Oklahoma Department of Transportation

# SH-123 over the Caney River

## PUBLIC MEETING

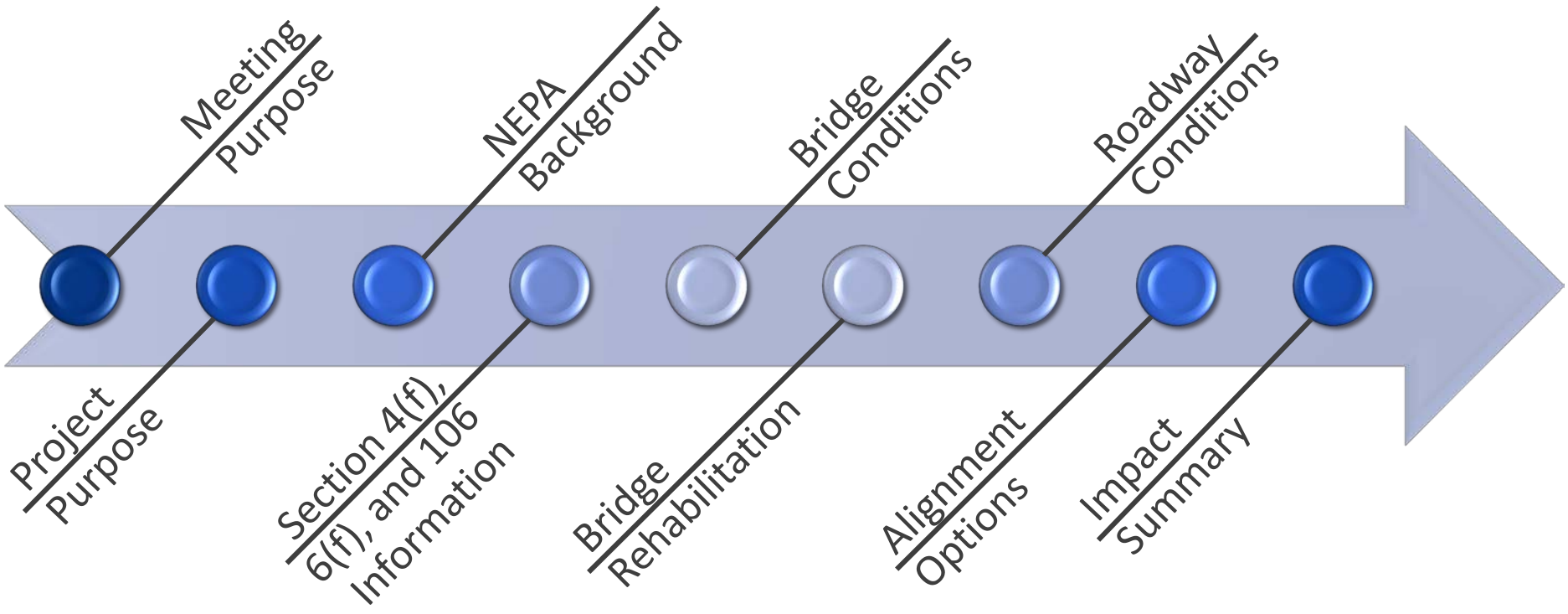
MAY 10, 2016
AT 6 PM

INFRASTRUCTURE ENGINEERS, INC.

PEC
PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
CELEBRATING FIFTY YEARS ► 1965-2015

Able CONSULTING

# Meeting Agenda



# Meeting Purpose

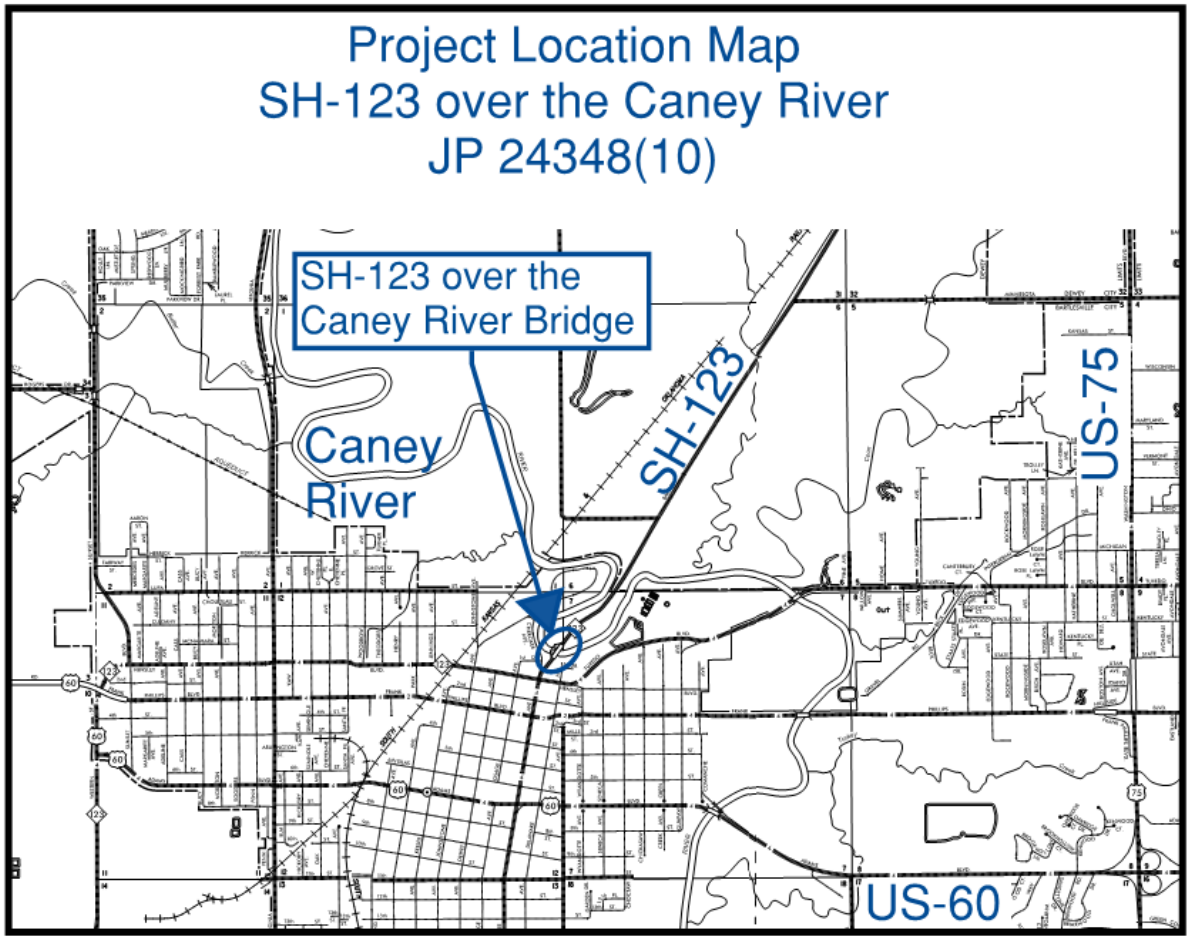
Present the alternatives considered and obtain input on the proposed options for further consideration.

