THE DETROIT–SUPERIOR BRIDGE PROJECT
Connectivity Plan

Transportation for Livable Communities

PROJECT PARTNERS

City of Cleveland
Cuyahoga County Department of Public Works

FUNDERS

Northeast Ohio Areawide Coordinating Agency (NOACA)
Ohio Department of Transportation (ODOT)
National Endowment for the Arts
Cuyahoga Arts & Culture
Ohio City, Inc.
The George Gund Foundation
The Cleveland Foundation
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PROJECT TEAM

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SUMMARY

The Detroit-Superior Bridge Project Connectivity Plan builds upon previous plans for the Downtown Cleveland and near-west neighborhoods, with the intent of re-opening the former streetcar level of the bridge as a public thoroughfare for cyclists and pedestrians, and as a venue for events, programming, and recreation. The goal is to highlight the bridge as a unique historic and cultural destination amidst some of Cleveland's most important civic landmarks while strengthening and multiplying connections between Downtown, the Flats, the Warehouse District, Ohio City, Detroit-Shoreway, and other destinations.

The recommendations of the Transportation for Livable Cities Initiative (TLCI) report include:

- *Open the lower level of the bridge for daily pedestrian and cyclist use for daily commuters and recreational users. Improvements outlined in this report include necessary electrical, security/ safety, plumbing, and/or structural updates or enhancements.*
- *Provide and enhance connections to existing and future developments, including: the terminus of the Towpath Trail, Canal Basin Park, the Lakelink Trail, Settler's Landing RTA Station, Ohio and Erie Canalway, the Superior Viaduct, and the proposed Ohio City Farm expansion.*
- *Enhance the image and identity of the bridge to help foster civic identity and economic development opportunities built around the historic and scenic resources of the bridge and its surrounding area. This includes historical interpretation signage and programming, enhancing viewsheds of other prominent Cleveland historical landmarks, as well as arts programming, small-scale festival and retail opportunities, and performance space.*
- *Strengthen multi-modal transportation connections through the improvement of sidewalks and crosswalks, bicycle networks, vehicular corridors, and public transit.*
- *Improve and develop sites around the bridge to generate activity and nearby users for the bridge, and to help foster a sense of the bridge as a gateway to the near west side, the Flats, and downtown. This includes the possibility of future residential development at the west side of the bridge, and a landscape connection to the future Canal Basin Park and the Towpath Trail terminus.*

Recommendations for implementation are phased to include short-term recommendations for making the streetcar level of the bridge safe and accessible to the public, and recommendations for longer-term improvements and full build out of the bridge as a public space and a venue for events and programs.

- *Short-term (phase one improvements)* include two new points of entry to the bridge, pavement striping and a cycle track across the lower level of the bridge, improvements to existing entry points, re-surfacing of the central deck, lighting and security cameras, security fencing, new crosswalks and minor landscaping for an estimated cost of $2.6 million.
- *Longer-term (phase two improvements)* include two entry plazas and associated landscaping, benches and trash receptacles, stair reconstruction, interpretative and wayfinding signage, decorative fencing, and other improvements for an estimated cost of $4.4 million.
- *Full build-out (phase 3 improvements)* include plumbing, restrooms, elevators, site improvements, and venue improvements for an estimated cost of $4.4 million

Total estimated cost for all three phases is $11.4 million. A detailed cost opinion can found on page 57.

EAST SIDE *recommendations for pedestrian and bicycle connections, green space, and future development*

WEST SIDE *recommendations for pedestrian and bicycle connections, green space, and future development*

STREETCAR LEVEL
recommendations for safety, lighting, and pedestrian and cyclist traffic.

UNDER THE BRIDGE
recommendations for integrating the bridge into the Flats and Canal Basin Park

BACKGROUND & CONTEXT II

BRIDGE HISTORY

The bridge traverses four distinct areas of the city, all with a unique and rich history and urban fabric: Ohio City, the Flats, the Warehouse District, and the Central Business District. A ten to fifteen minute walk from the West Side Market and the pedestrian-friendly mixed-use Market District, and touching two of the city's most vibrant residential neighborhoods, the lower level of the Detroit-Superior

Bridge could once again serve as a multi-modal thoroughfare.
The Detroit-Superior Bridge (also known as the Veterans' Memorial Bridge) serves as an exemplary through-arch steel and concrete structure. Begun in 1914 and completed in 1917, the bridge is listed on the National Register of Historic Places, and serves as one of two primary local arteries (along with the Lorain-Carnegie Bridge)into downtown Cleveland from the near West side. Its distinguished character has become a part of the civic identity and an integral part of the city's skyline.

Constructed by the King Bridge Co. to provide relief from traffic congestion on the Superior Viaduct, the Detroit-Superior Bridge was built at a height (96 feet) to allow tall ships to pass underneath, thereby furthering new economic possibilities for the Industrial Flats. Designed as a two-tier bridge with automobile traffic on top, the lower level was designed to carry trolley cars to connect to downtown and the near west side, until 1954 when trolley service was discontinued. In 1967, two additional travel lanes for automobiles were added to the top level, and in 2003 top level modifications were made to better accommodate bicyclists and pedestrians, including the closure of the northernmost automobile traffic lane.

A major structural stabilization effort was conducted in the 1990's which, as well as a lighting initiative to highlight the bridge's form at night. Cuyahoga County will typically open the lower level of the bridge to the public annually, drawing large crowds to its underside. Through events such as this and continued community education, a large grass roots system has developed, which supports and encourages public use of the lower level on a permanent basis.

THE DETROIT SUPERIOR BRIDGE PROJECT-CLEVELAND, OH

THE DETROIT-SUPERIOR BRIDGE PROJECT

This planning study was developed as a Transportation for Livable Cities (TLCI) project, conducted through the Northeast Ohio Areawide Coordinating Agency (NOACA). The project team, in consultation with local partners, was tasked with determining a recommended planning and design solution, as well as a course of action for opening the lower level to the general public on a regular basis.

Years of interest from grass roots organizations and the community at large have resulted in a series of projects and events, which have generated community support for opening the lower level of the bridge on a more permanent basis. In 2009, Kent State University's Cleveland Urban Design Collaborative asked students to participate in a design/build charrette to envision interventions on the lower level of the bridge. Ingenuity Fest, a successful music and arts based festival, has utilized the lower level of the bridge to host its event in recent years. The lower level of the bridge was also part of the National Trust for Historic Preservation as part of its "This Place Matters" campaign in 2011. Through support from the local community, as well as the City of Cleveland and Cuyahoga County, this study intends to:

- *address design concepts for pedestrian and bicycle paths across the lower level of the bridge;*
- *design conceptual alternatives for each access point to the bridge;*
- *provide a traffic study for roadways and intersections at both ends of the bridge;*
- *analyze the potential for use of the bridge by arts and culture organizations;*
- *assess the potential for real estate development within and near the bridge; and*
- *conceive of connectivity strategies to nearby (current and future) attractions and neighborhoods.*

COMMUNITY ASSETS & CONNECTIONS

The bridge traverses four distinct areas of the city, all with a unique and rich history and urban fabric: Ohio City, the Flats, the Warehouse District, and the Central Business District. A ten minute walk from the West Side Market and the pedestrian-friendly mixed-use Market District, Likewise, on the east end of the bridge, the Warehouse District boasts a strong residential population and mixed-use programming.

WEST SIDE MARKET *at the corner of West 25th Street and Lorain Avenue*

LAKEVIEW TERRACE *neighborhood north of the Detroit-Superior Bridge*

AERIAL VIEW *of the Detroit-Superior Bridge (center) spanning the Flats, with the Lorain-Carnegie Bridge to the South, and the Hope Memorial Bridge to the north*

View from the Superior Viaduct to Ohio City

View from Settler's Landing RTA Station to the Flats and Cuyahoga River

FLATS WEST BANK *with Superior Viaduct, Swing Bridge, and the Detroit-Superior Bridge in the distance*

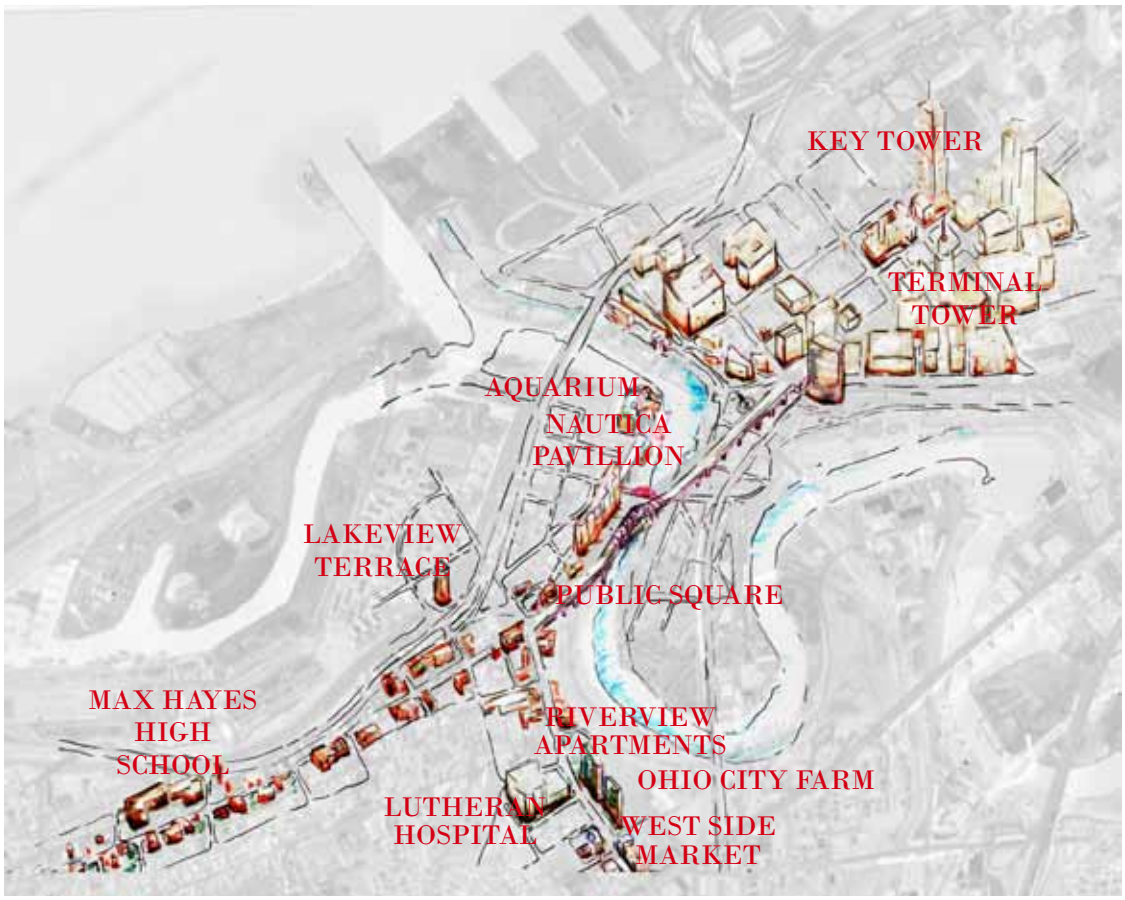
View from bridge platform to Flats

View looking east to the Warehouse District & Downtown

The area surrounding the Detroit-Superior Bridge a diverse and dense urban landscape of considerable architectural and scenic interest. Thanks in part to grassroots efforts, there have been major preservation and restoration efforts which have preserved much of the architecture and infrastructure that makes this area of the city a major point of interest.

As a regional asset, the area surrounding the bridge is encompassed in the Ohio and Erie Canalway National Heritage Area, which stretches from the Lake Erie waterfront South to New Philadelphia, Ohio 110 miles along the Cuyahoga River. Additionally, the route across the upper level of the Detroit-Superior Bridge is designated as part of the America's Byway system. There are numerous architectural and historic landmarks in the immediate surrounding area, including the Western Reserve Building by Daniel Burnham & Co., the Rockefeller Building by Knox & Elliot, the Superior Viaduct, a variety of industrial era bridges including jackknife, lift and swing bridges, the Lorenzo Carter Cabin, Settler's Landing. A large part of the Flats, primarily at the lake's edge, and further South in the Industrial Flats, produce and transport industrial goods up and down the river, organized under the Flats Industries Association.

In the surrounding area, multiple institutions and anchors offer a variety of services and activities. They can be thought of in a few categories: social service and public institutions; large multi-family developments; dense, mixed-use development; and civic and entertainment nodes.



- SOCIAL SERVICE & PUBIC INSTITUTIONS *include St. Malachi Center and parish just north of the Cuyahoga County Department of Public Works garage on the Superior Viaduct., Lutheran Hospital located north of Vestry Avenue, the Arts & Sciences Preparatory Academy, Max S. Hayes vocational high school.*
- LARGE-SCALE MULTI-FAMILY HOUSING *developments include the CMHA Riverview Towers containing 664 dwelling units as well as the Ohio City Farm, CMHA's Lakeview Terrace to the north of the Memorial Shoreway contains 620 low-rise dwelling units and an additional 214 units in its high rise tower. Stonebridge Waterfront is a market-rate apartment complex located just north of the bridge on the west end.*
- DENSE MIXED-USE DEVELOPMENT *occurs primarily on the eastern edge of the bridge in the Warehouse district and downtown. While residential units are primarily filled, there is a high vacancy rate for retail and office uses.*
- CIVIC AND ENTERTAINMENT NODES *include the new Greater Cleveland Aquarium, Nautica Pavillion, the Old Coast Guard Station, the Superior Viaduct, the Lorenzo Carter Cabin, Settler's Landing, Lock 44 of the Ohio and Erie Canal, and nearby Public Square and its associated amenities.*

ALL-PURPOSE SEGMENT *of the Towpath Trail*

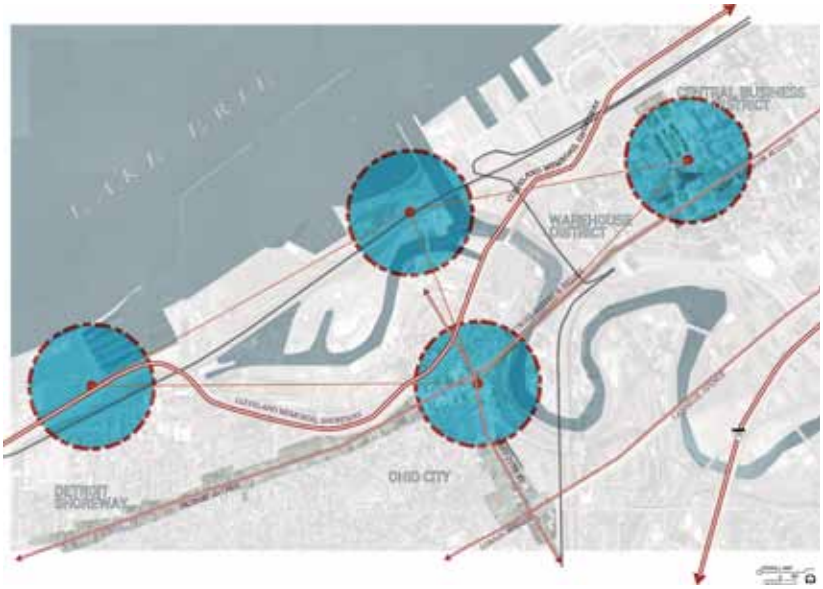
View from WENDY PARK *to downtown*

An industrial past is successfully re-purposed through a landscape park in Duisburg, Germany which links to the RUHR VALLEY INDUSTRIAL HERITAGE TRAIL

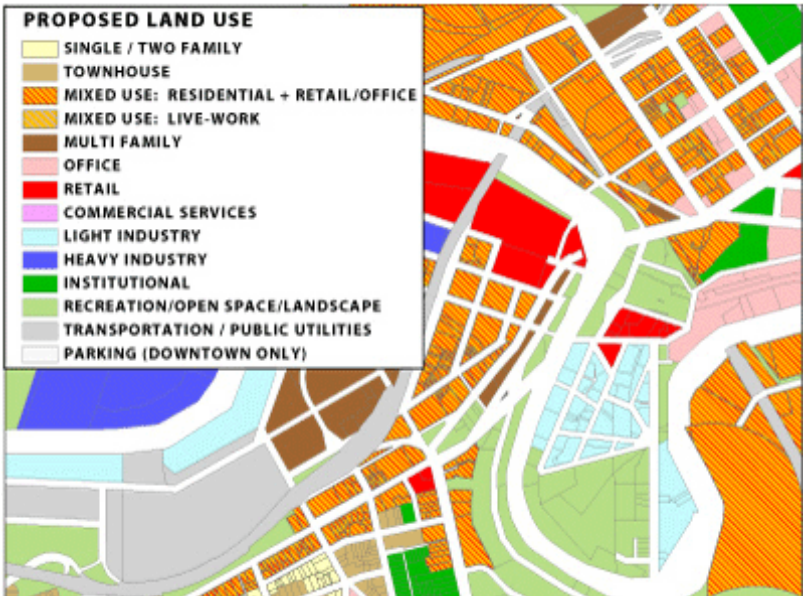
The area also has strong inter-modal connections to other parts of the city and green spaces. Through the addition of the lower level being opened for cycle and pedestrian use, it is conceivable that the bridge and surrounding area could serve as a regional hub for recreational cyclists, tourists, and city residents.

As an example, Minneapolis, MN has successfully created a regional bike network of bike trails and lanes which serve the downtown, city neighborhoods, and surrounding parks and lakes. Similar in scope to the Towpath Trail, the Route Industriekultur in the Ruhr Valley of Germany provides a cultural and recreational trail created by a network of re-purposed industrial sites, which draws visitors from across the world to travel its path and visit its historic sites.

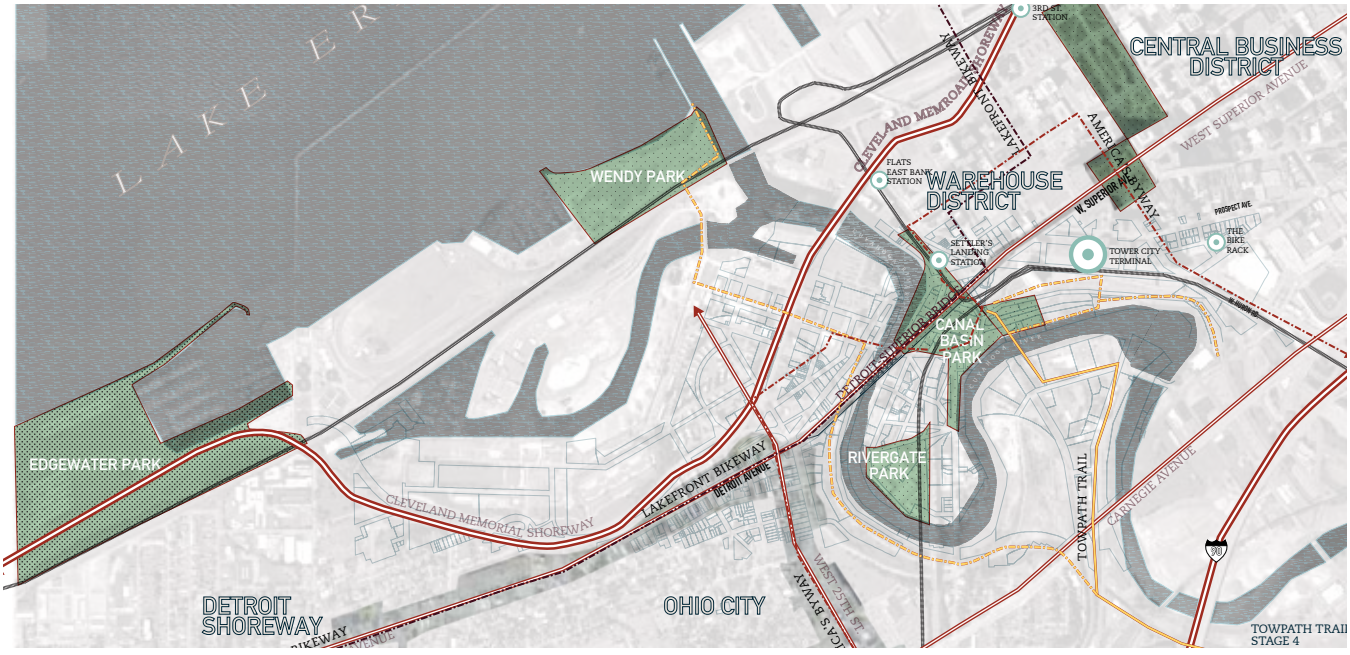
Annually, visitors from around the region arrive at the lower level for the Detroit Superior Bridge tour, sponsored by the Cuyahoga County Department of Public Works. The event attracts over 1000 visitors annually who enjoy the space and history associated with the bridge. Additionally, the lower level has been programmed for successful public events such as the Ingenuity Festival, which showcases local and regional arts, entertainment, and music.



PARK AND GREEN SPACE
connections



PROPOSED LAND USE
(Cleveland 2020 Citywide Plan)



MAJOR CONNECTIONS

CONTEXT FOR THE PLAN

There have been several plans for the area surrounding the Detroit-Bridge in recent years. While some are currently under construction, others are awaiting implementation. The Bridge Project seeks to serve as both a crossroads and a destination in relation to many of these projects.

- *The Flats East Bank Project* is currently under construction for its first phase, which will provide a twenty-three story, 500,000 SF mixed-use tower, anchored by Ernst & Young and a 150-room boutique hotel, along with retail, restaurants, health club, and boardwalk. Its second phase will include 140 units of residential housing in addition to retail and other mixed-use amenities.
- A plan is currently underway for a *Public Square Redesign,* which would potentially close automobile traffic north/south-bound on Ontario Street, and east/west-bound along Superior Avenue, leaving the perimeter of the square to funnel traffic. Current thinking on the plan suggests leaving Superior Avenue open for bus, cycle and pedestrian traffic.
- Currently, the foot of the Detroit-Superior Bridge is occupied primarily by surface parking lots which mostly serve downtown employees and visitors. Eighty-five percent of this land is located in the public domain, and currently planning efforts are underway to turn the area into Canal Basin Park. This effort was supported by *The Canal Basin District TLCI Plan* completed in 2009. The aim of the plan is to develop a network of trail connections which connect Canal Basin Park to downtown and nearby neighborhoods.
- *The Transformer Station* on Church Avenue in the Ohio City neighborhood serves as a cultural anchor for the area and a west-side outpost of the Cleveland Museum of Art. Nearby on Church Avenue there will be an adaptive reuse of the *Exhibit Buiders' building* into approximately 70 market-rate apartment units.
- Implementation of the *Market District Vision Plan* is currently underway. The plan was prepared by the Peter J. Smith Co. for Ohio City Inc. in 2011. The plan seeks to strengthen and utilize cultural anchors such as the West Side Market to help spur economic activity, in addition to strengthening local and regional connections, and building urban character.
- *West 25th Street corridor plan,* prepared by the Cleveland Urban Design Collaborative in 2012 examines the corridor from the Old Brooklyn downtown area north to Detroit Ave. Noteworthy considerations for the area nearest the Bridge include the Lutheran Hospital Expansion, mixed-use development recommendations, identity markers, and streetscape enhancements.
- *The Towpath Trail and Lakelink Trail* are both proposed connectors which could further strengthen the Detroit-Superior Bridge as a bicycle connector trail, as well as a destination. Current thinking proposes that the final phase of the Towpath Trail will terminate in the future Canal Basin Park. Recommendations in this plan suggest making that link close to the bridge to connect Towpath riders to downtown and to the near West side.
- *Expansion of the Ohio City Farm* is a recommendation from the Market District Vision Plan, and aims to coincide with the eventual stabilization of Irishtown bend by the Port Authority due to geologic instability.
- *Rivergate Park* is located at the toe of the canal basin, and seeks to serve as a common ground for rowers who use the Flats.
- *Separated bicycle facilities* have been added to the Lorain-Carnegie Bridge.


