

# Burlington Downtown Flood Mitigation & Riverfront Improvements

Plan Commission Presentation  
May 17<sup>th</sup>, 2016

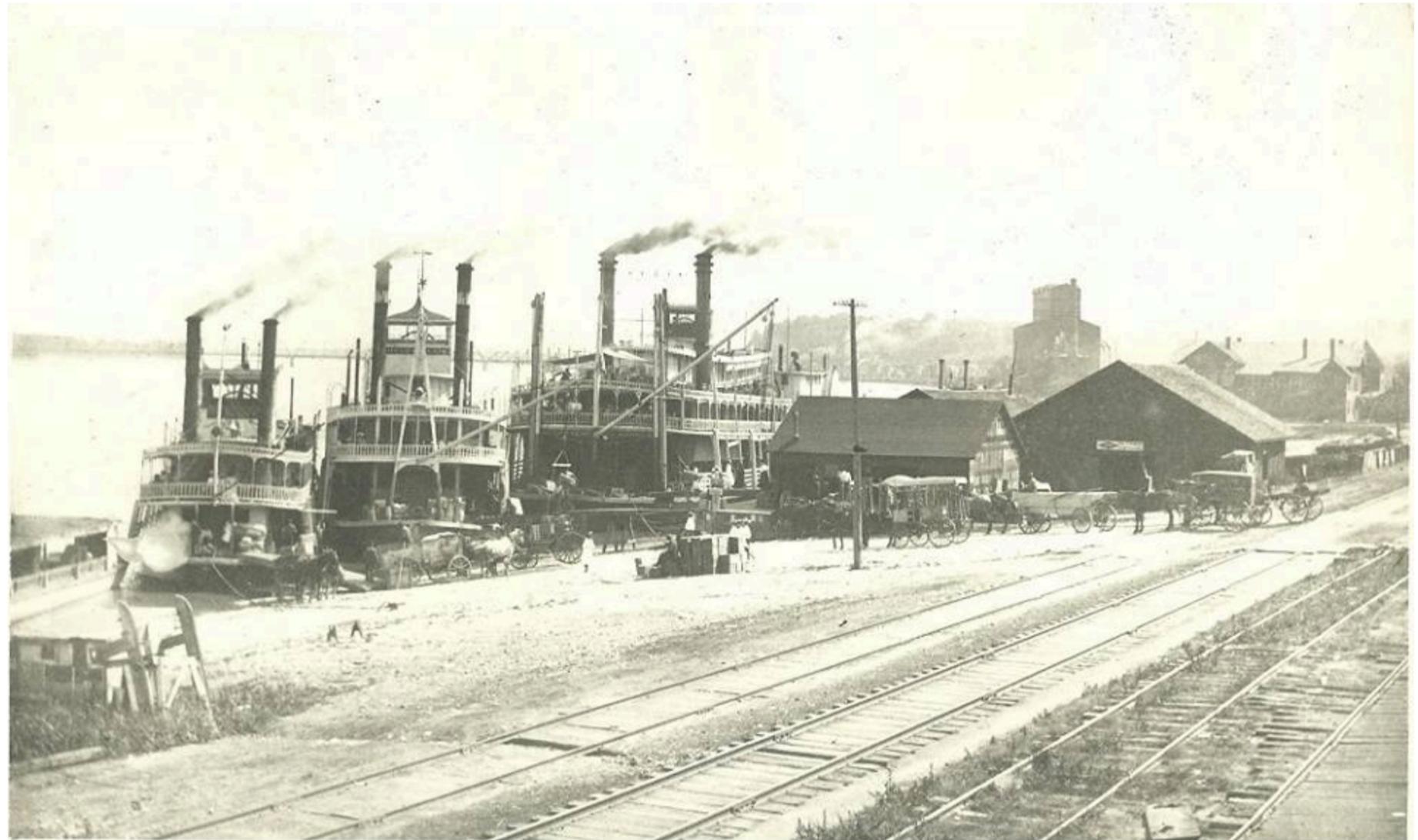


Veenstra & Kimm  
SmithGroupJJR



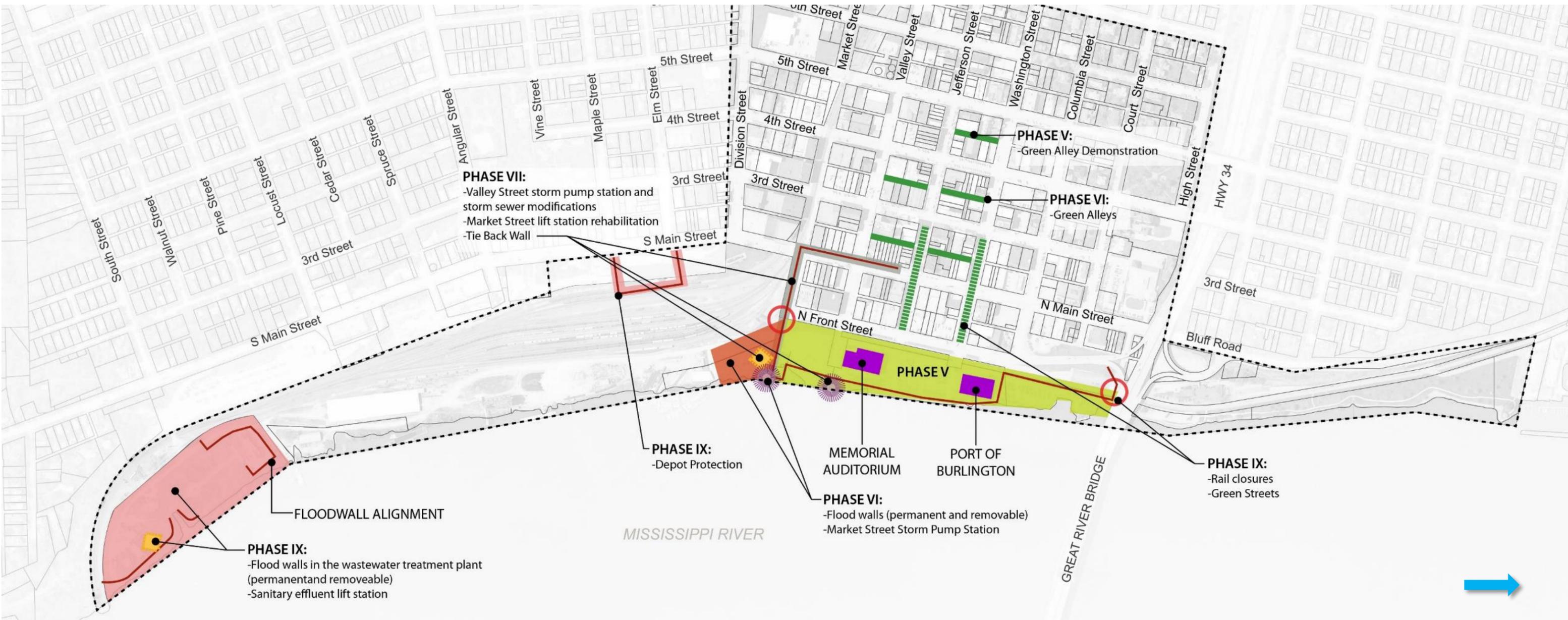
# Presentation Overview

- Overview of Project and Process
- Review of April Workshop
- Refined Consensus Plan
- Phase V Scope & Future Phasing
- Next Steps



# Downtown Flood Mitigation Overview

- Phase V is the first phase of implementation of the *Burlington Downtown Mississippi Riverfront Plan (2015)*



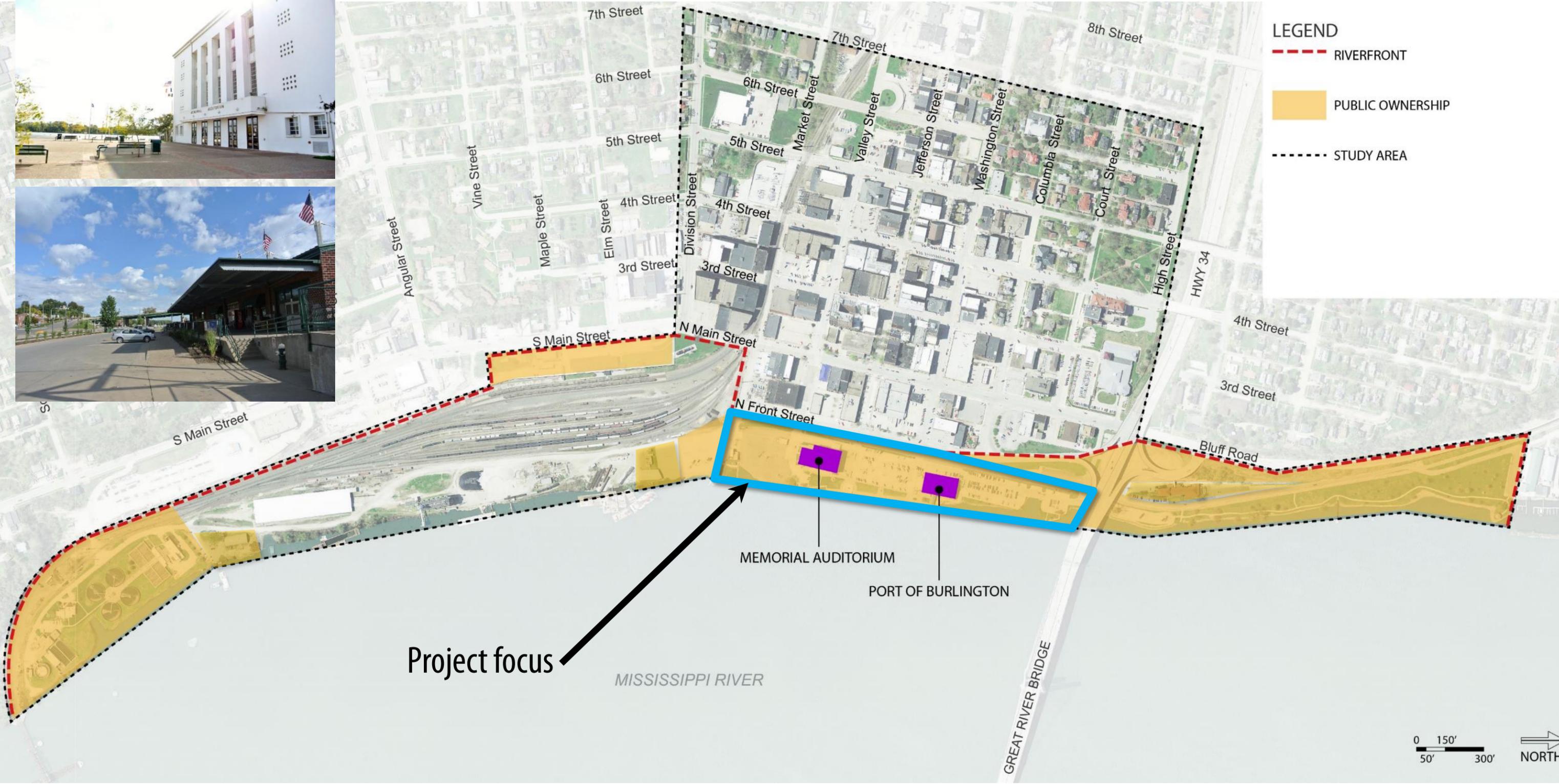
Phases I – IV included grant-matching projects previously funded by the City including Hawkeye Equalization Tanks (2009), Water Works System Improvements (2009), Cascade Watershed Separation Projects (2010 – 2016) and MASL Watershed Sewer Separation Project (2014)

# Process for Phase V Design Phase

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1. APRIL – Programming and Design Refinement Workshop
2. **THIS WEEK** - Schematic Design
3. SUMMER – Design Development
4. FALL – Final Plans
5. WINTER – Permitting & Bidding
6. JULY 2017 – Construction Starts

# Riverfront Planning: Project Extents and Study Area



Project focus

- LEGEND
- RIVERFRONT
- PUBLIC OWNERSHIP
- STUDY AREA



# Riverfront Flooding and Stormwater Influence



- Protect to 28' or 538.8' Mean Sea Level.
- Walls and levees protect from Mississippi River. Storm sewer improvements and pump stations protect from interior rainfall and sewers backing up.