## Protected Resources – Section 4(f)

- NRHP Eligible Bridge
- NRHP Eligible Dam
- Johnstone Park
- Pathfinder Parkway
- NRHP Eligible Carr-Bartles Mill

NRHP – National Register of Historic Places

# Project Location



# Project Purpose

The purpose of the project is to provide a structurally sound crossing and preserve transportation continuity over the Caney River.

The need of the project is to address the current structural and functional deficiencies of the existing bridge structure and approach roadway.

- The Bridge is classified as structurally deficient
- The Bridge is rated in poor condition
- Currently has a posted 10 ton load limit

# NEPA
# National Environmental Policy Act

- Federally Funded Projects
- Complete environmental studies and documentation for ODOT/Federal Highway Administration (FHWA) approval
- Determine Environmental Impacts
  - Avoid
  - Minimize
    - By design
  - Mitigate

# NEPA
# National Environmental Policy Act

Process includes the following:

- Public and Agency Involvement
  - Public Meeting
    - We need your input on these resources and alignment options
  - Solicitations
- Environmental Studies
- Consultation with Agencies and Tribes
- DOT Regulations – If Protected Resources

# NEPA
# National Environmental Policy Act

## Studies and Consultation For:

- Relocations
- Scenic Rivers
- Wetlands & Streams
- Section 106
  - Historic Properties
  - Archeological Sites
  - Tribal Concerns
- Threatened & Endangered Species
- Prime Farmland
- Noise Impacts
- Floodplains
- Permitting
- Hazardous Waste Sites
- Parks & Recreational Areas (Section 4(f) & 6(f))

# Section 4(f) & 6(f) Resources

# Section 4(f) & 6(f) Resources

Officials with Jurisdiction and Concurrence Requirement

- SHPO – Section 4(f) NRHP Eligible Bridge over the Caney River
- SHPO – Section 4(f) NRHP Eligible Dam – Under Bridge
- City – Section 4(f) Johnstone Park Surrounding Project
- NPS & City – Section 4(f) & 6(f) Pathfinder Parkway
- SHPO – Section 4(f) NRHP Eligible Carr-Bartles Mill
- SHPO – NRHP Nellie Johnstone #1

Section 6(f) Resource – Land and Water Conservation Funds regulated by the Department of the Interior and the Oklahoma Tourism Department protects recreational properties that have used these funds and would require replacement in kind, if impacted.

SHPO – State Historic Preservation Officer

NPS – National Park Service

# USDOT Section 4(f) Regulations

FHWA may not approve an action that uses public park and recreation land, or historic properties, when there is a *feasible* and *prudent* alternative.

To reject an avoidance alternative, one must demonstrate that it cannot be constructed as a matter of sound engineering practice (not feasible) and that it does not cause other severe problems of a magnitude that substantially outweighs the importance of protecting the Section 4(f) property (not prudent).

DOT – Department of Transportation

# USDOT
# Section 4(f) Regulations

If the analysis of avoidance alternatives concludes that there is no feasible and prudent avoidance alternative, then the FHWA may only approve the alternative that causes the least overall harm to the Section 4(f) property.

# NHPA
# Section 106

## Section 106 Definition

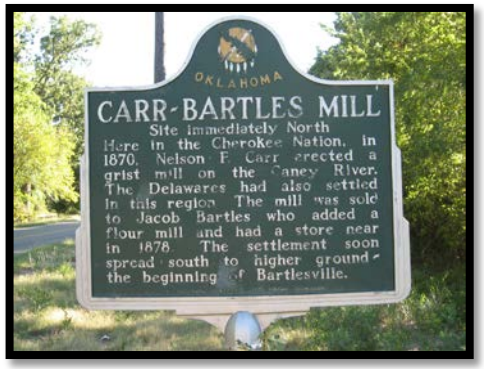
Section 106 of the NHPA requires federal agencies to consider the effects of their projects on historic properties and avoid or minimize those effects.
If effects cannot be avoided or minimized, they must be mitigated.

NHPA – National Historic Preservation Act

# Cultural Resources

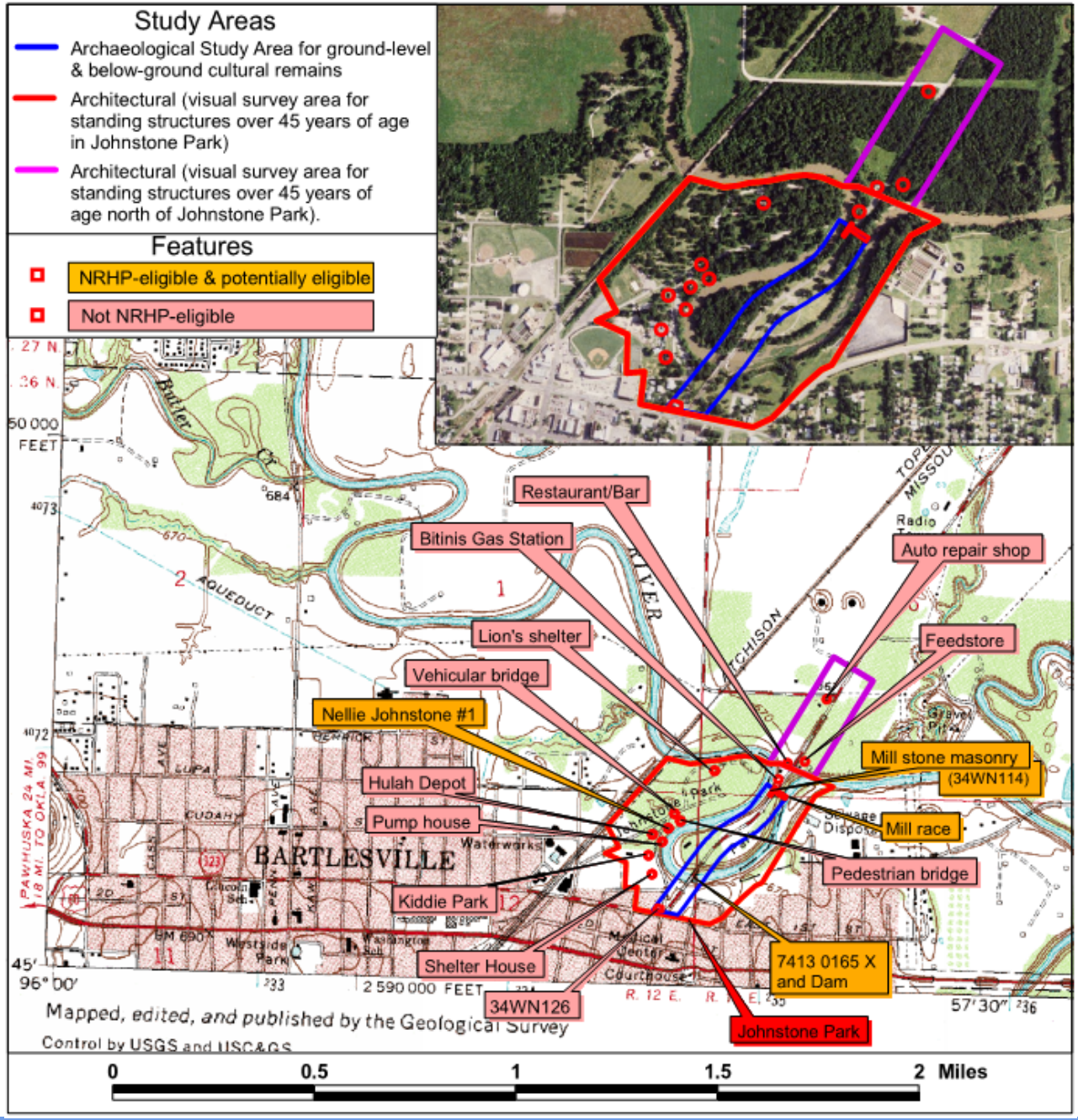
## Section 106 Consultation to Date

- Consulting Party Comments
  - Delaware Tribe
  - Oklahoma Historic Bridge and Highway Group
  - City of Bartlesville




