## **Design and Environmental Study For**







# ARLINGTON AVENUE BRIDGES REPLACEMENT

Aesthetics Working Group Meeting #4 | June 22, 2022

## Agenda

- Aesthetic Design Goals
- ✓ Aesthetic Elements
- ✓ Selected Bridge Elements for Discussion
  - ✓ Overall Bridge Elevation Options 3
  - ✓ Bridge Rail- 2
  - ✓ Metal Bridge Rail Motif-3
  - ✓ Overlooks/Center Pier
  - ✓ Lighting Post top and Column-3
  - ✓ Railing Lighting
  - ✓ Under Bridge Lighting
  - ✓ End and Mid Pylons -5
  - ✓ Pier and Abutment Texture
  - ✓ Pilaster Insets
  - ✓ Sidewalk Treatment On and Between Bridges
- Vote on Items to Show at Public Meeting
- ✓ Public Meeting: August 11<sup>th, 2022</sup>



## 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
- 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



### Aesthetic Elements to Be Included:



- 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





# Overall Bridge Elevation Options





Overall Bridge Option 1 - Texas DOT Concrete Bridge Rail/Parapet

# Overall Bridge Elevation Options





Overall Bridge Option 2 - Metal Vehicular Bridge Rail with Metal Pedestrian Fence-Layered Motif

# Overall Bridge Elevation Options





Overall Bridge Option 3 - Concrete Vehicular Bridge Rail with Metal Overlook Fence, Layered Motif

### Selected Bridge Elements – Concrete Bridge Rail







Option 1 - Texas DOT Concrete Bridge Rail/Parapet/Overlook

### Selected Bridge Elements – Metal Bridge Rail Motif





Option 2A - Metal Vehicular Bridge Rail with Metal Pedestrian Fence at Overlook - Layered





Option 2B - Metal Vehicular Bridge Rail with Metal Pedestrian Fence at Overlook - Chevron



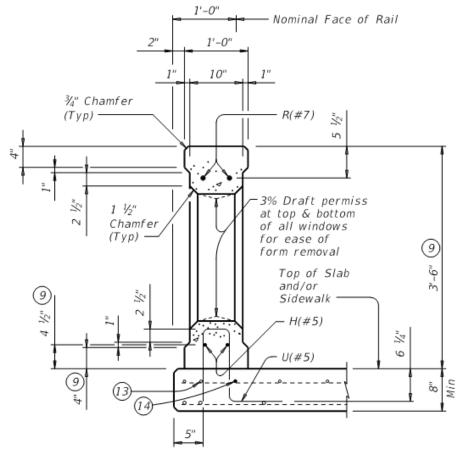


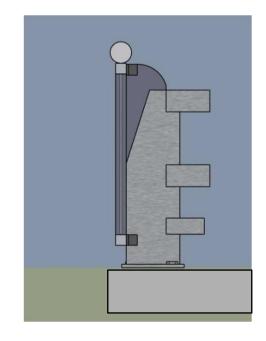
Option 2C - Metal Vehicular Bridge Rail with Metal Pedestrian Fence at Overlook - Greek Key



### Selected Bridge Elements – Bridge Rail







SECTION THRU WINDOW ON BRIDGE SLAB

Cross Section - Concrete Rail

Cross Section - Metal Rail

### Selected Bridge Elements – Overlooks





Option 1 - Overlook with Texas DOT Concrete Bridge Rail Overlook



Option 2 - Overlook with Metal Vehicular Bridge Rail/Pedestrian Fence Overlook (layered)

### Selected Bridge Elements – Overlooks/Center Pier





Option 1 - Overlook with Texas DOT Concrete Bridge Rail/Parapet/Overlook, Brackets and Center Pier Treatment



Option 2 - Overlook with Metal Vehicular Bridge Rail/Pedestrian Fence/Overlook, Concrete Brackets and Center Pier Treatment (layered)

### Selected Bridge Elements – Lighting







Option 1 - LED Post-Top Luminaire

Two potential lighting strategies:

Option 1: Post-top

Option 2: Custom Column



Option 2 - Custom Column with Bridge Rail Motif

### Selected Bridge Elements – Lighting





Option 1 - LED Post-Top Luminaire





### Selected Bridge Elements – Lighting





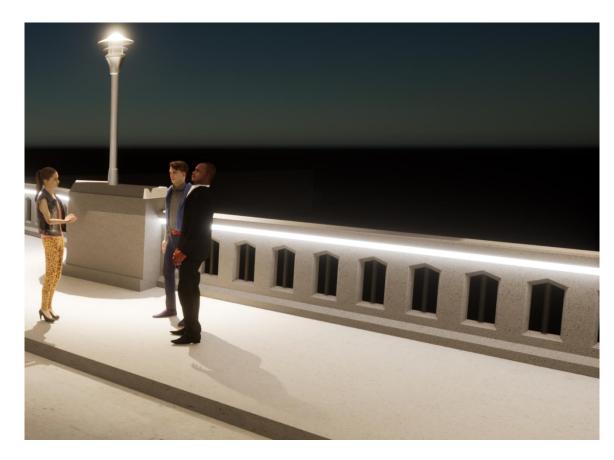




Layered Chevron Greek Key

### Selected Bridge Elements – Railing Lighting





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



Bridge Rail Option 2 Metal Vehicular Bridge Rail/Metal Pedestrian Fence, Under Top Rail Lighting