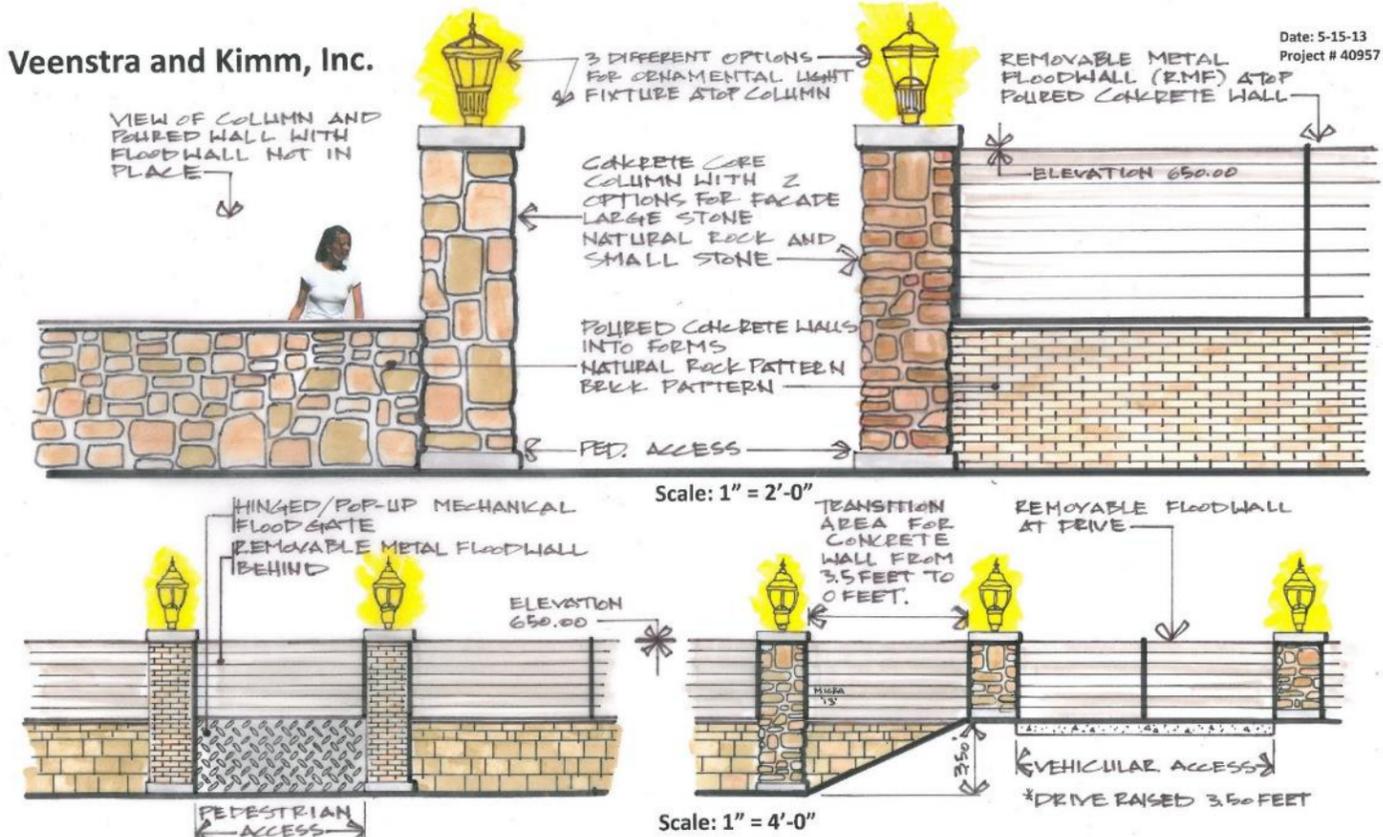


# Flood Protection – Area Impacted



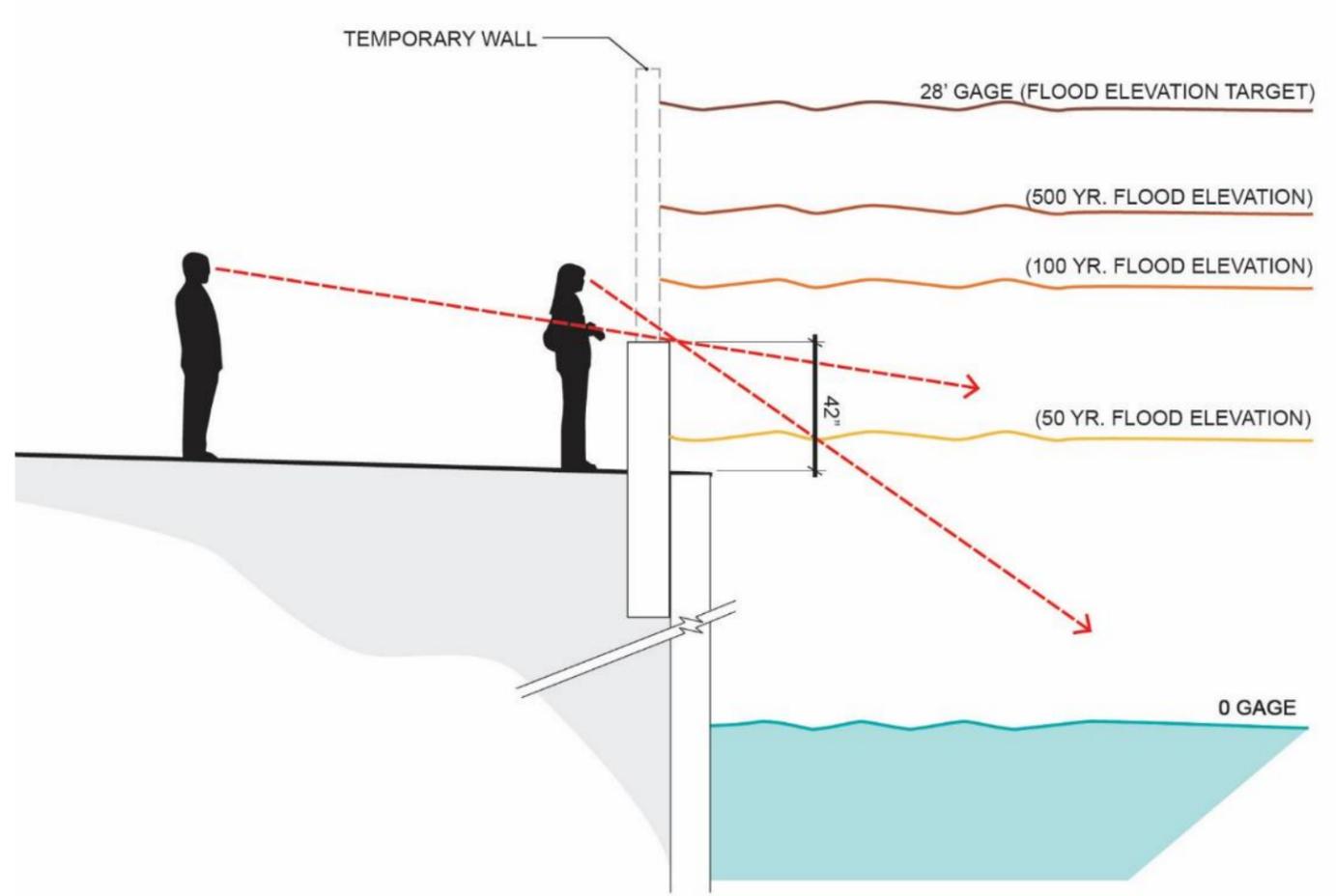
28' GAGE (TARGET FLOOD ELEVATION)  
500 YEAR FLOOD ELEVATION  
100 YEAR FLOOD ELEVATION

# Flood Protection – Permanent & Demountable Flood Walls



Ottumwa Water Treatment Plant Floodwall Concept

Front Elevation View



# The Project Area – Existing Conditions



# The Project Area – Existing Conditions (North)



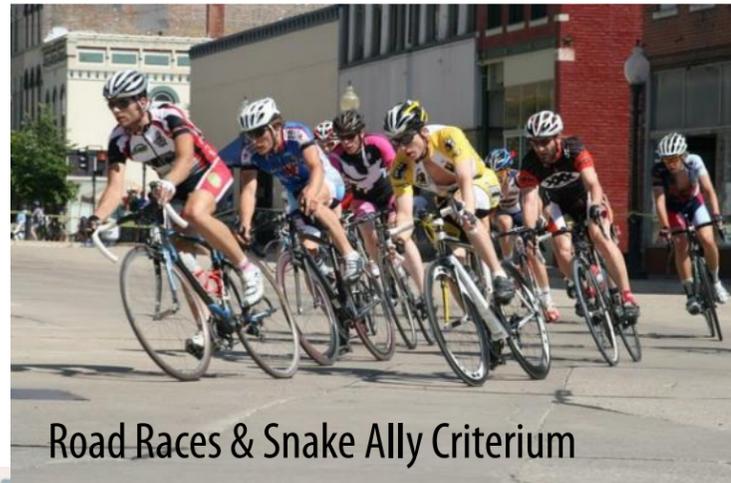
# The Project Area – Existing Conditions & Initial Ideas (South)



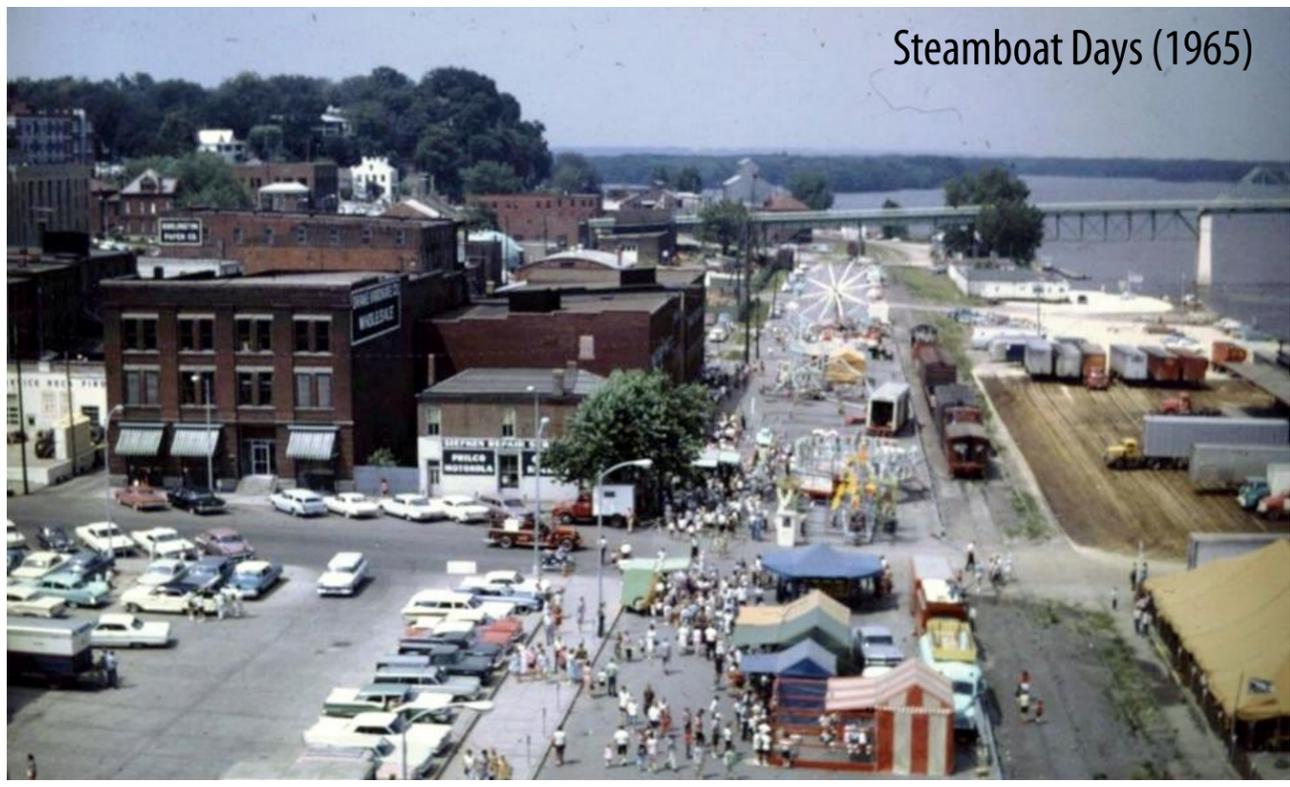
# The Project Area – Existing Conditions (Landing)



# The Landing – Special Events



Steamboat Days (1965)



Road Races & Snake Alley Criterium



Rotary Chicken Cook-off



Circus Parade (1954)