## Key Features

- Stone Masonry for Carr-Bartles Mill
- Nellie Johnstone #1 (NRHP Listed/Section 4(f))
- Johnstone Park (Section 4(f))
- Pathfinder Parkway (Section 4(f) & 6(f))
- Bartlesville Water Company Dam (NRHP Eligible)


Study Areas
Archaeological Study Area for ground-level & below-ground cultural remains
Architectural (visual survey area for standing structures over 45 years of age in Johnstone Park)
Architectural (visual survey area for standing structures over 45 years of age north of Johnstone Park).
Features
NRHP-eligible & potentially eligible
Not NRHP-eligible
Restaurant/Bar
Bitinis Gas Station
Auto repair shop
Lion's shelter
Feedstore
Vehicular bridge
Nellie Johnstone #1
Mill stone masonry (34WN114)
Hulah Depot
Pump house
Mill race
Pedestrian bridge
Kiddie Park
Shelter House
7413 0165 X and Dam
34WN126
Johnstone Park
BARTLESVILLE
Butler Cr
AQUEDUCT
PAWHUSKA 24 MI. 18 MI. TO OKLA. 99
Mapped, edited, and published by the Geological Survey
Control by USGS and USC&GS
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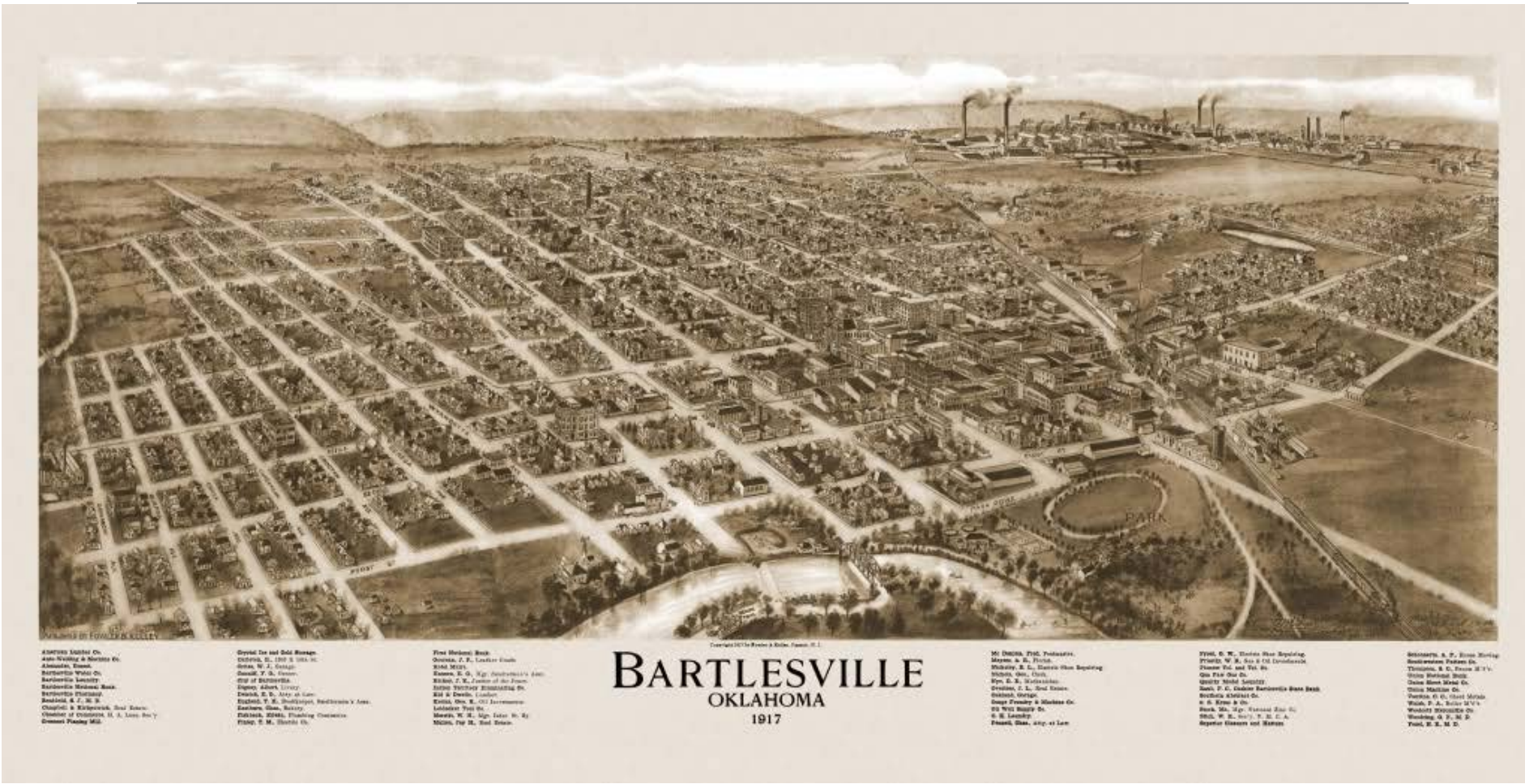
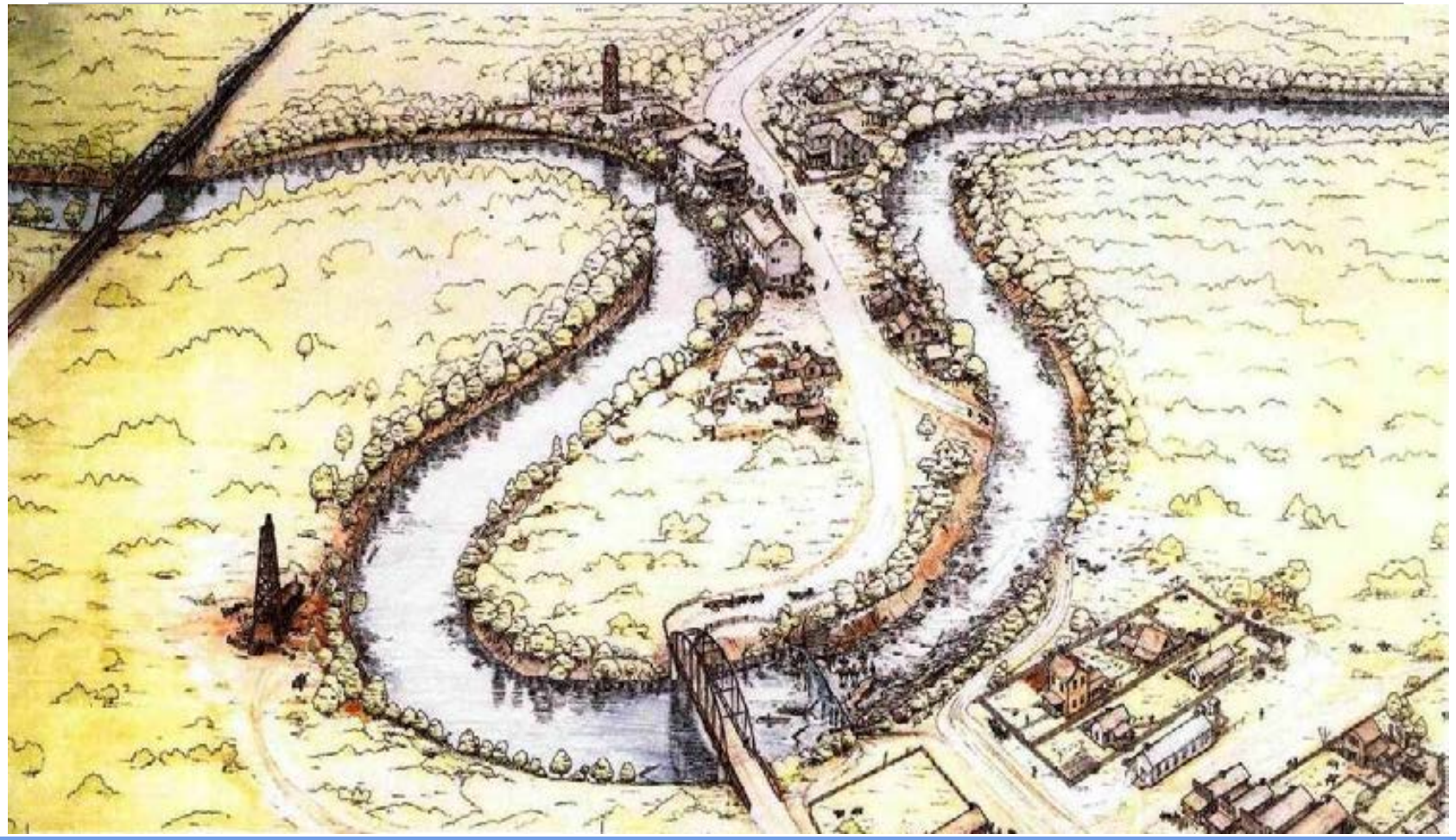
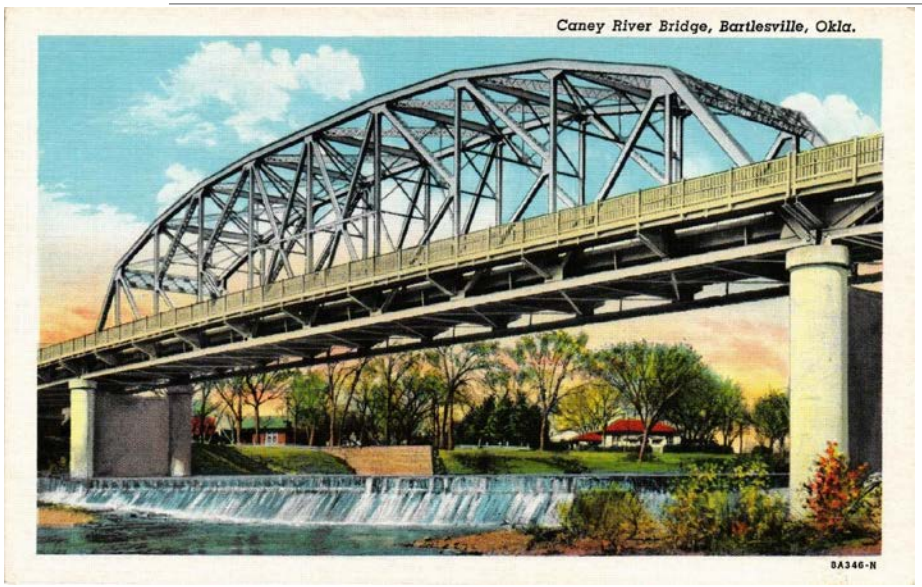
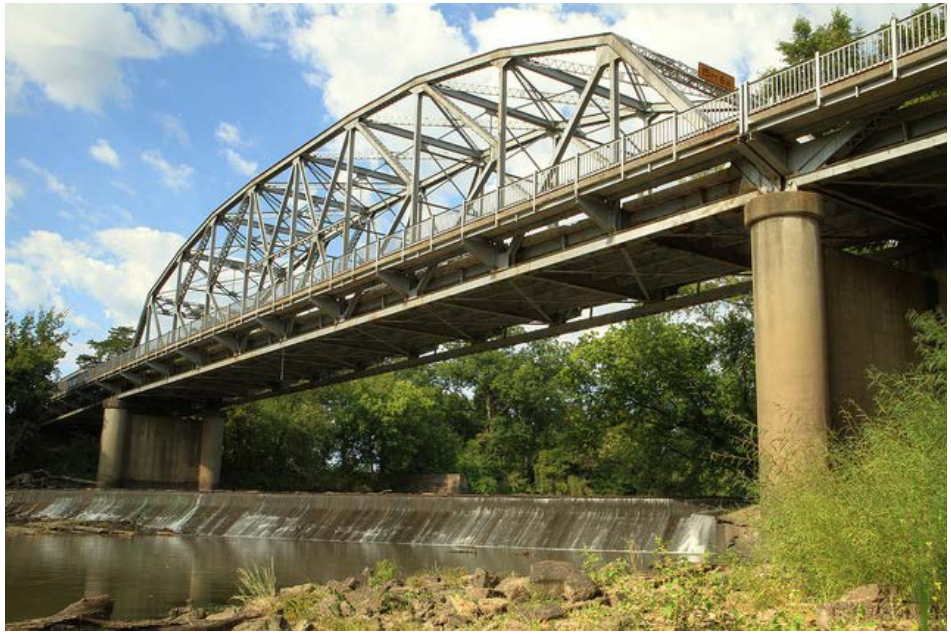

BARTLESVILLE
OKLAHOMA
1917




Caney River Bridge, Bartlesville, Okla.
8A346-N



# Environmental Summary

## Impacts Addressed

- NEPA
- Section 4(f), 6(f), and 106

## Next Step

- Public Comments and Input
  - Importance of the Environmental Impacts in the project area
    - Rank Impacts on the Comment Card
      - 1 “Not Important” to 5 “Most Important”

# Bridge Background

## 418 Foot Long Truss Bridge

- 3-Span Bridge
- 210 Foot Truss Main Span
- 2-100 Foot Long Pony Truss Spans

## Functionally Obsolete

- 24 Foot Bridge Deck Width
- 15 Foot 6 Inch Vertical Clearance
- Sidewalks Do Not Meet Current ADA Standards

## Structurally Deficient

- Deck in poor condition
- Superstructure in poor condition
  - 10 Ton Limit
- Substructure in poor condition