CENTRAL BUSINESS DISTRICT
PUBLIC SQUARE REDESIGN
FLATS EAST BANK DEVELOPMENT
WAREHOUSE DISTRICT
WHISKEY ISLAND
LAKEFRONT BIKEWAY
MEMORIAL SHOREWAY
CUYAHOGA RIVER
W. ST. CLAIR AVE.
W. SUPERIOR AVE.
W. HURON RD.
SETTLER'S LANDING PARK
CANAL BASIN PARK
DETROIT-SUPERIOR BRIDGE
PROPOSED LAKE LINK TRAIL
HERITAGE PARK
W. 25TH ST
MAIN AVE.
LAKEVIEW TERRACE
TOWPATH TRAIL PHASE IV
RIVERGATE PARK
DETROIT AVE.
EXHIBIT BUILDERS' RESIDENTIAL CONVERSION
PROPOSED CONNECTION TO LAKE LINK TRAIL
W. 25TH ST. TLCI STUDY
NEW MIXED-USE
OHIO CITY FARMS EXTENSION
LORAIN CARNEGIE BIKE IMPROVEMENTS
LORAIN-CARNEGIE BRIDGE
RESTORED ROUNDABOUT
LUTHERAN HOSPITAL EXPANSION
OHIO CITY
LORAIN AVE.
MARKET DISTRICT VISION PLAN
DETROIT-SUPERIOR BRIDGE CONTEXT PLAN
RECOMMENDATIONS
1 STREETSCAPE ENHANCEMENTS
2 ENHANCE ENTRY & GATEWAY TO MAKE MORE VISIBLE
3 RAMP MAX 5% SLOPE FOR CYCLE ENTRY
4 INTRODUCE GATEWAY ELEMENTS: SIGNAGE, NEW TWE/ENTRY FOR PEDS,PAVING
5 INTRODUCE TRAIL DESIGNATION AT W. 25TH AND DETROIT AVE. CROSSINGS
6 ENHANCE PRESENCE OF HISTORIC ENTRY THROUGH MATERIAL AND SIGNAGE
7 RETAIN EXISTING ENTRY FOR MULTI-MODAL ENTRY
8 RAMP MAX 5% SLOPE FOR CYCLE ENTRY
9 INTRODUCE GATEWAY ELEMENTS: VEGETATION, PAVING, & SIGNAGE
10 REOPEN RAMP ENTRY FOR PERFORMANCE SPACE SERVICE ENTRY
11 RETAIN EXISTING ENTRY FOR MULTI-MODAL ENTRY
12 WIDEN CROSSINGS/SIDEWALKS
KENT STATE UNIVERSITY
CLEVELAND URBAN DESIGN COLLABORATIVE
SCALE
FEET

DEVELOPMENT ASSESSMENT

MARKET CONDITIONS RESEARCH

A market conditions research study was completed by Coral Strategies. The work included interviews with key market stakeholders, including property owners, developers, brokers, retail tenants, and community development corporations to assess:

- *Current market conditions and trends*
- *Current market rents in the area*
- *Concepts + proposals for the bridge*
- *Potential impact of bridge improvements*
- *Concerns about bridge improvements*

The study identified three key market conditions and trends:

1. *Success of Ohio City is driving demand and development*
2. *Ohio City connection north to bridge: multi-modal path, street modifications*
3. *Housing Market is tight in Ohio City and Warehouse District*

Current market rents are as follows:

Retail

- *Core of Ohio City: $12 - $20/SF net*
- *Edge of district ~$12/SF net.*
- *Warehouse District: $12 - $17/SF gross for retail*

Office

- *$10-$16/SF in Ohio City*
- *Above Massimo da Milano restaurant= $16/SF gross*
- *$12-$17/SF in Warehouse District*
- *Down from $18/SF a few years ago*

Residential

- *$1.35/SF for residential in Ohio City, Warehouse District*
- *Church St. Apartments $1.05 - $1.13/SF*

BRIDGE CONCEPTS (MODEST SCOPE)

- *Expanded tours + open for area festivals*
- *Special events: festivals, carnivals, arcade, some added infrastructure*
- *Seasonal regular events – a la Wade Oval Wednesday*
- *Weekend market / bazaar / flea market*
- *Bike path / walkway / gathering space*

BRIDGE CONCEPTS (AGGRESSIVE SCOPE)

- *Reopen trolley line + connect neighborhoods*
- *Build a visitor center*
- *Explore restoring access ramps on both ends*
- *Modular residential housing units*
- *Nightclubs, restaurants, retail*

CONCERNS

- *Security/safety and jumpers*
- *No visibility or parking – tough for retail/ restaurant*
- *Competition for public funding: higher priorities with greater impact*
- *Connect development to Bridge on either side before focusing on the Bridge*
- *Prohibitive costs of running utilities and closing windows*
- *Opposition from Massimo da Milano*
- *Homeless gather in park on east end of the bridge*

POSITIVE IMPACT

- *Public space / performance space missing from Warehouse District and limited in Ohio City*
- *Shorten connection points between Ohio City, Downtown, Canal Park, Wendy Park*
- *Drive retail traffic and development at ends of bridge*
- *Additional tourist destination at edge of downtown*
- *Add "funkiness" and originality to downtown*
- *Help restaurants/bars on non-weekend nights*

DEMAND FOR USE FROM ARTS & MUSIC COMMUNITIES

Surveys were completed Cypress Research and Levin Ventures, with follow up interviews conducted by Levin Ventures. This work was intended to test the market demand for art/music space on the redeveloped Detroit Superior Bridge. Thirty-three cultural organizations were interviewed, mostly in-person, and 186 individual artists/performing groups were surveyed online in the Fall of 2012. The major findings from those inquiries are below.

Awareness of use of the streetcar (lower) level of the bridge for community events/performances was extremely high within the professional arts & cultural community. Almost all artists/cultural organization leaders were both familiar with the bridge and aware of its current and potential alternative uses.

- *The Detroit Superior Bridge is viewed as iconic.* The location and high visual impact of the bridge create a sense that, if redeveloped, will become one of Cleveland's iconic images.
- *Interest in use of the bridge for musical and visual artists is very high.* Most of the cultural organizations expressed strong interest in using the bridge for at least some of their outreach programming as did the individual music and visual artists interviewed. We can estimate the level of use by each of the cultural subsectors:
  - » Cleveland-based cultural organizations: About half of the 33 organizations interviewed expressed likely use of the bridge for part of their annual programming. If each of them using the bridge for at least one half-day event a year, they would account for approximately 450 programming hours a year. This could be a very conservative estimate, as it does not account for multi-day or multi-week events.
  - » Cleveland-based music groups (self-produced, as opposed to produced by large cultural organizations): We estimate that the independent music community would account for at least 520 hours of programming per year.
  - » Cleveland-based visual artists: Although they outnumber Cleveland-based musical artists by about 4-to-1, their initial use of the bridge is very difficult to estimate at this time. We expect the initial interest in the bridge by visual artists (outside of participation in large-scale planned events, e.g., festivals) to be low. The reason for that is outlined below.

  Note that the level of potential use by non-local music/arts groups or organizations is currently unknown, but very likely to be non-zero.
- *Visual Artists and Musical Artists have different requirements before they would have interest in using the bridge for programming/display.* Musical artists expect to 'rent' the space for individual performances, which they would self-produce and promote. *They* would attract visitors to the bridge for their performances. Visual artists, instead, would require large numbers of visitors to be on the bridge in order to pique artists' interest in locating there – individually, they cannot attract significant numbers of visitors.
- *The bridge would require significant improvements in order to meet performing musicians needs; however, those needs are very basic:* electricity, lighting, a defined 'stage' (need not be large or complex), flexible seating, a 'green room,' and that the space itself be easily accessed for the musicians (ability to carry equipment, etc.). The space itself should not be modified

greatly – the musicians want it to be 'open' and 'cool' and not *too* developed. The rawness of the space is its major appeal. Parking was noted as a potential problem, and audience size is expected to be in the 200-400 range.

While the region's musicians are not very pleased with the quality of performing space for small events in Cleveland, the lack of such space was not seen as a major barrier to their mounting events. The musical groups complain about their access to quality small venues, yet they routinely produce events in spaces they view as inadequate.

- *Cleveland area artists and cultural organizations want to be part of the bridge.* The Detroit Superior Bridge has an extremely high 'cool factor.' The individual musicians want to offer that sort of environment to their audiences, and the cultural organizations wish to associate their brands with the bridge. The bridge will naturally attract the kinds of audiences the more established cultural organizations are very interested in nurturing.
- *Arts & musical organizations/groups, as a whole, will not represent a significant revenue stream, to start.* The expected audience size for the musical events on the bridge is expected to be only 200-400. Local musical groups struggle to earn a profit in the venues they currently use for their events; they pay small fees for those events because the business model for the venues relies on food/beverage sales, not ticket sales. Visual artists currently pay very little (most commonly, nothing) for most of their display events. The most promising revenue stream for the bridge from the artist's community is likely the larger arts & cultural organizations. If larger/more profitable events can be staged on the bridge, the larger cultural organizations expect to pay market rates for use of the space.

> "If that bridge is filled with people all the time we will all be fighting for space on it"
>
> Cleveland Gallery Owner

- *If you build it, they will come.* All of the results of this inquiry were based on how artists, musicians and cultural organization leaders envision the final redevelopment of the bridge. On the one hand, all are somewhat in love with the idea of that space being available for artistic/musical endeavors. *It is highly unique, special, and 'ours.'* On the other hand, none can completely appreciate how the bridge will 'look and feel' once it is redeveloped. It could shape up to be a ho-hum space that really isn't all that special at all, or, it could be the next "must see" destination for Cleveland. It is just hard to say, right now, how much commercial demand will be created once the bridge is complete. What we can say right now with full confidence is that the artists/musical community is interested, is watching, and will be very open to pursuing opportunities to perform/display at the bridge as soon as possible. Whether or not interest is eventually manifested into events will be a function of how well the space is developed and how the costs associated with performing/displaying on the bridge will impact the profitability of the events.

Summary and Conclusions: This inquiry investigated the demand for using the streetcar-level of the Detroit Superior bridge for arts & cultural events. This is just one revenue-generating potential use of the bridge, and our results suggest strong interest in locating events/performances on the bridge by members of the arts and cultural community. However a conservative estimate of the initial use of the bridge is approximately 1,000 hours (excluding long term-events, such as festivals). Much of the arts and cultural community will want to include the bridge in at least some part of their annual programming. How large of a part of their programming remains to be seen.

The potential barriers for the establishment of the bridge as regularly-used event space are many, but none of them were shown to be a barrier within the arts & culture community: there is high awareness of the bridge; there are no objections to its location; and, the arts & culture community is attracted to, not repelled by, the 'rawness' of the space. Assuming the space is developed to meet the basic needs of performers (electricity, lighting), there will remain looming concerns on the sustainability of the bridge as a commercial space: 1) How secure will the space be? 2) Will use of the space be priced in a way to allow profitable use by the arts and cultural community? This is likely a function of the totality of revenue streams the bridge can attract. The demand for use of the bridge is high among the cultural community, but much of the community cannot pay large fees for use of the space and have the events remain profitable. As one of the interviewed artists insisted, "the bridge cannot be financially viable without money coming from some source besides the arts and cultural community."

For a detailed overview of the survey of cultural organizations, please see Appendix C.

> "I don't think there is anything like that bridge anywhere in the U.S. We are lucky to have it – we should use it."
>
> Cleveland Musician

CIRCULATION & ACCESS

IV

CONNECTIONS *between Tremont, Ohio City, the Flats, the Warehouse District and downtown. The Detroit-Superior Bridge is one of two local arteries leading from the near west side to downtown*

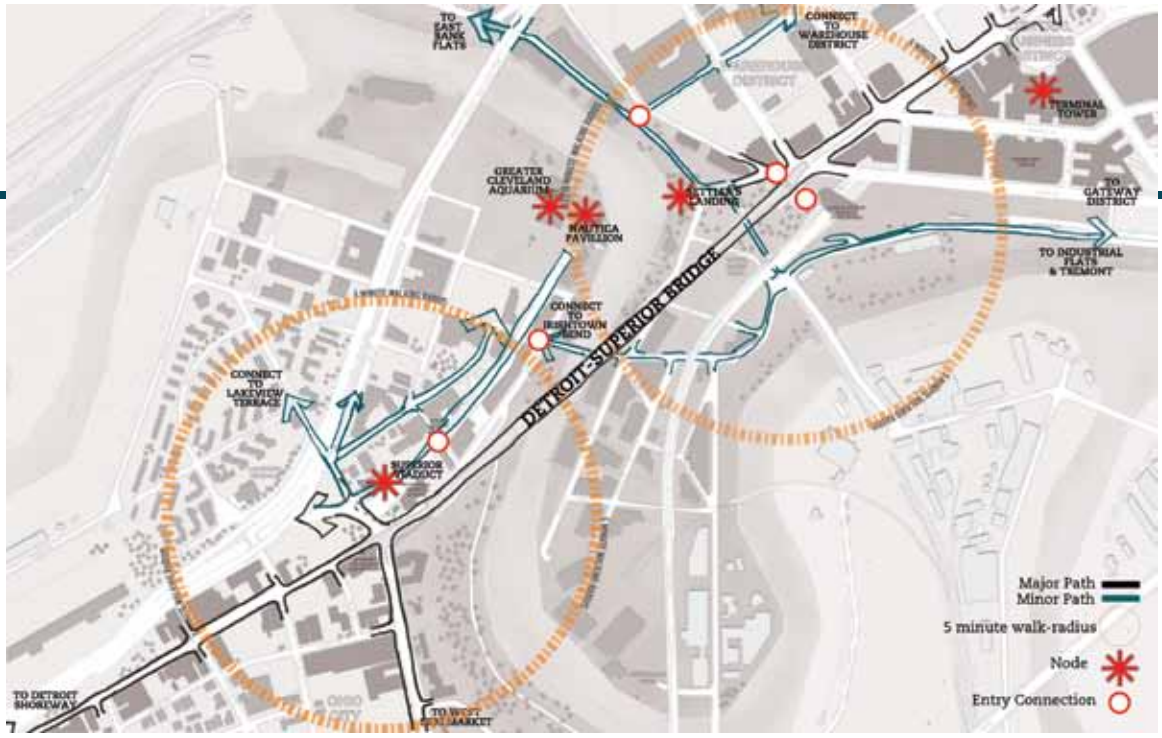
APPROACH TO THE BRIDGE *with the historic entryway in the foreground*

A MAJOR TRUCK ROUTE *takes truck traffic from the West 25th Shoreway exit down Main Avenue into the Flats*

CITY & REGION

There are three primary modes of transportation in the area around the bridge:

- RAIL *Settler's Landing Station located just north of the bridge is part of the Waterfront Line, which began reduced service in November of 2008, and currently only operates on weekends. With the development of the Flats East Bank Project, the Waterfront Line will likely see an increase in ridership, primarily at the Flats East Bank station. Ridership may also improve if Canal Basin Park's design reduces the number of parking spaces available to downtown commuters. The Red Line also runs near the bridge and stops at Tower City.*
- AUTOMOBILE & BUS *Cars are the primary mode of transportation through neighborhoods surrounding the bridge. Lorain Ave., Detroit Ave./Superior Ave. (OH 3/US 6/US 20), W. 25th St. (OH 3/US 42), and W. Huron serving as the primary arterials, while Franklin Blvd., Fulton Rd. & W. 28th St., W. 9th, W. 10th, and W. Superior Ave. serve as connectors.*
- BICYCLE & PEDESTRIAN *Bicycle improvements and amenities are being encouraged by grassroots organizations such as Bike Cleveland. In recent years, The Bike Rack in the Gateway District, a separated bicycle travel lane on the Lorain-Carnegie Bridge, and proposed improvements along Detroit Avenue from W. 78th into downtown are all relevant to the project. New amenities along Detroit Avenue, which is designated as a priority bike route per the Regional Bicycle Plan, would likely encourage cyclists from the Detroit Shoreway and Ohio City neighborhoods to preference Detroit Avenue, as their east-west route of travel. Amenities such as bike racks or even a bike share along the length of the bridge would likely increase cyclist usage.*



There is also semi truck and heavy vehicle traffic, primarily leading from the Shoreway (OH 2) exit at W. 25th St. to Main Avenue, and into the Flats area, either north towards Whiskey Island, or South on Center St., over the Center St. Bridge and into the Flats Oxbow area.

One of the difficulties for development in the area surrounding the bridge is the relative isolation, lack of activity, and weak connections to more vibrant areas nearby. The lack of connection is partially due to the topographic change, which allowed the Flats to flourish as an industrial area, but provides a psychological disconnect from the surrounding neighborhoods and areas, making the transitional spaces from the east and west embankments crucial for a cohesive connective strategy to the Flats and surrounding areas and anchors. Likewise, the Superior Viaduct provides wonderful views to the city, but is largely disconnected and difficult to find, unless one is familiar with the area. This has proven difficult for businesses who try to remain viable on and near the Viaduct.

Cyclists from the Tremont neighborhood could utilize the Lorain-Carnegie Bridge to access downtown, via the Abbey Avenue Bridge, or they may access downtown through the Flats from W. 3rd St. and Canal Rd. If Tremont cyclists were to take Canal Rd. to Robert Lockwood Jr. Dr. to the bridge, they could access Ohio City and the near west from the northern edge of the neighborhood.

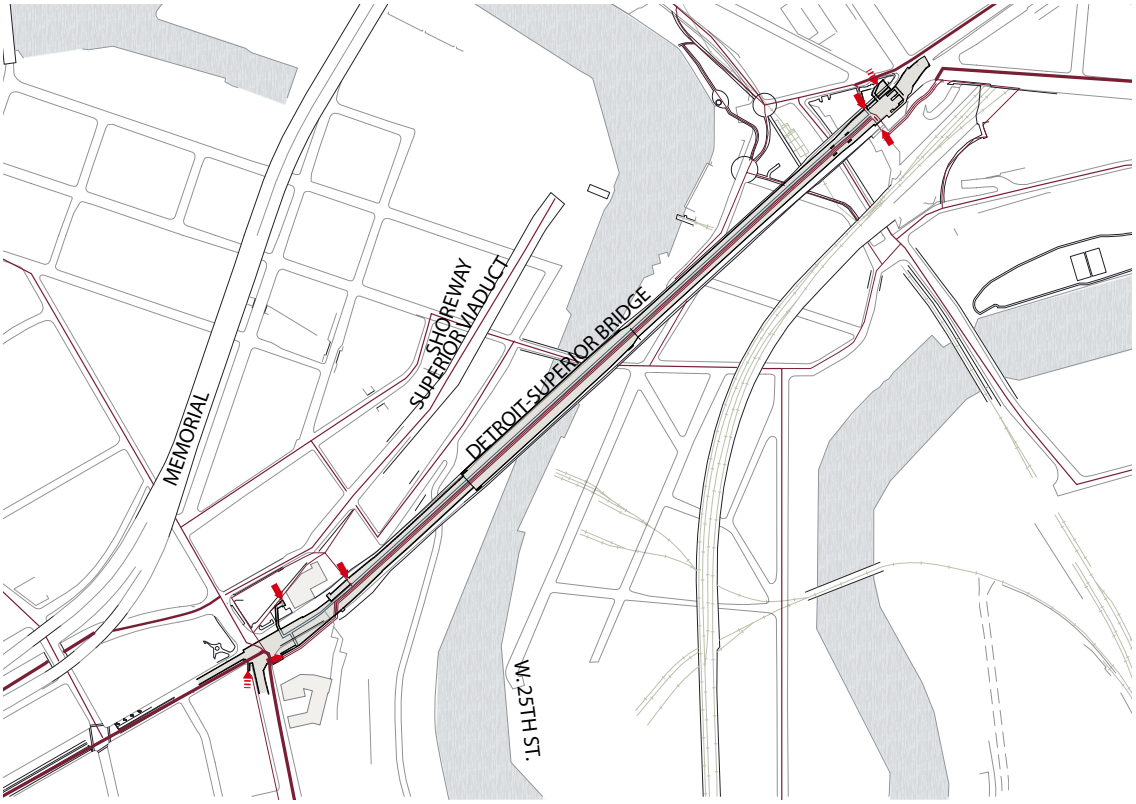
Amongst development occurring in the Flats East Bank, and Phase II of the Horseshoe Casino there will conceivably be an increased demand for multiple uses of transportation. Additionally, the Rotary Club of Cleveland is working to create a bicycle and pedestrian greenway along the RTA Red Line through Ohio City, Detroit-Shoreway, and the Flats. The greenway would conceivably make a connection to the Lake Link trail, and possibly to Rivergate Park or another part of the Canal Basin, which would likewise enhance travel options.

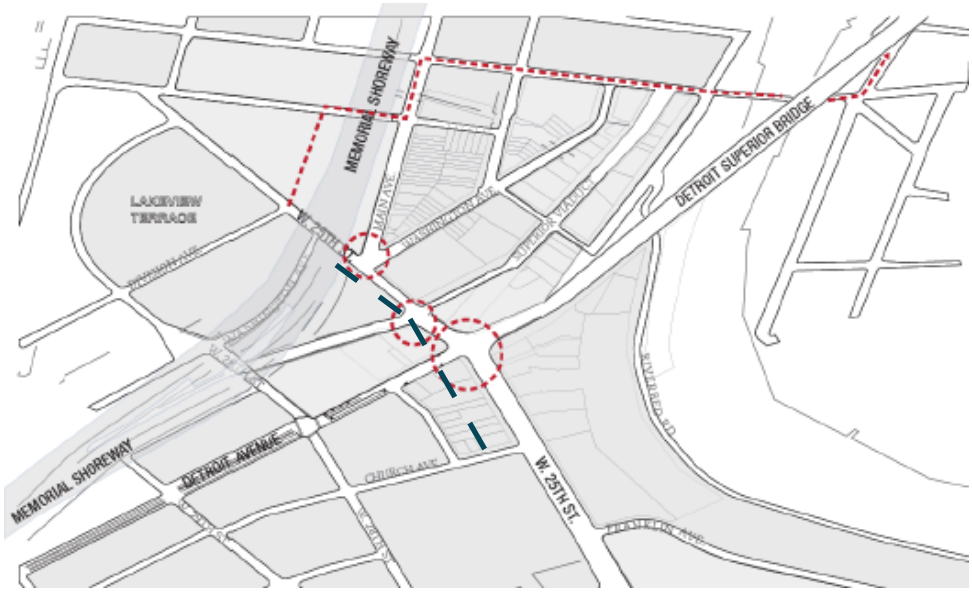
SECTION *looking north showing connectivity across the Flats*

TRANSIT ACCESS *Bus routes are depicted in yellow, the Red line is depicted in red, and Rapid transit stops are depicted by red asterisks*

RTA Waterfront line Station at SETTLER'S LANDING

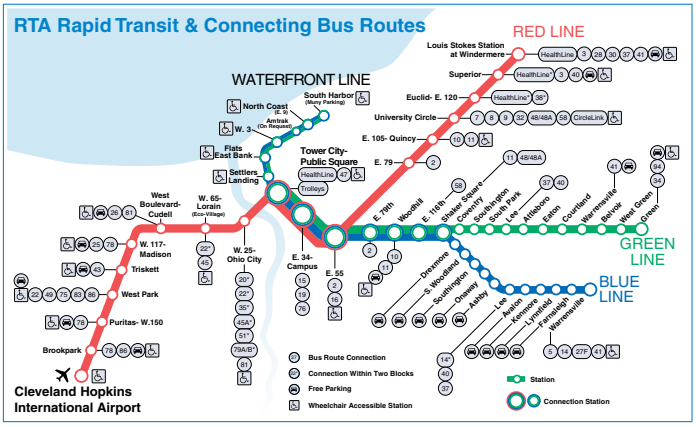
Local circulation & LOWER LEVEL ACCESS





PREFERRED WALKING ROUTE *for Lakeview Terrace Residents to downtown. Circles show intersections which were identified as potentially dangerous. The blue dash indicates an alternative path from Lakeview Terrace into Ohio City.*

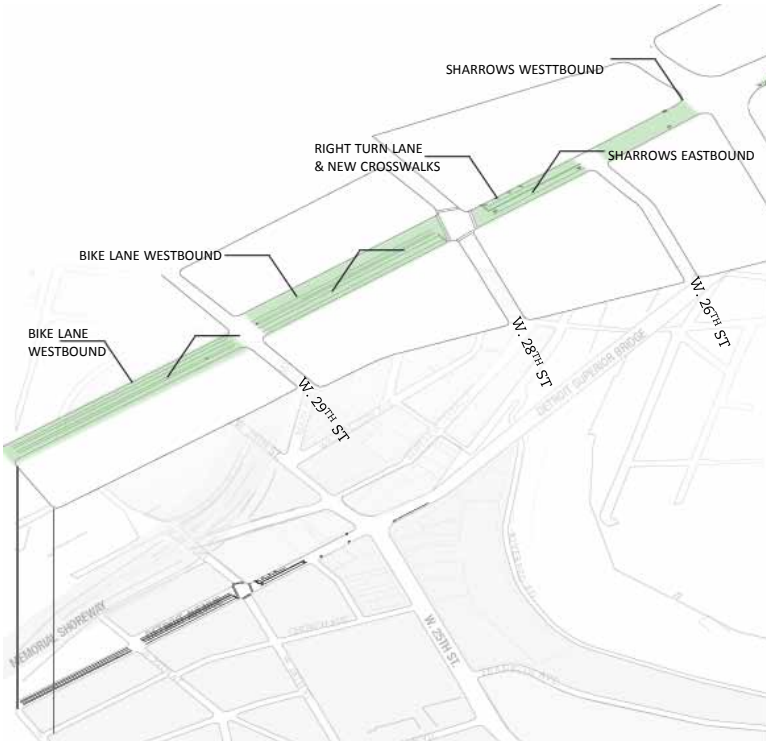
CENTER STREET SWING BRIDGE *provides access to the site of the future Canal Basin Park*



RTA Rail lines

FORMER ENTRY To *the streetcar level of the bridge. While the connection still exists, today the entry leads to a restaurant*

View from the edge of the Superior Viaduct



A RECENT STUDY *for the west end of the bridge along Detroit Avenue recommends a combination of sharrows and bike lanes from the Detroit Shoreway neighborhood into downtown*

PEDESTRIAN & BIKE PROMENADE *on the upper level of the bridge; enhancements on the lower level could provide an alternative route for cyclists and pedestrians*

COMPLETING A SURVEY *at the corner of W. 25th and Detroit at a public event held on August 24, 2012*

BICYCLE

Bicycle amenities currently exist on the upper level of the Detroit-Superior Bridge, including sharrows and signage on the southern most lane, and a 20′-0″ wide bike and pedestrian promenade on the northern most edge of the bridge. The promenade was opened in 2004 transforming a six lane automobile traffic thoroughfare into four lanes. It also features permanent public art and canopied seating areas.

As part of the *NOACA Regional Bicycle Transportation Plan* (March 2008) both the intersection of W. 25th and Detroit Avenue and the intersection of W. 65th and Detroit Avenue were listed as "intersections with highest bike counts," for the county in recent years. Additionally, the report shows a decrease of almost 25% in bicycle accidents over a ten year period (from 1995-2006) in Cuyahoga County. In addition, from September 2011 to May 2012, there has been a recorded 32% increase in bike traffic. With a rise in ridership, especially to and from the downtown area, safer and more abundant amenities and a growing awareness of cyclists by motorists, this shows that Cleveland is becoming a more bike-friendly city. The Lakefront Bikeway was developed as part of the 1997 bikeway recommendations, and runs across the top level of the bridge and into downtown. Additionally, Detroit Avenue is designated as a priority bike route, per the Regional Bicycle Plan published by NOACA.