# Stakeholder & Steering Committee Interviews

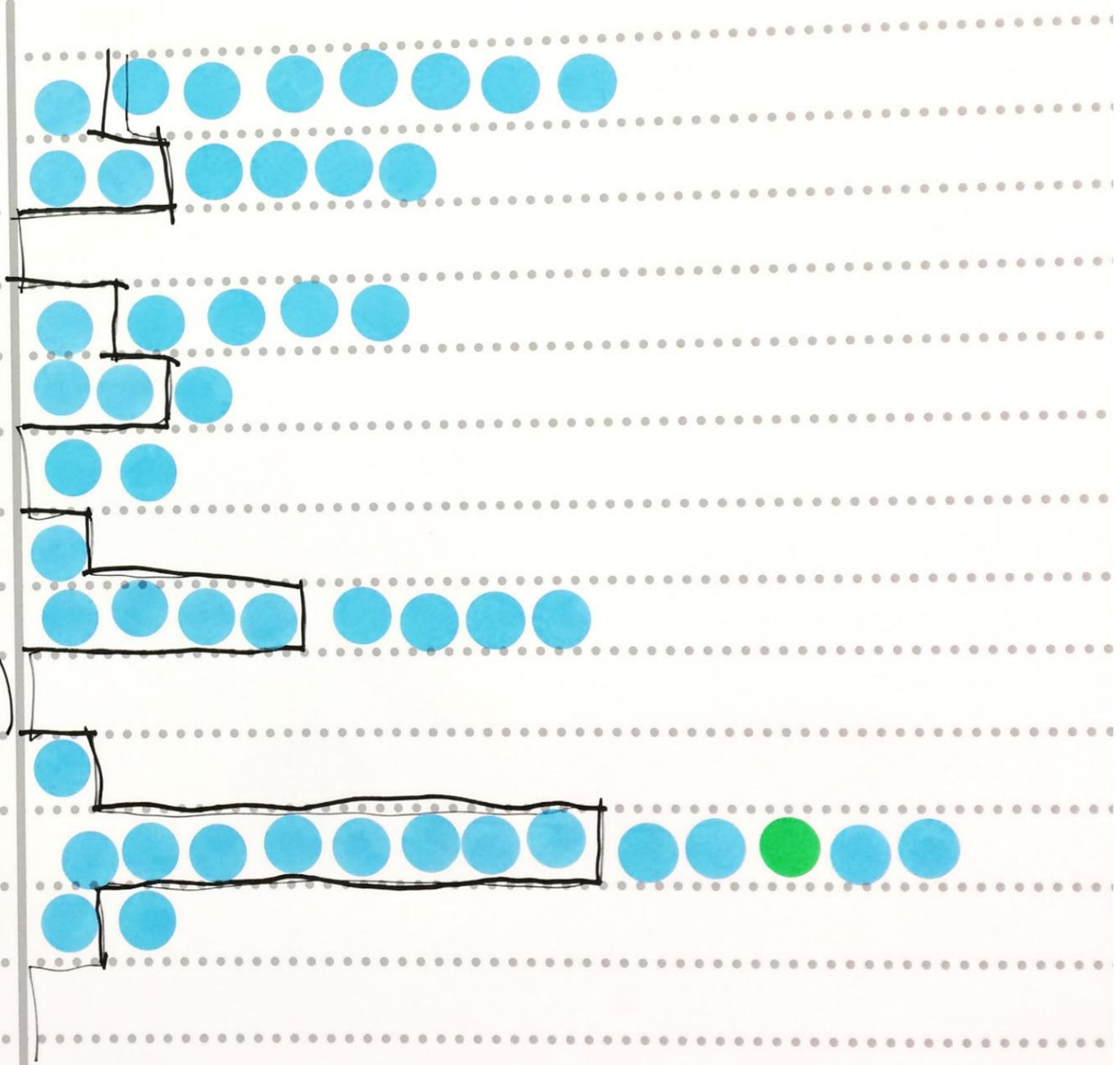
- City Staff (City Manager, Council, Plan Commission, Planning, Public Works, Parks, Engineering, WWTF)
- Riverfront Advisory Committee
- Steamboat Days
- Greater Burlington Partnership
- Downtown Businesses
- Convention & Visitor's Bureau
- Burlington Northern Santa Fe Railroad
- Burlington Short Line
- Friends of the Depot
- Others: Steamboat operators & cruise lines



# What's Your Top 5?

## Riverfront Program Ideas

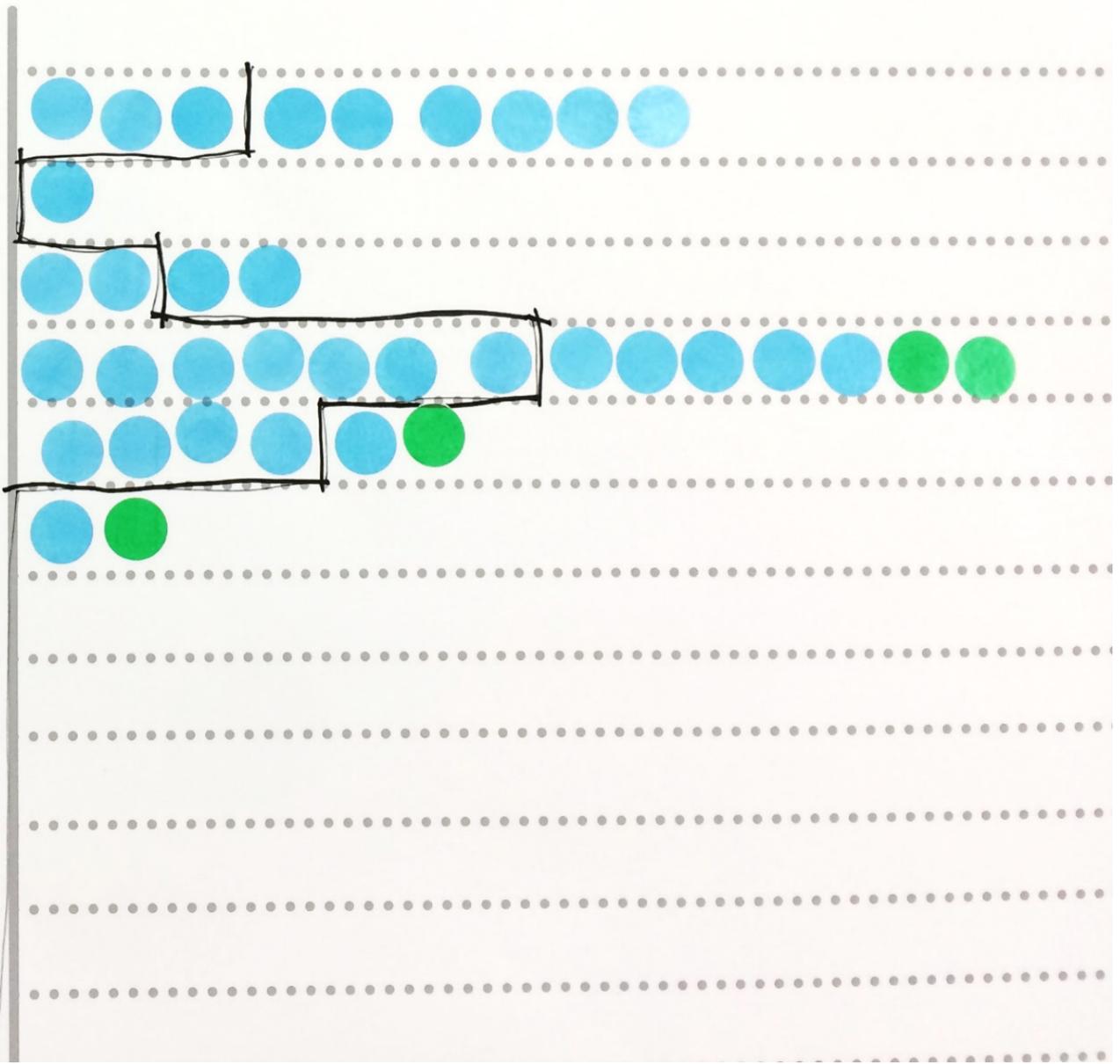
- ICE SKATING
- FLOATING BOARDWALK
- FOUNTAIN (EXISTING)
- INTERACTIVE WATER FEATURE
- SHADE PAVILION
- ADD'L PUBLIC RESTROOMS
- PLAYGROUND
- LAWN
- AMUSEMENT FEATURE (CAROUSEL  
FERRIS WHEEL)
- AMPHI THEATER
- RIVERFRONT TRAIL
- DEDICATED PARKING @ LANDING



# What's Your Top 5?

## Riverfront Program Ideas

- VISITOR BOAT DOCKING
- FISH CLEANING STATION
- AUTO-TRAILER PARKING
- EVENT PLAZA
- PICNIC AREAS
- PUBLIC ART
- OTHER?



# Initial Concept Plan Comments (4/5/16)

Legacy History

## Initial Concept Plan: what do you like, what is missing?

Enhance downtown living

See wall w/ island to avoid driving near center

More green less concrete

Access to water

need to address parking (more residents downtown)

use crowd enclosed space w/ a bar for concert

Motor home Park -

Access to the water

for south launch ramp too steep & need breakwater for protection

inviting to tourist who want to enjoy the riverfront

Commercial Space to draw people

Shade

Historical Feature to link past

Shade way to riverfront

Maintain views to river

Sustainability - Future Maint. costs

need to understand views from Columbia over streets



**SMITHGROUP JJR**  
Veenstra & Kimm

Charrette  
Burlington  
April, 2016

# Design Drivers – “What We Heard”

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## ECONOMIC

- Reduce the **financial impact** of flooding
- Minimize expense of **cleanup effort** after flooding
- Leverage city investment to secure **outside funding**
- Use public infrastructure as catalyst to **attract private investment**
- Ensure **parking needs** are addressed
- Encourage and expand waterfront-related **tourism**
- **Improve Burlington's appeal as a destination** for visitors and residents
- Construct durable, long lasting and **low maintenance** improvements
- **Enhance user experience and programming of the Port and Memorial Auditorium**
- Protect **prior investments** in riverfront improvements and support ongoing local organization initiatives
- Leverage existing grants and local funds to attract **additional funding**

## SOCIAL

- Provide **well-articulated access** along riverfront (open space and trail)
- **Create a riverfront destination** that supports and enhances **daily riverfront use** while also accommodating **larger events**
- Preserve and expand **recreational opportunities** along riverfront (especially boating)
- Enhance the riverfront as a **gateway** to the community
- **Allow for flexibility** and diversity of use along the waterfront
- Improve **connections** between the riverfront, **downtown** and nearby parks

# Design Drivers – “What We Heard”

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## ECOLOGICAL

- Enhance **water quality** from runoff within the downtown and riverfront
- Reduce discharges of **untreated effluent** into river
- Minimize underutilized **impervious areas** along riverfront
- **Add vegetation and green the riverfront**

## HUMAN EXPERIENCE

- Preserve and enhance the **culturally significant buildings** and sites
- Encourage and maintain the community heritage as a **working riverfront**
- Support use of the waterfront by a **broad range** of users
- Enhance **visual connections** between downtown and riverfront
- **Create civic destinations**
- Protect **views** of the river
- Increase the prominence of existing **memorials** along the riverfront
- Improve riverfront **access** for residents and visitors
- Enhance the aesthetics and **appeal** of the riverfront
- **Embrace change** and be proactive in decision making to guide the future of the community

