

Design and Environmental Study For



ARLINGTON AVENUE BRIDGES

REPLACEMENT

Public Meeting #2 | August 2022

Purpose of This Presentation

- ✓ Project Purpose and Need
- ✓ We need your input!
 - ✓ Build-A-Bridge
 - ✓ Take our Survey
- ✓ What are the impacts?
- ✓ History and Background
- ✓ Landscape, Aesthetics, and Design Updates
- ✓ Environmental/Permitting Requirements
- ✓ Project Timeline and Next Steps



Purpose and Need

Agreed upon with FHWA, NDOT, and City of Reno

Vetted with Reno City Council, TAC, SWG, and the Public

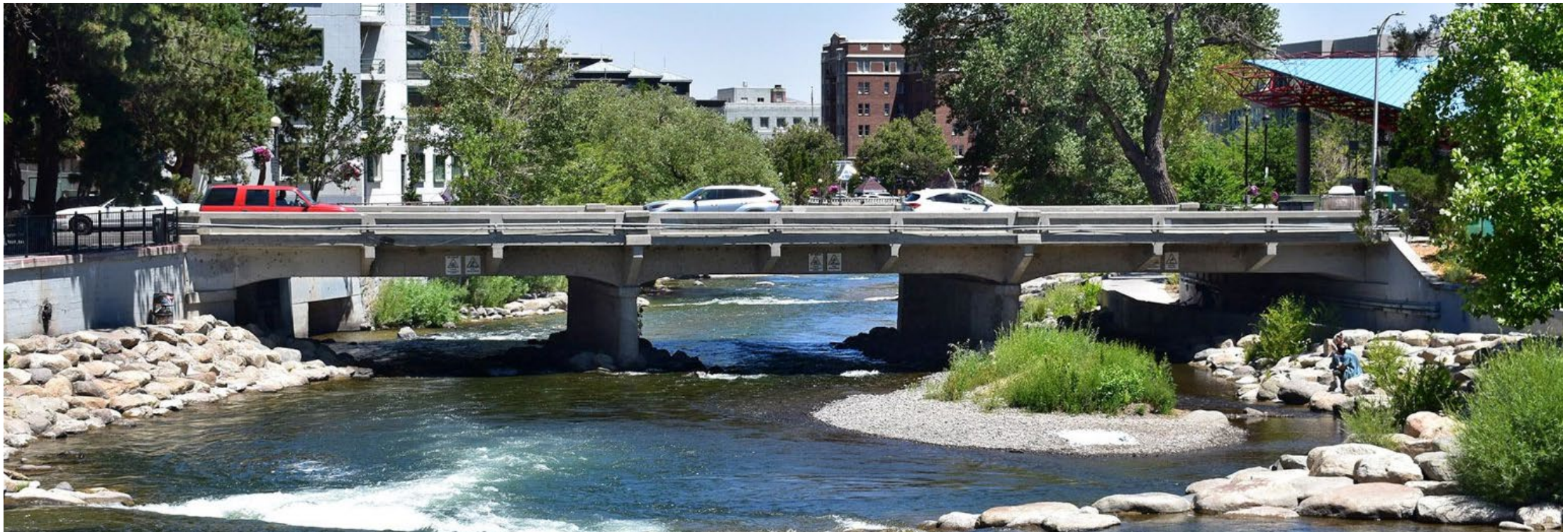
- ▶ Address structurally deficient bridges
- ▶ Preserve the hydraulic capacity of the Truckee River
- ▶ Provide safe and ADA compliant multimodal improvements
- ▶ Respond to adopted regional and community plans



We Need your Input!

Build-A-Bridge Aesthetic choices shown together in a photo simulation

- ▶ Bridge Railing, Pedestrian Lighting Fixtures, Pylon Geometrics
- ▶ Take our Survey - ArlingtonBridges.com



Landscape and Aesthetics- Railing



Option 1:
TX DOT Concrete Railing



Option 2:
Metal Railing



Option 3:
Concrete Railing with
Metal Railing at Overlook

Landscape and Aesthetics- Railing



Option 1 - Texas DOT Concrete Bridge Railing

Landscape and Aesthetics- Railing



Option 2 - Metal Bridge Rail with Metal Pedestrian Fence

Landscape and Aesthetics- Railing



Option 3 - Concrete Bridge Rail with Metal Overlook Fence

Landscape and Aesthetics- Lighting



Option 1 - Pole with LED Post-Top Luminaire



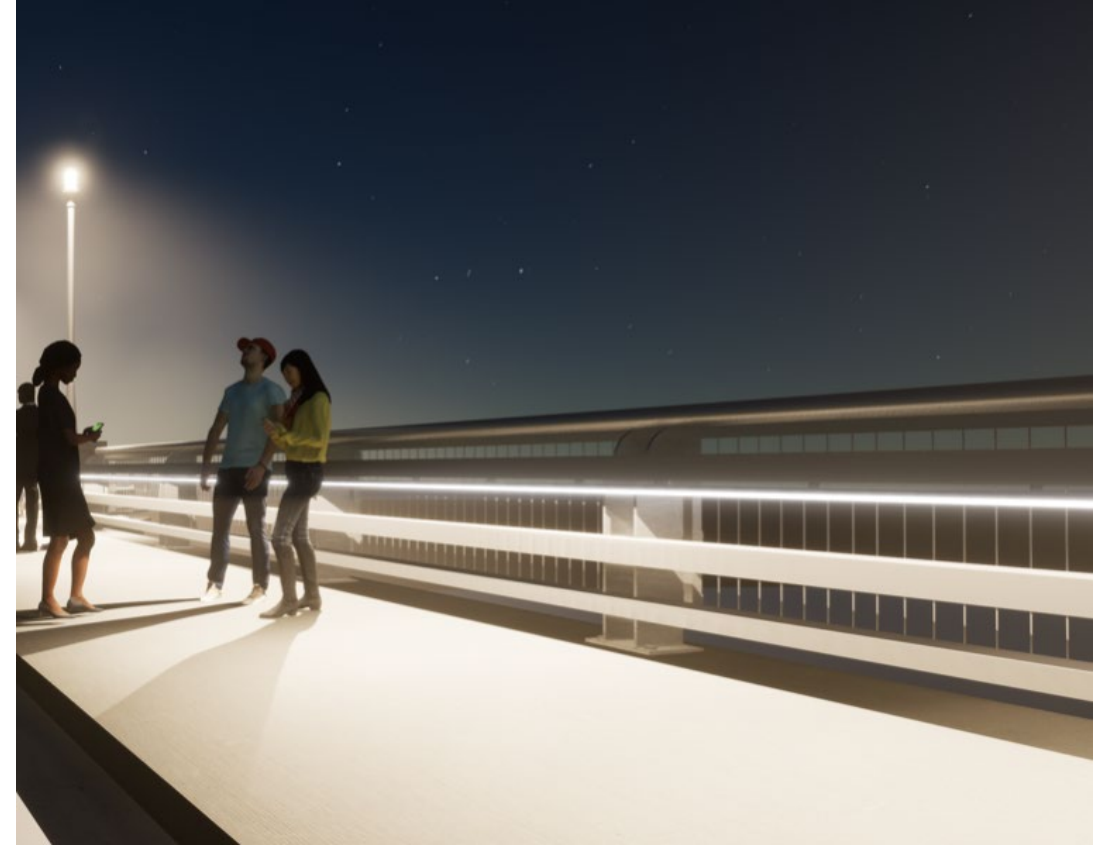
Option 2 - Custom Light Column with Bridge Rail Motif