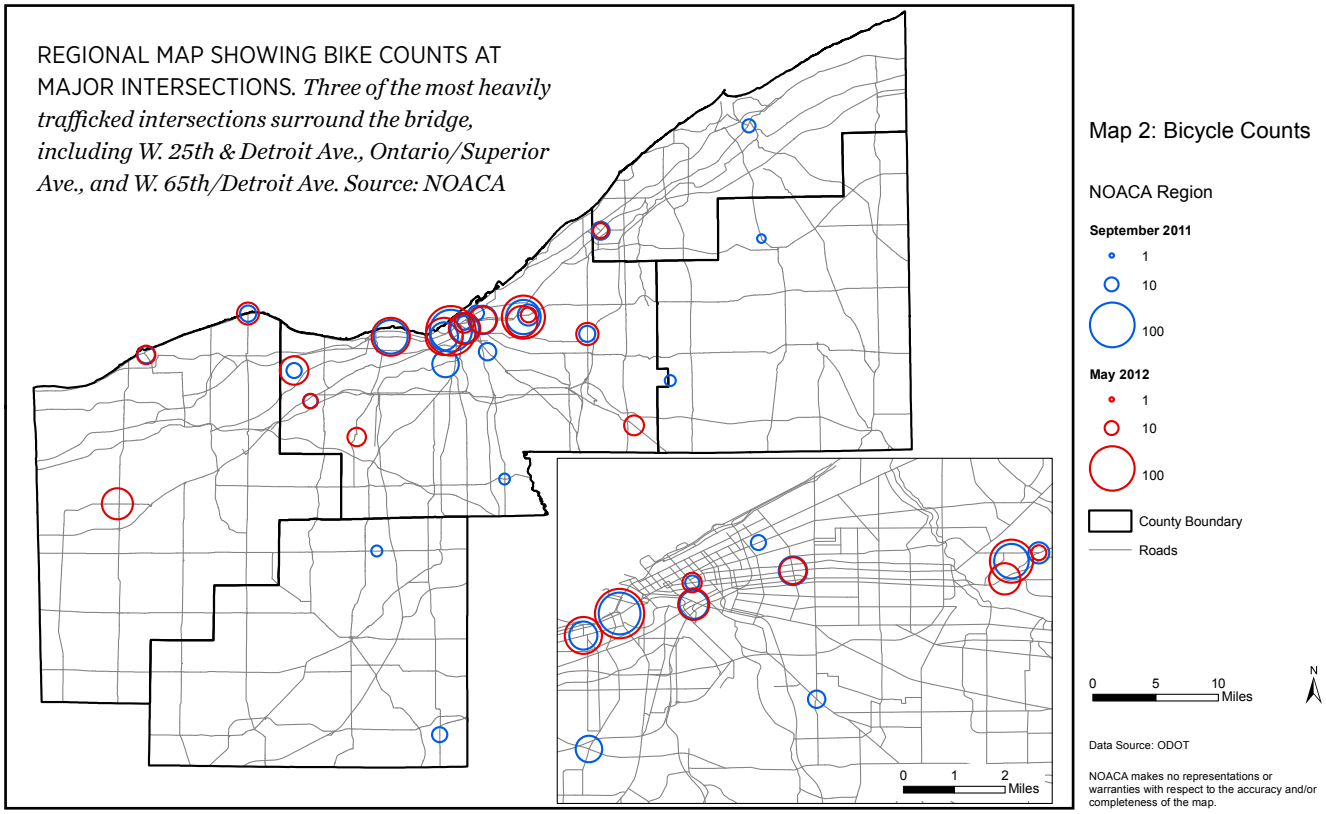
Participants from the bicycle community surveyed at public events throughout this project have said they would be inclined to take the lower level, particularly during the day, in order to avoid automobile traffic, inclement weather, trash/debris, and to move more quickly across the bridge.

Major concerns for cyclists involve intersections at W. 25th and Detroit Avenue, and at W. 9th, Superior Avenue, and W. Huron Road. In its current configuration, the bike lane designation on the west end terminates at the intersection of W. 25th and Detroit

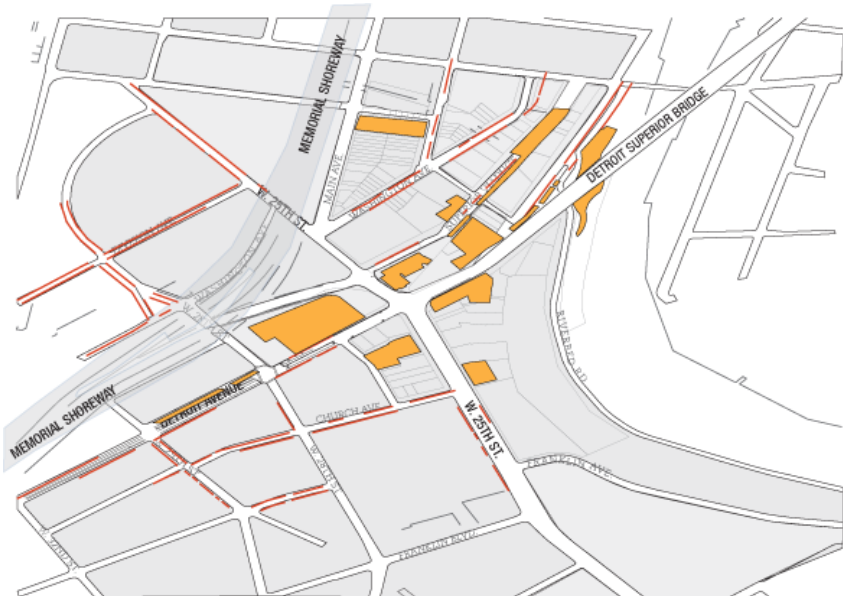
Avenue, forcing cyclists to merge into auto traffic through the busy intersection as they continue westward. It should also be noted that the traffic signalling at this intersection places a disadvantage to pedestrians who have to wait through long signalling changes, with a very short crossing time across a wide intersection.

A current study, undertaken by Bike Cleveland, the City of Cleveland, and Detroit Shoreway called the Detroit Avenue Bikeway Project, plans to extend bicycle amenities from W. 78th in the Detroit Shoreway neighborhood across the bridge and into downtown, through a combination of sharrows, bike lanes, and signage. Additionally, the Lake Link Trail and Greenway is a proposed 1.3 mile cyclist path that would connect across Irishtown Bend north to Whiskey Island and the old Coast Guard Station. Phase IV of the Towpath Trail will also terminate towards the foot of the bridge at the east end along Robert Lockwood Jr. Drive.

REGIONAL MAP SHOWING BIKE COUNTS AT MAJOR INTERSECTIONS. *Three of the most heavily trafficked intersections surround the bridge, including W. 25th & Detroit Ave., Ontario/Superior Ave., and W. 65th/Detroit Ave. Source: NOACA*



LAKE LINK TRAIL *(conceptual rendering) north of the Hope Memorial Bridge. Source: LAND Studio / Conger Moss Guillard*



EXISTING PUBLIC PARKING *available to the public on the west end*

PUBLIC AND PRIVATE SURFACE AND STREET PARKING *within a quarter-mile radius of the bridge*

PARKING

Parking is more of a concern on the west side of the bridge as it is not as intuitive as on the east side of the bridge. Parking heading down into the flats on the west side tends to be visually disconnected to the bridge area with smaller lots and on street parking. There are parking lots in the western study area that are not clearly identified as public or unrestricted. While there are gated and restricted surface lots, others are not are clearly labeled as private lots adding confusion as to its public use. Government or publicly owned lots such as the County Engineers facility do have guest parking but are considered restricted. These lots could, however, be used for event space if coordinated with various agencies. Lutheran Hospital (a Cleveland Clinic Hospital), owns a majority of the surface lots on the west side of the bridge near West 25th that are within a ¼ mile radius, 5 minute walk, of the bridge. However, this is considered private/ restricted parking.

The east side of the study incorporates most of the downtown parking lots. There is public parking along most of the public streets with significant private paid lots available. With typical downtown uses and venues, availability varies depending on time and day of use. Rates have been climbing as of recent with the additional off-peak businesses such as restaurants, bars, and new casino. The east side of the study area seems more intuitive and convenient as it is probably used by the public more than the west side of the study area. For potential patrons coming from outside communities, drivers will often travel to the bridge through downtown interstate exits taking them through downtown and closer the east side parking opportunities. Costs and availability will be the main concern for parking on this side of the project area.

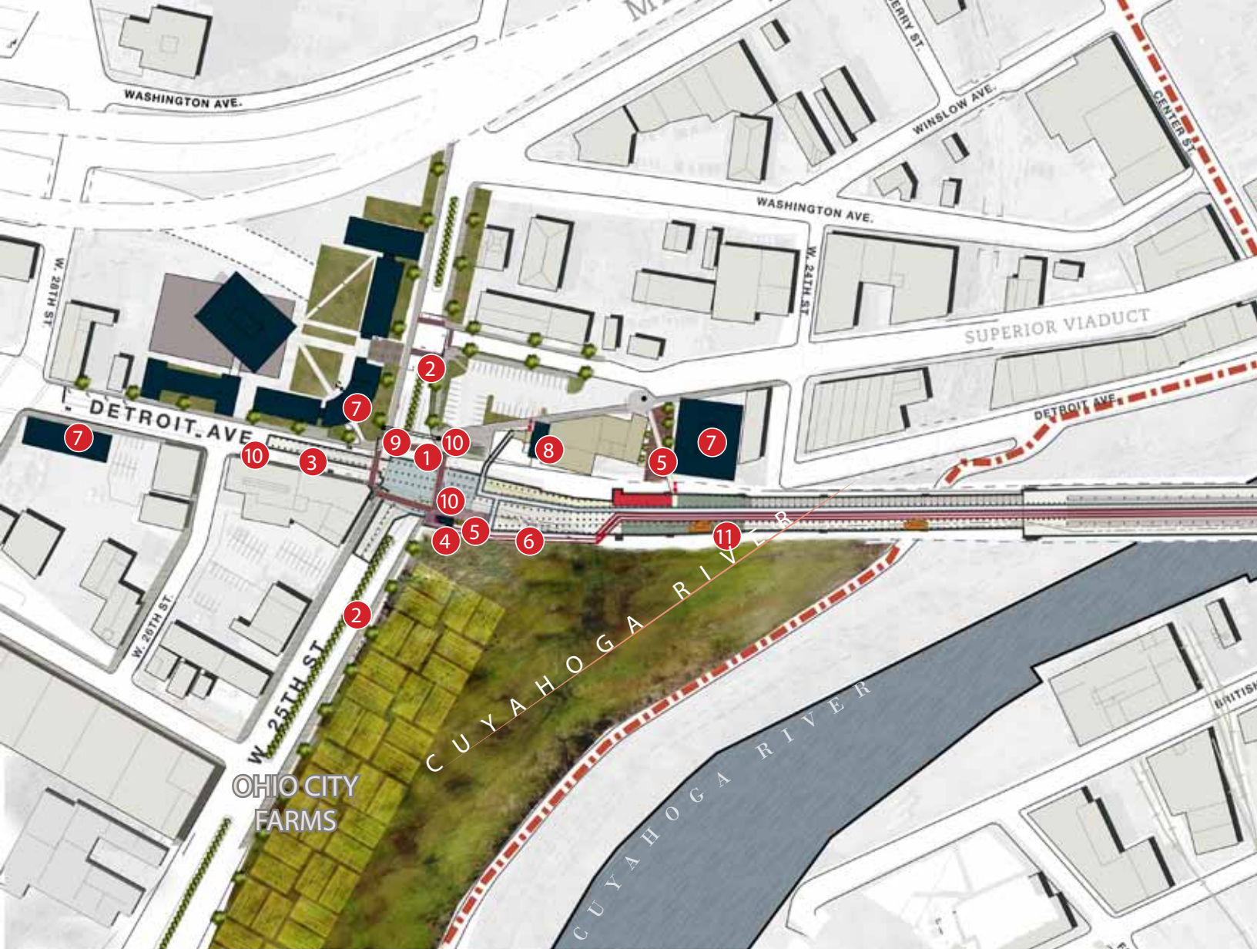
ELEMENTS OF THE PLAN

V

PUBLIC ENGAGEMENT EVENT
on the bridge invited bicyclists and pedestrians to test out temporary configurations to obtain feedback for user preferences

CYCLE & PEDESTRIAN THOROUGHFARE

Challenged with a five-point intersection at the east end and a heavily trafficked intersection at the west end, cyclists and pedestrians have a difficult time competing with heavy traffic. Despite this, a multitude of cyclists and pedestrians make use of the top level of the bridge on a daily basis. Conceived as a thoroughfare alternative for cyclists and pedestrians, the lower level reopening could provide relief and safety to the growing number of cyclists and pedestrians who travel into downtown and the surrounding areas.



WEST END

1. TRAIL CROSSING
2. STREETSCAPE ENHANCEMENTS
3. DETROIT AVE. BICYCLE ENHANCEMENTS
4. NEW TWE & ENTRY AT OLD RAMP
5. ENTRY-PLAZA TYPE
6. RAMP TO NEW OPENING
7. NEW RESIDENTIAL DEVELOPMENT
8. EXPANDED ENTRY/CENTER
9. GATEWAY TREATMENT

EAST END

13. PROPOSED CANAL BASIN PARK
14. STREETSCAPE ENHANCEMENTS
15. RELOCATED PARKING
16. ENHANCE COMMUNITY GARDEN
17. ENTRY-PATH TYPE
18. RAMP TO CANAL BASIN PARK
19. ESPLANADE PATH
20. RETAIN & ENHANCE ROCKERY
21. TERRACED PARK ENTRY

LEGEND

- LAKE LINK BICYCLE PATH
- PEDESTRIAN ROUTE
- CYCLE ROUTE
- PERFORMANCE SPACE
- VIDEO LOUNGE/LECTURE HALL
- GALLERY SPACE
- VENDOR KIOSK SPACE
- OPEN TO BELOW

200 0 200 400

SCALE FEET

ILLUSTRATIVE PLAN

10. SIGNAGE
11. VIEWING PLATFORM
12. NEW DECKING

22. STORMWATER MANAGEMENT SYSTEM
23. PLAZA SPACE
24. RAMP TO OPENING

The above plan shows recommendations in conjunction with other proposed amenities from other plans, such as the Ohio City Farms expansion, Canal Basin Park, and the closing and de-servicing of the Shoreway exit which currently exits onto W. 25th Street just North of W. 25th Street. If approached as a comprehensive vision, the likelihood of an attractive and lively neighborhood surrounding the bridge will increase.

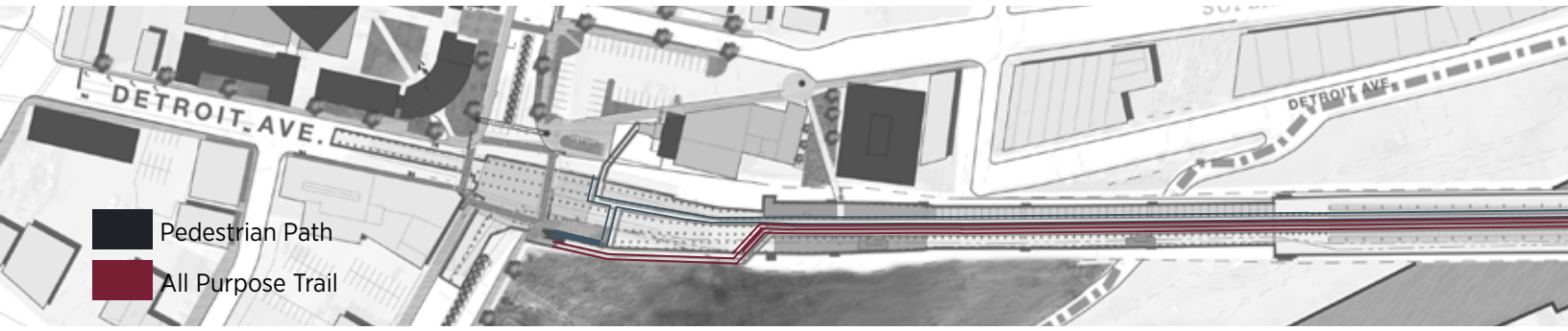
PREFERRED TRAIL ALIGNMENT *(west end)*

PROPOSED GRADE LEVEL IMPROVEMENTS *at the corner of W. 25th & Detroit Ave. showing an all purpose trail designation at all four corners of the intersection*

West End

In conjunction with planned bikeway improvements along Detroit Avenue, this plan seeks to offer better prioritization for cyclists and pedestrians who use this intersection. Through the designation of an all-purpose trail crossing at all four points of the intersections, legally, cyclists would not have to dismount their bicycles in order to cross the street and access the lower level, which they would have to do if they were to cross in a typical sidewalk.

A ten foot all-purpose trail connects the proposed plaza at the southeast corner of the W. 25th Street and Detroit Road intersection to the lower level of the bridge. This trail is ADA accessible and is adjacent just to the south of the outer-edge of the existing bridge. One or two archways would have to be opened up at the base of the lower level of the bridge to create an entry point for the new trail. There is an existing ramp inside the western end of the lower-level but it is not ADA compliant. The slope and distance of this ramp does allow for ADA accommodations, so it is proposed in all west entry options to convert that ramp to a staircase. With the construction of this ramp to a staircase, it is recommended that a second pedestrian-only entrance be created at the same southeast corner of the intersection, which would be very similar to the original entry-point the once existed when the streetcars were in operation in the lower level of the bridge.

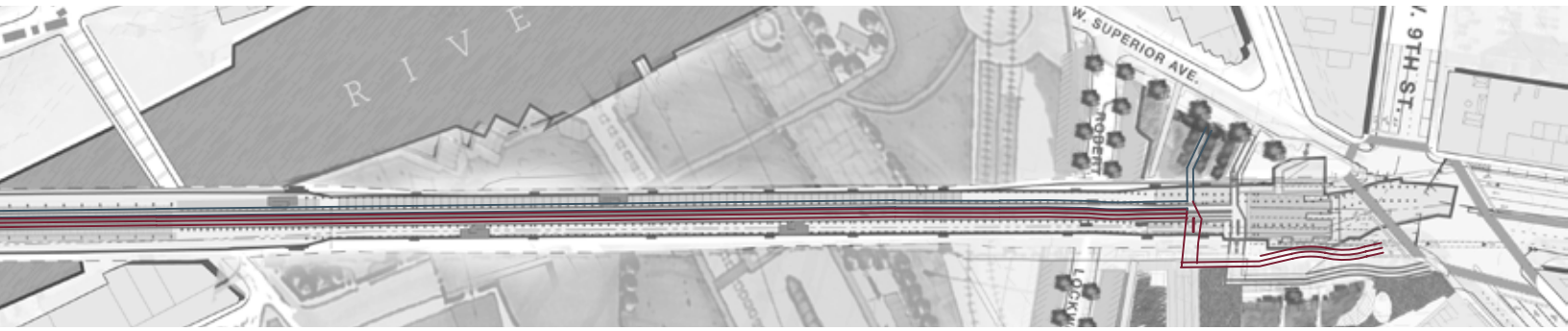


Intersection Recommendations

Recommendations made for this study do not include any changes in traffic patterns or vehicular driving lanes at either intersection. What is being recommended are improvements to the crosswalks, bicycle facilities, and on the west side of the bridge, the addition of trail crossings at the intersection of W. 25th Street and Detroit Road. On the west side of the bridge, 12 foot wide trail crossings are recommended at all legs of the intersection. The upgrade of the existing pedestrian crosswalks to trail crossings create a more visible crossing area that both pedestrians and cyclists can share and direct trail users from the on-road bicycle and off-road pedestrian facilities to the lower level of the bridge.

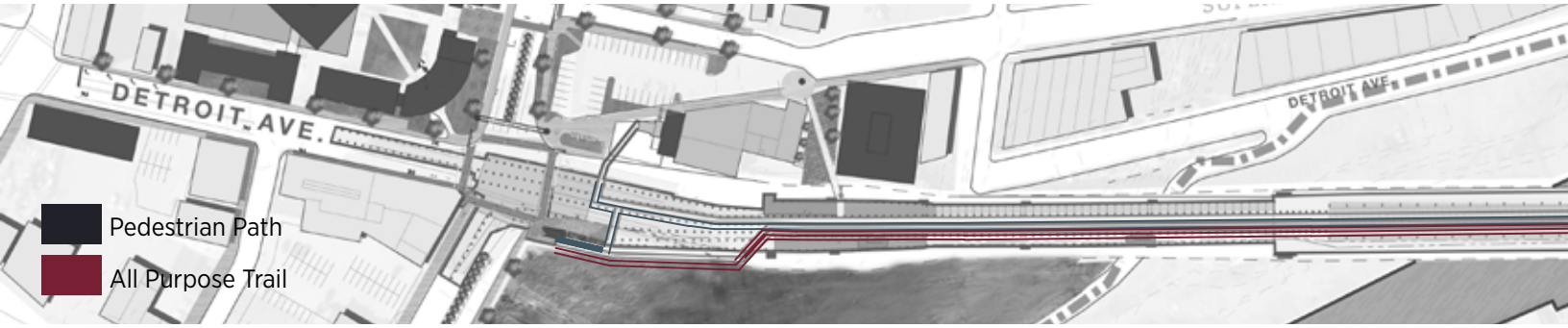
The northwest side of the bridge already has a striped bike lane and this study is recommending that a bike lane is striped on the southwest corner of the bridge where space permits. Vehicular lane widths are larger than needed on the southwest corner of the bridge and that extra lane width can just be re-striped as a bike lane without changing the lane configurations themselves. The center span of the bridge is not wide enough for a separated bike lane and should be striped as a sharrow lane once the span of the bridge deck cannot accommodate the width of the bike lane. Sharrows should be installed on Detroit Road west of W. 25th Street and bike lane markings should be striped within the W. 25th and Detroit Road intersection to lead cyclists to and from the transition of the bike lanes to the sharrow lanes. On the east side of the bridge,

NEW ENTRY *to the streetcar level of the bridge at the southeast corner of Detroit Avenue and West 25th Street*



crosswalk improvements are needed to make the pedestrian crossing areas more visible to vehicular traffic. At a minimum, the crosswalks need to be re-striped and brought up to current design standards with ladder or zebra striping. It is recommended that stamped concrete or a heated asphalt treatment be used to create colored brick-like treatments within the crosswalks to make them more visible and aesthetically pleasing.

A bike lane exists on the northern side of the E. 9th Street, Huron Road and Superior Avenue intersection, but just like on the west side of the bridge, where space allows, a bike lane should be striped on the southern portion of the bridge and lead into a sharrow lane onto the main roadway of Superior Avenue. Bike lane striping within the intersection is recommended to create a safer on-road cycling experience for both bicyclists and vehicular traffic.

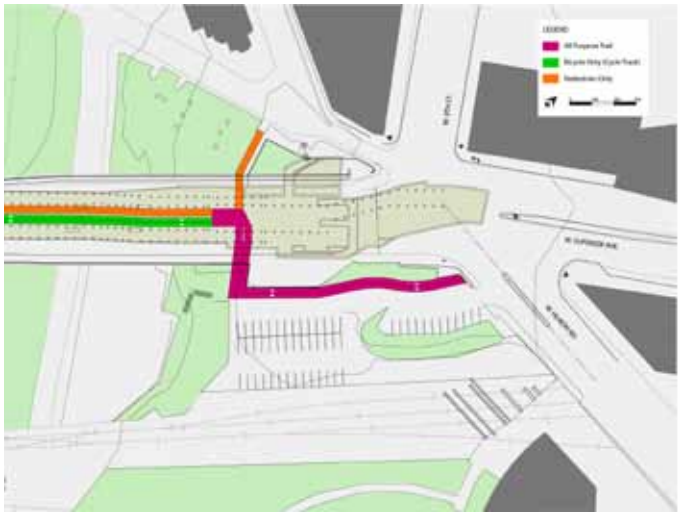


EXISTING FIVE POINT INTERSECTION *at the east end of the bridge is difficult for pedestrians and cyclists to navigate due to heavy traffic and wide crossing widths*

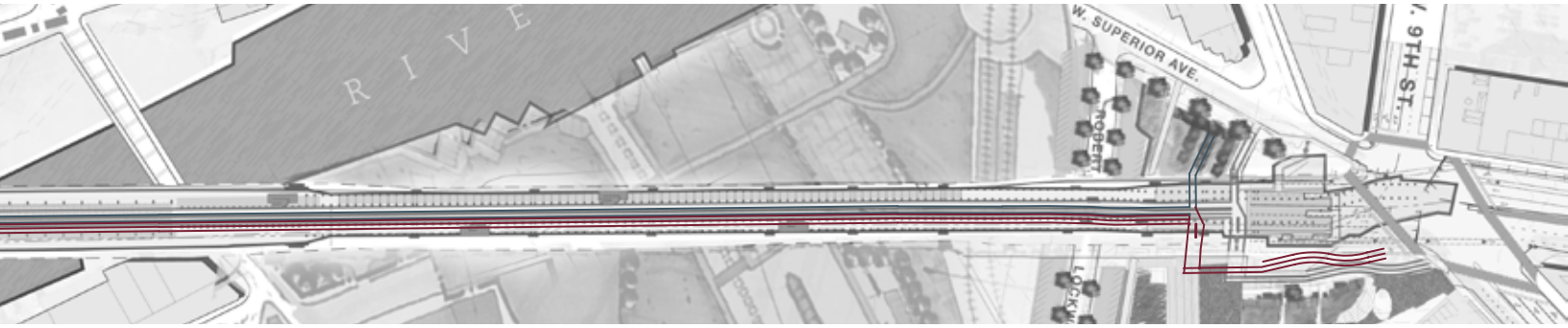
Pending a possible redesign of BICYCLE AMENITIES FOR THE TOP LEVEL OF THE BRIDGE AND SURROUNDING INTERSECTIONS, *a proper pedestrian safe zone at the halfway point of Superior Avenue and a painted/enhanced crosswalks will increase pedestrian visibility for drivers*

PREFERRED TRAIL ALIGNMENT *(center span)*

EAST END SURFACE IMPROVEMENTS *include striping the intersection at Superior Ave., W. Huron Rd., & W. 9th St., plus a designated all purpose trail on the north and south sides of the bridge*



PREFERRED TRAIL ALIGNMENT *(east end)*



ENTRY POINTS

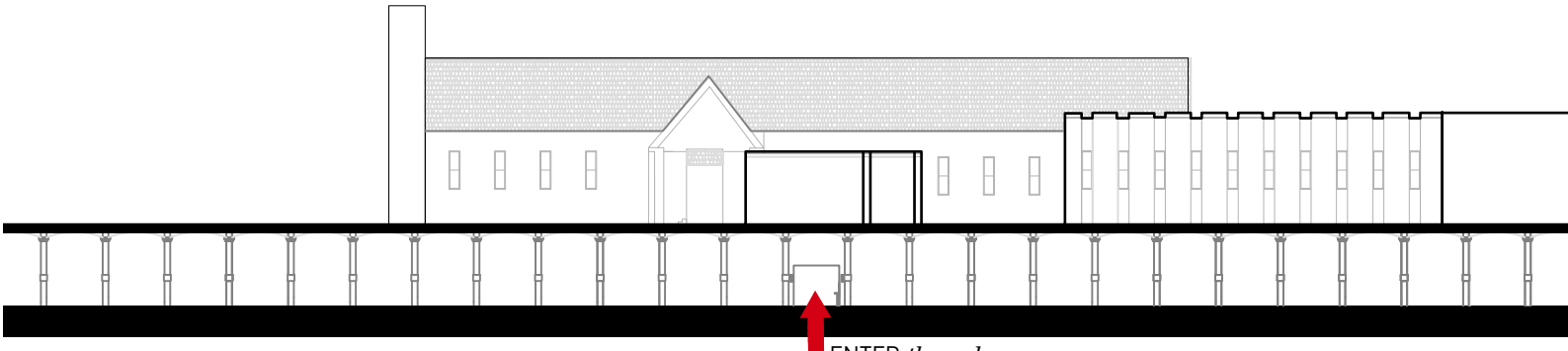
CURRENT ENTRY *at the west end via County Department of Public Works parking lot*

EXAMPLE OF ADAPTIVE REUSE *Tramway project in Glasgow, Scotland*

North entry at west end

Adjacent to the Cuyahoga County garage and offices at the corner of W. 25th and north of Detroit Ave, there exists a current access point which Cuyahoga County maintenance workers use to access the lower level. In its current configuration, it accommodates automobile traffic, including the width necessary for emergency response vehicles such as an ambulance and quick access towards the center span and eastward as well as the western embankment. It is the intention of this plan to retain the opening, due to its ability to function as a means of egress during performances, allows easy access to the Superior Viaduct and its surrounding amenities, and could be utilized for commuting cyclists if future development were to occur either on the site or in close proximity. Minor modifications could enhance the entry experience in an historically appropriate way, while maintaining a level of security. It is also the intention to retain and utilize during events the former entryway/ticket booth and staircase, with modifications to allow an elevator for additional ADA accessibility.