# Bridge Conditions

# Bridge Rehabilitation

- Alternative 1: Do nothing (Maintenance Only)
- Alternative 2: Rehabilitation without affecting historic integrity of the bridge
- Alternative 3: Build on new location
  - Alternative 3(a): Rehab and retain existing bridge in vehicular service as part of a one-way pair
  - Alternative 3(b): Retain existing bridge in place, either as a non-functional monument or as a non-motorized pedestrian and/or bicycle facility

# Roadway Conditions

- Minor Arterial/Non-NHS
- Posted Speed Limit
  - 35 mph on Bridge
  - 25 mph near Intersection
- 2- 12 Foot Driving Lanes
  - 24 Foot Wide Roadway
- 4 Foot Wide Sidewalk
- Curb & Gutter

- Current Traffic (2016)
  - 4,900 Vehicles Per Day w/ 13% trucks
- Projected Traffic (2036)
  - 6,900 Vehicles Per Day

# Alignment Option A

- Reconstruct Along Existing Alignment
- Replace Existing Bridge with New Bridge
- Road Closed for Construction

# Alignment Option A

- Option A Impacts
  - Removes Historic Bridge
  - Road Closed For Construction
  - Adverse Effect on Historic Aspect of Dam
  - Low Impact to Johnstone Park
    - 2.7 Acres for wider roadway
  - New Bridge Lifespan of 60-75 years
  - Estimated Total Cost is $5.0 Million
    - Estimated Bridge Construction Cost is $3.5 Million
    - Estimated New Roadway Construction Cost is $1.5 Million

# Alignment Option B

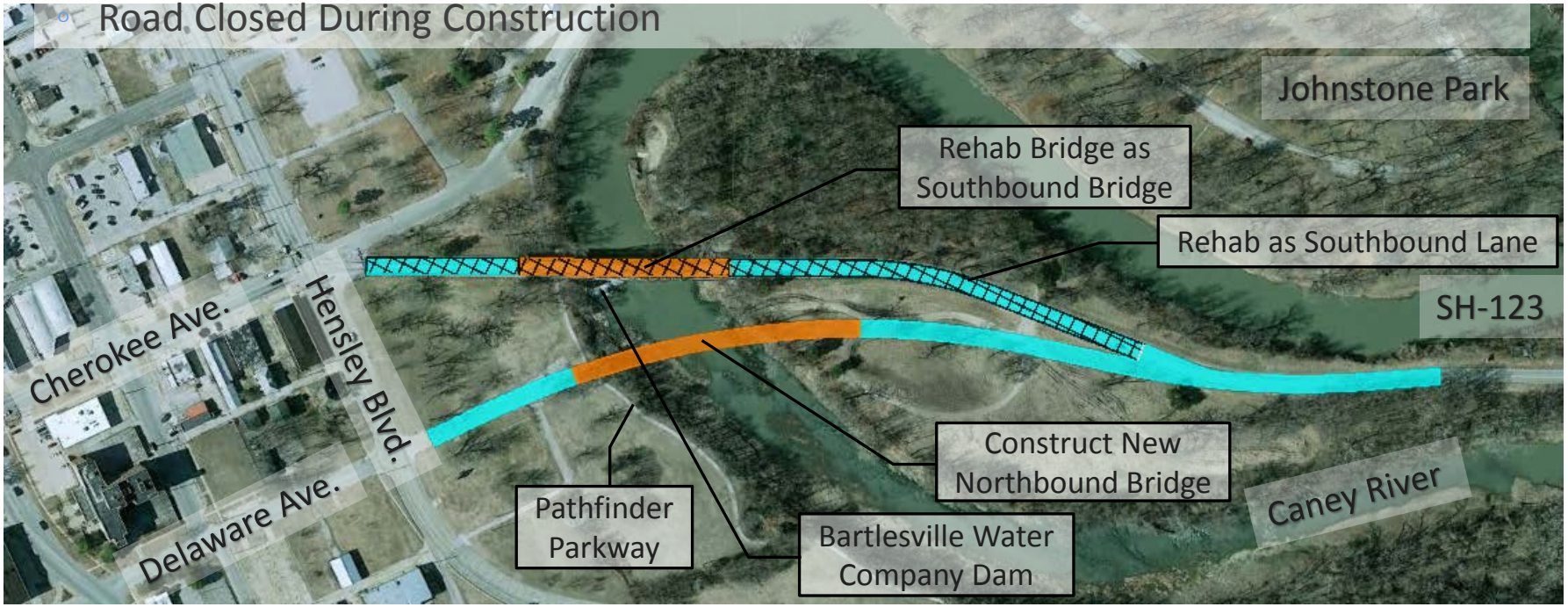
- Rehabilitate Existing Bridge
- Mill and Overlay Existing Roadway
- Reconstruct Curb and Gutter and Sidewalks
- Road Closed For Construction
- Minimize 4(f) Impact

# Alignment Option B

- Option B Impacts
  - Historic Bridge Remains In Place
    - Rehabilitate Existing Bridge for Vehicular Traffic
  - Road Closed for Construction
  - Historic Dam is Not Adversely Effected
  - No Impact to Johnstone Park
  - Rehabilitated Bridge Lifespan of 20-30 years
  - Total Estimated Construction Cost is $7.5 Million
    - Estimated Bridge Rehabilitation Cost is $6.5 Million
    - Estimated Roadway Rehabilitation Cost is $1.0 Million

# Alignment Option C

- Rehabilitate Existing Bridge as One-way Southbound Bridge
- Construct New Bridge as One-way Northbound Bridge
- Road Closed During Construction
- Mill and Overlay Existing Roadway for Southbound Traffic
- Construct New Roadway One Block East for Northbound Traffic