# Design Program: Riverwalk & Trail



# Design Program : Riverwalk Overlooks



# Design Program : Lawn & Landscaping



# Design Program: Shade Structures



# Design Program: River and Boating Access



# Design Program: Smaller Event Lawn/Space



# Design Program: Interactive Water Feature



# Design Program: Skating Rink



# Alternative Riverfront Concepts

## 1. Riverwalk

Linear green space with a strong trail connection



## 2. Grand Green

Large central lawn flanked by event plaza space



## 3. Multiple Rooms

Series of spaces and with interactive focal feature

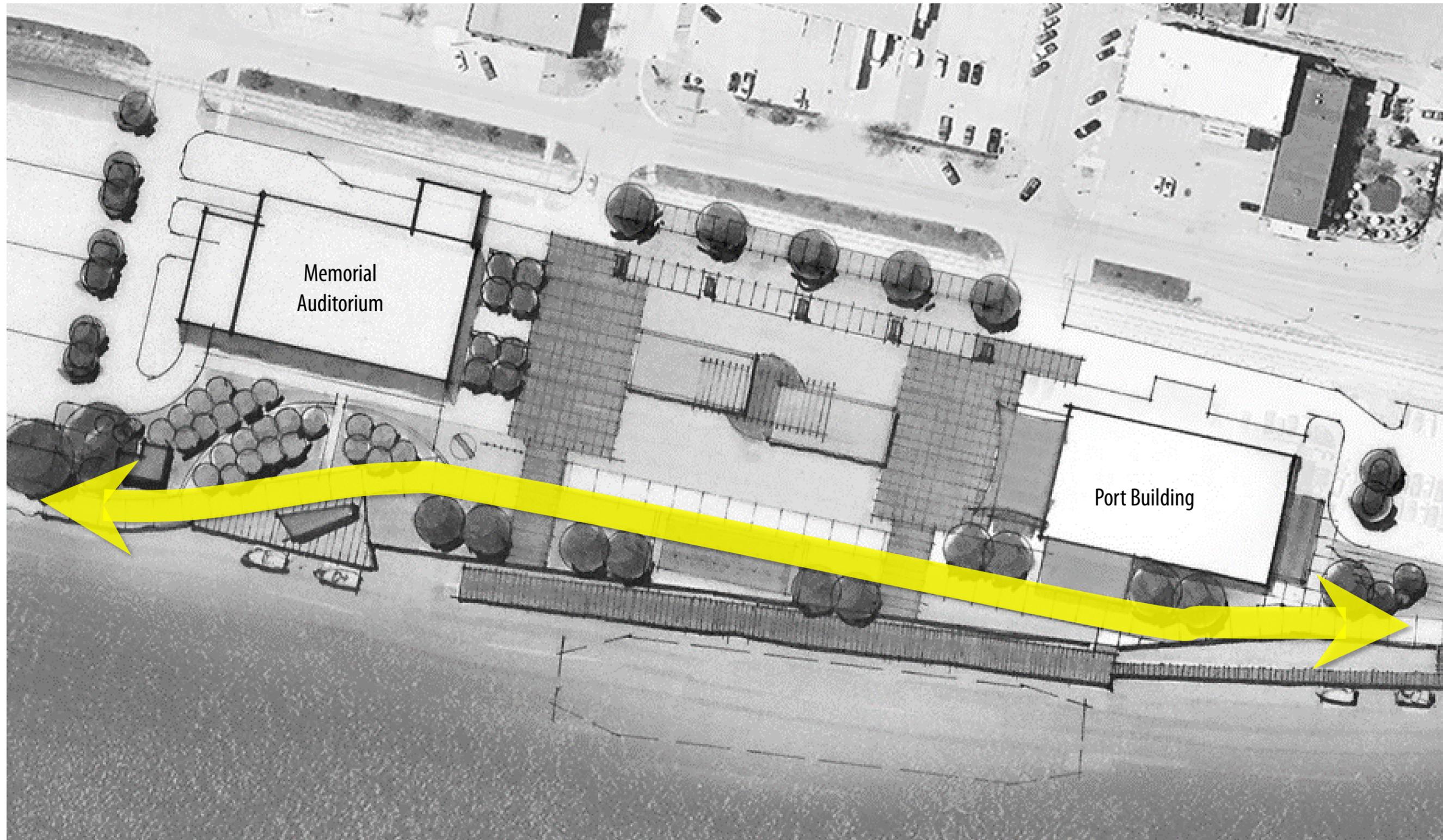


# Draft Consensus Plan (April)



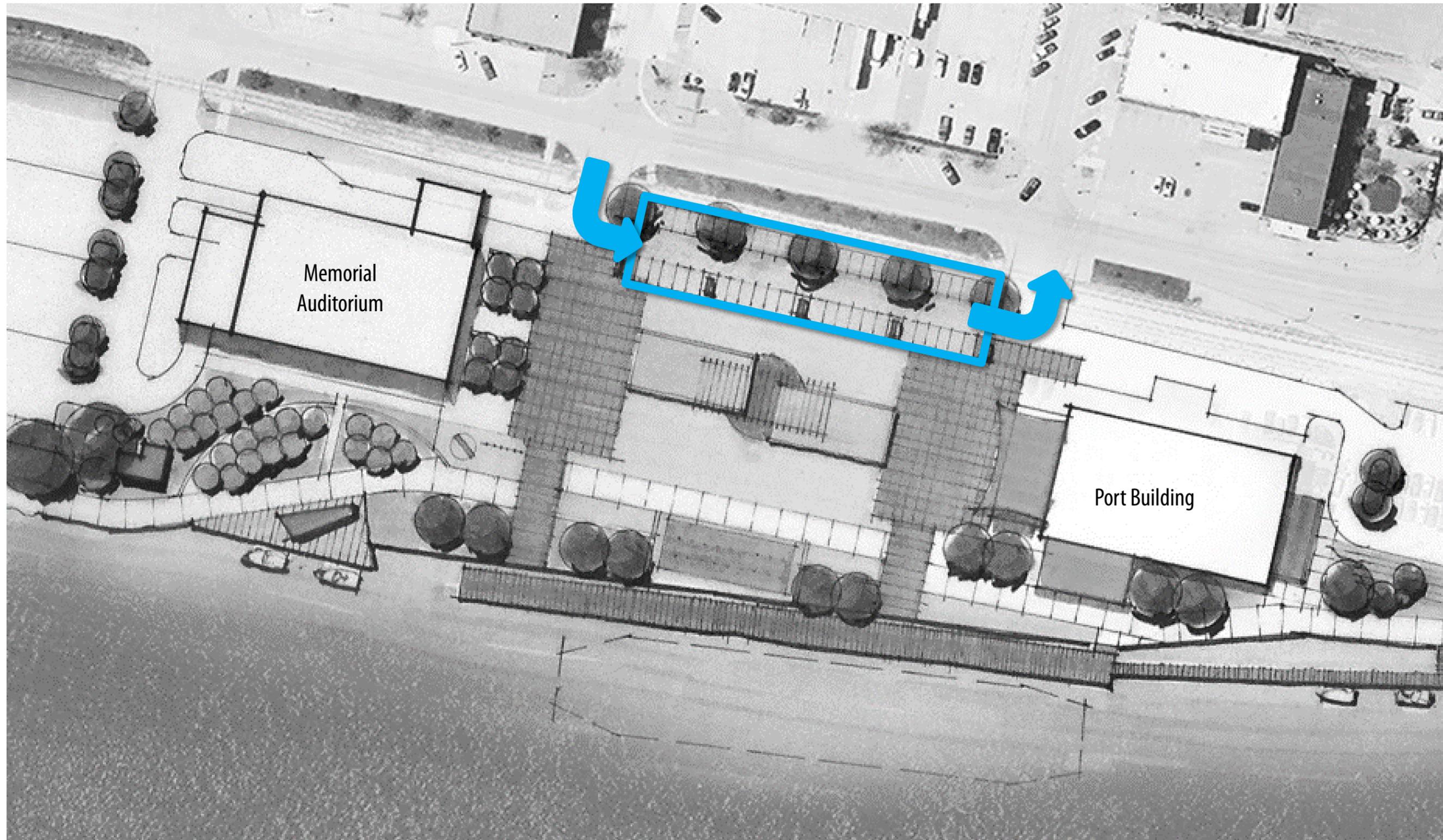
# Draft Consensus Plan (April)

Create a strong trail connection



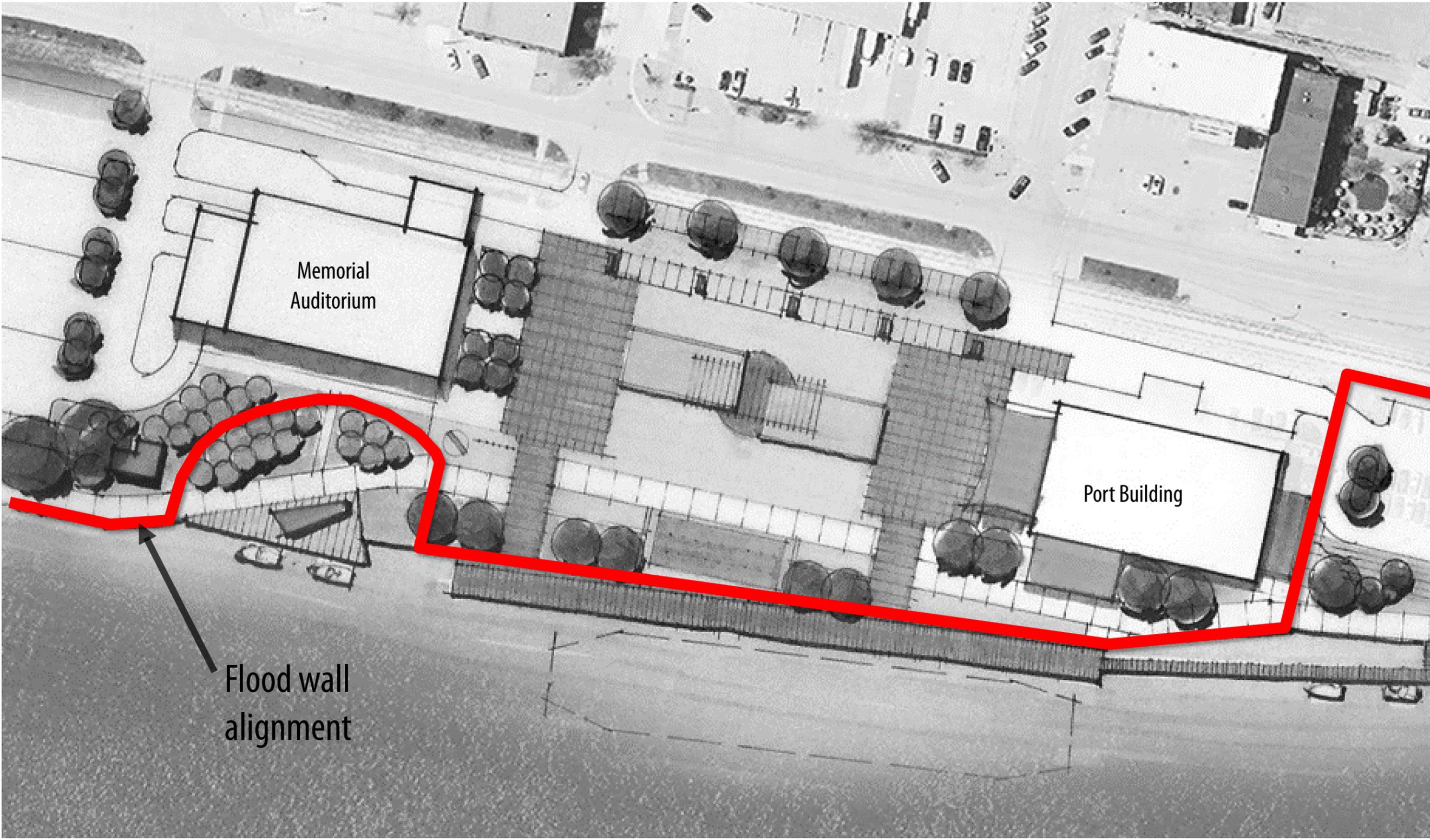
# Draft Consensus Plan (April)

Maintain parking and vehicular circulation through space



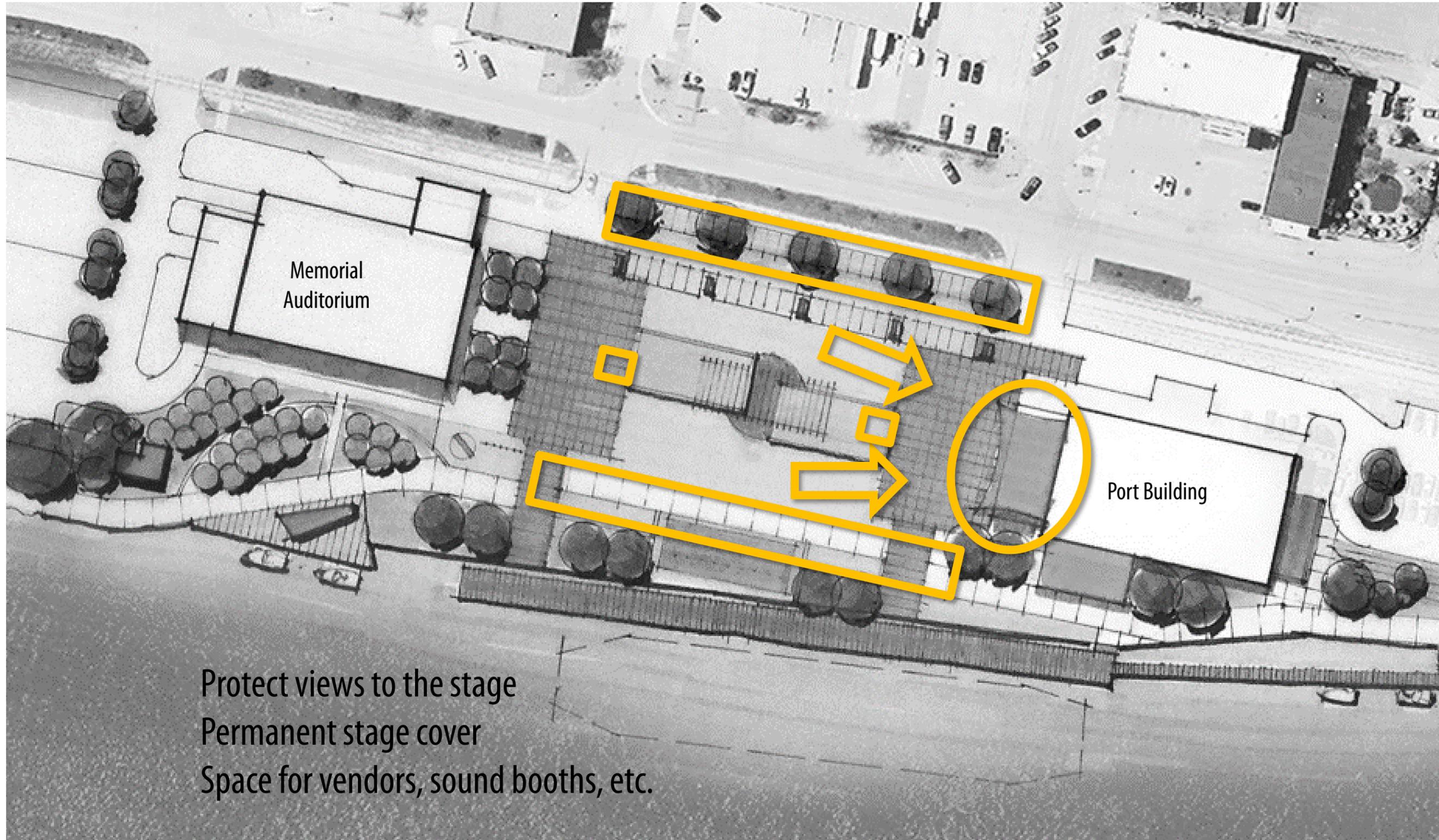
# Draft Consensus Plan (April)

