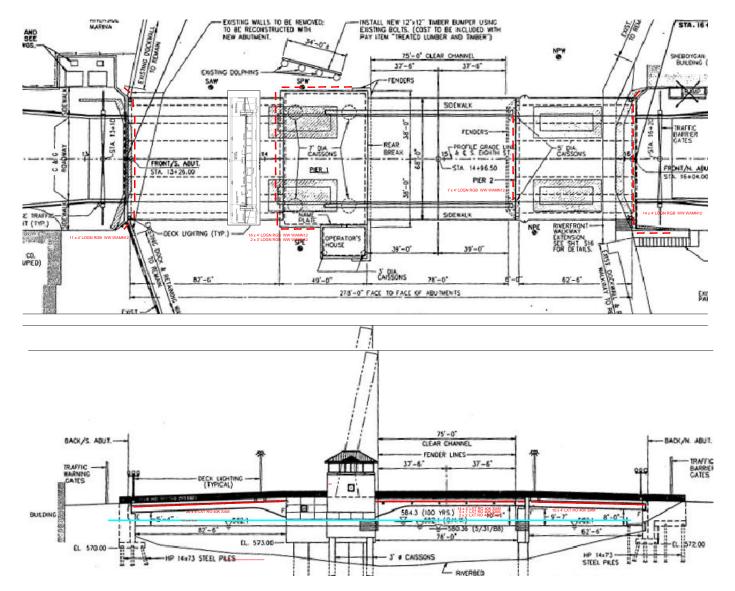
2. EIGHTH STREET BRIDGE

Sheboygan 8th Street Lift Bridge Lighting Proposal SLD LLC July 21, 2022

Estimate does not include installation nor power infrastructure.

Lighting BOM for scope indicated on plan overlay
Beam lights static white. Walls color changing
Programmed for 365 days. Includes holidays and special days.
Ideally on City Network. Else no remote editing.

\$ 208,574.00



Estimated additional Installation range is from \$55K to 82K plus under bridge lift rental. Rental cost to be determined with local bid. This assumes power is available.

| | # | cost per | totals |
|--|-----|-------------|---------------|
| Linear 4000k Lights for Beams | | | |
| Mainly 4' Lengths Continuous in feet: | 414 | \$ 178.70 | \$ 73,981.80 |
| | | | |
| Linear WallWasher RGB for walls | | | |
| Mainly 4' lengths 7' o.c.+ jumpers.In feet | 206 | \$ 465.20 | \$ 95,831.20 |
| | | | |
| Powersupplies plus feeders cables | 1 | \$ 3,770.00 | \$ 3,770.00 |
| Accessories | 1 | \$ 1,000.00 | \$ 1,000.00 |
| Control components+ monitoring(5yrs) | 1 | \$ 5,635.00 | \$ 5,635.00 |
| Wireless link across lift+ commissioning | 1 | \$ 6,500.00 | \$ 6,500.00 |
| Onsite tech to address/check control | 1 | \$ 3,335.00 | \$ 3,335.00 |
| BOM Lighting. | | | \$ 190,053.00 |
| | | | |
| SLD Design work | | | |
| (need detailed bridge drawings) | | | |
| Linear systems for Beams 4000K | 16 | \$ 150.00 | \$ 2,400.00 |
| | | | |
| Wall Washers RGB | 24 | \$ 150.00 | \$ 3,600.00 |
| | | | |
| Control Riser | 4 | \$ 150.00 | \$ 600.00 |
| | | | |
| ContractorDesign Documents | 4 | \$ 150.00 | \$ 600.00 |
| (Luminaire and channel schedules etc) | | | \$ 7,200.00 |
| | | | |
| Onsite programming (no aiming needed) | | | |
| Designer | | | \$ 6,393.00 |
| Programmer+preprogramming | | | \$ 4,928.00 |
| (see details below) | | | \$ 11,321.00 |
| | | | |