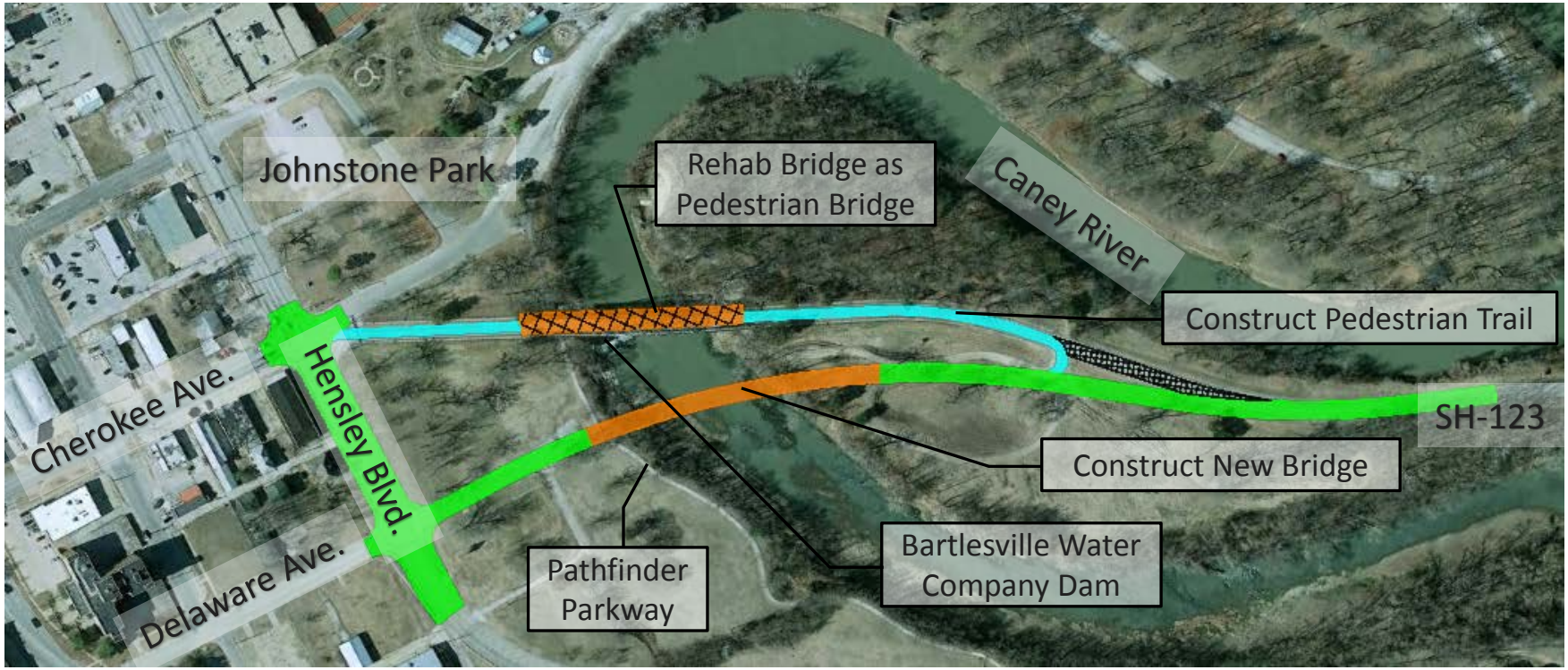


# Alignment Option C

- Option C Impacts
  - Historic Bridge Remains In Place
    - Rehabilitate Existing Bridge for One-Way Vehicular Traffic
  - Road Closed For Construction
  - Historic Dam is Not Adversely Effected
  - Moderate Impact to Johnstone Park
    - 4.9 Acres East of SH-123 for New One-Way Roadway
  - Total Estimated Construction Cost is $10.9 Million
    - Estimated Bridge Rehabilitation Cost is $5.1 Million
    - Estimated New Bridge Construction Cost is $3.5 Million
    - Estimated Roadway Rehabilitation Cost is $0.8 Million
    - Estimated New Roadway Construction Cost is $1.5 Million

# Alignment Option D

- Construct New Alignment One Block East
- Rehabilitate Existing Bridge as Pedestrian Bridge
- Construct New Bridge along New Alignment

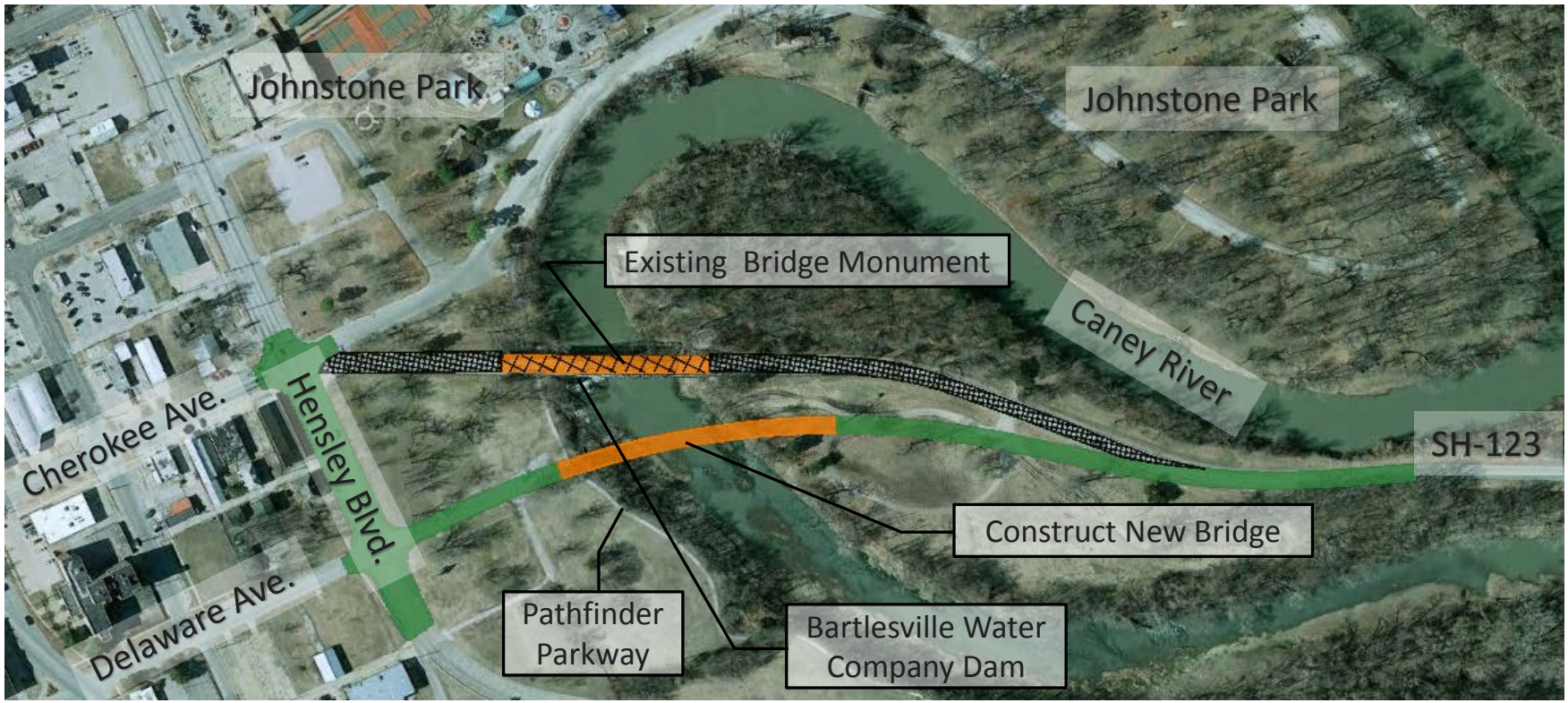


# Alignment Option D

- Option D Impacts
  - Historic Bridge Remains In Place
    - Rehabilitate Existing Bridge for Pedestrian Traffic
  - Roadway Open During Construction
  - Historic Dam is Not Adversely Effected
  - Moderate Impact to Johnstone Park
    - 4.9 Acres East of SH-123 for New Roadway
  - Total Estimated Construction Cost is $9.1 Million
    - Estimated Bridge Rehabilitation Cost is $2.6 Million
    - Estimated New Bridge Construction is $3.5 Million
    - Estimated New Roadway Construction Cost is $3.0 Million

# Alignment Option E

- Construct New Alignment One Block East
- Construct New Bridge along New Alignment
- Existing Bridge to Remain As Monument