Maximize use of space during a flood event



# Draft Consensus Plan (April)

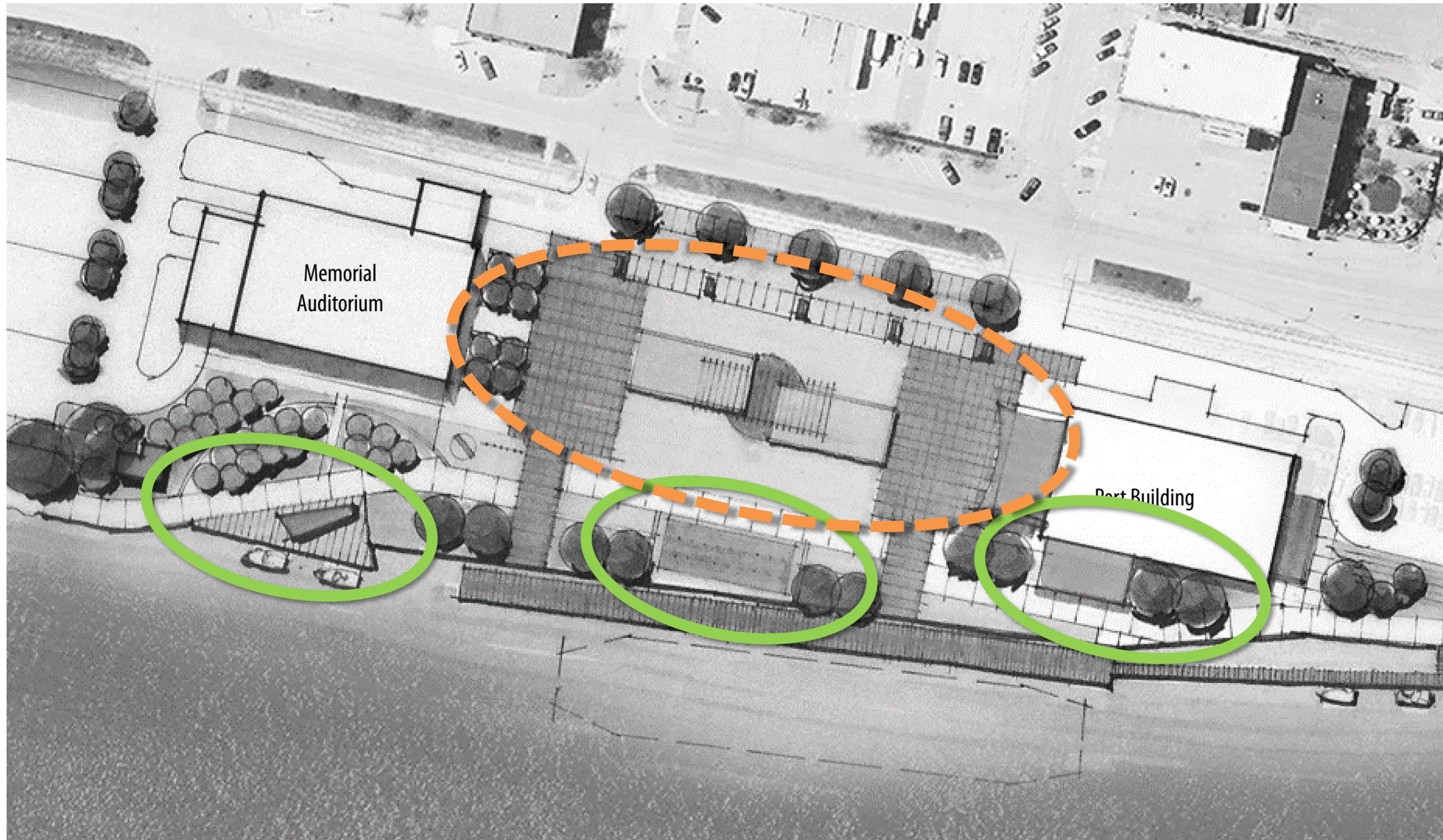
## Accommodate & enhance Steamboat Days



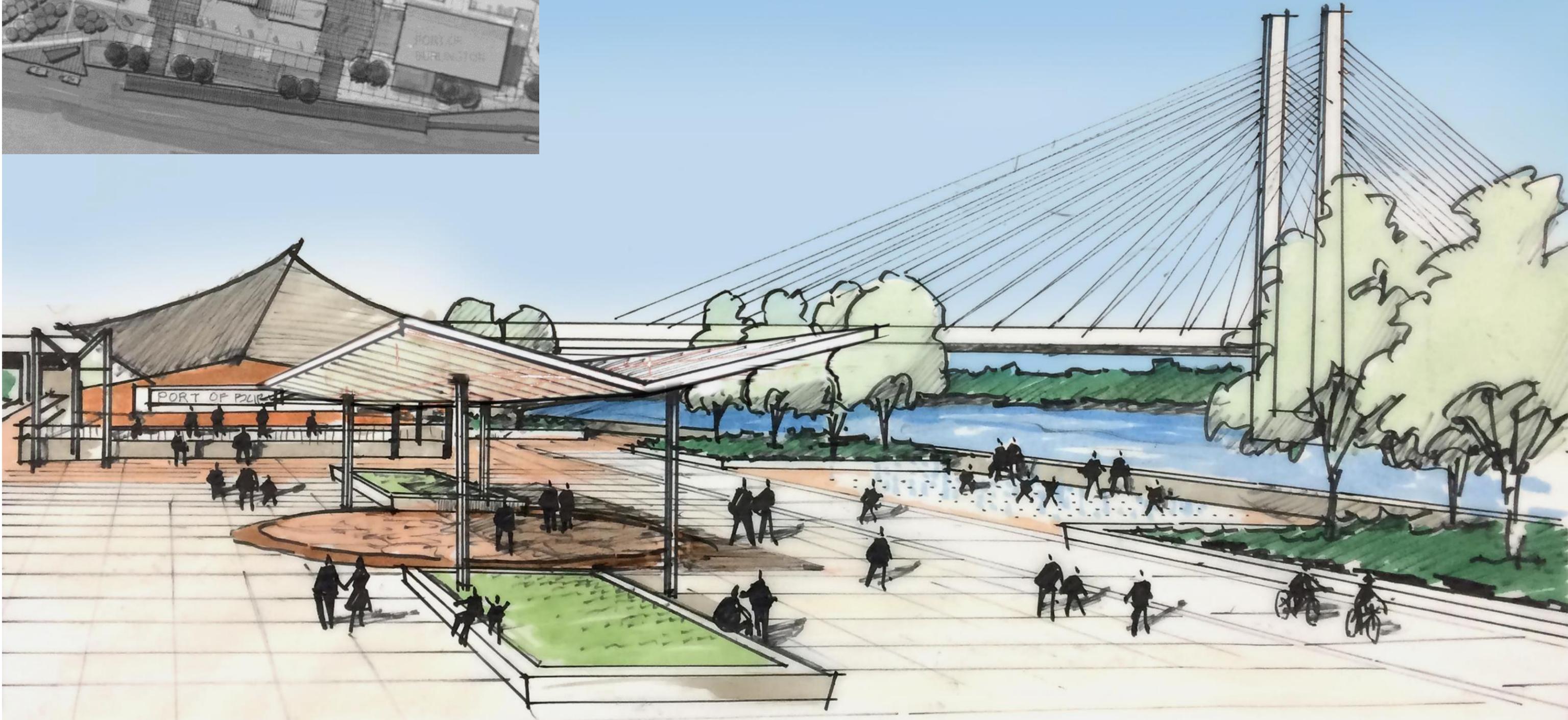
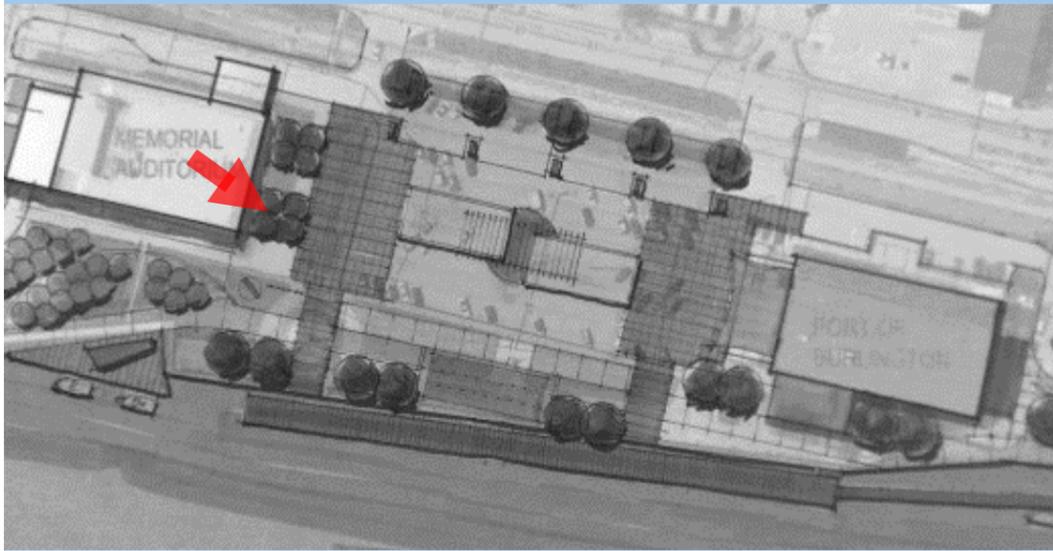
Protect views to the stage  
Permanent stage cover  
Space for vendors, sound booths, etc.