3. DOWNTOWN GATEWAY



| | quantity | unit | cost | | s | ubtotal |
|-------------------------------|----------|------|------|--------|----|---------|
| Site Prep/Mobilization | 1 | ea | \$ | 5,000 | \$ | 5,000 |
| | | | | | | |
| Pavement (Colored Concrete) | 3,620 | sf | \$ | 12 | \$ | 43,440 |
| Crosswalks (Colored Concrete) | 900 | sf | \$ | 12 | \$ | 10,800 |
| | | | | | | |
| Trees (upright, shade tree) | 2 | ea | \$ | 600 | \$ | 1,200 |
| Perennial Beds | 3,100 | sf | \$ | 15 | \$ | 46,500 |
| No-Mow Turf | 3,000 | sf | \$ | 2 | \$ | 6,000 |
| | • | | | | | |
| Kiosk | 1 | ea | \$ | 20,000 | \$ | 20,000 |

| Subtotal | ς | 132,940 |
|----------------------------|----|---------|
| | | |
| Design & Engineering (15%) | | 19,941 |
| Contingency (20%) | \$ | 30,576 |
| TOTAL | \$ | 183,457 |

SCULPTURE OPTION COSTS:

- Generalized estimate for large metal and cast stone sculpture with artist fees, production, base preparation and installation is \$300,000.
- Lighting costs for a large central sculpture at the Gateway can generally be compared to the range of estimates for lighting the roundabout at the other end of Eight Street (see pages 58 and 59).

ARCHITECTURAL ARCHWAY OPTION COSTS: A detailed estimate for central sculpture or archway options is not possible here as it would be pending further exploration of contract with the selected artist, material, base preparation, and lighting design.

4. HALPRIN FOUNTAIN LIGHTING COST ESTIMATES

OPTION 1: STATIC WHITE LIGHTING ESTIMATES

Luminaires, poles, mounting hardware and astronomical timer.

Delivered to installing Contractor

\$30,850

• Poles engineered using manufacturer data for 90 MPH.

Design and implementation:

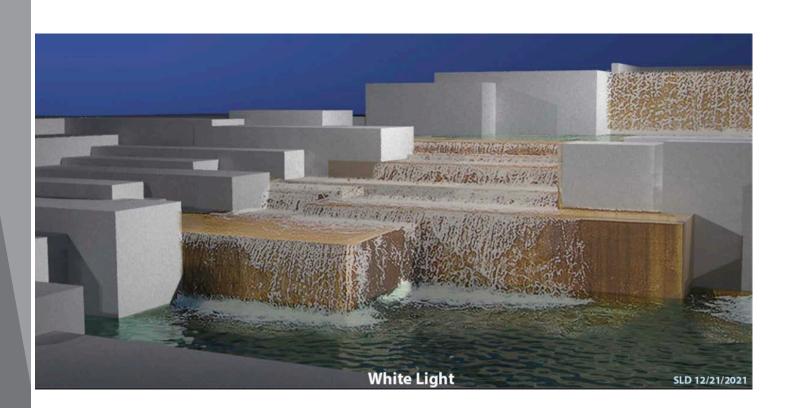
- Layout and specifications.
- Virtual walk-through with contractor.
- Supervise contractor luminaire aiming.

\$7,500

(Contractor responsible for pole footers and electrical engineering)

TOTAL STATIC WHITE ESTIMATE

\$38,350



OPTION 2: RGB SEQUENCED LIGHTING ESTIMATES

(more luminaires, larger poles)

Luminaires, poles, mounting hardware, control and playback devices.

- Delivered to installing Contractor.
- Poles engineered using manufacturer data for 90 MPH.
- Manufacturer tech to address and commission control and lighting with contractor at completion of installation.

~\$69,840*

Design and implementation:

- Layout and specifications.
- · Virtual walk-through with contractor.
- · Supervise contractor luminaire aiming.
- Program lighting sequences.
 \$13,700

(Contractor responsible for pole footers and electrical engineering)

TOTAL RGB ESTIMATE

~\$83,540

* Pending discussion of system details and interface







Shakespeare Lighting Design LLC