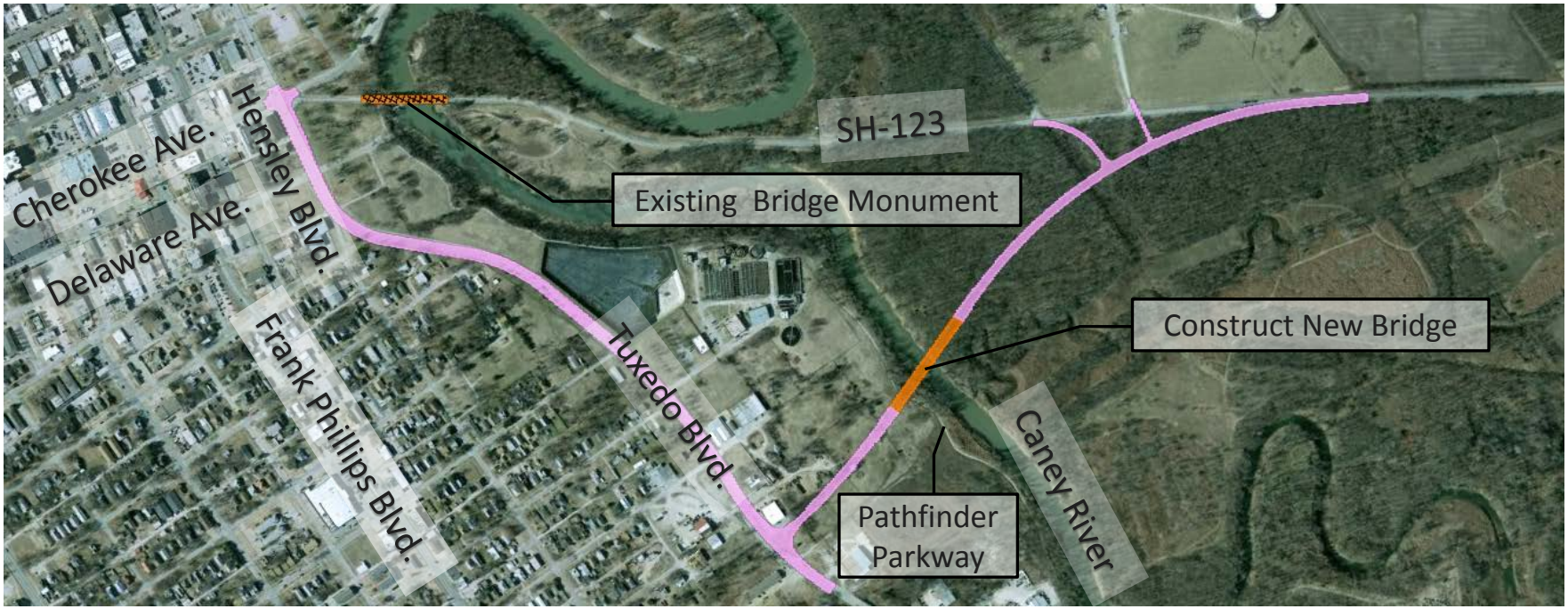


# Alignment Option E

- Option E Impacts
  - Historic Bridge Remains In Place
    - Leave in Place as Monument
  - Roadway Open During Construction
  - Historic Dam is Not Adversely Effected
  - Moderate Impact to Johnstone Park
    - 4.9 Acres East of SH-123 for New Roadway
  - Total Estimated Construction Cost is $8.4 Million
    - Estimated Bridge Rehabilitation Cost is $2.6 Million
    - Estimated New Bridge Construction is $3.5 Million
    - Estimated New Roadway Construction Cost is $2.3 Million

# Alignment Option F

- Construct New Alignment About One Half Mile East
- Construct New Bridge along New Alignment
- Existing Bridge to Remain As Monument

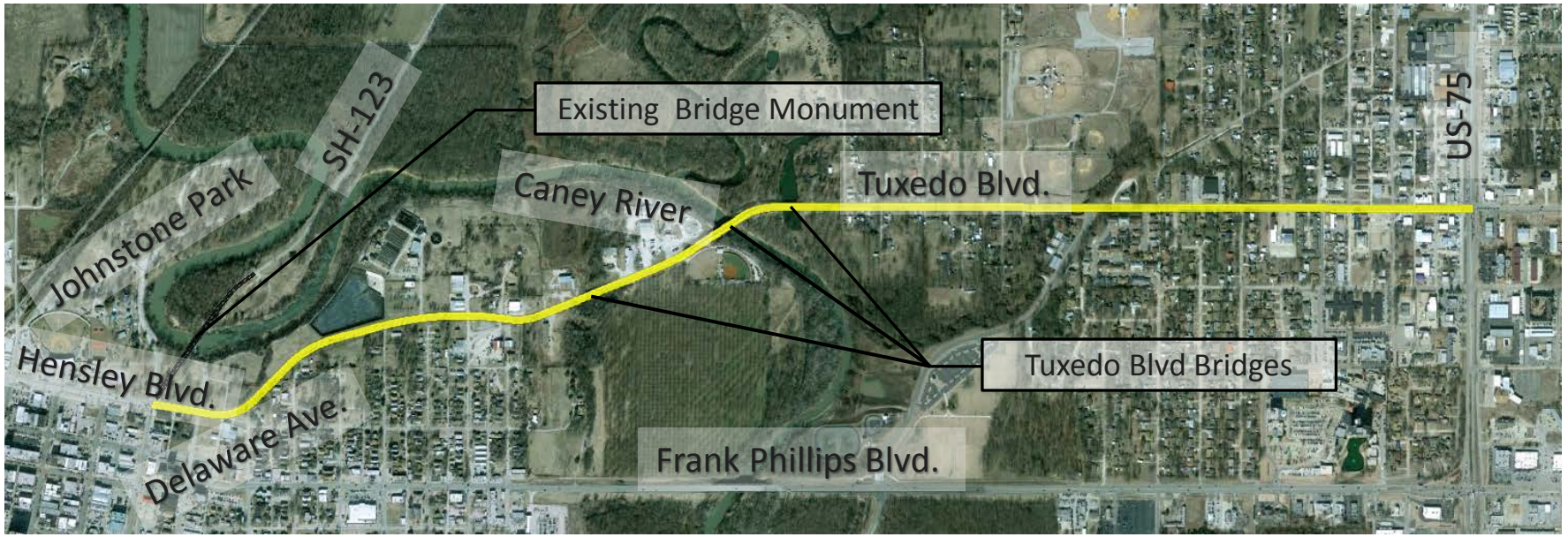


# Alignment Option F

- Option F Impacts
  - Historic Bridge Remains In Place
    - Leave in Place as Monument
  - Roadway Open During Construction
  - Historic Dam is Not Adversely Effected
  - No Impact to Johnstone Park
  - Wetland Impact of 10.5 Acres
  - Total Estimated Construction Cost is $11.2 Million
    - Estimated Bridge Rehabilitation Cost is $2.6 Million
    - Estimated New Bridge Construction is $3.5 Million
    - Estimated New Roadway Construction Cost is $5.1 Million

# Alignment Option G

- Realign SH-123 along Tuxedo Boulevard to US-75 intersection
- Rehabilitate Existing Bridges along Tuxedo Boulevard
- Existing SH-123 Bridge to remain as monument
- SH-123 to Remain as a Local Road without Bridge Crossing