Landscape and Aesthetics

Accent Lighting



Bridge Rail Option 1
Concrete Bridge Rail with
Under Top Rail Lighting



Bridge Rail Option 2
Metal Bridge Rail/Metal Pedestrian
Fence with Under Top Rail Lighting

Landscape and Aesthetics- Pylon



Group A: Tall End Pylon
(3'-4" W x 2'-0"D x 5.0' H)



Group B: Short End Pylon
(3'-8" W x 2'-6"D x 4'-6"H)



Group C: Mid-Size End Pylon
(3'-6" W x 2'-0"D x 5'-10" H)



Landscape and Aesthetics- Example

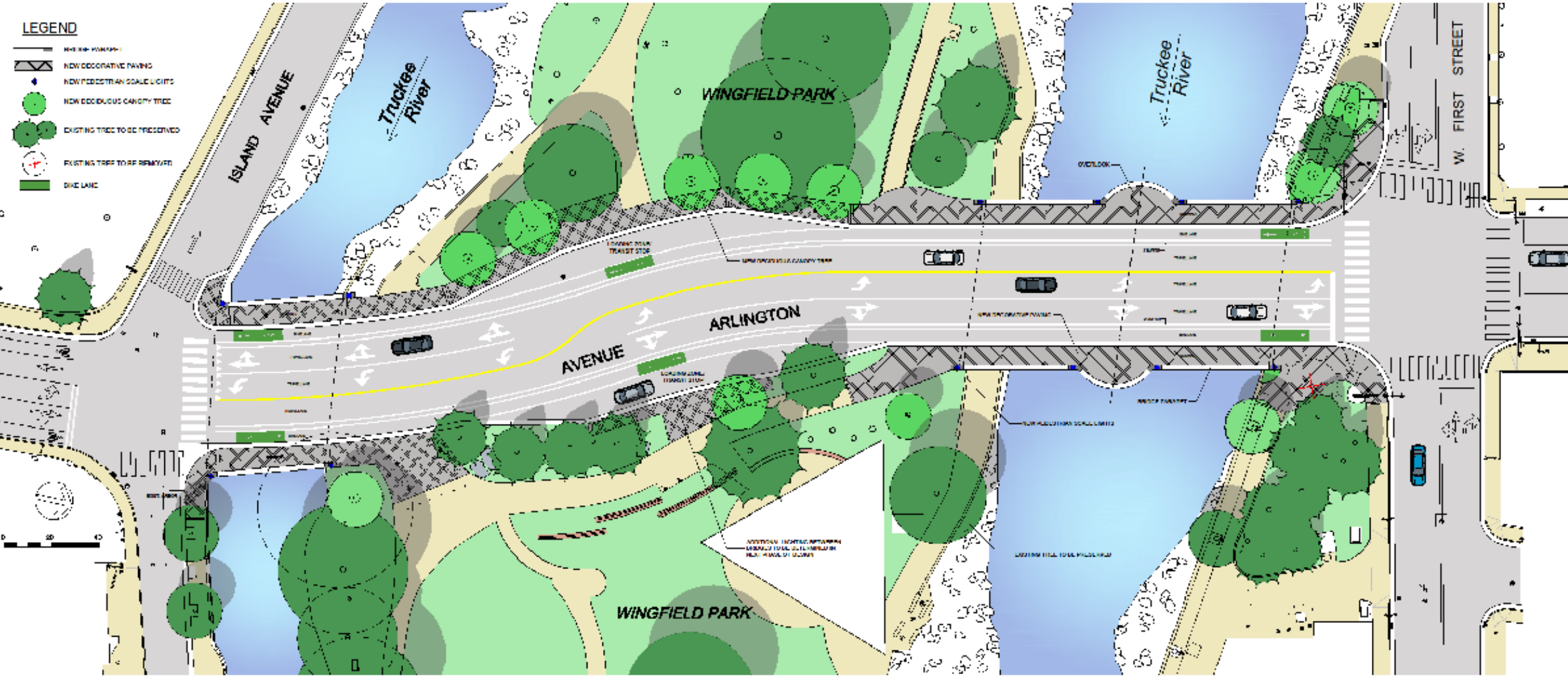


Pier and Abutment Wall Texture



Pier and Abutment Wall Texture Coordinated with Railing Motif

Streetscape Elements

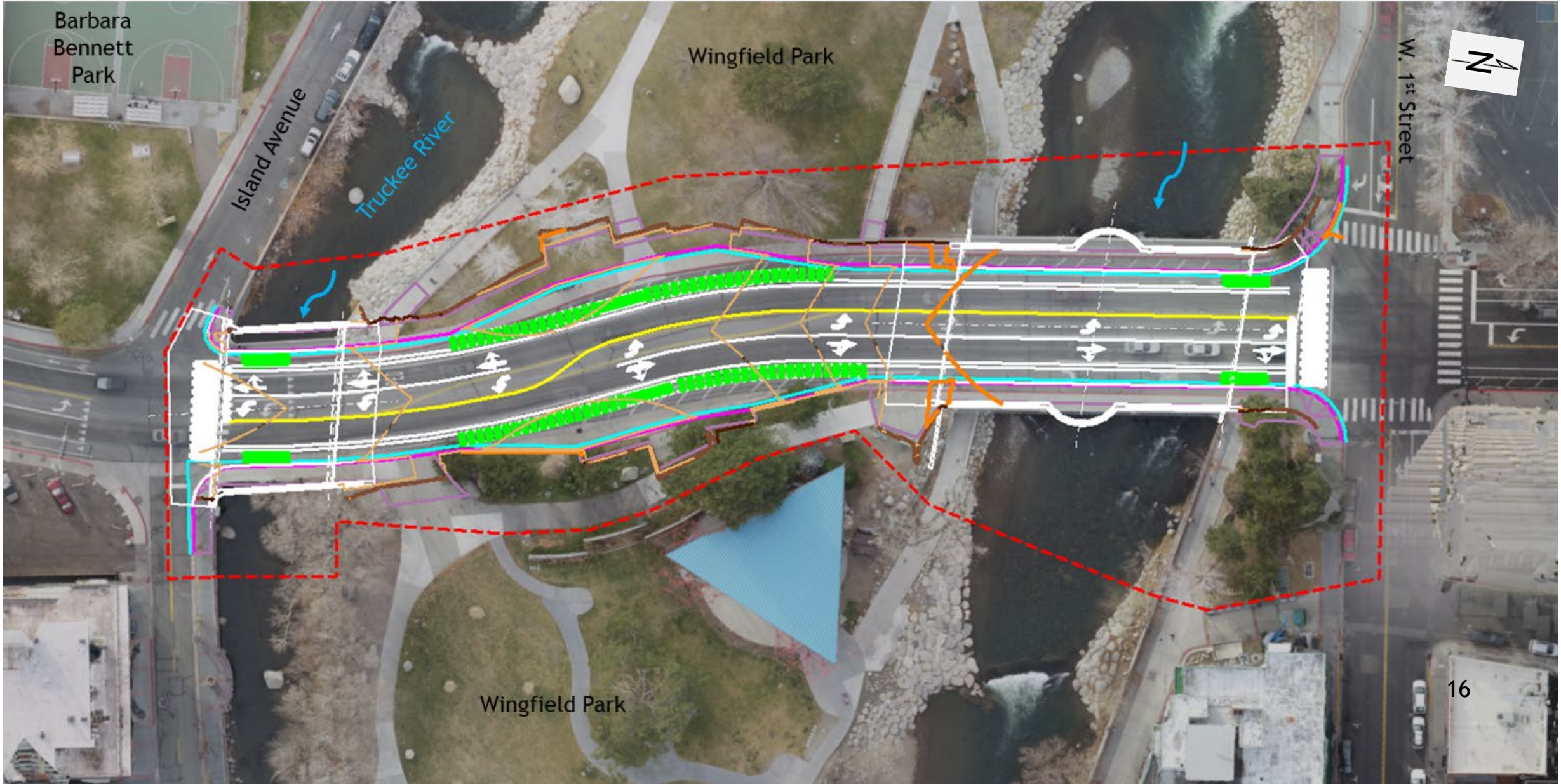


What are the Impacts?

- ▶ Anticipated Construction Schedule
 - ▶ August 2024 - Contractor Selected
 - ▶ September 30, 2024 - Deadline for RAISE Grant Fund Obligation
 - ▶ July 1 to October 31, 2025 North bridge in-river construction
 - ▶ July 1 to October 31, 2026 South bridge in-river construction
 - ▶ December, 2026 - Construction Complete