# Draft Consensus Plan (April)

Activate the waterfront through creation of gathering spaces



# Draft Consensus Plan (April)



# Draft Consensus Plan (April) - Refinements



## Large Annual Event vs. Smaller Daily Use

- **Scale** of pavement vs. lawn
- Larger green / **usable lawn space**
- **Hierarchy & definition** of spaces

## Riverwalk Location & Experience

- At edge
- **Continuity** of edge experience
- Flood wall access

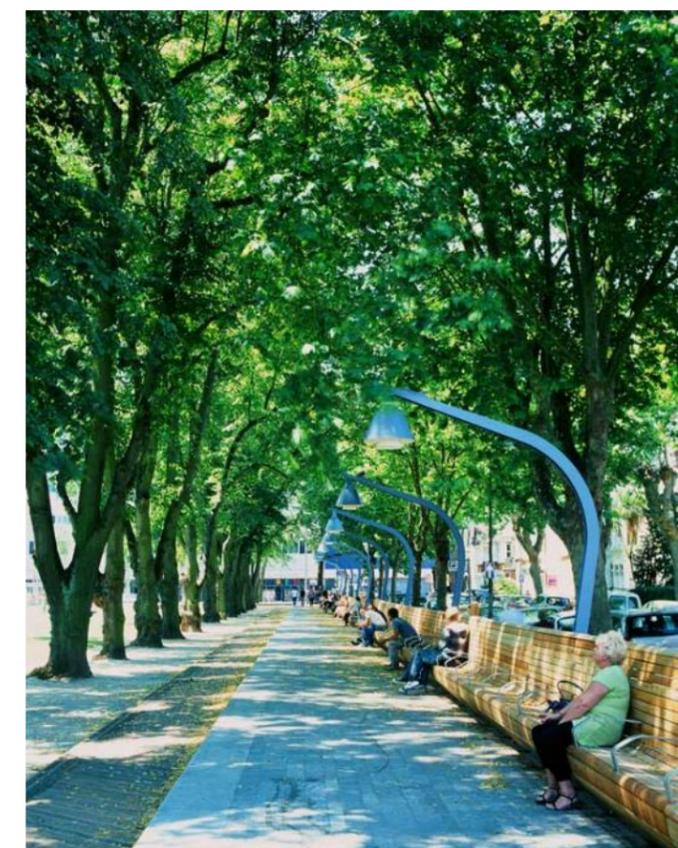
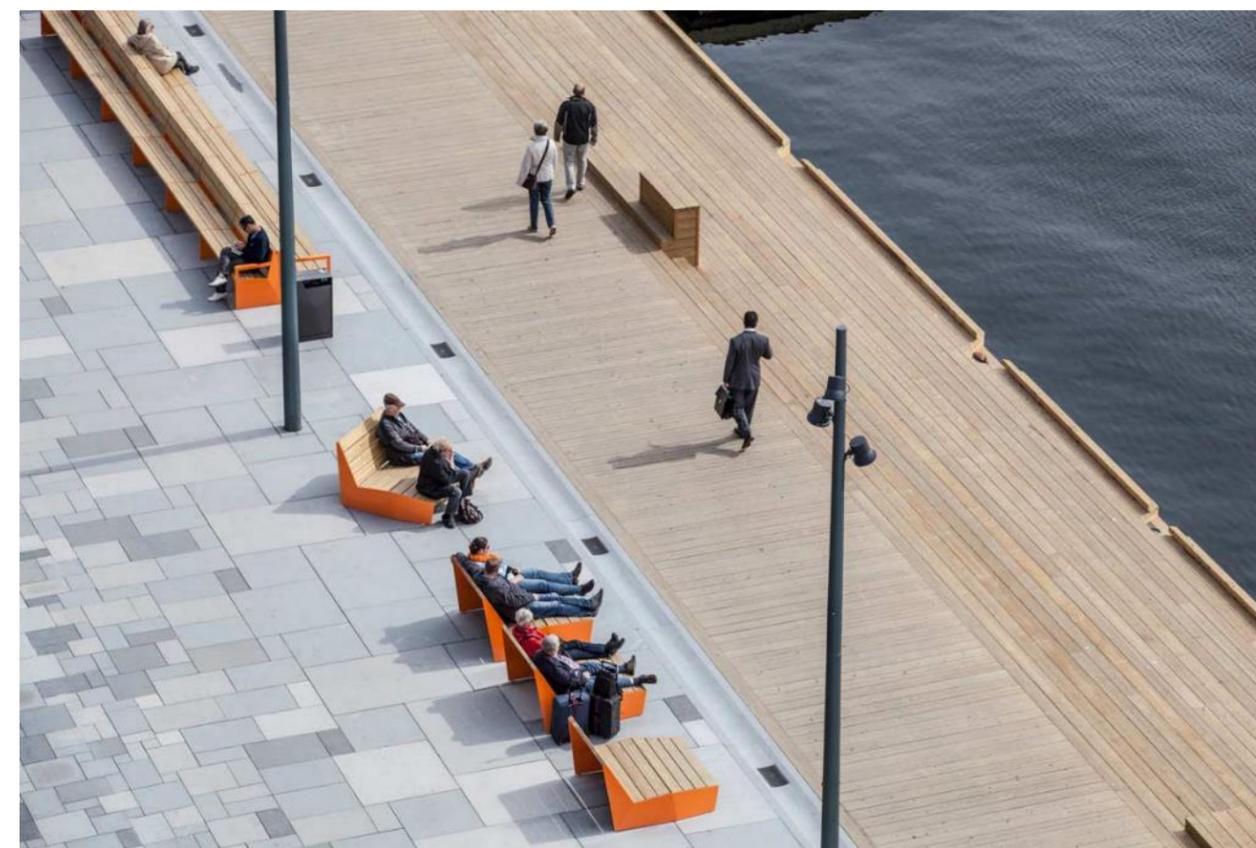
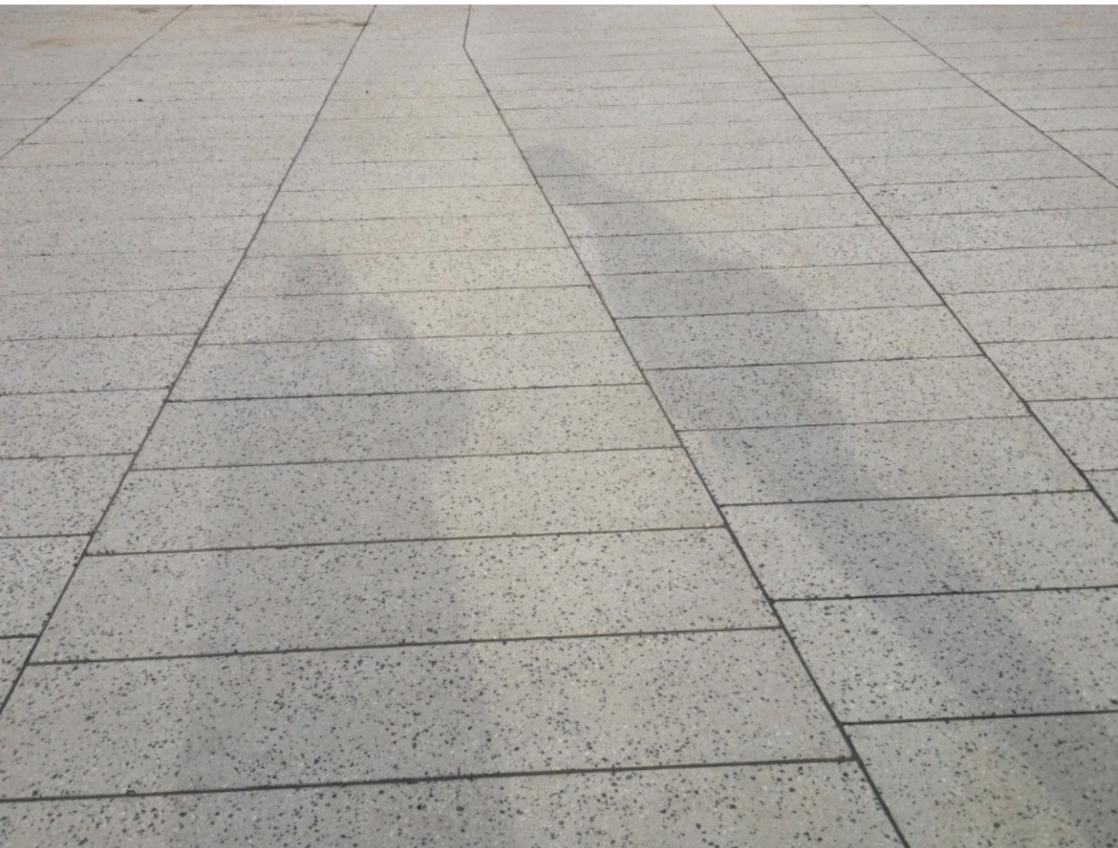
## Splash Pad | Water Feature

- **Centralized location** or being away from edge (scary)
- More visible & **prominent**

## Memorial Auditorium

- **Better utilize space** between short line rail and building (angle parking, expanded sidewalk, better landscaping)
- Consider **drop-off at entrance** that can be a plaza space

# Refined Consensus Plan – Design Inspiration



# Refined Consensus Plan – Design Inspiration



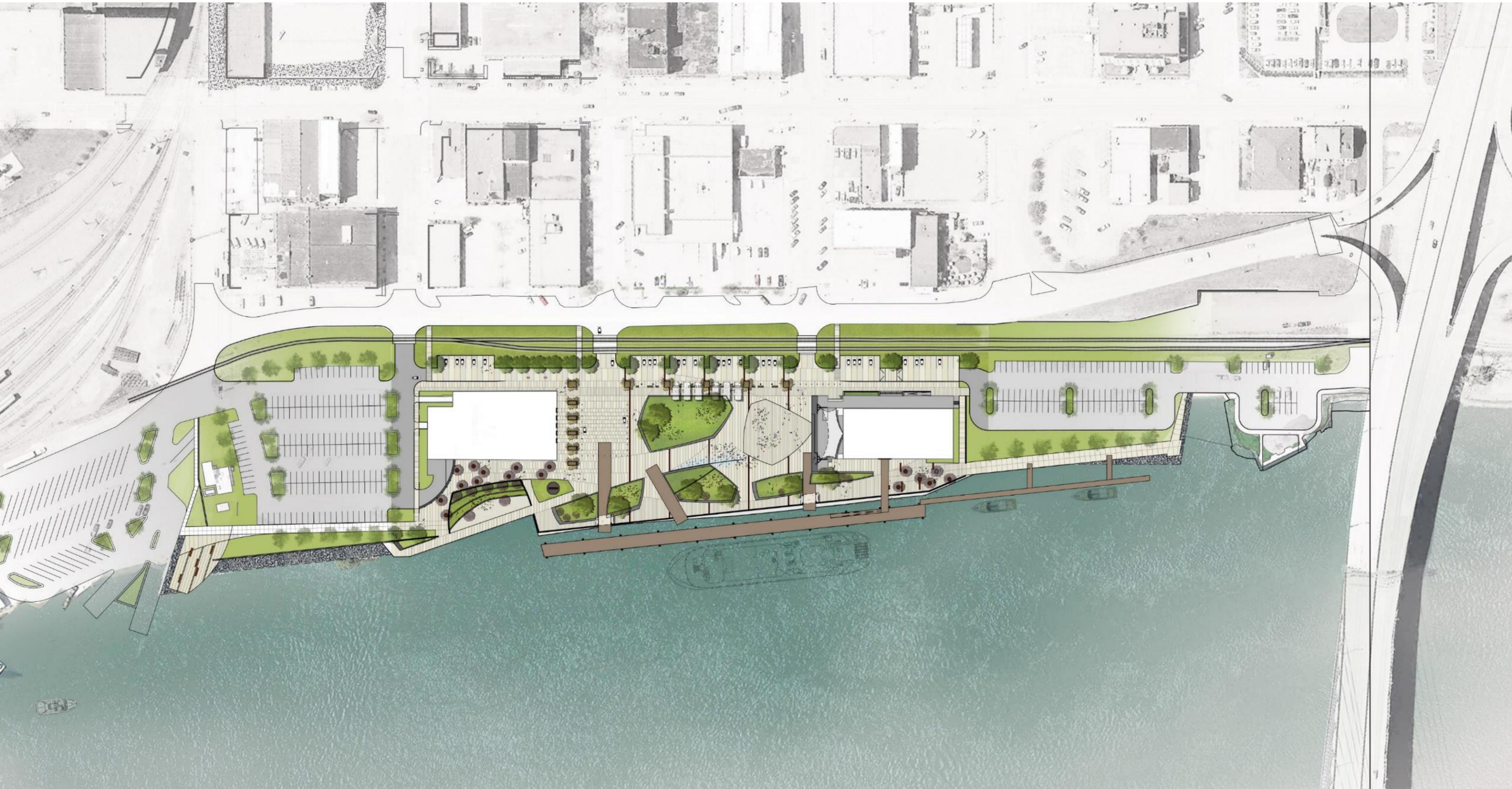
# Refined Consensus Plan – Design Inspiration