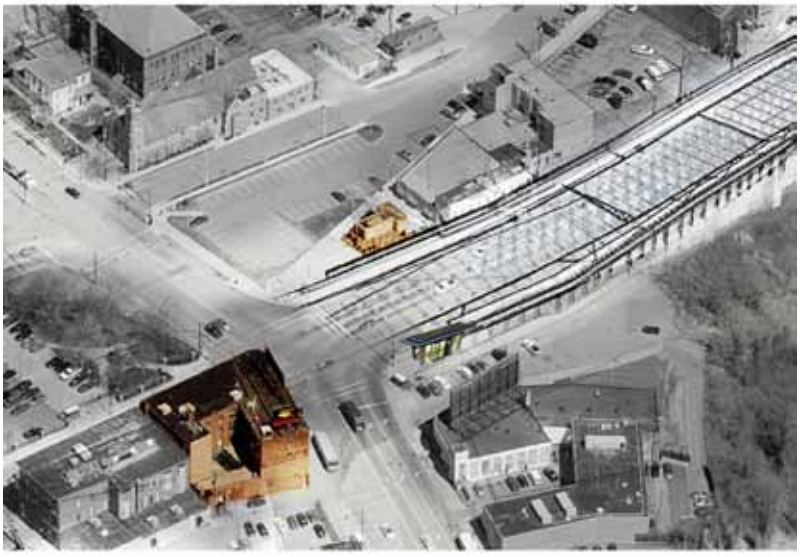
SITE SECTION *looking north showing entry with potential development at west end*



South entry at west end

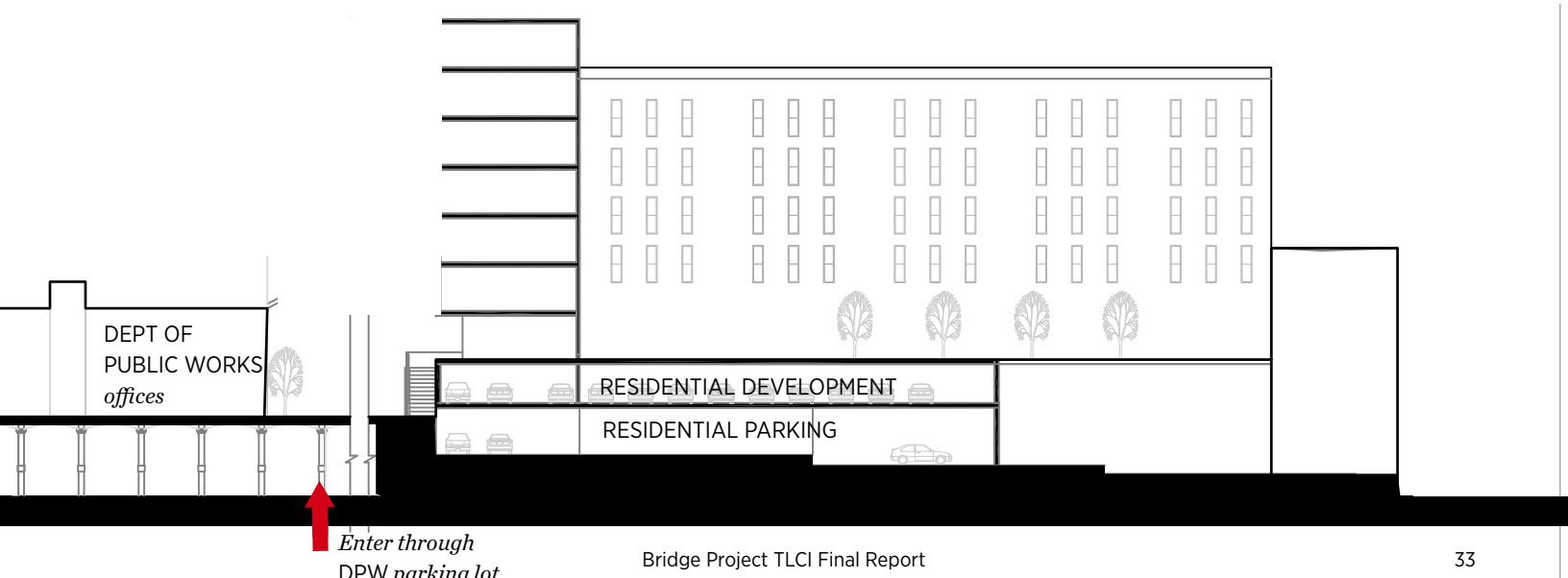
In an effort to expedite travel for commuting cyclists who would wish to use the lower level, placing an entry point at the southeast corner of the intersection would accommodate cyclists heading east from Detroit Avenue, as well as cyclists travelling north from West 25th Street.

There are two proposed entry points from the south side. One involves the re-opening of a former access ramp, and the second entry point proposes an outboard all-purpose trail which would enter as the plan begins to turn, and the bays narrow from six to four. With pending improvements to stabilize Irishtown Bend, the possible extension of Ohio City Farms, and the Lake Link Trail along the bend, there will be the potential to enter from the hillside, or from the Detroit & W. 25th intersection. The former access ramp would only allow pedestrian entry, while the outboard ramp would be ADA accessible, and primarily used for cyclists traffic coming in and going out from the lower level.



PROPOSED ENTRY POINTS *at west end*

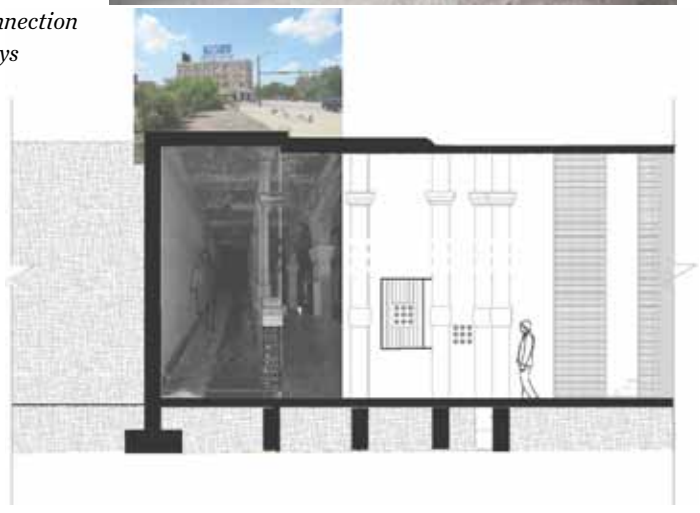
PROPOSED ALL-PURPOSE TRAIL ENTRY *at west end*



RAMP CONNECTING TO DETROIT AVENUE *could serve as an entry point for pedestrians. Removal of the concrete plinth over the space of the entry would require only minor modifications.*

WITH A RAMP SLOPE OF 16%, *the approach for cyclists to merge into the bridge would be unsafe, given column spacing and the landing area at the base of the ramp*

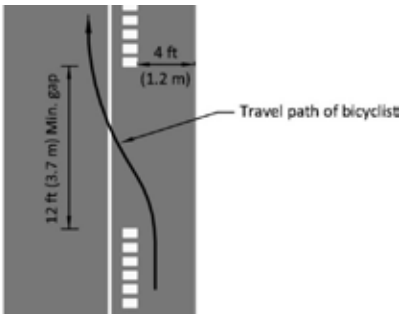
OUTBOARD RAMP *would lead cyclists to the second bay where they would eventually merge to the center bay as they exit the embankment area of the west end.*



SECTION *showing connection from ramp to other bays*

While the width of the existing ramp leading down from W. 25th could accommodate cyclist traffic, the approach would not be safe due to ramp slope and the landing area at the bottom of the ramp. Additionally, the outermost bay bottlenecks near this point, which would require a fast shift between bays. Additionally, AASHTO recommends a 12′-0″ minimum clearance for lane shifting (pictured below), which is not the typical clear space between columns in the embankment. As one approaches the concrete arch spans, typical clear space between columns is 12′-4″, which could better accommodate cyclists shifting between bays with fewer safety concerns.

A former entry leading from the "Forest City Savings and Trust Building" located at the corner of W. 25th and Detroit Avenue (whose ground floor is occupied by the Massimo da Milano restaurant) would not be considered as a primary entry point, due to privacy concerns and a lack of ADA accessibility.



AASHTO RECOMMENDATIONS
for lane shifting

There is an existing bus stop at the southeast corner of W. 25th and Detroit Avenue, at the foot of the plinth currently covering the ramped entry. A dual-purpose shelter in this location could provide pedestrian access to the bridge, as well as a waiting area for RTA passengers. A redesigned shelter that references the appearance of the former structure could tie in visually with the concrete balustrade and fencing of the bridge.

ACCESS RAMP *currently sealed at the west end*

FORMER ENTRY *leading from the "Forest City Savings and Trust Building"*

FORMER SHELTER *over ramp at W. 25th & Detroit Avenue*

NEW COVERED ENTRY *over the existing ramp for pedestrians could also serve as a transit waiting environment for RTA riders at this location.*

PROPOSED RAMP ENTRY *in context with a rehabilitated commercial building at the northeast corner of West 25th Street & Detroit Avenue*

FORMER ENTRY *on the north side at the east end. An existing ramp could not support bicycle traffic*

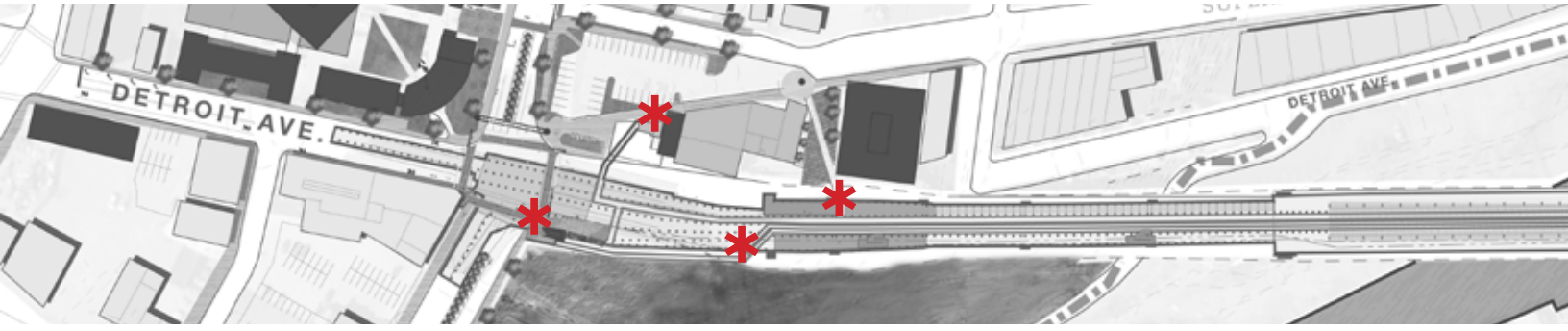
RE-OPENING THIS ENTRY *could allow for limited access for performances or act as an emergency exit*

PROPOSED EXIT *for pedestrians on the north side at the east end*

North Entry at East End

There exist two entry points at the northern side of the east end. Entry is a former ramp used for entry/exit. Ramp slope and head clearance as they exist would not conform to standards for bicycle or ADA entry. Additionally, an existing turn in the ramp without a landing would make for a hazardous entry for wheeeled transportation. The preferred recommendation would be to use this entry for limited access, such as for loading/ unloading of equipment for a performance. Removal of the existing concrete masonry unit (CMU) wall, and installation of a secured gate would make this entry usable as a limited access entryway.

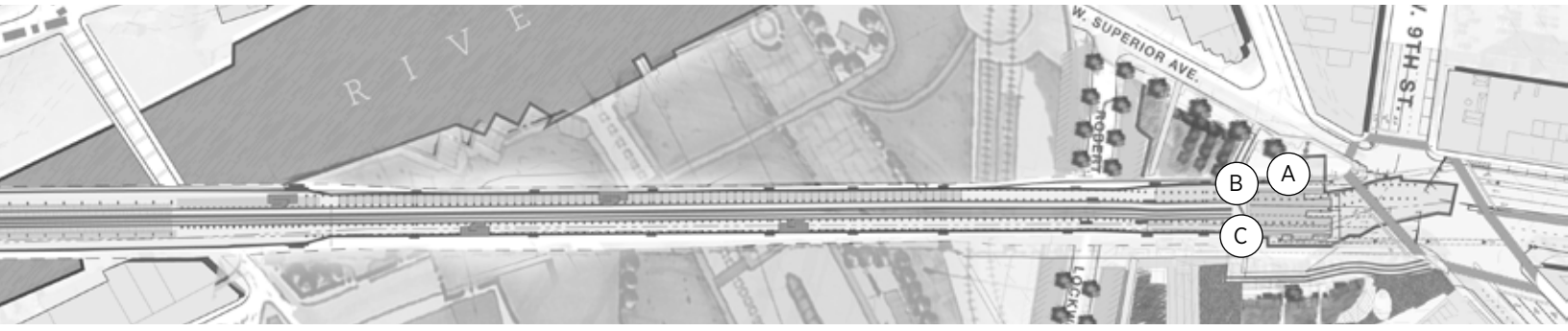
Entry currently exists with a rollover door at the base of the old Superior Viaduct foundation on the at the east end on the northern side. Adjacent archways exist as filled CMU walls. It is recommended to replace the current rollover door with a secured entry which would be more suitable to the bridge's historic character, while retaining its secure function. This would be the primary entry/exit for pedestrians at the east end.



South Entry at East End

A ten foot all-purpose trail connects the east side of the lower-level bridge to the street level. This trail is proposed to be adjacent to the southeast side of the bridge and leads users to the southwest corner of the E. 9th Street, Huron Road and Superior Avenue Intersection. To accommodate the grade change between the lower level of the bridge and the street level, the east entry trail would essentially be built as a plinth-like structure. Just like the West Entry, one or two archways would have to be opened up at the base of the lower level of the bridge to create an entry point for the new trail. Unlike the west side of the bridge, in order for this trail entrance to be ADA compliant, two landings will need to be constructed along the trail.

SITE SECTION *looking north showing entry with potential development at west end*

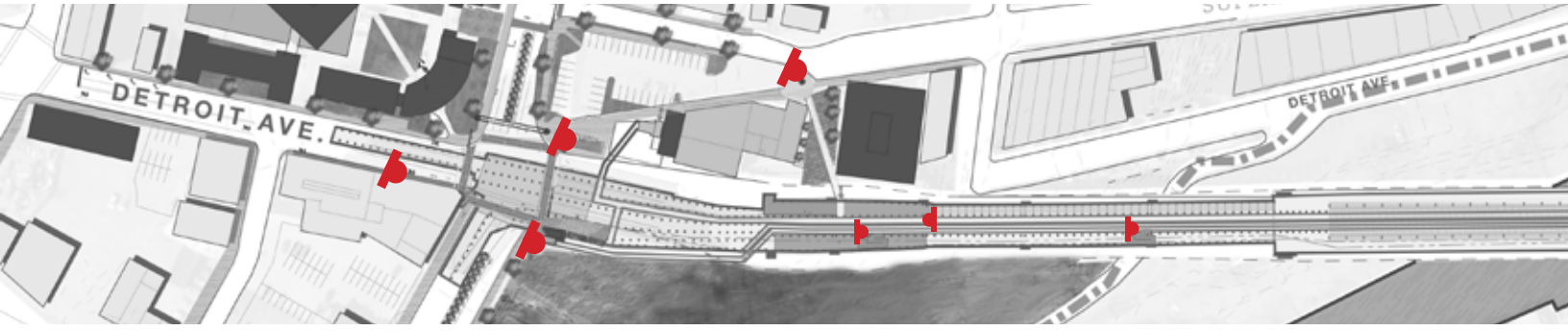


MAJOR DECISION-MAKING POINTS *provide signage locations*
(prepared by KSU Visual Communication Design students: Marivi Dionisio, Peni Acayo, Tyler Federico, Staton Hysell)

Two types of signage are needed: (1) safety, to clearly delineate bicycle and pedestrian areas, and (2) orientation, to lead bridge visitors and tourists to its location and points of entry. The first type is focused on pedestrian and bicycle orientation and safety, and conforms to ASHTO design standards. The second is geared toward wayfinding and place-making. Larger graphics, lit entry signage, and interpretive elements may be incorporated to bolster the sense of arrival, identify important landmarks and gateways, document the history of the bridge, and enhance the sense of identity associated with the bridge. As the bridge develops as a major Cleveland amenity and destination, a detailed signage plan will need to be developed.

Examples of AASHTO APPROVED SIGNAGE *for bicycle and pedestrian orientation and safety*

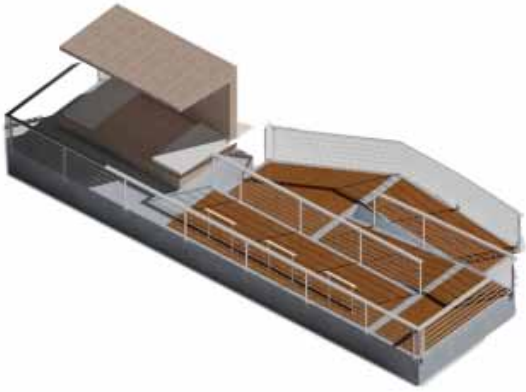
WAYFINDING SIGNAGE LOCATIONS



VIEWING PLATFORMS

The lower level of the bridge allows unique views to many of the city's historic and contemporary landmarks. Jack-knife bridges, Lake Erie, Irishtown Bend, Settler's Landing, Lock 44 of the Ohio and Erie Canal system, the Lorenzo Carter Cabin, the Carter Road Lift Bridge, the Columbus Rd. Bridge, the Center Street swing bridge, Rivergate Park, Heritage Park, Nautica Pavilion, the Main Ave. Bridge, the West Side Market, the Old Superior Viaduct, and the numerous historic industrial sites including: the Cleveland Milling Co., The Cleveland Ice Machine Co., and the Singletary Lumber Co. can all be viewed from the lower level. Additionally, numerous sites are visible in the Warehouse District and downtown, including the Bingham, and Terminal Tower.

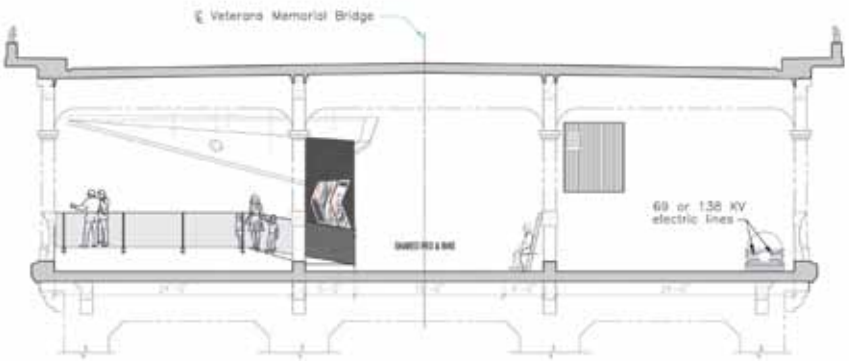
The current height of the sidewalls on the lower level do not allow views to be easily accessible. Viewing platforms with interpretive signage are recommended to rise to a height of 42″ to allow views into the surrounding areas.



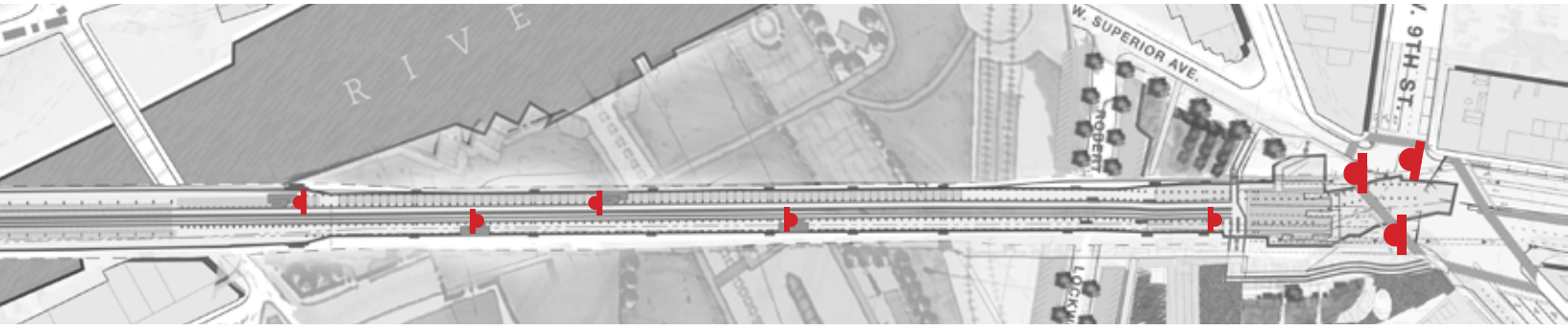
RAMP CONFIGURATION *allows for ADA access*

INSTALLING PLATFORMS *where lower crossbeams are not present avoids additional structural configuration.*

VIEWING PLATFORM *in New Islington, UK*



PLATFORM *allows visitors to view particular points of interest in the surrounding areas*



VIEWS *of the West Side Market, Irishtown Bend, and other highlights of Ohio City can be seen from the lower level.*

JACKKNIFE BRIDGES *Lake Erie, Nautica Pavillion, the Superior Viaduct are all visible from the lower level*

TOWER OF THE FORMER CLEVELAND MILLING CO. *adjacent to the bridge, seen from the southern bay, west of the center span*

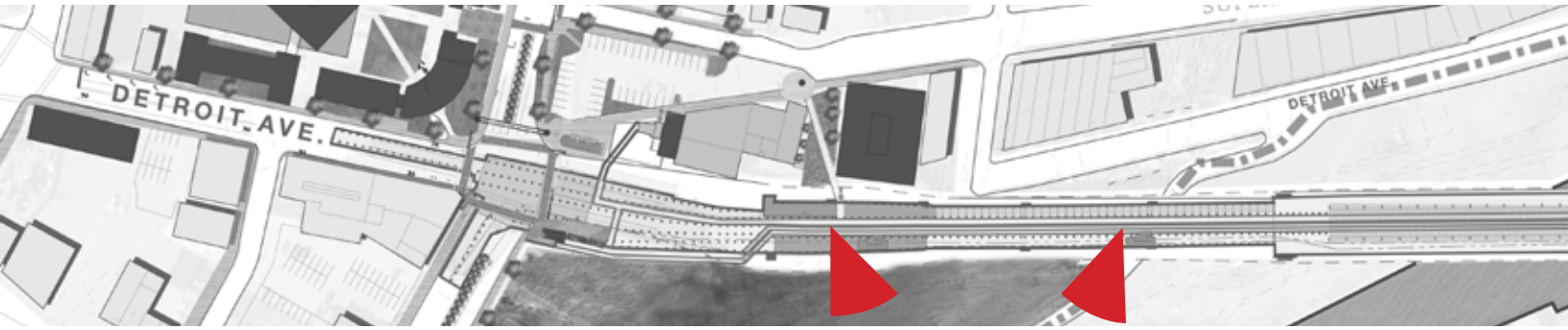
The platforms would be ADA accessible, with ramps facing the opposite direction of cyclist flow to discourage cyclists from riding up the ramps. Additionally, the platforms would function such that all traffic circulation would occur in the center bay, while viewing experiences would be isolated to the outer bays which would allow for a more efficient traffic flow, as well as address security issues by limiting circulation to only the center bay.

In addition, historical interpretation components, such as signage and coordinated historical programming, possibly in an addition which connects the Cuyahoga County offices and garage with the former entry on the north side of the site at the western end.

Isolation from road traffic noise and most environmental factors such as snow or harsh sun makes the lower level a unique space to take in views of the city's built form and past. While the upper level primarily functions as a heavily trafficked thoroughfare, the lower level's four bay configuration allows unique views to many of the city's historic and contemporary landmarks, as well as providing its own compelling narrative as a formal icon and piece of the city's history.

It is conceivable that lower level's vantage point and views of the city may be a source of economic income, as it could be used for large banquets and events, including wedding receptions/photographs, tours to various groups, and larger festivals and gatherings.