- ▶ Construction Limits - Map
- ▶ Temporary Wingfield Park Closure - Map
 - ▶ Safety concerns with dewatering, heavy construction equipment, river diversions, and various construction activities that would have a negative effect on the park user experience
 - ▶ Emergency Access and Challenges with Park Maintenance



Construction Limits



Upstream Signage at:
Mayberry Park, Crissie Caughlin Park,
and Idlewild Park

Wingfield Park and Truckee River
Access CLOSED



Project History and Background

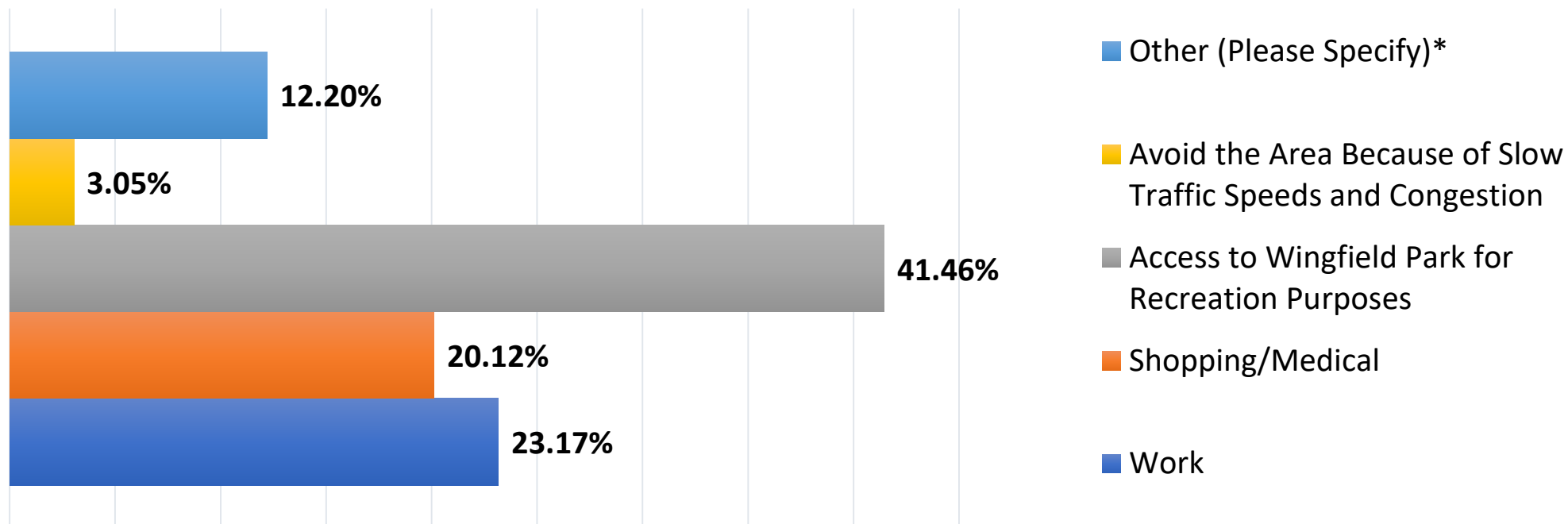
- ▶ Public Informational Meeting #1 Live March 14 - April 18, 2022
 - ▶ Survey Results - 164 Responded and 8 email comments
- ▶ Meetings and Input from Stakeholder Working Groups
 - ▶ Agency and Utility Coordination - 2 meetings
 - ▶ 50 Members (54% attendance)
 - ▶ Design Review Committee - 5 meetings
 - ▶ 46 Members (65% attendance)
 - ▶ Aesthetic Stakeholder Working Group - 4 meetings
 - ▶ 38 Members (66% attendance)
 - ▶ Key Decisions Based on Input Received