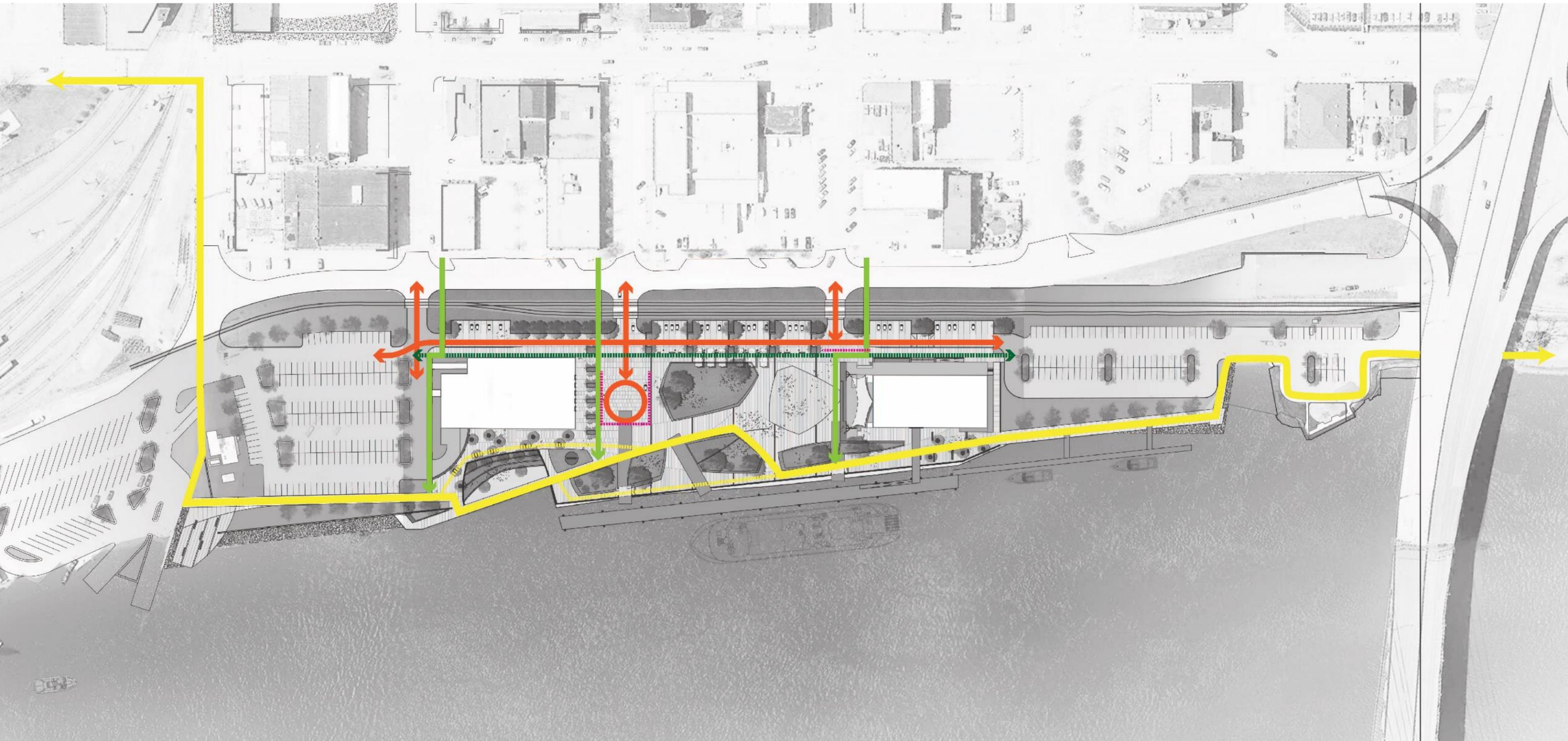
# Refined Consensus Plan – Design Inspiration