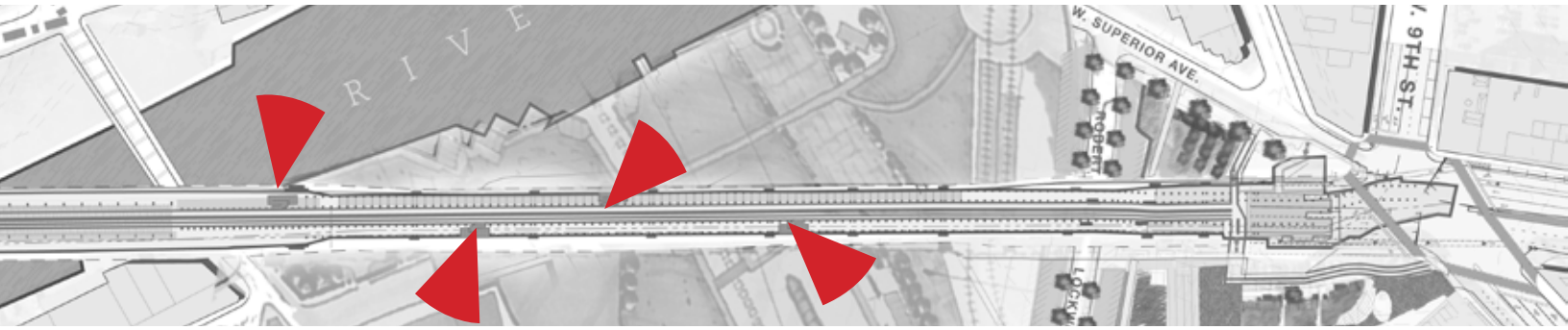
VIEWING PLATFORMS / LOCATIONS OF IMPORTANT VIEWS



Tower of the former Cleveland Milling Co. adjacent to the bridge, seen from the southern bay, west of the center span.

Tower of the former Cleveland Milling Co. adjacent to the bridge, seen from the southern bay, west of the center span.

View of Bridgeview Apartments in the Warehouse district, taken from the eastern span.



The cavernous spatial qualities of the lower level provide UNIQUE ACOUSTICAL QUALITIES *for musical performances*

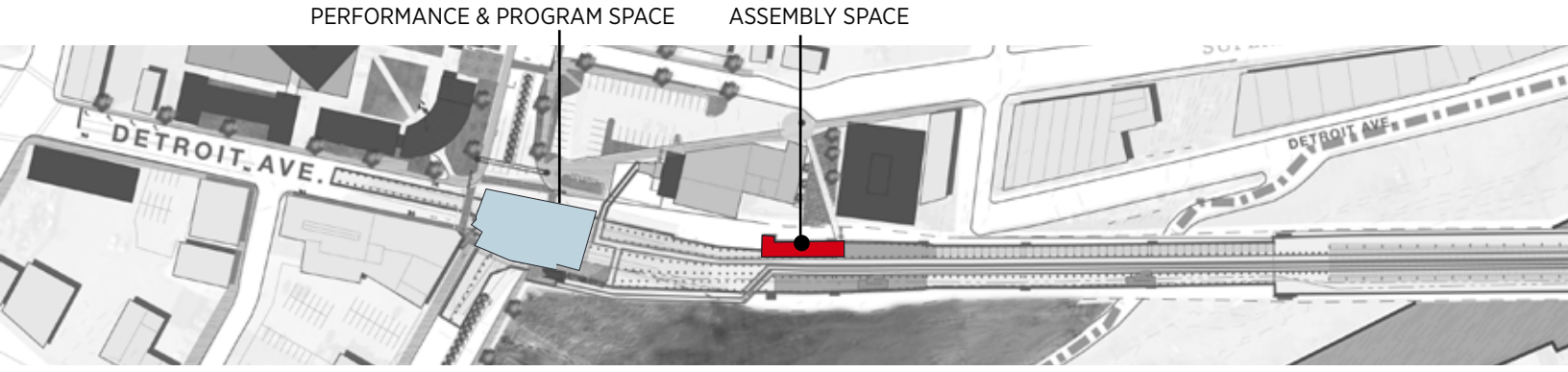
AN EARLY BRIDGE PROJECT EVENT *in 2009 attracted approximately 8,000 people to the bridge*

THE WEST END *provides a more intimate space for performances due to the curvature of the tunnel and easy accessibility given the numerous points of entry*

West End Catacombs

Findings from research conducted by Cypress Research and Levin Ventures suggest that there is a general lack of performance space for smaller acts in the City of Cleveland as a whole. Larger concert venues, including the nearby Nautica Pavillion draw national and regional acts on a consistent basis, while smaller venues such as the Grog Shop or Beachland Ballroom are limited in size and scope of performances. Findings suggest that a performance space for a 300 to 400 person crowd would be a desirable amenity to the creative community.

Past events on the bridge, such as Ingenuity Fest have proven to be highly successful gatherings on a large scale, throughout the entire span. While events and festivals such as this could still be housed on the bridge, the quality of space on the lower level also affords opportunities for smaller and more intimate events and performances, without disruption of pedestrian and bicycle traffic. Providing approximately 3000 SF of space at the West end for performances would require electrical and plumbing upgrades, as well as designated restroom space, and security measures.



West Span

Adjacent to the current entry from the County parking lot, there exists 1,700 SF of space in a columnar bay, partially enclosed by a concrete wall, offering a more intimate space apart from the rest of the bridge. Smaller performance pieces, lectures, and installations could be housed in this area. Due to the long depth, relatively short width of the space and hard surface materials, reverberation times for acoustical performances are not ideal. Lighting, acoustical modifications, amplification, and a small stage should be considered as additions to the space.

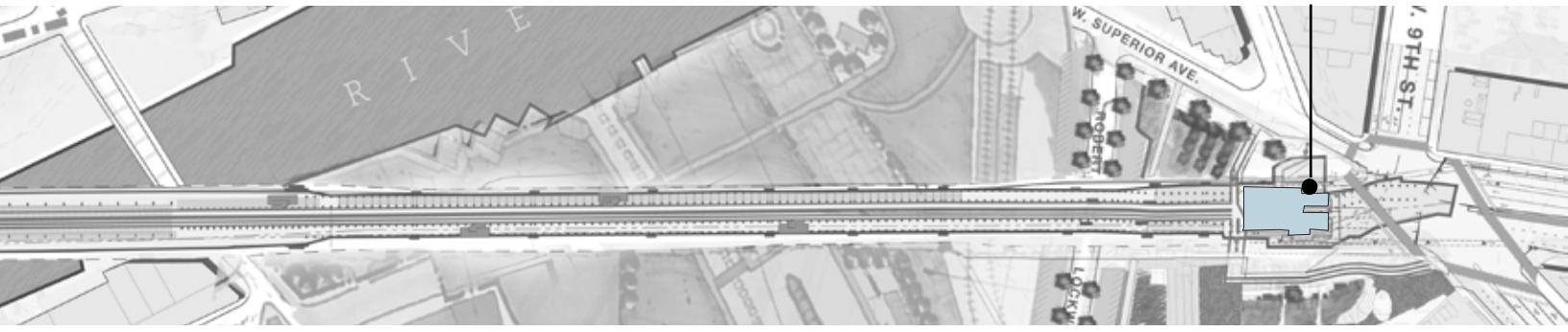
Based on market research of local artists and musicians, there is a desire and need for smaller performance and assembly spaces, which could seat approximately 300 people. The lower level has the capacity to do so. The western end seems a likely place to house events and assemblies, due to its more unique character and multiple access points. As part of the phase III build out, stages, lighting, and other amenities would be constructed, while adequate electrical service would comprise the first phase of improvements.

EXISTING SCREEN AND PROJECTOR *allow for lectures, presentations, and movies to be held on the lower level.*

MINOR ACOUSTIC MODIFICATIONS *could be made in order to accommodate musical performances*

MINOR LIGHTING MODIFICATIONS *will create flexible spaces for performance and programs*

PERFORMANCE AND PROGRAM SPACE



GALLERY & VENDOR SPACE

INSTALLATION *by artist Jimmy Kuehnle*

VENDOR SPACE *near the historic entry proved too narrow for efficient circulation. Recommendations suggest that vendors stay near the entries, but in the outermost bays.*

VENDOR BOOTH INSTALLATION *to accommodate Cleveland's "Bazaar Bizarre"*

NEUES MUSEUM *in Berlin, Germany provides gallery space in a redesigned historic shell.*

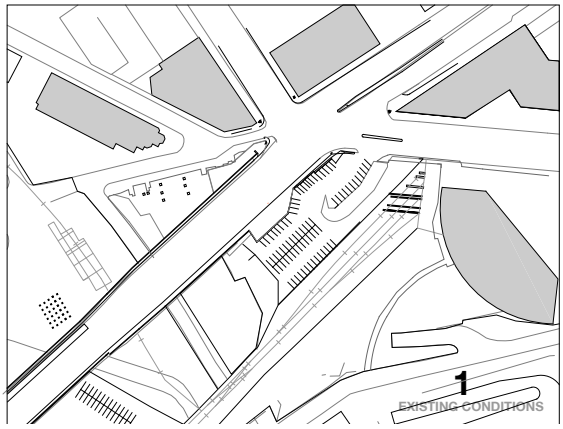
As a part of this project, local artists were engaged to transform the space for particular events. Smaller pieces were sold in craft booths while installation and lighting works were utilized at various events to enhance the space and break up the scale of the long spans. They were also intended to engage visitors on the bridge and orient them towards specific destinations.

Additionally, over the course of the summer, 2012, the Cleveland Urban Design Collaborative, in partnership with Youth Studio's coordinator Larissa Itomlenskis, conducted a design camp for youth at the Lakeview Terrace Community Center. Findings from the camp informed design decisions regarding the bridge itself and its uses, as well as connections to the Lakeview Terrace neighborhood. The large success of the camp, in addition to input from local artists' desire for display and unique gallery space may allow parts of the bridge to function as a gallery space. The nearby SPACES gallery on the Superior Viaduct may act as partner for coordination and programming of these events, educational opportunities, and exhibitions. Likewise, a 501(c)3 non-profit specifically oriented towards events on the bridge may take stewardship in programming both events and gallery opportunities.

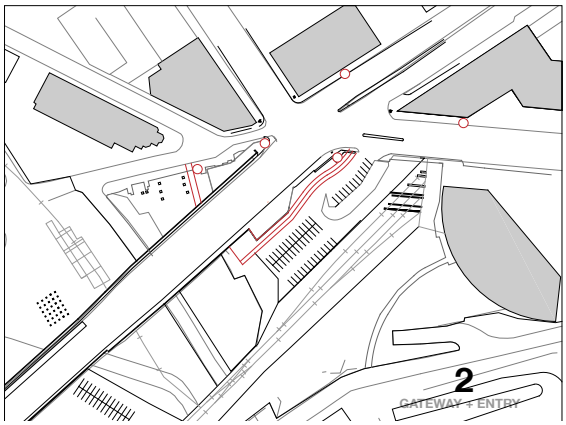
Additionally, food vendor trucks and an assortment of small vendors could be accommodated during events, or promoted as their own festival-type event, such as the "Bazaar Bizarre."

EAST END DEVELOPMENT

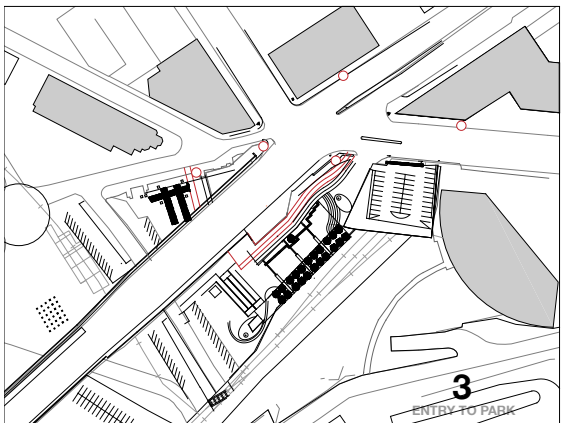
EXISTING CONDITIONS



PATHWAYS AND ENTRIES *would be the minimum intervention necessary to keep the bridge open on a consistent basis as a bike and pedestrian thoroughfare*



A FULL BUILD OUT *would include a thoughtful connection to the future Canal Basin Park and Towpath Trail terminus, which could make the experience a seamless transition from the urban landscape above to the more bucolic setting of the park and Flats area.*



PARKING LOT *serving the Federal Courthouse could continue to operate with a minimal intervention to access the lower level, in anticipation of a larger intervention which would connect the canal basin to downtown.*

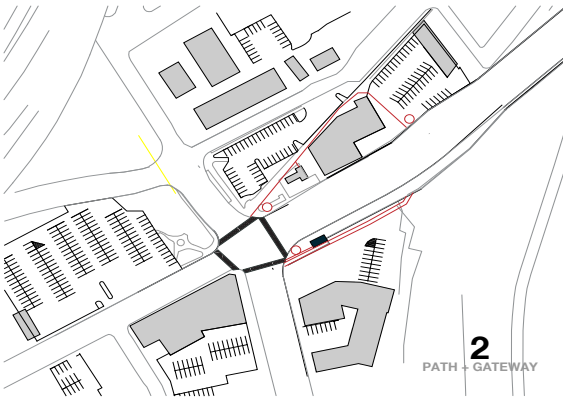
Completion of the bridge project has the potential to catalyze development activity at the eastern and western ends of the bridge. At the eastern end, the additional pedestrian and bicycle activity coming to/from the bridge, combined with the future completion of Canal Basin Park, will enhance opportunities to fill existing vacant retail and office spaces along Superior and West 9th. The existing conditions - street front vacancies, five way intersection, intimidating pedestrian crossing at the bridge - combined to cause a lack of pedestrian activity and a harsh and quick end to the energy of the Warehouse District. Opening up the underside of the bridge can spur more activity and soften the intersection, and events and performances on the bridge will give downtown residents and workers reason to cross the intersection. These projects may also open up the possibility of developing the parking lot wedged between the Federal Courthouse and the bridge into a potential residential or mixed-use project.

To gain entry on the southern side of the site, twenty-nine parking spaces would be removed and replaced by the all purpose trail. The lot is currently operated by USA Parking, and the parcel is under ownership of the federal government, and is tied to the adjacent federal courthouse.

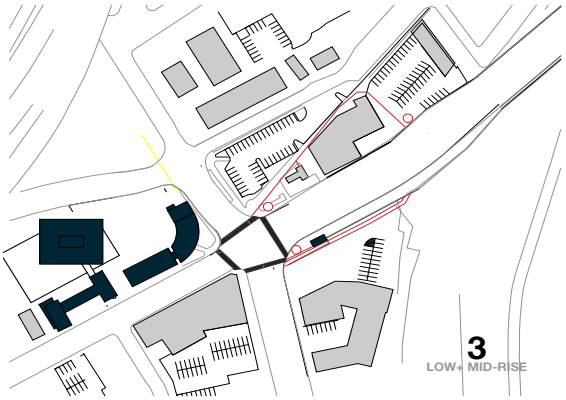
WEST END DEVELOPMENT

As rents climb in Ohio City and residential and retail development begin to creep northwards towards Detroit Avenue, the bridge project could also play a key role in catalyzing future development. The West 25th – Detroit intersection is another strangely configured and intimidating intersection that the bridge could help improve. More significantly, a parcel NW of the bridge across West 25th, one of the larger available buildable parcels for new development in Ohio City, could host a development of scale to anchor the western edge of the bridge. An anchor development on the edge of the bridge could support residential, retail, and parking and give tenants the chance to live at the axis of Ohio City, the Warehouse District, and the Gateway District. The amenities of this location are numerous: direct access to the bridge, Canal Basin Park, and the planned multipurpose trail on the south side of West 25th; proximate access to the lakefront and Wendy Park; and steps from the Warehouse District, West Side Market and Casino. Several key projects will support development growth to the bridge, including the Foran Group / Exhibit Builders apartment conversion; the hillside stabilization project, demolition of buildings on the south side of West 25th, and subsequent multipurpose path construction; and potential development of surface parking lots adjacent to Lutheran Hospital. Completing several studies in connection with the bridge project to assess the development viability of the site could be a strong initial first step in lining up a development project for this site.

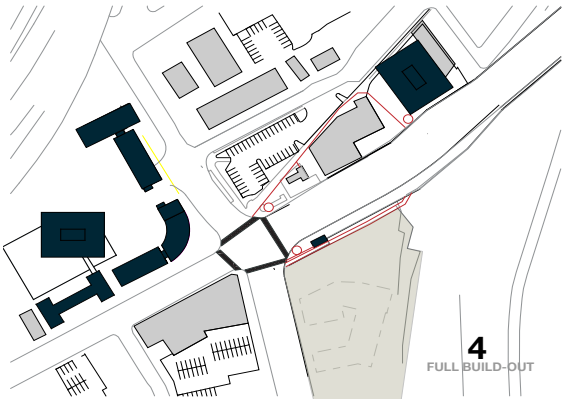
EXISTING CONDITIONS *at the western end of the bridge include some future development opportunities*



MINIMUM INTERVENTIONS *would include designating the crosswalks as all-purpose trails, in addition to a ramp on the southern edge and maintaining the current entry on the north side as an entryway.*



With downtown occupancy rates for residential apartments at 97%, it is conceivable that RESIDENTIAL DEVELOPMENT *could occur at the western site north of Detroit Ave. near the bridge.*



FURTHER RESIDENTIAL DEVELOPMENT *could occur near the bridge as a second phase. Planning efforts are underway to close the Shoreway exit at W. 25th St., which would create a larger development parcel.*

CANAL BASIN PARK CONNECTION

BRIDGE/EAST END *with conceptual design for a landscape link to Canal Basin Park*

ALLEGHENY RIVERFRONT PARK *Pittsburgh, PA. switchback connection*

ROCKERY IN TEARDROP PARK *Brooklyn, NY*

PARCO DORA *in Turin, Italy enhances and highlights the city's industrial heritage and river connections*

In October of 2009, the *Canal Basin District Plan* was completed, with recommendations to "satisfy the requirements of recreational users," provide pedestrian connections, integrate connections from the trail system to the other modes of transportation, and designate a riverwalk. Guiding principles included establishing links to complementary transit modes, separate incompatible transit modes for improved safety, and integrate a network of support amenities (such as bike rentals, lockers, and bike parking), amongst other suggestions.

The plan also recommends connection points between downtown and the surrounding areas including: a bike lane loop around public square, on street bike lanes along the Frankfort-Rockwell Corridor, Bike/Pedestrian trail connections to the Gateway area, Bike lanes on the W. 9th St. Bridge with a trail connection to the Lakefront Bikeway.

Recommendations in this plan suggest building on the framework of the Canal Basin District Plan, and connecting to other amenities in the area. Rivergate Park, Settler's Landing, Heritage Park, and an assortment of activity nodes such as the Cleveland Aquarium and Nautica Pavillion are all within close proximity to the bridge. Likewise, the aforementioned Towpath Trail phase IV development will occur near the eastern embankment of the bridge.

Plans for the park itself are in preliminary conceptual phases, but a large majority of the land proposed for the park is in the public domain. Preliminary thoughts for the park suggest removing a majority of the parking, which typically serve downtown office workers during the week. Other factors to be considered in the plan are the development of the second phase of the Horseshoe Casino, the extension of the Nautica Complex boardwalk, per the Canal Basin District Plan, the potential RTA Redline greenway proposal, more regular service of the RTA Waterfront Line, the future Cleveland Skate Park and

SETTLER'S LANDING STATION *and view into the Canal Basin*

ELEVATION CHANGE *creates a sense of separation between the future park and downtown. Heavily trafficked arteries above are in stark contrast to the more bucolic setting along the river below*

VIEW FROM THE NORTHERN SIDE *at the east end of the bridge looking north towards Lake Erie, the Main Ave. Bridge, Nautica Pavillion, and the Warehouse District*

CONCEPTUAL VISION *for the canal basin. (Source: the Canal Basin District Plan)*

Rivergate Park should all be considered as connective pieces. Additionally, the surrounding area is within the Flats Oxbow Business Revitalization District (BRD).

Focusing on transportation hierarchy, place-making strategies, and a diversity of architectural program could help the Flats flourish,allowing for the bridge and a connected Canal Basin Park to serve as both anchors and connective pieces to the rest of the city. With the removal of parking suggested by the Canal Basin Park preliminary plans, this plan suggests providing a minimal number of parking spaces at the foot of the bridge along Robert Lockwood Jr. Dr. to allow visitors to the park easy access to either the park (and by extension the rest of the Flats), the bridge, and downtown. This would focus pedestrian traffic towards crossing the RTA tracks at Settler's Landing Station, or closer to the Columbus Road intersection. A terraced landscape (similar to the one adjacent to the Carl B. Stokes Federal Courthouse Building) could ease the transition from downtown at the intersection of W. Huron Road and W. Superior Ave. This would also entail the removal of 75 parking spaces adjacent to the bridge, and between the RTA tracks and Federal Courthouse Building. Some of those spaces could be recouped by extending a plinth over the RTA tracks and proving parking there. Other improvements include streetscape enhancements, similar to the ones along Robert Lockwood Jr. Drive, a stormwater management system integrated into the terraced park entry (which could potentially help to alleviate flooding problems on the interior of the bridge, a plaza space at the entry of the eastern edge near W. Huron Road, an esplanade path underneath the bridge's arches, and enhancing existing amenities such as the community gardens on the northern edge, the Old Superior Viaduct foundations and nearby rockery.

IMPLEMENTATION STRATEGIES VI

This plan lays the groundwork for implementation of occupancy and stewardship of the lower level of the Detroit-Superior Bridge as a piece of connective infrastructure and a regional destination. Additionally, the aim of this plan is to provide an urban design framework for an integrated and vital neighborhood North of Detroit Avenue and at the East end, which uses the bridge and surrounding landmarks as catalysts for a sound urban fabric and ultimately creating an accessible, pedestrian and bicycle-friendly community founded on a shared vision of nearby community residents and stakeholders, as well as commuters and regional visitors. Through the prioritization of projects in the surrounding area which contribute to a larger vision of human scale, walkable streets, an accessible waterfront, and sense of place, the Bridge Project could serve as a centerpiece of a vibrant and inclusive area informed by its rich history, spatial uniqueness, and connective capacity.

IMMEDIATE ACTION ITEMS

Stairwell in the western embankment showing WATER INFILTRATION AND FLOODING *almost to the top of the stairwell*

MOISTURE LEVELS, *due to flooding, have effected the concrete structure and subsequently the re-bar, particularly in the western embankment*

ELECTRICAL AND TELECOM LINES *would need to be isolated/secured or removed were the lower level to be opened on a regular basis*

STORMWATER RUNOFF *has created erosion issues on the Northern side of the east embankment.*

In order for the Bridge Project to move forward, there are a series of steps that must take place in order to ensure the health, safety, and security of bridge visitors, for it to function on a daily basis for foot and cycle traffic, as well as a performance venue. There are two categories of preliminary studies and scopes of work necessary to open the lower level--generally defined here as initial soft costs and hard costs:

SOFT COSTS & GENERAL ISSUES:

- *A structural study by a professional engineer is necessary to address the stability of the concrete and steel structure. Although the bridge was originally designed to carry multiple streetcars across the lower level, there has been deterioration of some of the components over time and a new sustained live load on the bridge would require an engineer's approval for habitation.*
- *There are funds allocated for 2015, to address structural issues which effect the upper level of the bridge. These include making repairs to effected concrete columns, removing the standing water at both embankments, and the stabilization of a pier on the Southern side of the West embankment which has begun to deflect due to instability in the Irishtown Bend embankment. However, these funds are currently allocated only to address the upper level's structural issues. A separate report and recommendations are necessary to make the bridge inhabitable.*
- *An architectural and environmental study resulting in construction documents and an RFP for construction*
- *Complete initial due diligence to assess potential for the west end development site, including geotechnical study, ALTA survey, and title report on parcel(s).*

HARD COSTS:

- *Bike and Pedestrian pathways*
- *Lighting and emergency call boxes throughout*
- *Surface replacement at the central span*
- *Isolation and security of areas containing infrastructure elements, such as electrical and telecommunications wires.*
- *Removal and replacement of current snow fencing with approved railings at appropriate places.*
- *Transit-waiting enhancements*
- *An entry plaza at the West end*
- *West end streetscape and trail crossing enhancements.*
- *Streetscape and crosswalk enhancements at the east end.*
- *Relocated or removed parking at the east end.*
- *Electrical service at the east end of the bridge.*
- *Dedicated performance space at either end of the bridge.*

*A more detailed analysis of recommendations can be found in the cost opinion appendix of this report.