Survey Results Posted on the Website

Public Informational Meeting #1

Question 5:

When traveling on Arlington Avenue across the Truckee River, which of the following best describes your trip purpose? (Choose One)



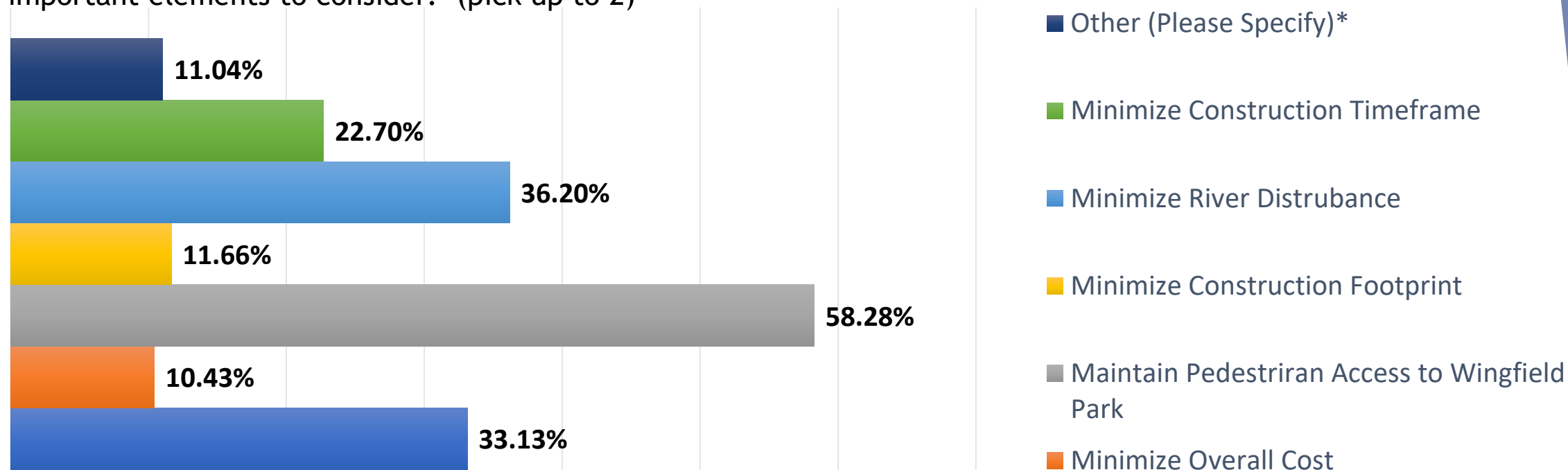
*Other (Please Specify) - Themes

- Commuting and Recreation
- Passing through to destination
- Live within the area

Public Informational Meeting #1

Question 6:

As the design team reviews constructability options, what do you feel are the MOST important elements to consider? (pick up to 2)



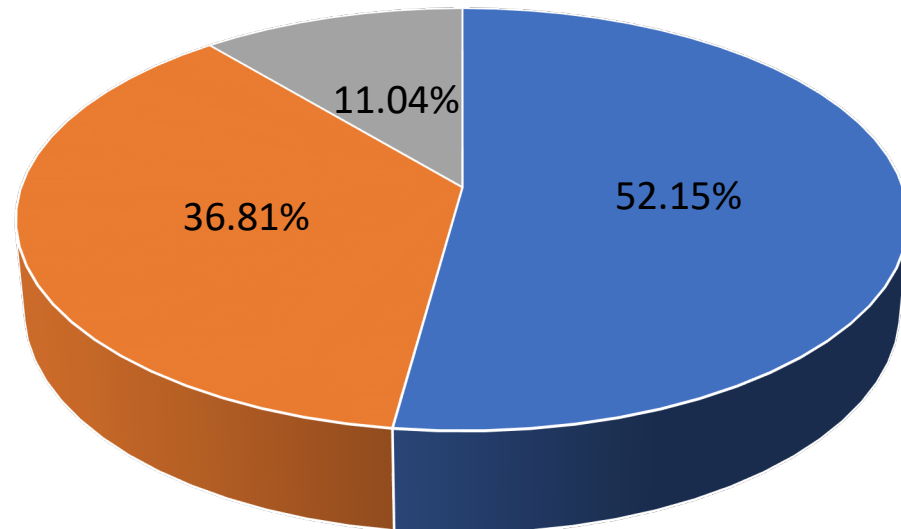
*Other (Please Specify) – Themes

- Safe bike and pedestrian routes during and after construction
- Improve the existing whitewater park and add a surfable wave east of the bridge
- Consult emergency responders (water rescue/arterial response) during design
- Allow for summer events
- Optimize traffic flow and intersection timing

Public Informational Meeting #1

Question 9:

Do you think protected micro mobility lanes should be included within the Project?