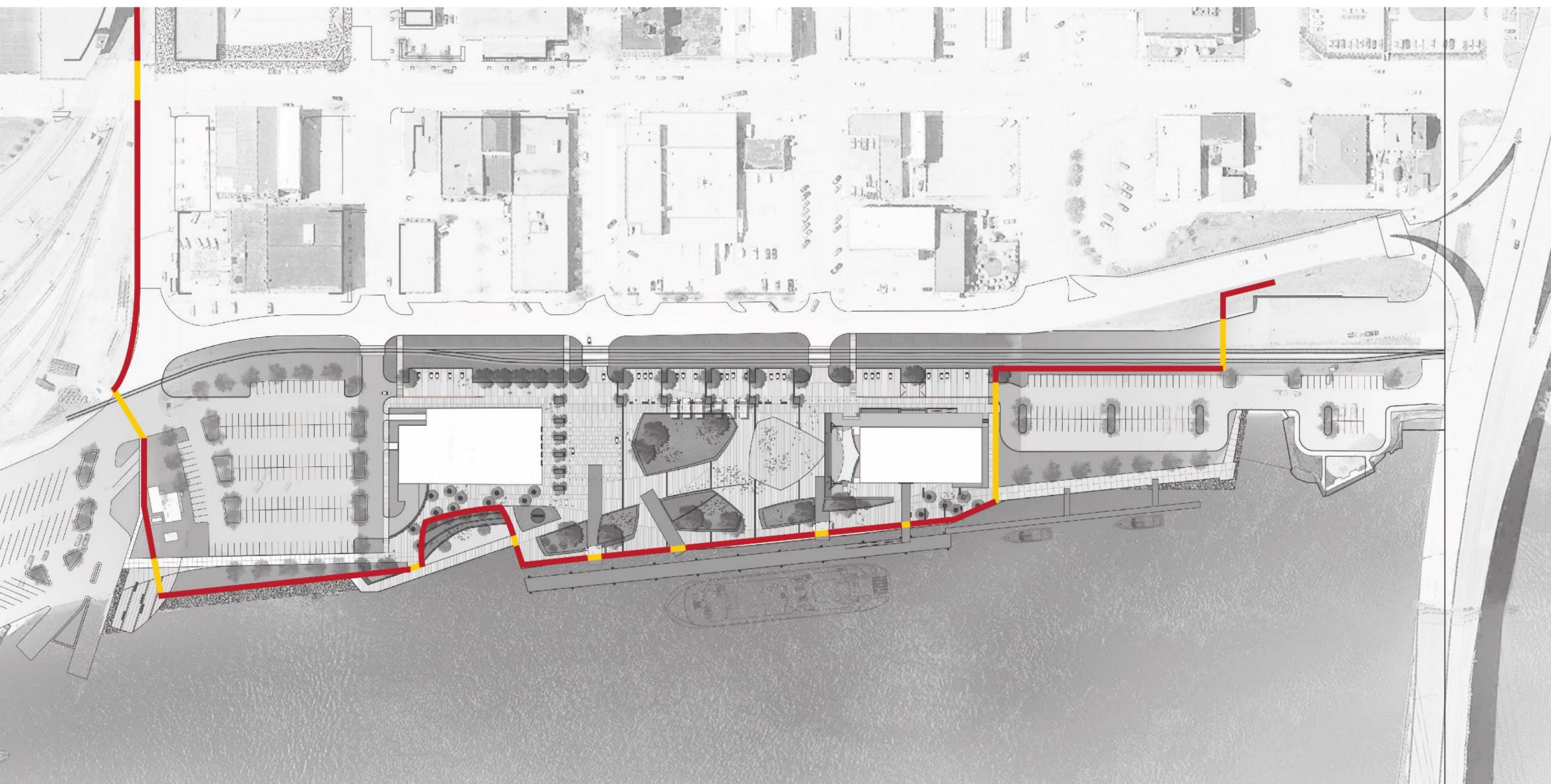
# Refined Consensus Plan



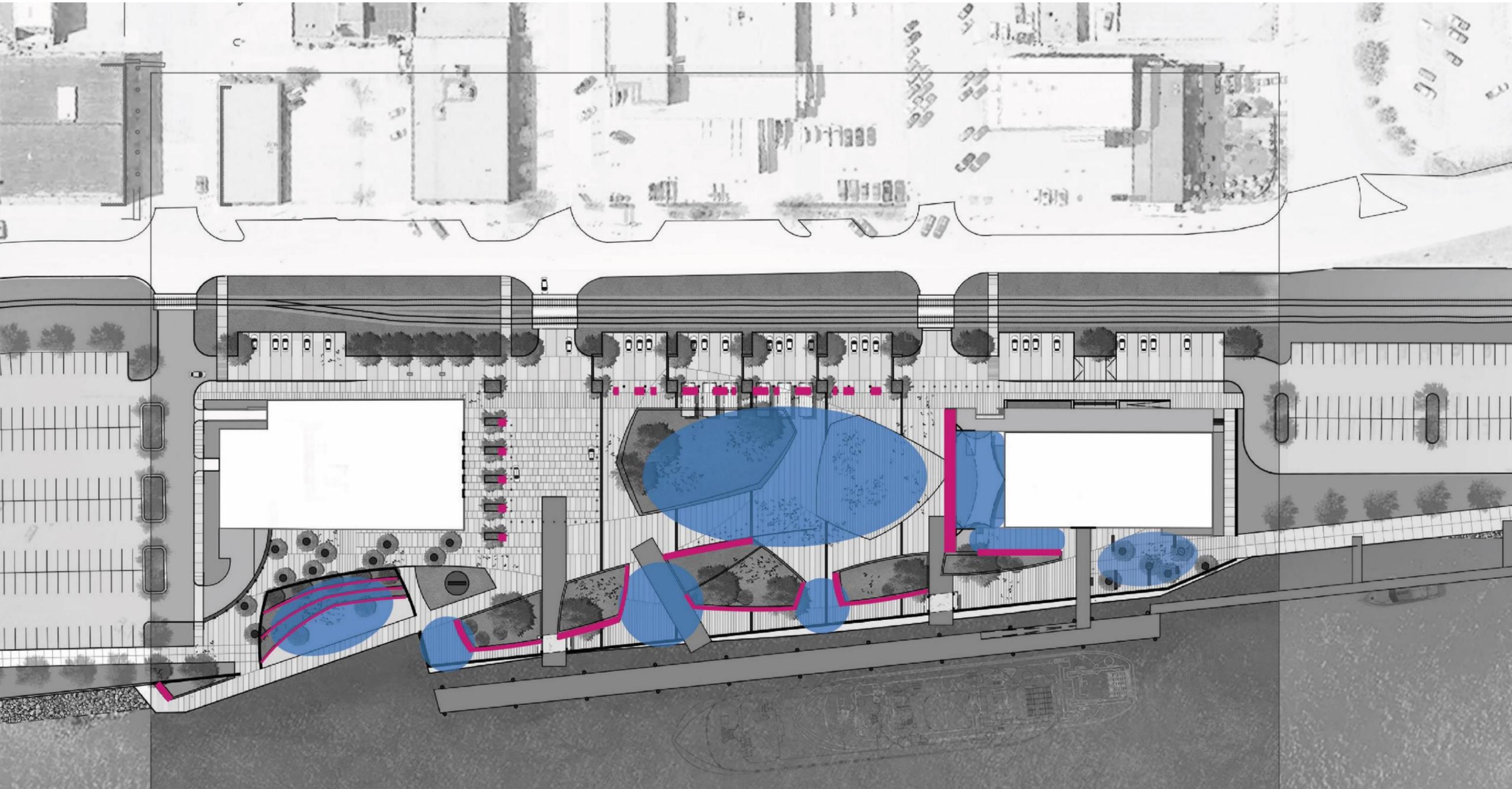
# Refined Consensus Plan - Circulation



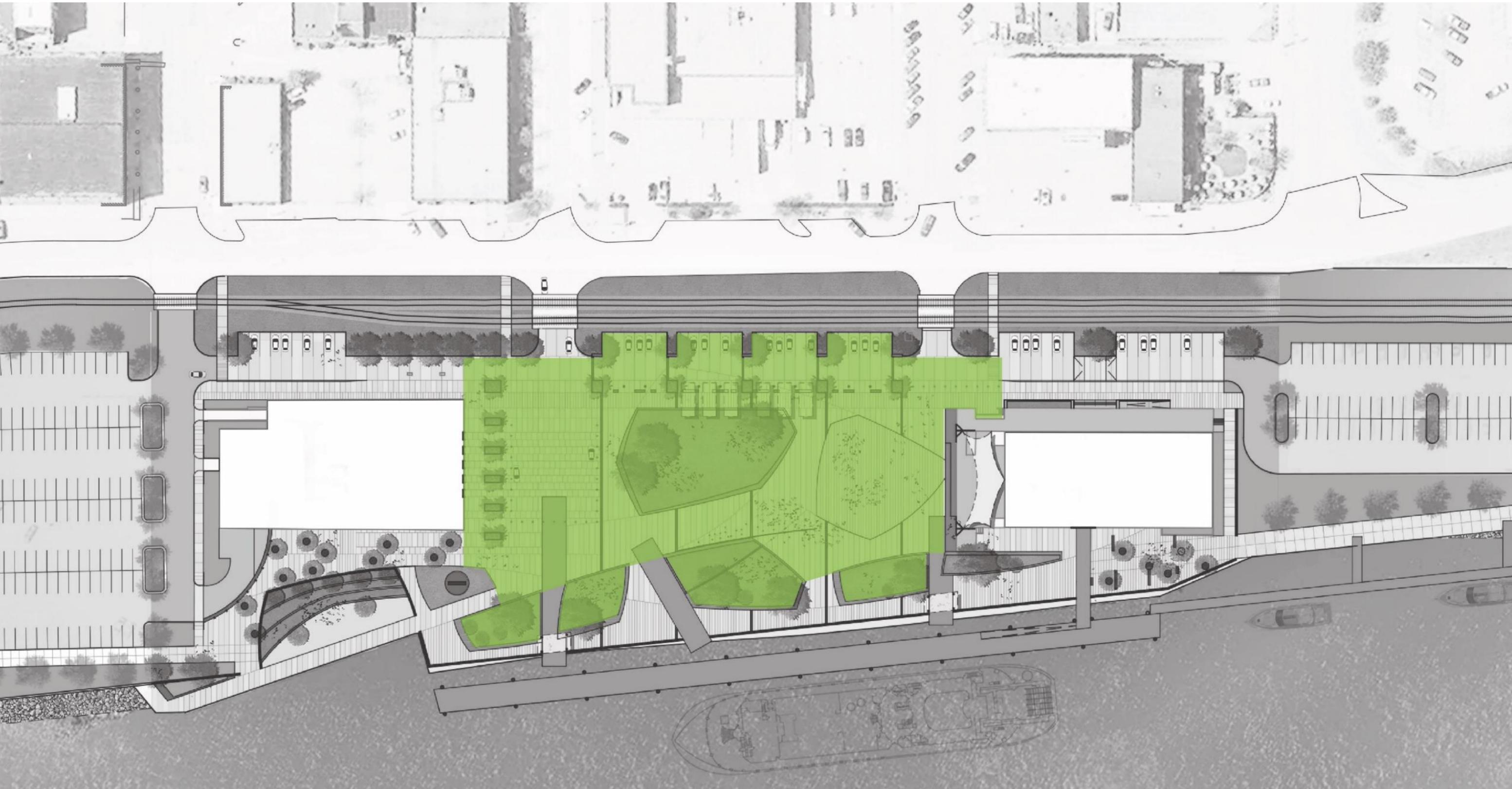
# Refined Consensus Plan – Flood Wall Alignment



# Refined Consensus Plan – Gathering Nodes



# Refined Consensus Plan – Event Space



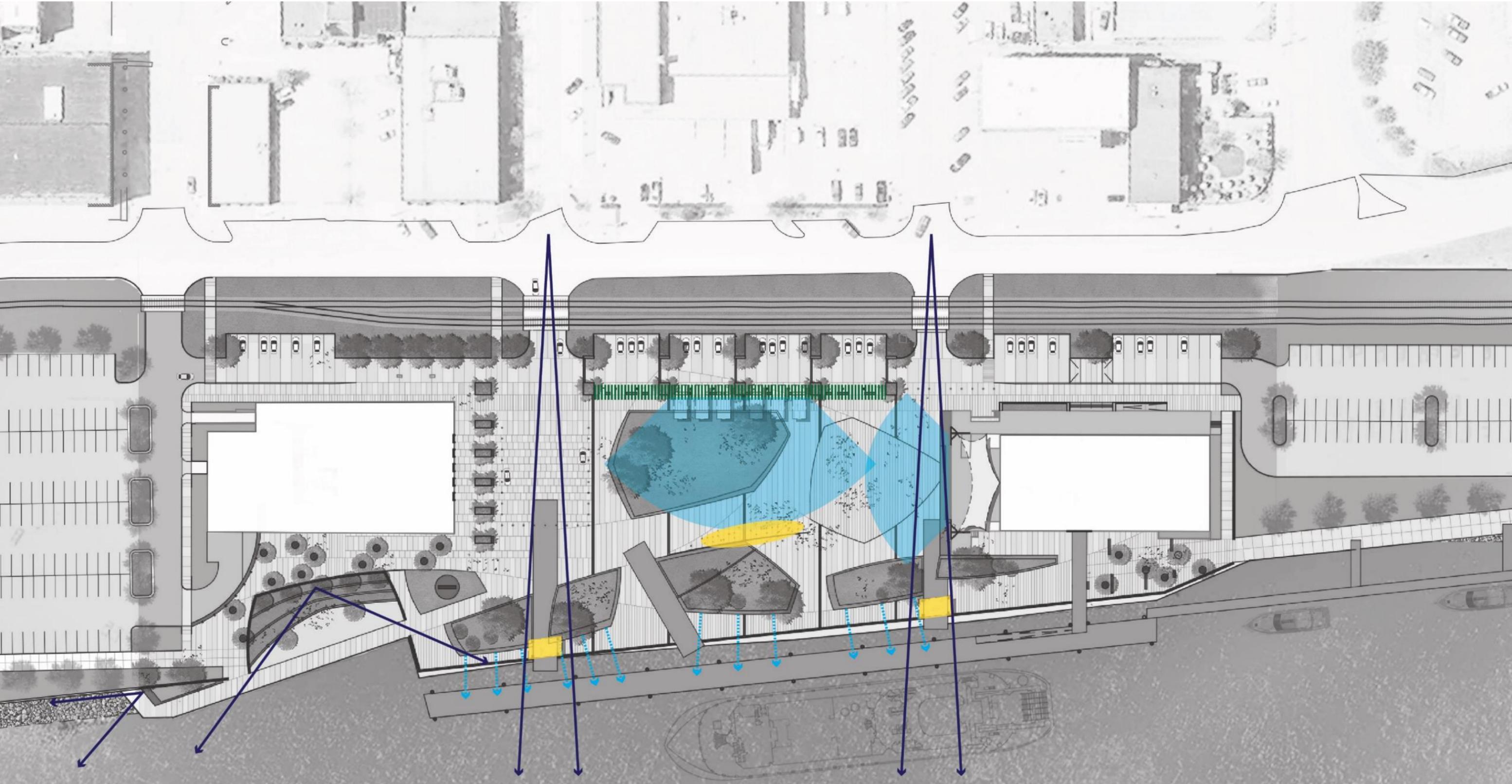
# Refined Consensus Plan – Steamboat Days



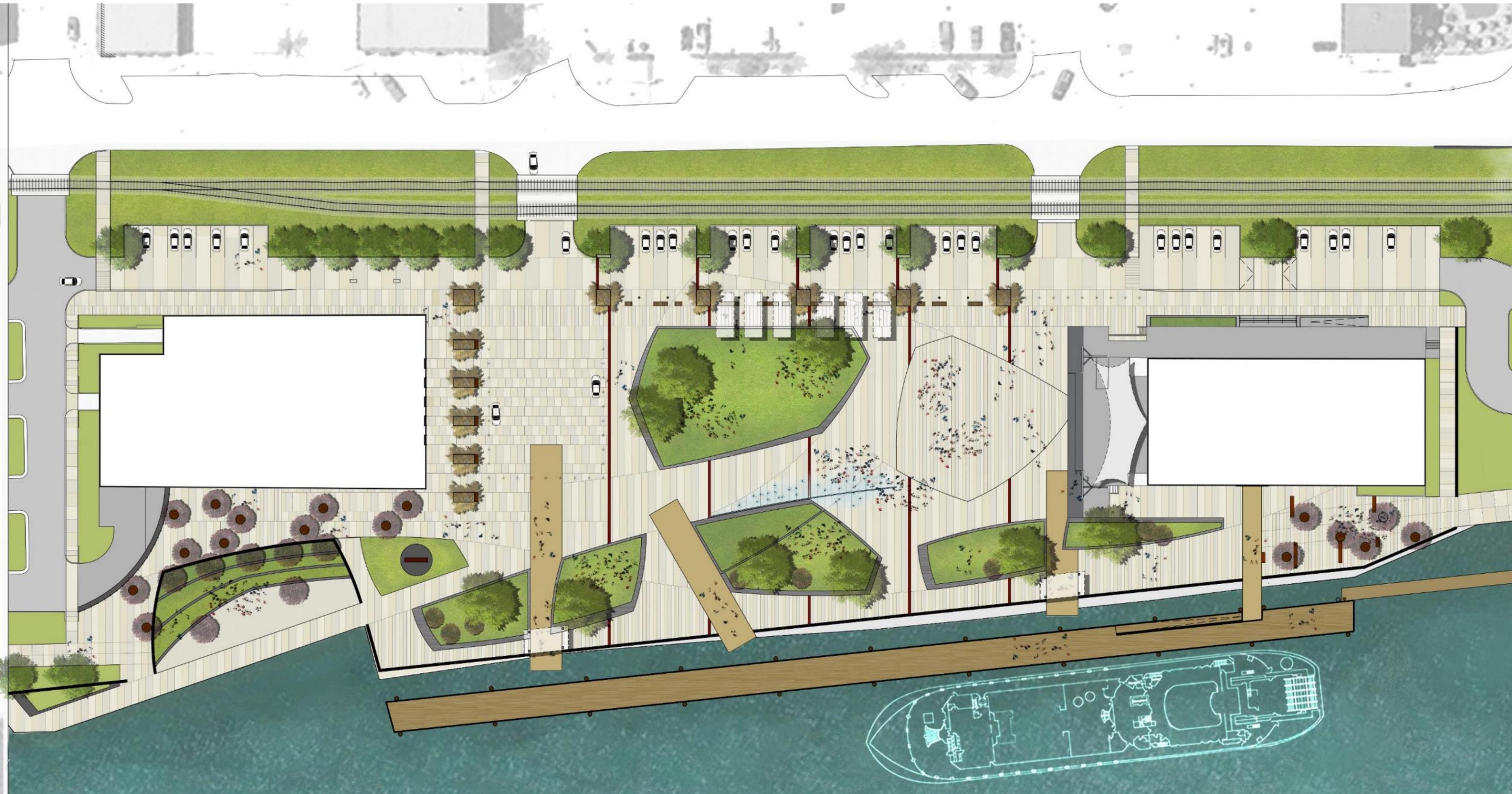
# Refined Consensus Plan – Vertical Elements



# Refined Consensus Plan – Views & Focal Elements



# Refined Consensus Plan



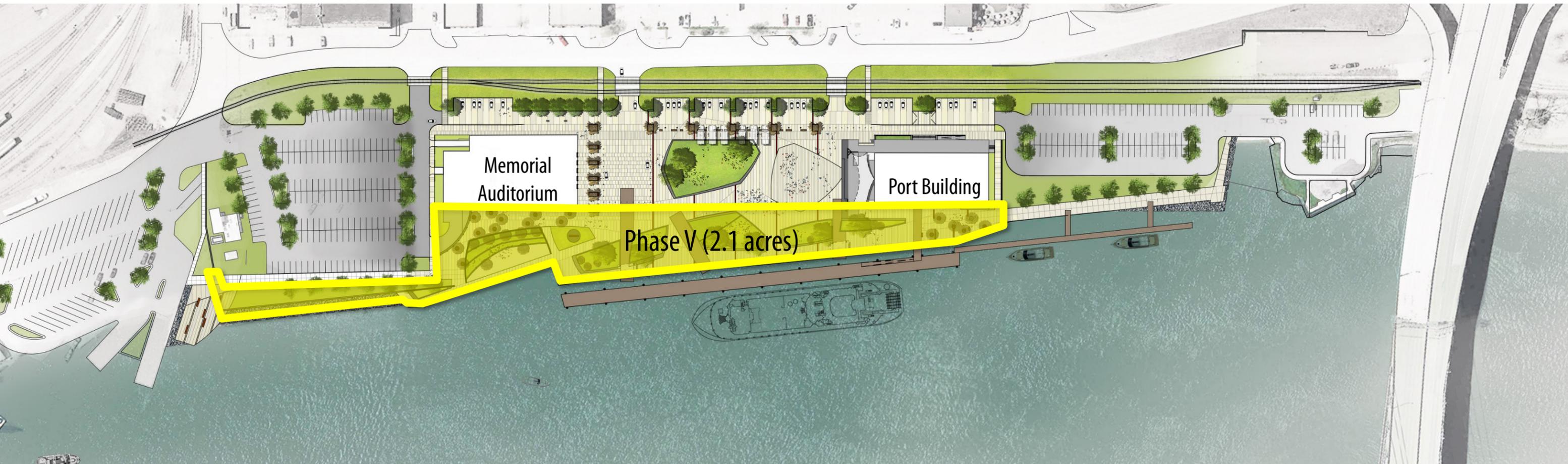
# Phase V Scope

## Budgeted Scope: \$850,000

- Pavements
- Landscape, lawn, trees
- Lighting
- Benches/furnishings

## Excludes:

- Splash play feature
- Overhead/shade structures
- Overlooks



# Next Steps

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Steering Committee Meeting Tomorrow (5/18/16)

Steering Committee Mid-June

Common Council 6/20/16

Fall: plans and specifications - Phase V

Winter: approvals and bidding - Phase V

Construction starts: July, 2017

**Questions or Comments?**