CANTILEVERED SECTIONS OF THE BRIDGE *have an open decking system that would need to be fenced off or partially covered to prevent people from gaining access or falling through.*

PLYWOOD SURFACE *over the grated deck at the center span is difficult to navigate with bicycles, wheelchairs, and strollers. A continuous, non-skid surface needs to be installed to provide full accessibility across the bridge.*

GOAL	ACTION	TIMING
Ensure structural integrity and safety of the lower level	Secure $20,000 for study of the lower level as part of the ODOT structural study of the upper level, currently underway.	Immediate (0-1 years)
Become a priority project	Carry momentum from this study forward and become a priority transportation project	Immediate
Conduct architectural and environmental study	Taking recommendations from this report, bring in an architectural consultant for a feasibility study, environmental analysis, cost estimates, design development and construction documents.	Immediate
Secure funding for construction	Coordinate fiscal resources from appropriate state, county, and/or city entities to ensure project completion in a timely manner.	Mid Term (1-3 years)
Program space and events	Either through the creation of a 501(c)3 non-profit, or for-profit entertainment manager, coordinate events, concerts, gallery exhibitions, performances, markets, and festivals at regular intervals on the lower level.	Mid Term
Complete construction	Issue an RFP for construction, in conjunction with upper level and Irishtown Bend stabilization efforts	Mid Term
Develop areas around the bridge, including residential development	Coordinate surrounding projects (both under construction and in planning phases), developers, community development corporations, and other stakeholders.	Long Term (3+ years)

GOAL	ACTION	TIMING
Develop connections to Lake Link Trail	Stabilize Irishtown Bend and construct Lake Link trail to travel north to the Lake.	Long Term
Develop connection to Canal Basin Park	Coordinate efforts with design team selected for design to ensure connections to the bridge, downtown, the Canal Basin and other amenities.	Long Term
Develop connection to Towpath Trail	Engage the Ohio and Erie Canalway Coalition to suggest a preferred alignment with Phase IV of the Towpath Trail.	Long Term
Develop connection to RTA Redline Greenway (Currently in feasibility studies)	If approved, coordinate with Rotary club members and RTA to suggest a preferred alignment which touches Rivergate Park, Canal Basin Park, the Canal Basin District and the bridge.	Long Term

SECURITY & SAFETY

EXISTING CATWALKS *would remain accessible only for maintenance*

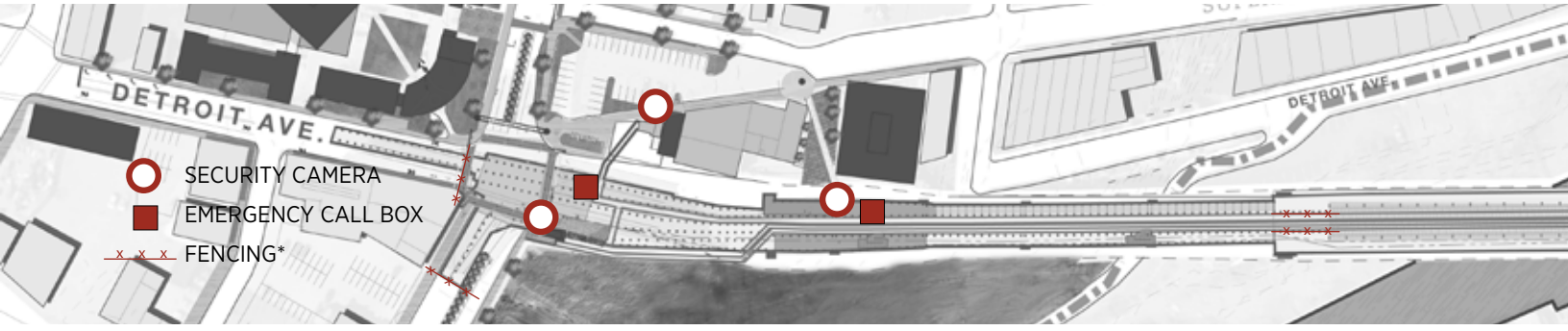
SNOW FENCING *is a temporary solution to discourage access from certain areas*

SECURITY CAMERAS AND FENCING *would be placed at entryways to monitor activity and restrict access to certain areas*

There are two basic types of safety considerations for the lower level: safety in terms of the space, and security in terms of public safety. Psychological considerations of the space include the transition from darkness to light, especially as one enters/leaves the space from the exterior into the embankments.

Other concerns involve the already existing infrastructure and catwalks, and how to limit access to general users while providing access for maintenance workers. This can largely be achieved through fencing/screening at strategic points throughout and minor movements of cables/traywork. Keeping traffic isolated in the center bay, except where viewing platforms exist, would decrease the likelihood of accidental falls and potentially help visitors avoid unsafe interactions in isolated areas.

Emergency call boxes would be located throughout the lower level and at the minimum, security cameras could be installed near entry points to monitor incoming and outgoing pedestrian and bicycle traffic. It is also recommended that regular patrols either by Cleveland police, the Downtown Cleveland Alliance Ambassadors, or other entity would ensure the public safety of visitors. During events, private security or hired off-duty police could augment security for the larger crowd.



*note: fencing marked is in addition to continuous fencing at lateral crossbeams throughout to prevent outer bay access.

STEWARDSHIP

EMERGENCY CALL BOX *located on the Queensboro Bridge in New York*

Stabilization of IRISHTOWN BEND *is critical to the development of amenities along the Cuyahoga River, including the Bridge Project, the Towpath Trail, Canal Basin Park, and the LakeLink Trail.*

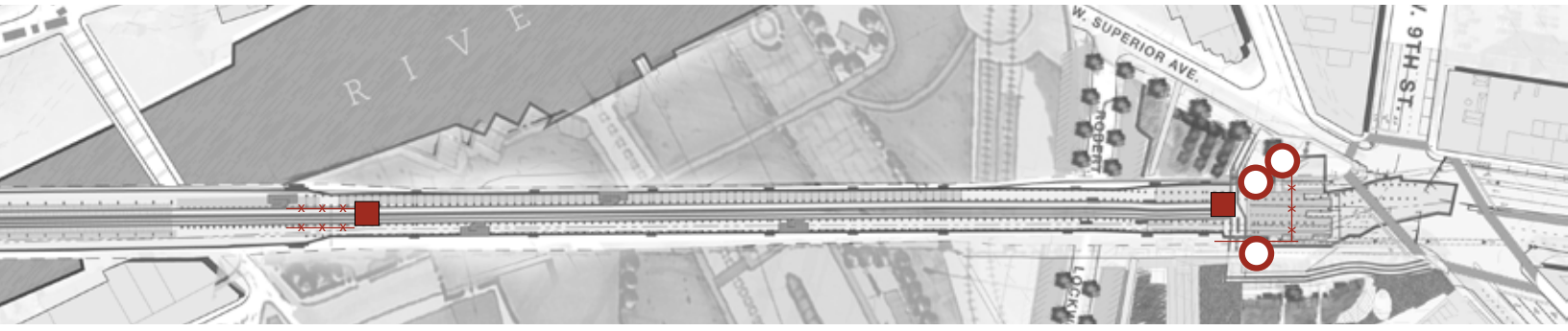
Implementation of this project will involve stewardship and maintenance of future lower level amenities. As of now, the city makes improvements to the upper level deck and surface, while the Ohio Department of Transportation (ODOT) is responsible for the structural integrity of the bridge. The bridge also falls under the jurisdiction of the Cuyahoga County Department of Public Works, which has offices and a maintenance facility immediately adjacent to the bridge.

As there are no travel lanes on the lower deck, it is currently not classified within the highway system. Through modifications, it is conceivable that the bridge could be re-classified as a bicycle and pedestrian thoroughfare, in which case it might need to remain open to the public 24 hours a day/seven days a week, except when closed to through traffic for special events. An organization or management entity may be needed to monitor the bridge for safety and to program spaces on the bridge for events.

Currently, ODOT needs to conduct an inspection and issue a permit for any events on the lower level of the bridge. The County Department of Public Works needs to issue a use permit and schedule security personnel from the County Sheriff's Office for all events on the bridge. Also, the City of Cleveland's Special Events Committee needs to review any proposed event and issue building permits, as needed, for event related installations on the bridge. If alcohol will be sold at the event, a liquor permit from the State of Ohio will also be required.

Streamlining the approvals process would encourage greater use of the bridge for a wider and more frequent range of activities and programs. Security cameras, monitored by the Cleveland Police Department, will help to address security concerns and may reduce the need for security personnel on the bridge on a day-to-day basis.

The long-term stewardship and management of the bridge would ideally be linked to that of future amenities planned for the area around the bridge, including the Towpath Trail, Canal Basin Park, and the LakeLink Trail. Stabilization of the hillside at Irishtown Bend is critical to all of these projects.



CONCLUSION

With a growing residential population in downtown Cleveland and its surrounding neighborhoods, the role of transportation infrastructure becomes a crucial issue in making a livable city and community. The Detroit-Superior Bridge's unique position as an already highly trafficked pedestrian and bicycle thoroughfare, as well as a centerpiece of existing and future development of urban fabric, makes it an essential linchpin for local and regional transportation and recreation. Opening the lower level of the bridge as a pedestrian and vehicular thoroughfare as well as a destination for events and passive activities would further solidify the identity of the burgeoning downtown and near west side neighborhoods, as well as provide an alternate multi-modal route for one of the highest trafficked arterials in the city.

Through a coordinated planning and implementation effort, the lower level could serve as an example at the national level of how to best utilize under-used infrastructure in the 21st century. Urbanists from around the country and the world have already taken note of the project's import and potential impact, including academic researchers from Turin, Italy and the University of Michigan, amongst others. The project is also supported by numerous grass roots and locally based organizations, such as Bike Cleveland, Ohio City, Inc., the Historic Warehouse District, the Ohio and Erie Canalway Coalition, amongst others. With a host of transportation and development plans for the surrounding areas, the lower level of the bridge could serve as a catalyst for development and an anchor in the area, while also augmenting and strengthening much needed alternative modes of transportation thoroughfares for the region.

It is recommended in this plan that a series of actions be taken to propel this project forward. Most interventions are relatively modest in scope, and could be augmented or supplanted over time, given available funding sources, market conditions, surrounding project development, community support and political will. The scope of this project allows multiple options for enhancement of the bridge to utilize its full potential. Given this, there are near-term interventions of a modest scope that could allow the lower level of the bridge to be opened to the general public on a regular basis. Through phased development, and surrounding project development, the area could grow over time, allowing for the lower level of the bridge to serve as a true community amenity.

VII APPENDIX A: COST OPINION

CONCEPTUAL OPINION OF PROBABLE COSTS

DETROIT SUPERIOR BRIDGE

FEBRUARY 26, 2013

PHASE 1		
SECTION	DESCRIPTION	TOTAL COST
A	WEST END	$439,348.66
B	THE BRIDGE	$1,776,526.20
C	EAST END	$383,443.32
ION OF	TOTAL	$2,599,318.18

PHASE 2		
SECTION	DESCRIPTION	TOTAL COST
A	WEST END	$1,720,972.78
B	THE BRIDGE	$1,795,701.60
C	EAST END	$908,430.00
	TOTAL	$4,425,104.38

PHASE 3		
SECTION	DESCRIPTION	TOTAL COST
A	WEST END	$402,000.00
B	THE BRIDGE	$1,366,800.00
C	EAST END	$2,631,900.00
	TOTAL	$4,400,700.00

	GRAND TOTAL	$11,425,122.55

E:\Cleveland Urban Design\11-60390-010\Design\Costs\Detroit Superior Cost Opinion.xlsx

DETROIT SUPERIOR BRIDGE CONCEPTUAL OPINION OF PROBABLE COSTS FEBRUARY 26, 2013					
A - WEST END (Phase 1)					
ITEM	**DESCRIPTION**	**QUANTITY**	**UNIT**	**UNIT COST**	**TOTAL COST**
1	**Site Preparation/Demolition**				
	A. Saw Cut Pavement	650	LF	$5.00	$3,250.00
	B. Remove Crosswalk Asphalt	433	SY	$9.00	$3,897.00
	C. Remove Pavement Striping (100' Beyond Int.)	1840	LF	$0.50	$920.00
	D. Remove Concrete Abutment Wall	1	LS	$12,500.00	$12,500.00
	E. Remove South Parking Lot Asphalt (#5)	444	SY	$35.00	$15,540.00
	Subtotal				**$36,107.00**
2	**Earthwork**				
	A. Excavation/Embankment	1600	CY	$15.00	$24,000.00
	Subtotal				**$24,000.00**
3	**Erosion Control**				
	A. Erosion Control Measures	1	LS	$5,000.00	$5,000.00
	Subtotal				**$5,000.00**
4	**Pavement**				
	B. Crosswalks (Stamped Colored Asphalt)		SF	$12.00	$0.00
	B. Asphalt for APT Approach	280	SY	$40.00	$11,200.00
	C. Concrete Retaining Wall for APT Approach	950	SF	$125.00	$118,750.00
	D. Pavement Striping Only	3000	LF	$1.75	$5,250.00
	Subtotal				**$135,200.00**
5	**Landscaping**				
	A. Landscaping	1	LS	$65,000.00	$65,000.00
	Subtotal				**$65,000.00**
6	**Construction Survey & Layout**				
	A. Survey & Layout	1	LS	$2,500.00	$2,500.00
	B. Traffic Control & Maintenance	1	LS	$5,000.00	$5,000.00
	Subtotal				**$7,500.00**
	TOTAL				**$272,807.00**
	A. Contingency (20%)				$54,561.40
	B. General Conditions (9%)				$25,227.63
	C. Overhead & Profit (10%)				$32,736.84
	D. Bonds & Insurances (3%)				$9,821.05
	E. Mobilization/Demobilization (1.5%)				$4,910.53
	F. Design & Documents (12%)				$39,284.21
	GRAND TOTAL				**$439,348.66**

DETROIT SUPERIOR BRIDGE
CONCEPTUAL OPINION OF PROBABLE COSTS
FEBRUARY 26, 2013

A - WEST END (Phase 2)

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL COST
1	**Site Preparation/Demolition**				
	A. Remove Concrete Access Ramp	1	LS	$2,000.00	$2,000.00
	B. Remove Concrete Access Ramp Cap	1	LS	$1,000.00	$1,000.00
	C. Remove North Parking Lot Asphalt (#5)	633	SY	$9.00	$5,697.00
	Subtotal				**$8,697.00**
2	**Earthwork**				
	A. Excavation/Embankment	300	CY	$10.00	$3,000.00
	Subtotal				**$3,000.00**
3	**Erosion Control**				
	A. Erosion Control Measures	1	LS	$10,000.00	$10,000.00
	Subtotal				**$10,000.00**
4	**Pavement**				
	A. Rebuild Concrete Stairs w/ Railing	1	LS	$45,000.00	$45,000.00
	B. Crosswalks (Stamped Colored Asphalt)	3900	SF	$12.00	$46,800.00
	Subtotal				**$45,000.00**
5	**Site Amenities**				
	A. Transit Platform Structure (#4)	1	LS	$250,000.00	$250,000.00
	B. Gateway Arch Sculpture	1	EA	$90,000.00	$90,000.00
	C. Ornamental Gate for lower deck entrance	1	LS	$35,000.00	$35,000.00
	D. Superior Viaduct Plaza (#5)	1	LS	$270,000.00	$270,000.00
	E. Detroit & W. 25th Plaza (#5)	1	LS	$215,000.00	$215,000.00
	F. Signage - Traffic	1	LS	$2,000.00	$2,000.00
	G. Signage - Interpretive/Wayfinding	1	LS	$10,000.00	$10,000.00
	H. Bench	10	EA	$2,500.00	$25,000.00
	I. Trash Receptacle	4	EA	$1,500.00	$6,000.00
	Subtotal				**$903,000.00**
6	**Landscape**				
	A. Superior Viaduct Plaza Landscape (#5)	1	LS	$50,000.00	$50,000.00
	B. Detroit & W. 25th Plaza Landscape (#5)	1	LS	$40,000.00	$40,000.00
	Subtotal				**$90,000.00**
7	**Construction Survey & Layout**				
	A. Survey & Layout	1	LS	$5,000.00	$5,000.00
	B. Traffic Control & Maintenance	1	LS	$5,000.00	$5,000.00
	Subtotal				**$10,000.00**
	TOTAL				**$1,069,697.00**
	A. Contingency (20%)				$213,939.40
	B. General Conditions (9%)				$97,172.73
	C. Overhead & Profit (10%)				$128,363.64
	D. Bonds & Insurances (3%)				$38,509.09
	E. Mobilization/Demobilization (1.5%)				$19,254.55
	F. Design & Documents (12%)				$154,036.37
	GRAND TOTAL				**$1,720,972.78**

DETROIT SUPERIOR BRIDGE
CONCEPTUAL OPINION OF PROBABLE COSTS
FEBRUARY 26, 2013

A - WEST END (Phase 3)

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL COST
1	**Site Preparation/Demolition**				
	A. Remove Concrete Access Ramp		LS	$2,000.00	$0.00
	B. Remove Concrete Access Ramp Cap		LS	$1,000.00	$0.00
	C. Remove North Parking Lot Asphalt (#5)		SY	$9.00	$0.00
	Subtotal				**$0.00**
2	**Earthwork**				
	A. Excavation/Embankment		CY	$10.00	$0.00
	Subtotal				**$0.00**
3	**Erosion Control**				
	A. Erosion Control Measures		LS	$10,000.00	$0.00
	Subtotal				**$0.00**
4	**Pavement**				
	A. Rebuild Concrete Stairs w/ Railing		LS	$45,000.00	$0.00
	B. Crosswalks (Stamped Colored Asphalt)		SF	$12.00	$0.00
	Subtotal				**$0.00**
5	**Site Amenities**				
	A. North Structure elevator and associated work	1	LS	$250,000.00	$250,000.00
	B. Gateway Arch Sculpture		EA	$90,000.00	$0.00
	C. W. 25th Streetscape		LS	$0.00	N.I.C.
	D. Superior Viaduct Plaza (#5)		LS	$270,000.00	$0.00
	E. Detroit & W. 25th Plaza (#5)		LS	$215,000.00	$0.00
	F. Signage - Traffic		LS	$2,000.00	$0.00
	G. Signage - Interpretive/Wayfinding		LS	$10,000.00	$0.00
	H. Bench		EA	$2,500.00	$0.00
	I. Trash Receptacle		EA	$1,500.00	$0.00
	Subtotal				**$250,000.00**
6	**Landscape**				
	A. Superior Viaduct Plaza Landscape (#5)		LS	$50,000.00	$0.00
	B. Detroit & W. 25th Plaza Landscape (#5)		LS	$40,000.00	$0.00
	Subtotal				**$0.00**
7	**Construction Survey & Layout**				
	A. Survey & Layout		LS	$5,000.00	$0.00
	B. Traffic Control & Maintenance		LS	$5,000.00	$0.00
	Subtotal				**$0.00**
	TOTAL				**$250,000.00**
	A. Contingency (20%)				$50,000.00
	B. General Conditions (9%)				$22,500.00
	C. Overhead & Profit (10%)				$30,000.00
	D. Bonds & Insurances (3%)				$9,000.00
	E. Mobilization/Demobilization (1.5%)				$4,500.00
	F. Design & Documents (12%)				$36,000.00
	GRAND TOTAL				**$402,000.00**

DETROIT SUPERIOR BRIDGE CONCEPTUAL OPINION OF PROBABLE COSTS FEBRUARY 26, 2013					
B - THE BRIDGE (Phase 1)					
ITEM	**DESCRIPTION**	**QUANTITY**	**UNIT**	**UNIT COST**	**TOTAL COST**
1	**Pavement**				
	A. Concrete Sections	2,058	LF	$0.00	$0.00
	B. Metal Grate Section - Colored Fiberglass Overlay	16,700	SF	$12.00	$200,400.00
	C. Pavement Striping Only	6,000	LF	$1.75	$10,500.00
	D. Green Cycle Track	-	SF	$2.50	$0.00
	E. Concrete Section - Expansion Joints (80' O.C.)	1	LS	$3,000.00	$3,000.00
	F. Metal Section - Rubber Expansion Joints	27	EA	$2,250.00	$60,750.00
	Subtotal				**$274,650.00**
2	**Electric**				
	A. Electrical Distribution (2 transformers)	1	LS	$400,000.00	$400,000.00
	B. Wall Sconce Fixture (50' O.C. both sides)	104	EA	$750.00	$78,000.00
	Subtotal				**$478,000.00**
3	**Site Amenities**				
	A. Composite Wood Overlooks (Ex. Deck)		EA	$150,000.00	$0.00
	B. Composite Wood Overlooks (No Deck))		EA	$200,000.00	$0.00
	B. Replacement Access Doors	2	EA	$25,000.00	$50,000.00
	C. Signage - Traffic	1	LS	$6,000.00	$6,000.00
	D. Signage - Interpretive/Wayfinding	1	LS	$50,000.00	$50,000.00
	E. Ornamental Fence Inset Panels (No Decking)	2,760	LF	$80.00	$220,800.00
	F. Ornamental Fence Inset Panels (w/ Decking)	1,965	LF	$80.00	$157,200.00
	G. Black Vinyl Chain Link (12' High) w/ Gates	135	EA	$125.00	$16,875.00
	H. Communication/Security (w/ video)	1	LS	$250,000.00	$250,000.00
	I. Bench (500' O.C. & 3 at Overlooks)	23	EA	$2,500.00	$57,500.00
	J. Trash Receptacle (500' O.C. & 1 at Overlooks)	11	EA	$1,500.00	$16,500.00
	K. Demostration Areas Improvements		EA	$0.00	N.I.C.
	Subtotal				**$824,875.00**
4	**Construction Survey & Layout**				
	A. Survey & Layout	1	LS	$5,000.00	$5,000.00
	Subtotal				**$5,000.00**
	TOTAL				**$1,104,525.00**
	A. Contingency (20%)				$220,905.00
	B. General Conditions (9%)				$99,857.25
	C. Overhead & Profit (10%)				$132,543.00
	D. Bonds & Insurances (3%)				$39,762.90
	E. Mobilization/Demobilization (1.5%)				$19,881.45
	F. Design & Documents (12%)				$159,051.60
	GRAND TOTAL				**$1,776,526.20**

* No structural bridge work (safety study will determine if or type of remediation may be required)

DETROIT SUPERIOR BRIDGE CONCEPTUAL OPINION OF PROBABLE COSTS FEBRUARY 26, 2013					
B - THE BRIDGE (Phase 2)					
ITEM	**DESCRIPTION**	**QUANTITY**	**UNIT**	**UNIT COST**	**TOTAL COST**
1	**Pavement**				
	A. Concrete Sections		LF	$0.00	$0.00
	B. Metal Grate Section - Colored Fiberglass Overlay		SF	$12.00	$0.00
	C. Pavement Striping Only		LF	$1.75	$0.00
	D. Green Cycle Track	20,580	SF	$2.50	$51,450.00
	E. Concrete Section - Expansion Joints (80' O.C.)		LS	$3,000.00	$0.00
	F. Metal Section - Rubber Expansion Joints		EA	$2,700.00	$0.00
	Subtotal				**$51,450.00**
2	**Electric**				
	A. Additional Electrical Distribution	1	LS	$40,000.00	$40,000.00
	B. Additional Lighting	1	LS	$100,000.00	$100,000.00
	Subtotal				**$140,000.00**
3	**Site Amenities**				
	A. Composite Wood Overlooks (Ex. Deck)	4	EA	$150,000.00	$600,000.00
	B. Composite Wood Overlooks (No Deck))	2	EA	$180,000.00	$360,000.00
	B. Replacement Access Doors		EA	$25,000.00	$0.00
	C. Signage - Traffic		LS	$6,000.00	$0.00
	D. Signage - Interpretive/Wayfinding		LS	$50,000.00	$0.00
	E. Ornamental Fence Inset Panels (No Decking)		LF	$60.00	$0.00
	F. Ornamental Fence Inset Panels (w/ Decking)		LF	$60.00	$0.00
	G. Black Vinyl Chain Link (12' High) w/ Gates		EA	$150.00	$0.00
	H. Additional Communication/Security	1	LS	$100,000.00	$100,000.00
	I. Bench (500' O.C. & 3 at Overlooks)		EA	$2,500.00	$0.00
	J. Demostration/Venue Improvements (East End)		LS	$250,000.00	$0.00
	K. Demostration/Venue Improvements (West End)		LS	$500,000.00	$0.00
	Subtotal				**$1,060,000.00**
4	**Construction Survey & Layout**				
	A. Survey & Layout	1	LS	$5,000.00	$5,000.00
	Subtotal				**$5,000.00**
	TOTAL				**$1,116,450.00**
	A. Contingency (20%)				$223,290.00
	B. General Conditions (9%)				$100,930.50
	C. Overhead & Profit (10%)				$133,974.00
	D. Bonds & Insurances (3%)				$40,192.20
	E. Mobilization/Demobilization (1.5%)				$20,096.10
	F. Design & Documents (12%)				$160,768.80
	GRAND TOTAL				**$1,795,701.60**

DETROIT SUPERIOR BRIDGE CONCEPTUAL OPINION OF PROBABLE COSTS FEBRUARY 26, 2013					
B - THE BRIDGE (Phase 3)					
ITEM	**DESCRIPTION**	**QUANTITY**	**UNIT**	**UNIT COST**	**TOTAL COST**
1	**Pavement**				
	A. Concrete Sections		LF	$0.00	$0.00
	B. Metal Grate Section - Colored Fiberglass Overlay		SF	$12.00	$0.00
	C. Pavement Striping Only		LF	$1.75	$0.00
	D. Green Cycle Track		SF	$2.50	$0.00
	E. Concrete Section - Expansion Joints (80' O.C.)		LS	$3,000.00	$0.00
	F. Metal Section - Rubber Expansion Joints		EA	$2,700.00	$0.00
	Subtotal				**$0.00**
2	**Electric**				
	A. Additional Electrical Distribution		LS	$50,000.00	$0.00
	B. Additional Lighting		LS	$120,000.00	$0.00
	Subtotal				**$0.00**
3	**Site Amenities**				
	A. Composite Wood Overlooks (Ex. Deck)		EA	$150,000.00	$0.00
	B. Composite Wood Overlooks (No Deck))		EA	$180,000.00	$0.00
	B. Replacement Access Doors		EA	$25,000.00	$0.00
	C. Signage - Traffic		LS	$6,000.00	$0.00
	D. Signage - Interpretive/Wayfinding		LS	$50,000.00	$0.00
	E. Ornamental Fence Inset Panels (No Decking)		LF	$60.00	$0.00
	F. Ornamental Fence Inset Panels (w/ Decking)		LF	$60.00	$0.00
	G. Black Vinyl Chain Link (12' High) w/ Gates		EA	$150.00	$0.00
	H. Additional Communication/Security (video, etc..)		LS	$200,000.00	$0.00
	I. Bench (500' O.C. & 3 at Overlooks)		EA	$2,500.00	$0.00
	J. Demostration/Venue Improvements (East End)	1	LS	$250,000.00	$250,000.00
	K. Demostration/Venue Improvements (West End)	1	LS	$500,000.00	$500,000.00
	L. Restroom (M&F) - 1 set at each end of bridge	2	EA	$50,000.00	$100,000.00
	Subtotal				**$850,000.00**
4	**Construction Survey & Layout**				
	A. Survey & Layout		LS	$5,000.00	$0.00
	Subtotal				**$0.00**
	TOTAL				**$850,000.00**
	A. Contingency (20%)				$170,000.00
	B. General Conditions (9%)				$76,500.00
	C. Overhead & Profit (10%)				$102,000.00
	D. Bonds & Insurances (3%)				$30,600.00
	E. Mobilization/Demobilization (1.5%)				$15,300.00
	F. Design & Documents (12%)				$122,400.00
	GRAND TOTAL				**$1,366,800.00**