■ Yes ■ No ■ Other (Please Specify)*

*Other (Please Specify)

- Include protected bike lanes
- Widen sidewalks for pedestrians
- Include a multi-use trail
- Not sure
- Unconcerned
- Depends on feasibility and cost

Top 3 Environmental Resource Concerns
#1 - Parks/Recreation
#2 - Multimodal (Bike/Ped/Transit)
#3 - Water Resources/Wetlands

Key Decisions

- ▶ Bridge Type
 - ▶ Single Pier for North Bridge
 - ▶ Clear Span for South Bridge
 - ▶ Precast Bridge Girders
- ▶ Pedestrian Path under South Bridge Determined Not Feasible
 - ▶ Safety Concerns, Tunnel is not Ideal, Requires Tree Removal, Utility Impacts, Requires Kayak Park Design, Overall Grading Limits Increase, Increased Maintenance, No Access During High River Flows
- ▶ Roadway Geometry
 - ▶ Wider Sidewalks with Overlooks on North Bridge
 - ▶ Adjust lane configuration to accommodate all modes of transportation
 - ▶ Improve Pedestrian Circulation
 - ▶ Enhance Pedestrian Crossing at Island Avenue
 - ▶ Loading Zone/Transit Areas

Landscape and Aesthetic Design Goals

Cohesive Design Language

1. Establish a project theme to unify all the bridge and landscape elements

Enhance Pedestrian Experience

1. Maintain vantage points of the river and surrounding landscape, avoid above street bridge types
2. Enhance pedestrian experience with shade trees, decorative lighting, decorative railing, paving, sculptural/artistic features and unified materials between sidewalk and street

Notes: Arlington Avenue acts as an urban plaza during special events; consider using unified materials for the sidewalks; new standards for sidewalks in Downtown

Contextual and Historical Relevance

1. Design structural elements to have relevance to the urban context
2. Provide design solutions that pay homage to Reno's history, while representing a new age of bridge development within the downtown core
3. Virginia Street bridge to be the landmark bridge and others focal bridges

Innovation and Sustainability

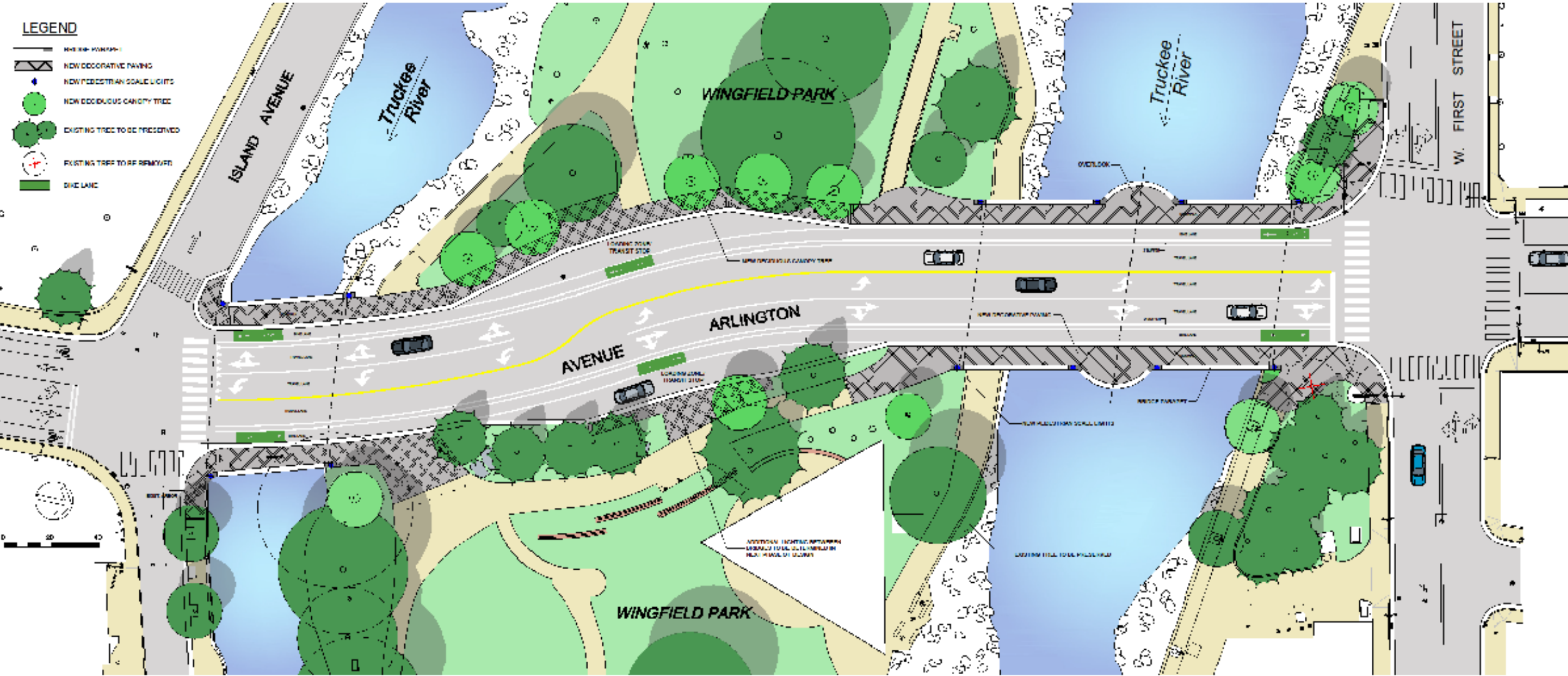
1. Provide stormwater infiltration on street (Low Impact Development - LID) permeable pavement or pavers
2. Use LED lighting
3. Use drought resistant and native trees and plants