### Accent Lighting – Under Bridge





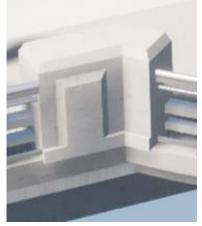




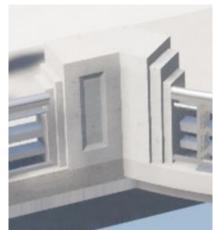












Pylon Group A

Pylon Group B













Pylon Group C

Pylon Group D

Pylon Group E

Pylon Groups - 5 Options



Pylon Group A 19



Pylon Group B 20



Pylon Group C 2



Pylon Group D 22



Pylon Group E 23

### Selected Bridge Elements – Pier and Abutment Wall Texture

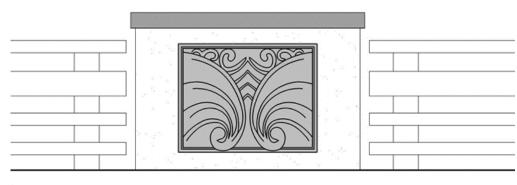




Pier and Abutment Wall Texture Coordinated with Railing Motif

## Bridge Element: Pilaster Insets



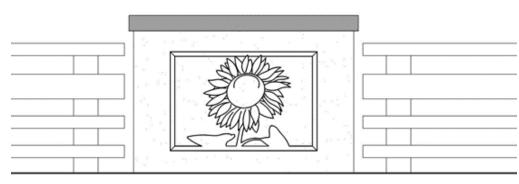








Polychrome or Monochrome Terra Cotta





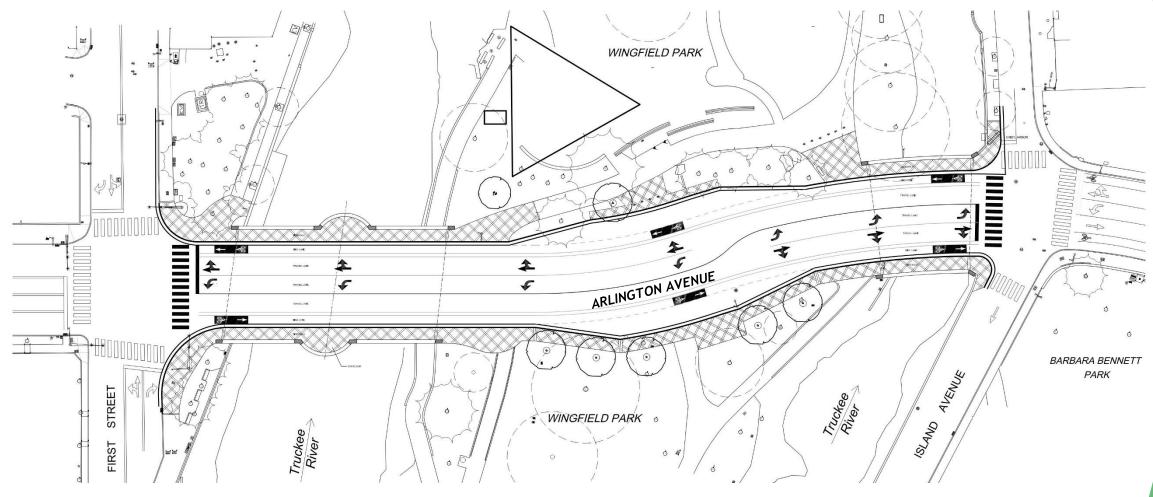




Tinted or Untinted Precast Concrete Panel

# Sidewalk Treatment On and Between Bridges





### **Project Timeline**

### **NOVEMBER 13**

RTC Board/ City Council Meeting

#### **DECEMBER 12**

Public Meeting #1 Feasibility Study

#### **FEBRUARY**

RTC Board/City Council Meeting

#### **FIRST QUARTER**

Public Meeting #2 Feasibility Study

#### **SECOND QUARTER**

Complete Feasibility Study

#### DECEMBER

Kick off NEPA/Design

#### **JANUARY**

60% Design Submittal

#### **FEBRUARY**

Public Meeting #3

#### JUNE

90% Design Submittal

#### JULY

Public Meeting #4

#### **OCTOBER**

100% Design Submittal

2019

2020

2021

2022

2023

2024

2025

### **FEBRUARY 6**

SWG-1 Constraints/Criteria

#### **JULY 15**

TAC-1 Permitting & Regulatory

#### **AUGUST 31**

TAC-2 Bridge & Road Elements

### **NOVEMBER 5**

SWG-2 Bridge Concepts

#### **DECEMBER 15**

SWG-3 Aesthetic Concepts

#### **FEBRUARY**

Aesthetic SWG Meeting #1 Public Meeting #1

#### MARCH

Aesthetic SWG Meeting #2

#### **APRIL**

Aesthetic SWG Meeting #3

### JUNE

30% Design Submittal

#### JULY

Public Meeting #2

#### FIRST QUARTER

Finalize Permitting Advertise

### SECOND QUARTER

**Construction Starts** 



FEASIBILITY STUDY

NEPA/DESIGN

CONSTRUCTION

# Next Meetings, Action Items, and Submissions



- >30% Design Submittal June 2022
- > Public Meeting #2- August 11 2022



# Thank You for Participating!



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Through Quality Transportation.
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