DETROIT SUPERIOR BRIDGE
CONCEPTUAL OPINION OF PROBABLE COSTS
FEBRUARY 26, 2013

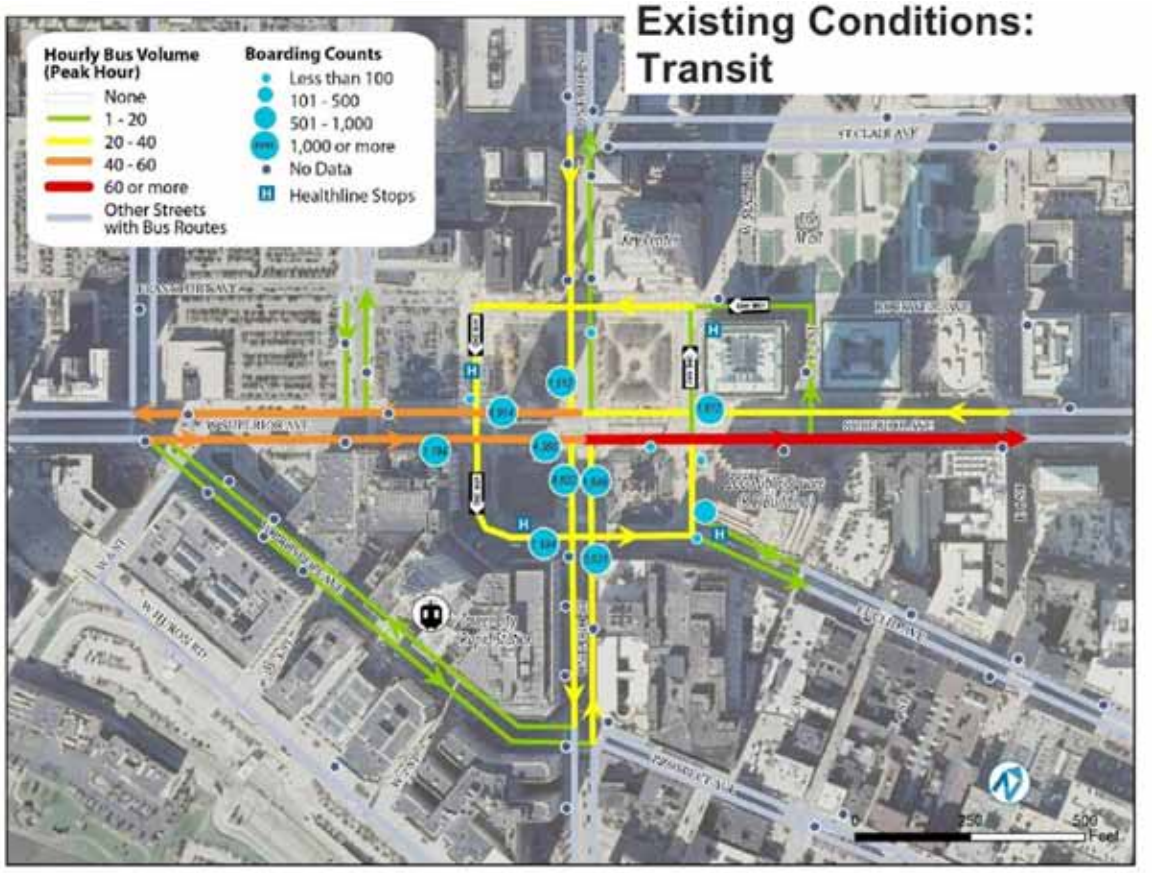
C - EAST END (Phase 1)

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL COST
1	**Site Preparation/Demolition**				
	A. Saw Cut Pavement	1074	LF	$5.00	$5,370.00
	B. Remove Crosswalk Asphalt	716	SY	$9.00	$6,444.00
	C. Remove Pavement Striping (100' Beyond Int.)	2456	LF	$0.50	$1,228.00
	D. Remove Concrete Block Abutment Wall	1	LS	$5,000.00	$5,000.00
	E. Remove Gravel & Concrete Pedestrian Approach	1	LS	$1,000.00	$1,000.00
	F. Remove Parking Lot Asphalt	400	SY	$9.00	$3,600.00
	Subtotal				**$22,642.00**
2	**Earthwork**				
	A. Excavation/Embankment	300	CY	$20.00	$6,000.00
	Subtotal				**$6,000.00**
3	**Erosion Control**				
	A. Erosion Control Measures	1	LS	$5,000.00	$5,000.00
	Subtotal				**$5,000.00**
4	**Pavement**				
	A. Crosswalks (Stamped Colored Asphalt)	6444	SF	$12.00	$77,328.00
	B. Asphalt for APT Approach	333	SY	$40.00	$13,320.00
	C. Concrete Retaining Wall for APT Approach	310	LF	$125.00	$38,750.00
	D. Pavement Striping Only	3200	LF	$1.75	$5,600.00
	E. Plaza	1	LS	$30,000.00	$30,000.00
	F. Concrete Pedestrian Approach	680	SF	$5.00	$3,400.00
	Subtotal				**$168,398.00**
5	**Site Amenities**				
	A. Signage - Traffic	1	LS	$2,000.00	$2,000.00
	B. Bench	2	EA	$2,500.00	$5,000.00
	C. Trash Receptacle	1	EA	$1,500.00	$1,500.00
	Subtotal				**$8,500.00**
6	**Landscape**				
	A. Plaza Landscape	1	LS	$20,000.00	$20,000.00
	Subtotal				**$20,000.00**
7	**Construction Survey & Layout**				
	A. Survey & Layout	1	LS	$2,500.00	$2,500.00
	B. Traffic Control & Maintenance	1	LS	$5,000.00	$5,000.00
	Subtotal				**$7,500.00**
	TOTAL				**$238,040.00**
	A. Contingency (20%)				$47,608.00
	B. General Conditions (9%)				$22,098.60
	C. Overhead & Profit (10%)				$28,564.80
	D. Bonds & Insurances (3%)				$8,569.44
	E. Mobilization/Demobilization (1.5%)				$4,284.72
	F. Design & Documents (12%)				$34,277.76
	GRAND TOTAL				**$383,443.32**

DETROIT SUPERIOR BRIDGE CONCEPTUAL OPINION OF PROBABLE COSTS FEBRUARY 26, 2013					
C - EAST END (Phase 2)					
ITEM	**DESCRIPTION**	**QUANTITY**	**UNIT**	**UNIT COST**	**TOTAL COST**
1	**Site Amenities**				
	A. North Side Park	1	LS	$125,000.00	$125,000.00
	B. South Side Park	1	LS	$125,000.00	$125,000.00
	C. East End Structure elevator and associated work	1	LS	$250,000.00	$250,000.00
	D. Ornamental Gate for lower deck entrance	1	LS	$35,000.00	$35,000.00
	Subtotal				**$535,000.00**
	TOTAL				**$535,000.00**
	A. Contingency (20%)				$107,000.00
	B. General Conditions (9%)				$96,300.00
	C. Overhead & Profit (10%)				$64,200.00
	D. Bonds & Insurances (3%)				$19,260.00
	E. Mobilization/Demobilization (1.5%)				$9,630.00
	F. Design & Documents (12%)				$77,040.00
	GRAND TOTAL				**$908,430.00**

DETROIT SUPERIOR BRIDGE CONCEPTUAL OPINION OF PROBABLE COSTS FEBRUARY 26, 2013					
C - EAST END (Phase 3)					
ITEM	**DESCRIPTION**	**QUANTITY**	**UNIT**	**UNIT COST**	**TOTAL COST**
1	**Site Amenities**				
	A. North Side Park	1	LS	$1,200,000.00	$1,200,000.00
	B. South Side Park	1	LS	$350,000.00	$350,000.00
	Subtotal				**$1,550,000.00**
	TOTAL				**$1,550,000.00**
	A. Contingency (20%)				$310,000.00
	B. General Conditions (9%)				$279,000.00
	C. Overhead & Profit (10%)				$186,000.00
	D. Bonds & Insurances (3%)				$55,800.00
	E. Mobilization/Demobilization (1.5%)				$27,900.00
	F. Design & Documents (12%)				$223,200.00
	GRAND TOTAL				**$2,631,900.00**

APPENDIX B: TRAFFIC & PARKING ANALYSIS



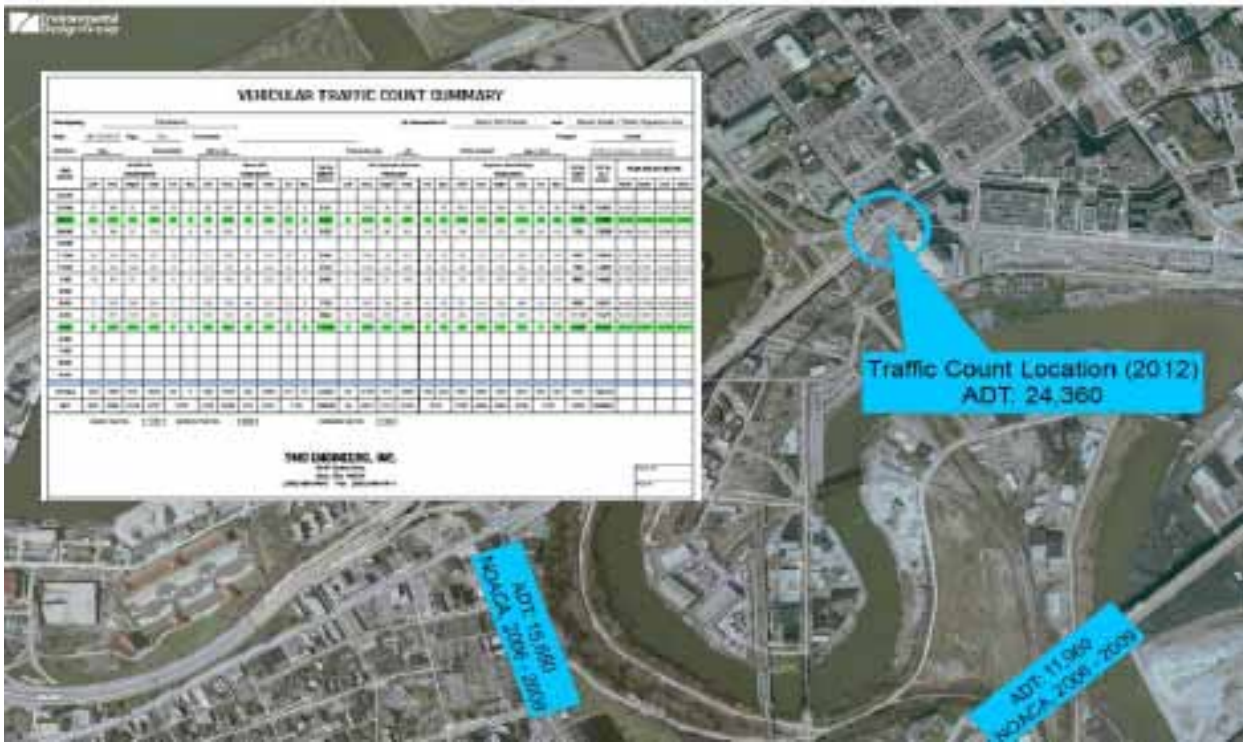
ANALYSIS

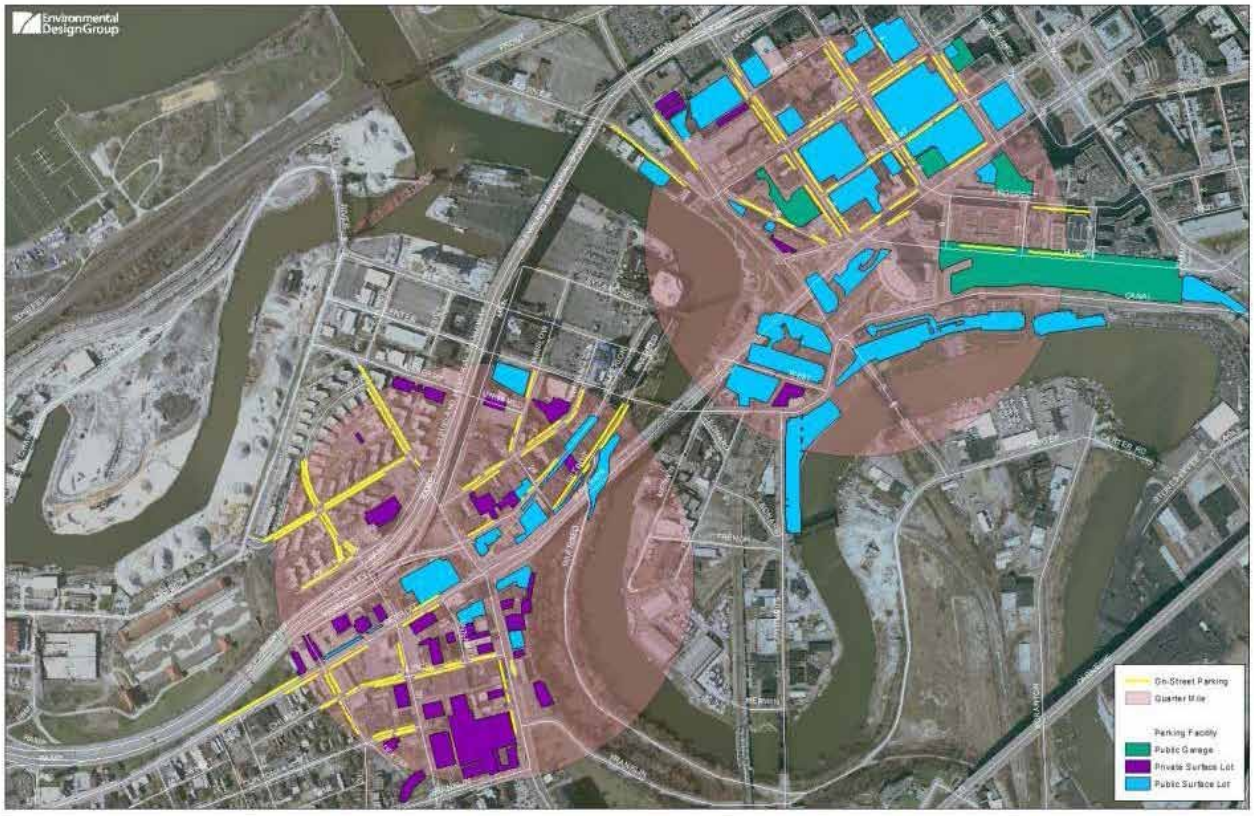
A full traffic analysis, including turning movements and level-of-service (LOS), was conducted for this study at the East 9th Street, Superior Avenue and Huron Road intersection. The average daily traffic (ADT) for all directions at this intersection is 21,331. The total north/south ADT is 9,456, the total east/west ADT is 6,708 and the total south/east ADT is 5,167. NOACA used this ADT data, as well as the turning movement data collected, in their traffic model to determine the future traffic forecast. The model showed that the current traffic is very close to the 2030 traffic projections, so per NOACA's recommendation, the existing traffic data, including the existing LOS, is also the data (i.e. the same numbers) being used for the future traffic data.

A traffic analysis was conducted as part of the Lakefront West (previously designated as the West Shoreway) project that was jointly sponsored by the Ohio Department of Transportation (ODOT) and the City of Cleveland. Per NOACA's approval, the ADT's and turning movement counts collected from that study were used for the W. 25th Street and Detroit Road intersection in this study.

Bicycle traffic is very light of the Detroit/Superior Bridge, especially compared to pedestrian traffic. This matches many antidotal comments that the Consultant Team has heard from bicyclists in the area that they do not like riding on the bridge due to its design and lack of being comfortable or safe, or the perception of not being comfortable or safe.

VEHICULAR TRAFFIC COUNT *Summary*





PARKING INVENTORY *¼ mile (5 minute Walk)*

PARKING ANALYSIS

West Side:

Parking is more of a concern on the west side of the bridge as it is not as intuitive as on the east side of the bridge. Parking heading down into the flats on the west side tends to be visually disconnected to the bridge area with smaller lots and on street parking.

There are parking lots in the western study area that are not clearly identified as public or unrestricted. While there are gated and restricted surface lots, others are not are clearly labeled as private lots adding confusion as to its public use.

Government or publicly owned lots such as the County Engineers facility do have guest parking but are considered restricted. These lots could, however, be used for event space if coordinated with various agencies.

Lutheran Hospital (a Cleveland Clinic Hospital), owns a majority of the surface lots on the west side of the bridge near West 25th that are within a ¼ mile radius, 5 minute walk, of the bridge. However, this is considered private/restricted parking.

East Side:

The east side of the study incorporates most of the downtown parking lots. There is public parking along most of the public streets with significant private paid lots available. With typical downtown uses and venues, availability varies depending on time and day of use. Rates have been climbing as of recent with the additional off-peak businesses such as restaurants, bars, and new casino.

The east side of the study area seems more intuitive and convenient as it is probably used by the public more than the west side of the study area.

For potential patrons coming from outside communities, drivers will often travel to the bridge through downtown interstate exits taking them through downtown and closer the east side parking opportunities.
Costs and availability will be the main concern for parking on this side of the project area.

TRAFFIC DATA

Turning movement counts are being recounted to include W. Superior Avenue, the 5th leg of the East 9th, Superior, Huron intersection, to accommodate NOACA's concerns about the movement of that intersection.

The average daily traffic on Superior Avenue at the intersection with West 9th and Huron is 24,360 cars per day. (Source: TMS, 2012)

The average daily traffic on West 25th at Detroit Avenue was 15,650 cars per day (Source: NOACA, 2006-2009)

Bicycle traffic is very light on the Detroit/Superior Bridge, especially compared to pedestrian traffic.

This matches the many antidotal comments that the Consultant Team has been hearing from bicyclists in the area that they do not like riding on the bridge due to its design and lack of being comfortable or safe, or the perception of not being comfortable or safe.

PARKING INVENTORY *NOACA/Plain Dealer*

APPENDIX C: SURVEY OF CULTURAL ORGANIZATIONS

CULTURAL ORGANIZATIONS' INTEREST IN UTILIZING THE STREETCAR LEVEL OF THE DETROIT SUPERIOR BRIDGE: A SURVEY

Submitted and Prepared by James Levin
Report to the Steering Committee of The Cleveland Bridge Project
September 24, 2012

INTRODUCTION: *The Purpose of the Survey*

The streetcar level of the Detroit Superior Bridge is envisioned both as a pedestrian and bicycle thoroughfare and as multi-use venue. A key potential use is as a space for arts organizations to showcase their work and to reach the public in a new way, and to provide visitors with a rich and exciting cultural experience. In order to further our understanding of the appeal and challenges of using the Streetcar Level of the Detroit Superior Bridge from the perspective of area arts organizations, we created an interview template (survey) to test interest and explore resistance. We sought to determine not only whether an organization would in fact want to utilize the bridge but also to gain more specific insight about issues such as the nature and duration of use, expected amenities, parking and logistical issues and what reservations or concerns the organization might have regarding the venue.

SURVEY RESPONDENTS: *Whom did we ask?*

The organizations interviewed for this survey (See Appendix A) were selected by James Levin and Terry Schwarz, who purposefully sought to secure information from a wide variety of performance- and exhibit-based cultural organizations. We selected arts organizations from across the spectrum, from small, emerging groups at one end to large, "iconic" institutions at the other. The groups interviewed represented a range of artistic disciplines, including theatre, dance, music and visual arts, and the sampling included both "producer-based" groups and presenters. Other characteristics were also used as selection criteria: of the 33 organizations surveyed, 25 are non-profit, and 8 are for-profit; 23 have a primary venue to present their performances and/or exhibitions, and 10 do not. While not a scientific sample, the survey participants constitute an accurate reflection of area arts groups.

METHOD: *How did we reach them?*

The interviews were conducted by Marc Dorsey (BA, Case), Jeremy Ludemann (intern from the College of Wooster) and by James Levin, from July through September 2012. The information was obtained primarily through "in person" interviews although some of the organizations (three of the 33) responded by answering the survey by e-mail and one interview was conducted in a telephone conversation.

RESULTS: *What did they say?*

1. *Familiarity/previous experience.*

   All but one of the organizations surveyed were familiar with the venue (Oberlin Conservatory was the exception). The majority had actually been on the Bridge but a few had not (the Conservatory, the MOCA curator, Tailspinner Director and the Beck Center Artistic Director).

   Interestingly, of these four who had not yet been to the space, three -- based solely on the

idea itself and photographs of the bridge -- indicated interest in using it (Beck Center was the dissenter). Eleven of those that indicated previous experience on the bridge had in fact already presented or performed on the Bridge, either at the Bridge Project in 2009 or Ingenuity in 2010 or 2011. Others had experienced the bridge in the early 2000s at a Spaces event or had been on the annual County tour.

2. *Interest/prospective ideas*
   When asked, "If the bridge were available, would you be interested in using space on the bridge to present your organization's programming?" 28 of the 33 organizations surveyed indicated that they in fact would be interested in staging a performance or exhibition on the Bridge. The work envisioned ranged from the rather modest (workshops and classes by Great Lakes; retail vending by Glass Bubble; musical excerpts and spoken word by Near West Theater) to very ambitious use of the entire span, programming that would entail large-scale installations (Cleveland Museum of Art, Red Dot, Stocker Art Center) an multi-stage performances and/or installations (All Go Signs, Sphere Productions). Much of the envisioned work was "site specific" (meaning that the particular work would be created explicitly to fit in the space) including ideas from MOCA, CPT and Stocker Art Center. In addition, many of the organizations indicated a willingness to simply showcase their "normal" programming, wanting to utilize the bridge because of the appeal or charisma of the venue itself.

In addition to the positive responses and ideas listed above, some other noteworthy ideas were:

- Classical music recitals, by Cleveland Institute of Music
- Printmaking and an exhibit on gallery walls on castors, by Zygote Press
- A ballet by Verb Ballets
- Sculpture, installations, functioning fountains, and a contemporary "fluid exposition" by Asterisk Gallery;
- Sculpture, experimental performance and video, by Spaces;
- Show independent short features or narrative/documentaries by Cleveland Film Festival
- DJs and comedy by Grog Shop
- Chamber ensembles or a small opera, by Oberlin Conservatory
- Cleveland Museum of Art's "grant artistic treatment of the history of the bridge and industrial Cleveland."

Regarding those who indicated no present interest in using the venue, their reasoning was described as follows:

- Beck Center: "We are over-programmed and under-staffed already."
- Cleveland Playhouse: "Cool space but we are just settling in. We could look at this again in two or three years."
- Fine Arts Willoughby: " We have no discretionary money to spend on anything.
- Maybe in a few years."
- Beachland Ballroom: "We want people to come here and buy beer."
- Dobama: No explanation given.

3. *Motivation*
   The reasons for wanting to program the space also differed from group to group. Several of the organizations saw programming as a means of furthering their brand – whether through larger scale site-specific work (MOCA, CPT) or simply offering workshops or "excerpts" in a space distinctively not associated with their "usual" space (GLTF, Near West Theatre, Oberlin Conservatory). Virtually all of the organizations who were familiar with the space are inspired to simply "do something" in the venue because of the "coolness factor" and believe that by doing something on the bridge would enhance their profile in the community in general, broaden their appeal to a younger "downtown-oriented" audience and enhance their standing with their own demographic.

4. *Space Desirability*
   The sites within the bridge that organizations found appealing were equally diverse and ranged from "the catacombs" (small stage near the trolley façade or use of the various nooks and crannies) to the concourse and center span for larger scale installations on, to the use of the fresh water pool at the east end as a backdrop for a large stage.

5. *Audience capacity*
   For those seeking a stage, with some exceptions, the majority emphasized the need for a stage with an audience capacity in the range of 200 to 500.

6. *Expected duration of use/exhibition time*

   With respect to optimal duration of use, theatres requested one to two weeks; dance companies, one night to two weeks; music presenters and those presenting workshops, one day or night; and those presenting art installations or exhibits, one week to one month (except Cleveland Museum of Art who wanted "all year").

7. *Logistical/technical support*
   Set-up and preparation, with some exceptions, could take place in one day, during regular work hours. The exceptions, predictably, entailed those with a larger scope of "transformation" of the space, often involving site specific installations or performances, including CMA, All Go Signs, Theatre Ninjas, CPT, Antaeus Dance, Stocker Arts Center, Asterisk Gallery and Ensemble Theatre, all of whom envisioned between 2 and 5 days of set-up. With respect to technical support, the larger well-equipped organizations indicated ability to bring their own stages, sound and light systems, exhibiting equipment; the mid-sized and smaller organizations indicated, repeatedly, a need for a house sound system, a small crew or tech person, a light system. The dance companies all asked for a marley floor and most of the performance based groups requested chairs for audience.

8. *Amenities*
   The survey included a questions seeking information about perceived obstacles in using the space, and "What amenities should be present?" and the (combined) responses were: Sound system (6), lighting in the span (4), electricity-in center and east end (8), external noise (2), safety (3), a formal or mobile stage (7), sound separation (3), security of art objects (1), weather (3), restrooms (8), stage-lighting (5), green or dressing room (3), mechanism to hang art (1), load in/out-distance and access (5), water (1), box office (2),funding to pay security (1), technical staff (3), Parking (1), food and drink (1).

9. *Parking*
   When asked to project how many parking spaces they would need for staff, artists, volunteers and audiences, the great majority indicated that 100 to 300 spaces would suffice. Two projected that less than 50 spaces would be needed and two predicted that they would need at least 500 (larger scale, multi-staged, day-long events).

10. *Contribution*
    Of the 28 organizations that have indicated interest in using the space, 17 affirmatively answered that they would pay a fee for the security, insurance, and maintenance if provided by the county. Of these 17, 13 agreed to pay the minimal of the choices offered ($100 to $500). The four that agreed to pay more (two at $600 to 1000; one at $1100 to $1500; and one at

$1600 to $2000) were either from a large organization familiar with such costs (Cleveland Museum of Art) and/or familiar with the existing costs of presenting large-scale events in the venue (All Go Signs, which has extensive experience with production and presenting costs in this venue and Sphere Productions, which in fact is now planning a Music Festival for next June).

NOTE: In an era when cultural organizations are forced to reduce operation costs, programming, and marketing, I was somewhat surprised at the passion and openness that the leaders of these arts organization expressed in envisioning performances, exhibits, installations and festivals at the Streetcar Level of the Detroit Superior Bridge. I was also surprised that so many of the groups were willing to pay something towards the venue (security, maintenance, insurance). Because the Bridge Project and Ingenuity presented many of these groups (paid them a fee, did not ask for any contribution), my fear was that the idea of them paying something would be untenable. For 11 of them, it was – they expect to be presented without contributing to the real costs, but 17 accepted that they would be compelled to pay at least some of these costs.