Landscape and Aesthetic Elements

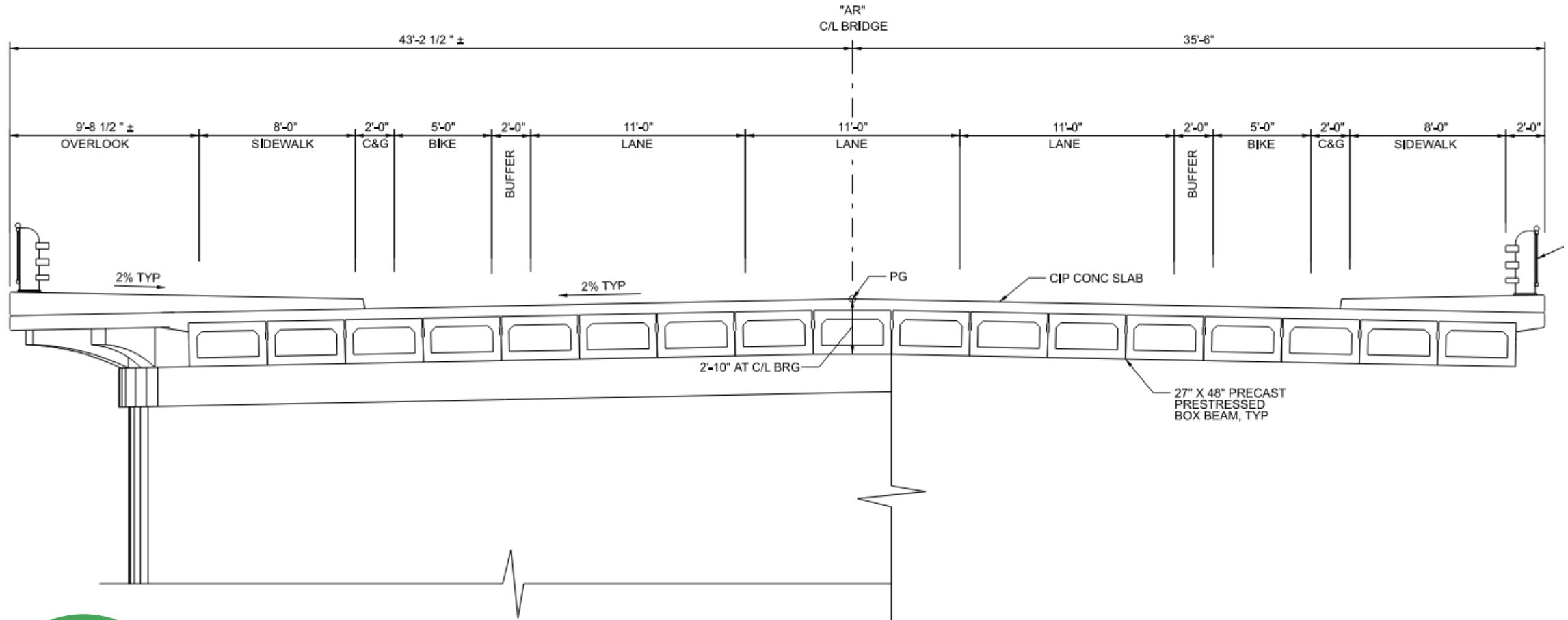
- ▶ Use Modern Design Elements: A Melding of Old and New
- ▶ Use Pedestrian-Scaled Lighting Where Possible
- ▶ Develop Bridge Accent Lighting
- ▶ Develop a Transparent, Traffic-Rated Bridge Railing
- ▶ Maintain Pedestrian Accessibility Throughout Arlington Avenue
- ▶ Widen Bridge Sidewalk and/or Provide Overlook
- ▶ Treat Abutment Walls and Flood Walls Uniquely
- ▶ Develop Seamless Transition from Sidewalks to Street-Paving



Design Updates



North Bridge Section

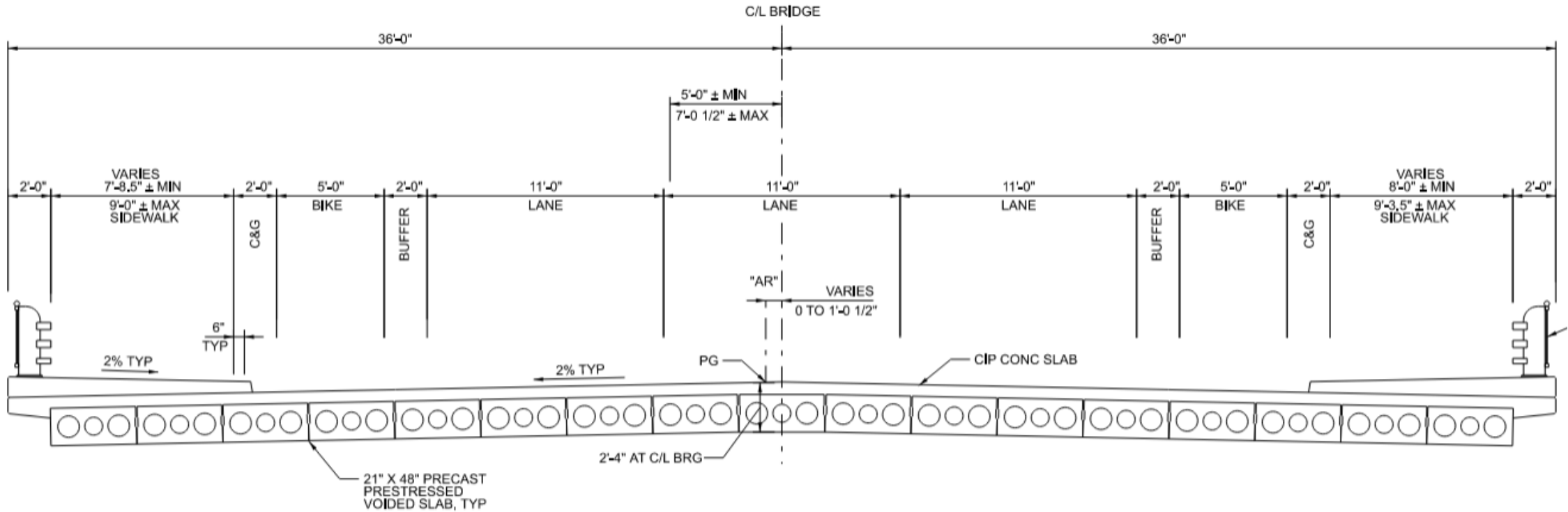


SECTION AT PIER

TYPICAL SECTION
1/4" = 1'-0"

TYPICAL DECK SECTION

South Bridge Section



TYPICAL SECTION
1/4" = 1'-0"

Environmental Requirements

- ✓ NEPA clearance
- ✓ Cultural Resources - Section 106 Consultation
- ✓ Park & Recreation Resources - Section 4(f) Approvals
- ✓ Threatened and Endangered Species - Section 7 Consultation
- ✓ Permitting - Section 401, 404, and 408



National Environmental Policy Act (NEPA) Clearance

- ▶ Decision-making process required because of federal funding
- ▶ Federal Highway Administration (FHWA) is the lead federal agency
- ▶ FHWA likely to require preparation of a Categorical Exclusion
- ▶ Resource technical reports prepared this fall
- ▶ Anticipate NEPA clearance in Spring 2023



Cultural Resources

- ▶ Required to comply with Section 106 of the National Historic Preservation Act
- ▶ Consulting parties include:
 - ▶ State Historic Resource Officer (SHPO)
 - ▶ Native American Tribes
 - ▶ Local Governments
- ▶ The intent is to identify and consider project effects on significant cultural resources, and seek ways to avoid, minimize or mitigate any adverse effects.

Parks & Recreation Resources



Section 4(f)

- ▶ Section 4(f) of U.S. Dept. of Transportation Act protects “significant” parks and recreation areas
- ▶ Coordinating with City of Reno on park/recreation resources (5 considered significant)
- ▶ Consider effects of the project on Wingfield Park (including the Whitewater Park) to be a de minimis impact under Section 4(f)
- ▶ A de minimis impact finding may be made if the project does not adversely affect the features, attributes, or activities qualifying the property for protection under Section 4(f)
- ▶ Approval for *de minimis* requires agreement from owner (City of Reno) and opportunity for public comment
- ▶ For more information on this regulation, please visit:

<https://www.govinfo.gov/content/pkg/FR-2008-03-12/html/E8-4596.htm>

Threatened and Endangered Species

- ▶ Section 7 of the Endangered Species Act requires US Fish and Wildlife Service consultation for potential impacts to protected species.
- ▶ Preparing Biological Assessment for two protected fish species
- ▶ Will likely perform in-water work July-November