11. *Additional suggestions*
    In the "why not ask as long as we are in a conversation" category, the survey included one question about other uses appropriate to the venue, uses unrelated to arts and culture. Among the answers were: retail markets (arts and crafts) (6), food vendors (3), geo-cache, restaurants or cafes (3), studio spaces for artists, bungee jumping, athletic events, retreat space, bicycle repair shop (3), shoe repair (2), video studio, fund-raiser events, indoor bicycle park, dog fashion show.

CONCLUSION: *What did we learn?*
The County has a very valuable asset in the Streetcar Level of the Detroit Superior Bridge. Even based solely on those organizations who would like to provide programming on the bridge and who would be willing to pay a fee, the County could program this venue literally for the next 12 months. In order to reap the benefits of this resource, which itself could support economic activity on either side of the bridge, feeding both the east and west development pools, the owner of the property could:

Assign a full time employee the responsibility to market the space, facilitate its use, negotiate terms with respect to security and insurance, and serve as a liaison between the user and city and county departments; Install amenities to enhance usage and diversify functions, such as: electrical power access on the center span and east side; install restrooms on the east side and west side; improve general lighting across the span and in the west side station area ("the catacombs"); acquire a modular movable stage equipped with a basic sound system and light system;

Provide security – as this is public space, as much as Public Square or the Gateway area, city police or county deputies or security service could provide basic surveillance (to be enhanced by cultural events to the degree that the scope demands).

The venue can be a thoroughfare and a destination. With some investment into its infrastructure and in its operating potential, it can become a vital component to the downtown and near west side economic engines.

APPENDIX D: COMMUNITY ENGAGEMENT

VISION STATION *asked participants to share their program ideas for the bridge. Popular suggestions included performance spaces, recreational opportunities, and a bike share.*

ACTIVATING THE BRIDGE

In addition to traditional community engagement methods, such as public and steering committee meetings, the project team hosted and partook in a series of engagements which opened the lower level of the bridge to the public and programmed it as if it were open on a permanent basis through the use of temporary use design. This form of engagement is often referred to as "pop-up" urbanism.

A series of events both on the bridge and off of it were held throughout the course of the project to gather differing user groups' feedback in regards to their desires for uses of the bridge, and how it might function on a daily basis. A strong showing of community members at all events reflects a well-grounded basis of community support for the project and the reuse of the lower level. Over 1100 visitors came to the lower level for the Cuyahoga County Bridge tour this year.

At this event the CUDC and partners engaged visitors in a series of stations aimed at collecting their feedback for their vision of the lower level if it were to be opened on a permanent basis. Each station approached users with different sets of questions, pertaining to their experience on the bridge. A general introduction to the project and an existing conditions analysis was presented to groups as they entered the lower level, and then asked for their feedback in regards to safety, security, general sense of the space of the bridge, kids' impressions of the lower level, and what types of program they would like to see on the lower level were all focal points of the stations. Additionally, a website was launched for the first event to draw potential users and community members to bridge events and also ask their input on design criteria and recommendations being proposed by the project team.

WWW.BRIDGEPROJECTCLEVELAND.COM was used as a digital public forum throughout the course of the project to inform the broader public, post events, blog posts, and gain feedback.

WEBSITE *containing upcoming events on the bridge, design options, and blog posts was created to inform and engage the public on this project*

OVERVIEW OF EXISTING CONDITIONS *analysis and the scope of the project is presented to the public at the County's annual tour of the bridge event.*

YOUTH STUDIOS *instructor Larissa Itomlenskis set up a space for kids to offer their input about what the space could become and asked them to express their vision through visual media.*

SUMMARY OF RESPONSES *from Bridge Tour in July of 2013*

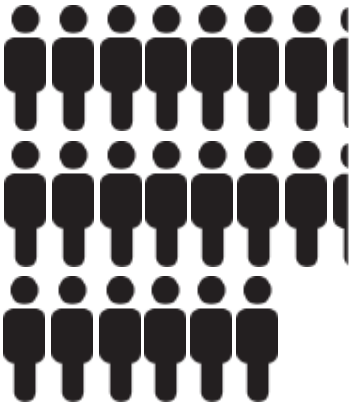
HOW WOULD YOU DESCRIBE YOUR VISIT?

Positive/Interesting: 95

Educational/Historical: 47

Enjoyed Views: 12

BRIDGE ACTIVITIES YOU WOULD PARTAKE IN



Snack Shop/Café: 71

Walk: 71

Art Installations: 60

WERE THERE PLACES ON OR NEAR THE BRIDGE WHERE YOU FELT UNSAFE?

No: 116

Center Span/Plywood: 31

Not enough light: 5

BRIDGE ACTIVITIES YOU WOULD PARTAKE IN

Music Shows: 60

Bike: 53

Run: 33

IS THIS A GOOD PLACE TO BRING KIDS?

Yes (General): 45

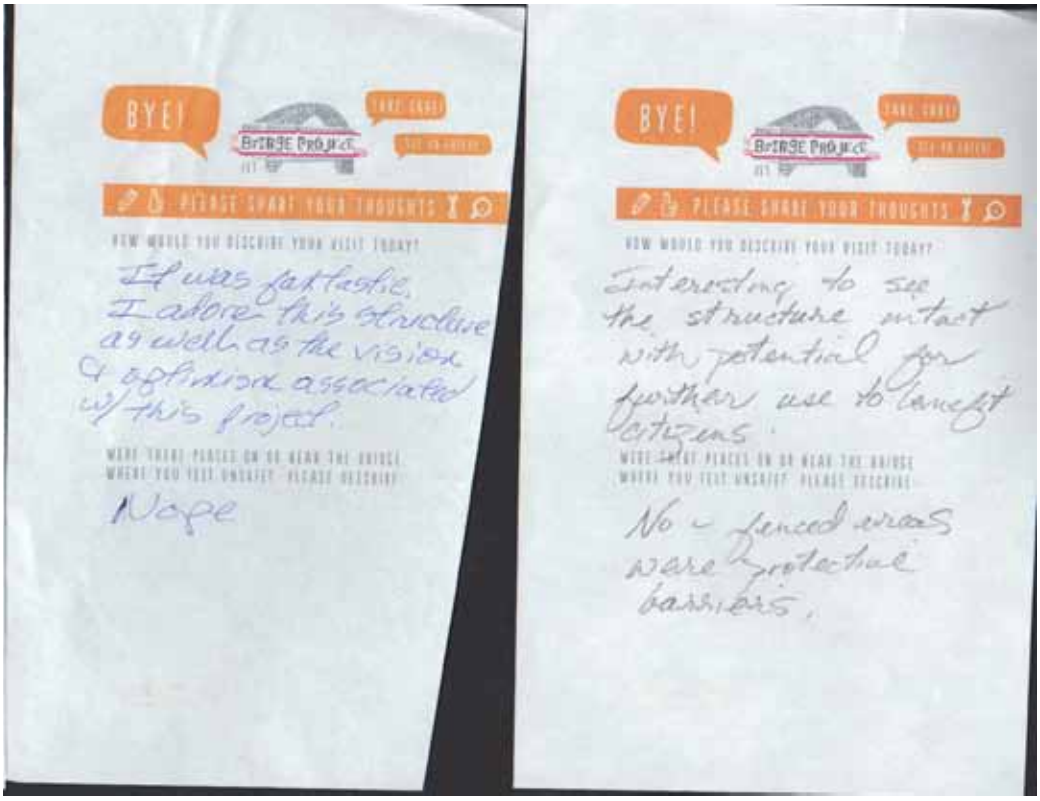
Yes, good for education/ historic preservation: 14

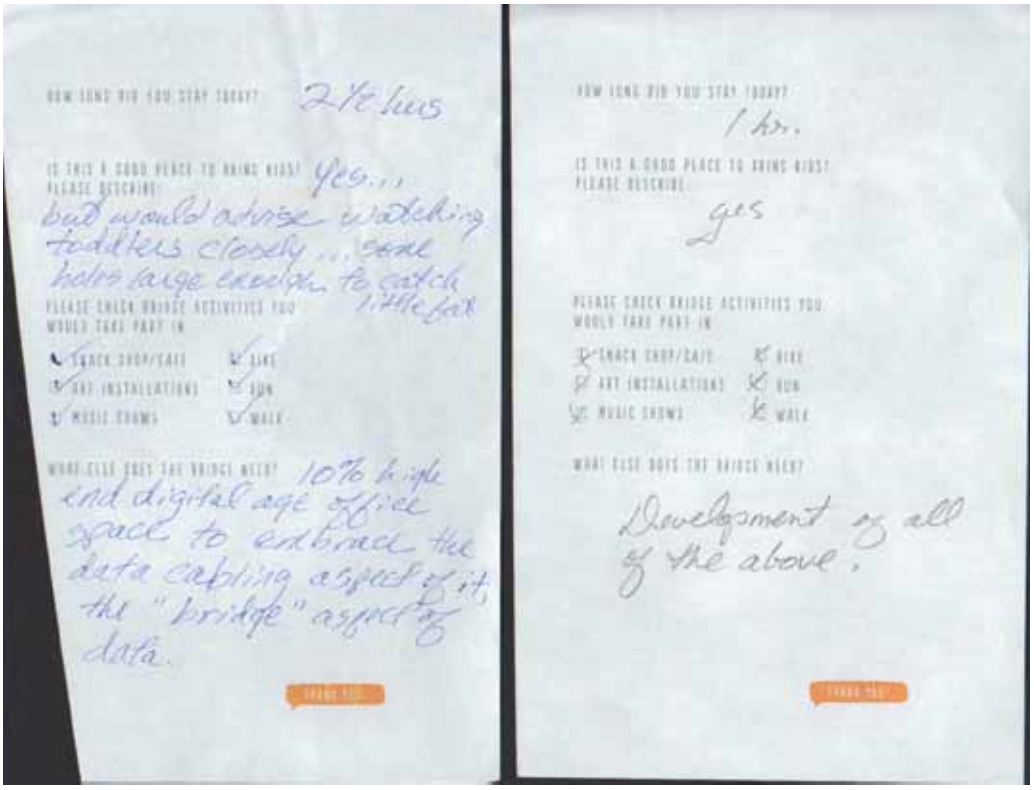
Yes, but depends on event/security: 16

BEFORE TODAY, WHAT EVENTS HAVE YOU ATTENDED ON THE BRIDGE?

Ingenuity Fest: 15

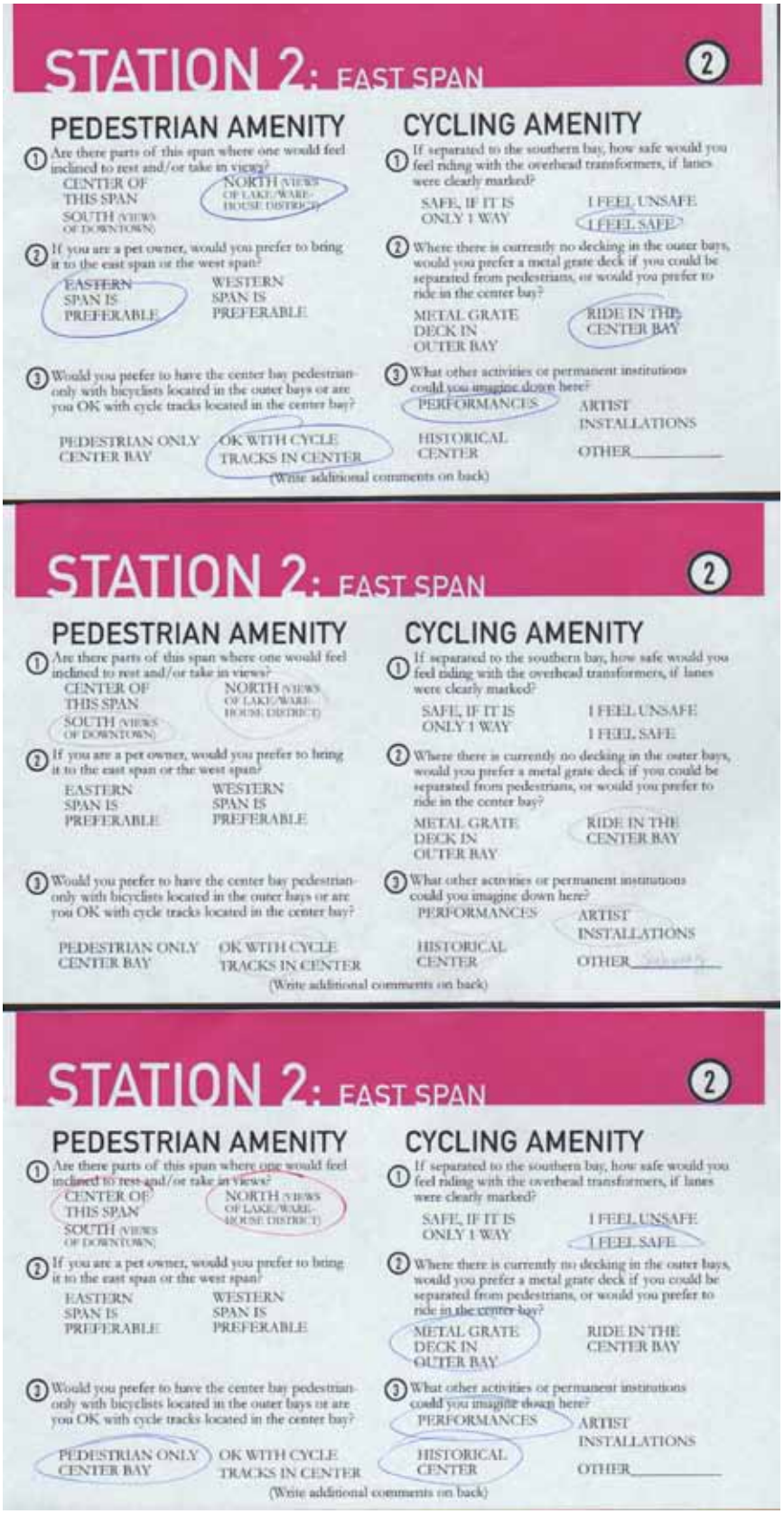
County Bridge Tour: 13





Examples of SURVEY RESPONSES

Examples of
SURVEY RESPONSES



STATION 2: EAST SPAN

2

PEDESTRIAN AMENITY

1. Are there parts of this span where one would feel inclined to rest and/or take in views?
   - CENTER OF THIS SPAN
   - NORTH (VIEWS OF LAKE/WAREHOUSE DISTRICT) — circled
   - SOUTH (VIEWS OF DOWNTOWN)
2. If you are a pet owner, would you prefer to bring it to the east span or the west span?
   - EASTERN SPAN IS PREFERABLE — circled
   - WESTERN SPAN IS PREFERABLE
3. Would you prefer to have the center bay pedestrian-only with bicyclists located in the outer bays or are you OK with cycle tracks located in the center bay?
   - PEDESTRIAN ONLY CENTER BAY
   - OK WITH CYCLE TRACKS IN CENTER — circled

(Write additional comments on back)

CYCLING AMENITY

1. If separated to the southern bay, how safe would you feel riding with the overhead transformers, if lanes were clearly marked?
   - SAFE, IF IT IS ONLY 1 WAY
   - I FEEL UNSAFE
   - I FEEL SAFE — circled
2. Where there is currently no decking in the outer bays, would you prefer a metal grate deck if you could be separated from pedestrians, or would you prefer to ride in the center bay?
   - METAL GRATE DECK IN OUTER BAY
   - RIDE IN THE CENTER BAY — circled
3. What other activities or permanent institutions could you imagine down here?
   - PERFORMANCES — circled
   - ARTIST INSTALLATIONS
   - HISTORICAL CENTER
   - OTHER_____

STATION 2: EAST SPAN

2

PEDESTRIAN AMENITY

1. Are there parts of this span where one would feel inclined to rest and/or take in views?
   - CENTER OF THIS SPAN
   - NORTH (VIEWS OF LAKE/WAREHOUSE DISTRICT)
   - SOUTH (VIEWS OF DOWNTOWN) — circled
2. If you are a pet owner, would you prefer to bring it to the east span or the west span?
   - EASTERN SPAN IS PREFERABLE
   - WESTERN SPAN IS PREFERABLE
3. Would you prefer to have the center bay pedestrian-only with bicyclists located in the outer bays or are you OK with cycle tracks located in the center bay?
   - PEDESTRIAN ONLY CENTER BAY
   - OK WITH CYCLE TRACKS IN CENTER — circled

(Write additional comments on back)

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3. What other activities or permanent institutions could you imagine down here?
   - PERFORMANCES — circled
   - ARTIST INSTALLATIONS
   - HISTORICAL CENTER
   - OTHER_____

STATION 2: EAST SPAN

2

PEDESTRIAN AMENITY

1. Are there parts of this span where one would feel inclined to rest and/or take in views?
   - CENTER OF THIS SPAN — circled
   - NORTH (VIEWS OF LAKE/WAREHOUSE DISTRICT) — circled
   - SOUTH (VIEWS OF DOWNTOWN)
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   - OK WITH CYCLE TRACKS IN CENTER

(Write additional comments on back)

CYCLING AMENITY

1. If separated to the southern bay, how safe would you feel riding with the overhead transformers, if lanes were clearly marked?
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   - METAL GRATE DECK IN OUTER BAY — circled
   - RIDE IN THE CENTER BAY
3. What other activities or permanent institutions could you imagine down here?
   - PERFORMANCES — circled
   - ARTIST INSTALLATIONS
   - HISTORICAL CENTER — circled
   - OTHER_____

BIKE & PEDESTRIAN EVENT

On August 24, the lower level was opened to encourage cyclists and pedestrians to use the space and provide feedback on various lane configurations. Temporary lanes were constructed using duct tape throughout the bridge, as well as signs at intersection points where pedestrians and cyclists crossed paths.

Preference was expressed for separated pathways for bikes and pedestrians, and adjacent travel lanes for cyclists, as in a cycle track configuration. Both cyclists and pedestrians also seemed to agree with a central bay configuration, as opposed to separated facilities at the outer bays.

Concerns about lighting were raised, as well as feeling unsafe transitioning over the center span where the plywood and metal grating exists. Other concerns involved entryways and transitioning into the space from the existing openings, given the column spacing. Prominent signage and wayfinding was also suggested to make potential users aware, if the lower level were opened permanently.

MIDWAY EVENT

In order to simulate a variety of programmatic uses and daily use patterns, an event was held on Sept. 21, 2012 where the lower level was opened from 7am-11pm. The idea was to attract daily commuters and passersby and receive their feedback, as well as program the space with events throughout the day and evening to see how the space may function as an event space.

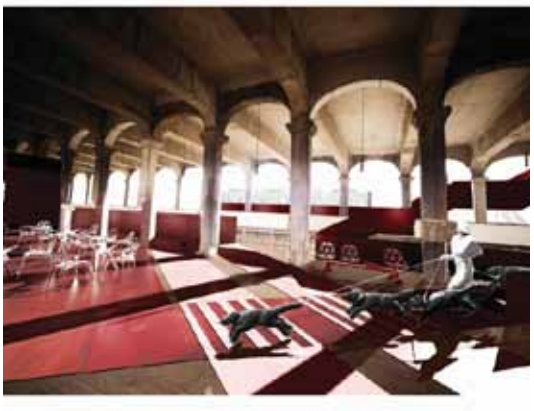
CLEVELAND COMPETITION

The Cleveland Competition is an annual ideas-based design competition open to architects and urbanists from around the world. This year, the competition chose the lower level of the bridge as its site of intervention. Several hundred designers from around the globe submitted ideas for the reuse of the bridge and surrounding areas as a piece of infrastructure and iconic form. Several designs centered around the idea of the bridge as a recreation space and place of gathering. The competition culminated with an awards ceremony and display of all competition entries on the lower level.

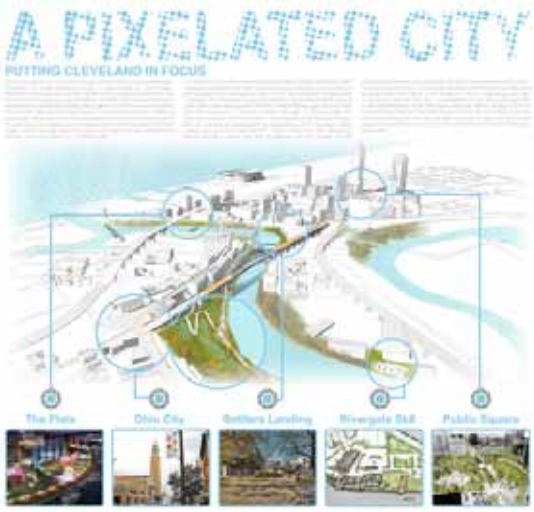
CLEVELAND COMPETITION *Hundreds of designers from around the country and around the world participated in the design competition*

Ashley Craig, Edna Ledesma, Jessica Zarowitz (Austin, TX)

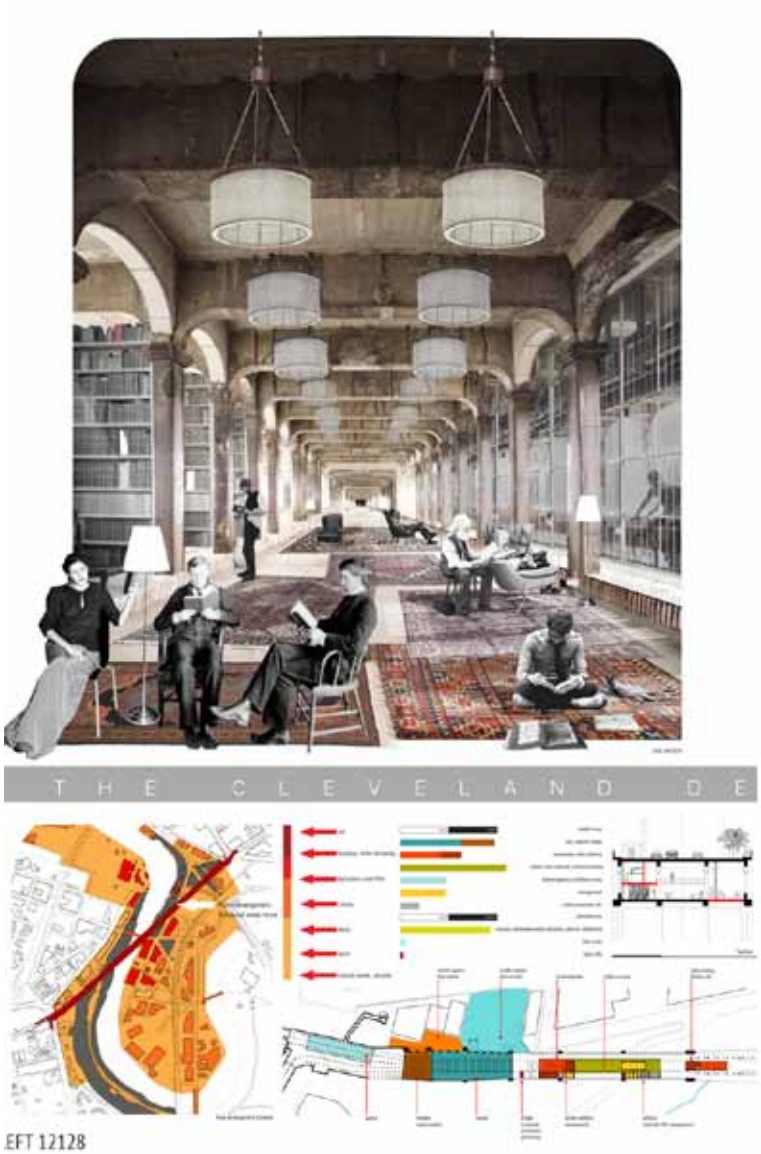
ARCHILIER ARCHITECTURE *Kai Sheng, Donghwan Moon, Changsoo Park ,Tinxing Tao (New York, NY)*



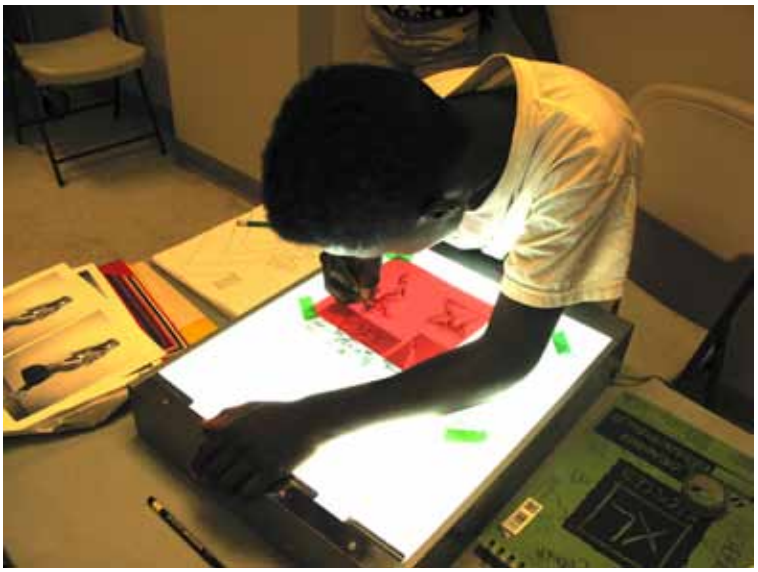
MOXON ARCHITECTS *Ben Addy, Tim Murray, Adam Holicksa, Pauline Marcombe, Augustine Ong, Jasper Stevens, Marcus Stokton (London, UK)*



Brandon Young, Thomas Nester, Gabriel Fey (Lakewood, OH)



Nadja Korbut, Anastasia Vaynberg (Russia)



LAKEVIEW TERRACE DESIGN CAMP

Over the course of a week in late July and early August of 2012, youth residents of Lakeview Terrace were asked to participate in a design camp, held with the CUDC and local designer and Youth Studios instructor Larissa Itomlenskis, and focused largely on ideas for the bridge and surrounding area. A site visit to the bridge, and daily lessons allowed students to imagine a career in design, while providing the design instructors with valuable input in regards to their relationship with the bridge and surrounding area.