Cui-ui



Lahontan Cutthroat Trout

Permitting

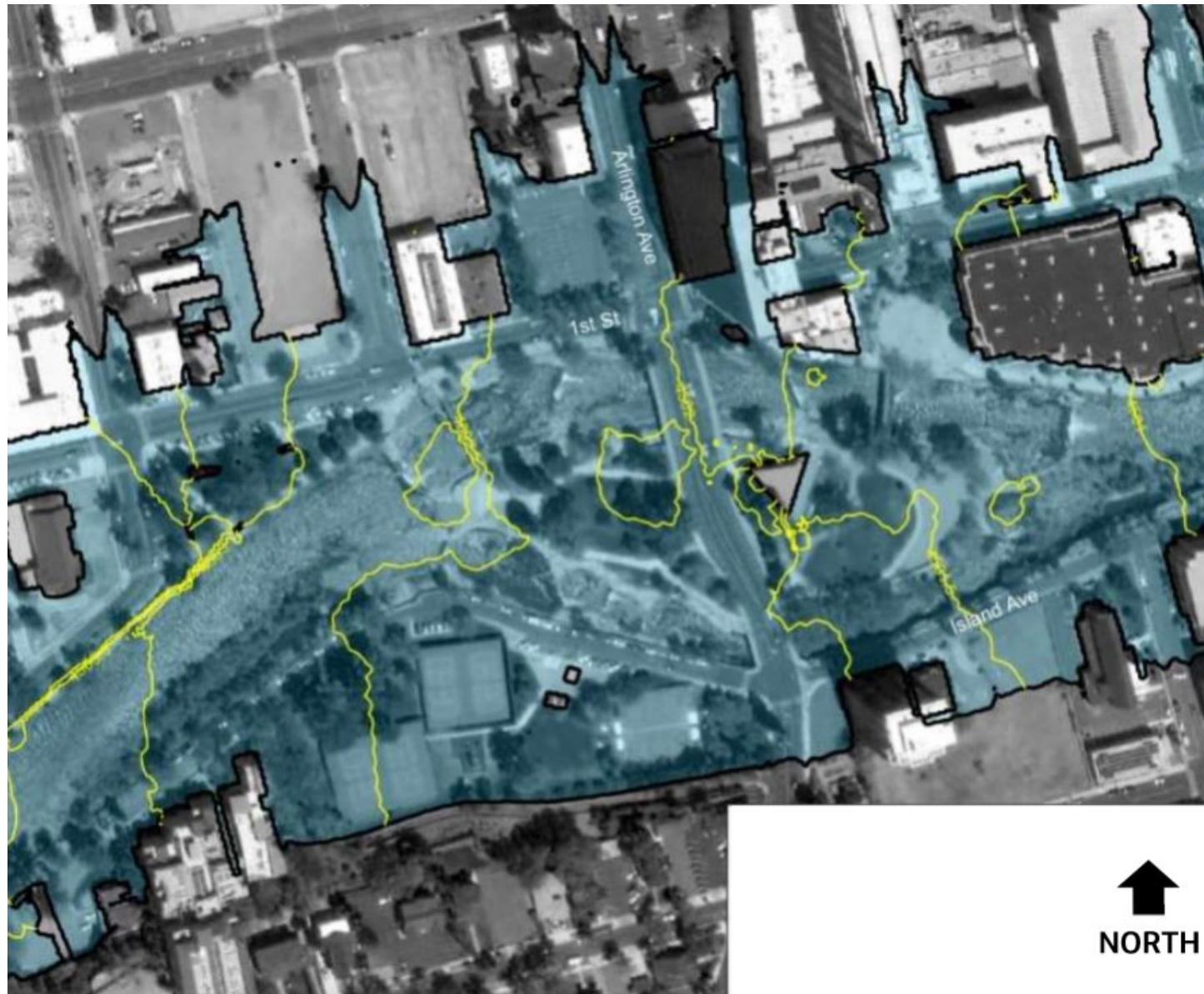
Section 401, 404, and 408

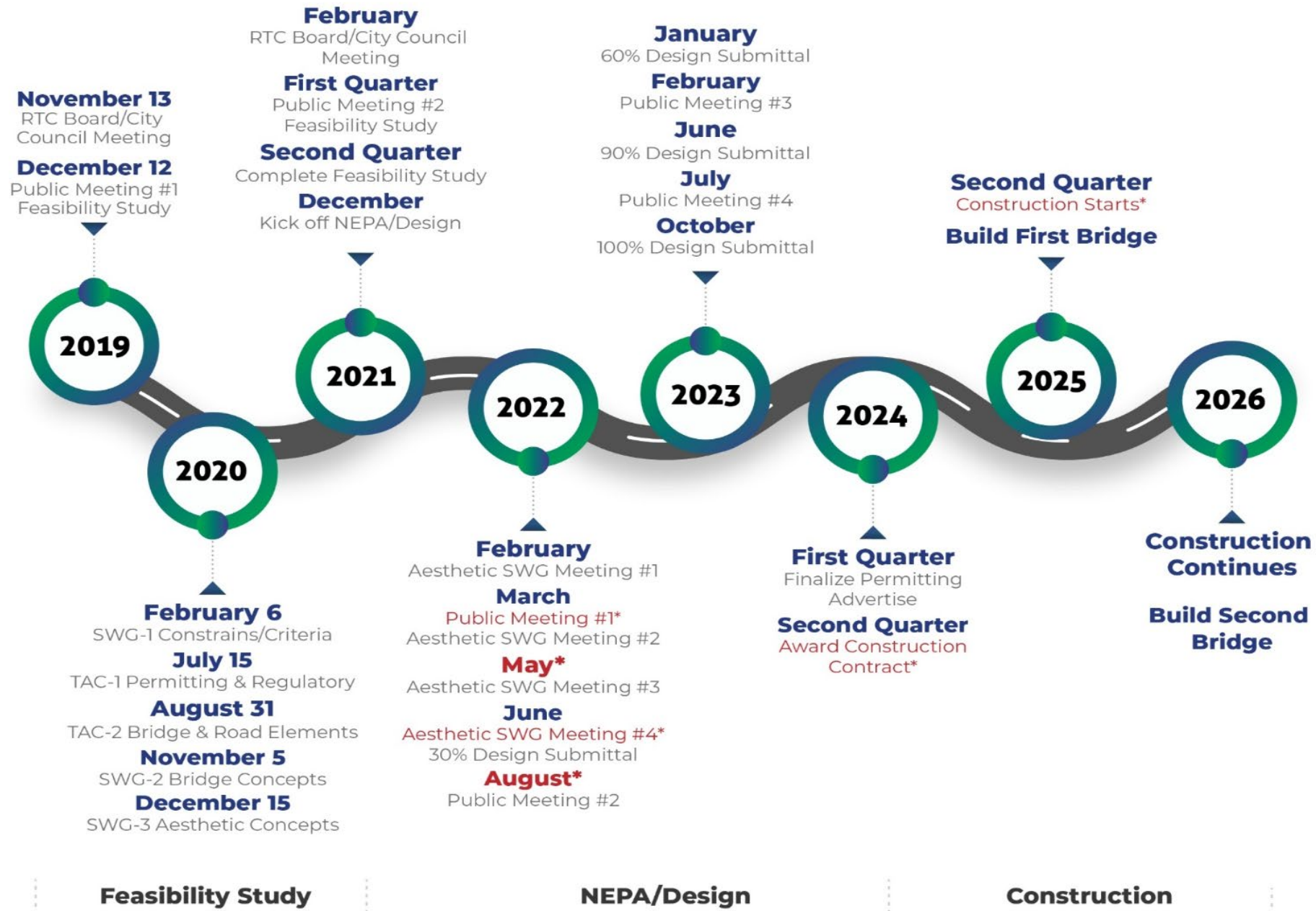
- ▶ Section 404 of the Clean Water Act - regulates discharge of dredged or fill material into waters of the US.
 - ▶ Section 401 of the Clean Water Act - Water Quality Certification Required for the Section 404 Permit
- ▶ Section 408 from USACE grants permission to alter their Civil Works Project (the Truckee River w/ Flood Walls, Bridges, Grading, etc. near our Project) upon determination that the alteration will not be injurious to the public interest and will not impair the usefulness of the Civil Works project
 - ▶ Carson-Truckee Water Conservancy District (CTWCD) is the local representative for USACE Regulatory boundary: 14,000 cfs inundation delineation (Approximate 50-year storm event)
 - ▶ City of Reno requires analysis of 100-year storm event: 20,700 cfs

CTWCD 50-year Inundation Map



TRFMA 100-year Flood Inundation Map





* Schedule changes highlighted in red

Next Steps

- ▶ Upcoming Opportunities for the Public
 - ▶ Public Informational Meeting #3 Review Design and Final Aesthetic Package
 - ▶ Public Informational Meeting #4 Kick-off Construction
- ▶ Design/Environmental Team
 - ▶ Utility Coordination
 - ▶ Street Lighting Analysis
 - ▶ Bridge Design
 - ▶ Aesthetic Selections Based on Your input
 - ▶ Environmental Clearance
 - ▶ Permitting

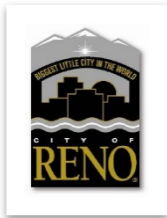
Survey Questions, Comments, and Build-A-Bridge



www.ArlingtonBridges.com

Email: JTortelli@rtcwashoe.com

Thank You for Your Participation!



*Building A Better Community
Through Quality Transportation.*
rtcwashoe.com



Jacobs



PK Electrical, Inc.