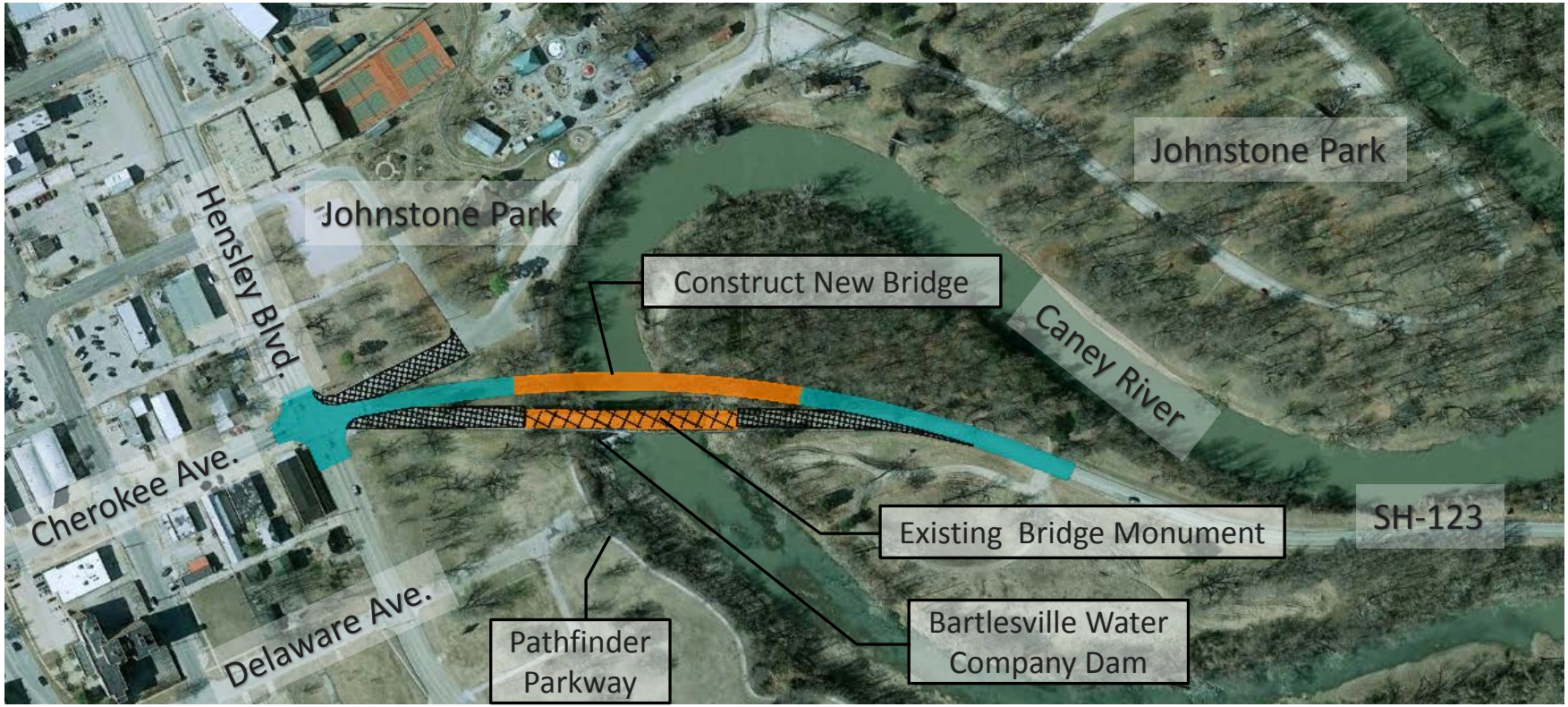


# Alignment Option G

- Option G Impacts
  - Historic Bridge Remains In Place
    - Leave in Place as Monument
  - Existing SH-123 Remains as a Local Road without a Bridge Crossing
    - 1 Bridge and 3.3 Miles Removed from the ODOT Highway System
  - Tuxedo Boulevard Resigned as SH-123
    - 4 New Bridges and 2.1 Miles Added to the ODOT Highway System
  - Roadway Open During Construction
  - Historic Dam is Not Adversely Effected
  - No Impact to Johnstone Park
  - Total Estimated Construction Cost is $18.0 Million
    - Estimated SH-123 Bridge Rehabilitation Cost is $2.6 Million
    - Estimated Tuxedo Boulevard Bridge Rehabilitation is $6.6 Million
    - Estimated Tuxedo Boulevard Rehabilitation Cost is $8.8 Million

# Alignment Option W

- Construct New Alignment Offset to the West
- Construct New Bridge along New Alignment
- Existing Bridge to Remain As Monument



# Alignment Option W

- Option W Impacts
  - Historic Bridge Remains In Place
    - Leave in Place as Monument
  - Roadway Open During Construction
  - Historic Dam is Not Adversely Effected
  - Significant Impact to Johnstone Park
    - 2.5 Acres West of SH-123 for New Roadway
  - Total Estimated Construction Cost is $7.6 Million
    - Estimated Bridge Rehabilitation Cost is $2.6 Million
    - Estimated New Bridge Construction is $3.5 Million
    - Estimated New Roadway Construction Cost is $1.5 Million
  - Not currently being considered due to Park Impacts

# Alignment Summary

| Alignment Option | | Existing Bridge | Existing Dam | Johnstone Park Impact | Wetland Impact | Construction Traffic | Estimated Total Construction Cost |
|---|---|---|---|---|---|---|---|
| A | Existing Alignment<br>New Construction | Removed | Adversely Effected | Low<br>2.7 Acres | Low<br>Potential | Road Closed | $ 5.0 Million |
| B | Existing Alignment<br>Rehabilitation | Rehabilitated<br>(Two-Way) | Not Adversely Effected | None | Low<br>Potential | Road Closed | $ 7.5 Million |
| C | Existing Alignment One-Way<br>and New Alignment One-Way | Rehabilitated<br>(One-Way) | Not Adversely Effected | Moderate<br>4.9 Acres (East) | Low<br>Potential | Road Closed | $ 10.9 Million |
| D | New Alignment<br>One Block East | Rehabilitated<br>(Pedestrian Only) | Not Adversely Effected | Moderate<br>4.9 Acres (East) | Low<br>Potential | Road Open | $ 9.1 Million |
| E | New Alignment<br>One Block East | Remain<br>(Monument) | Not Adversely Effected | Moderate<br>4.9 Acres (East) | Low<br>Potential | Road Open | $ 8.4 Million |
| F | New Alignment<br>Half Mile East | Remain<br>(Monument) | Not Adversely Effected | None | High<br>Potential | Road Open | $ 11.2 Million |
| G | Sign SH-123 along Tuxedo Blvd.<br>Existing SH-123 to Remain | Remain<br>(Monument) | Not Adversely Effected | None | Low<br>Potential | Road Open | $ 18.0 Million |
| W | New Alignment<br>About 150 Feet West | Remain<br>(Monument) | Not Adversely Effected | Significant<br>2.5 Acres (West) | Low<br>Potential | Road Open | $ 7.6 Million |

Option W is not currently being considered due to the Park Impacts.

An Agreement is required for the existing SH-123 Bridge to Remain as a Pedestrian Bridge or Monument.

# Meeting Summary

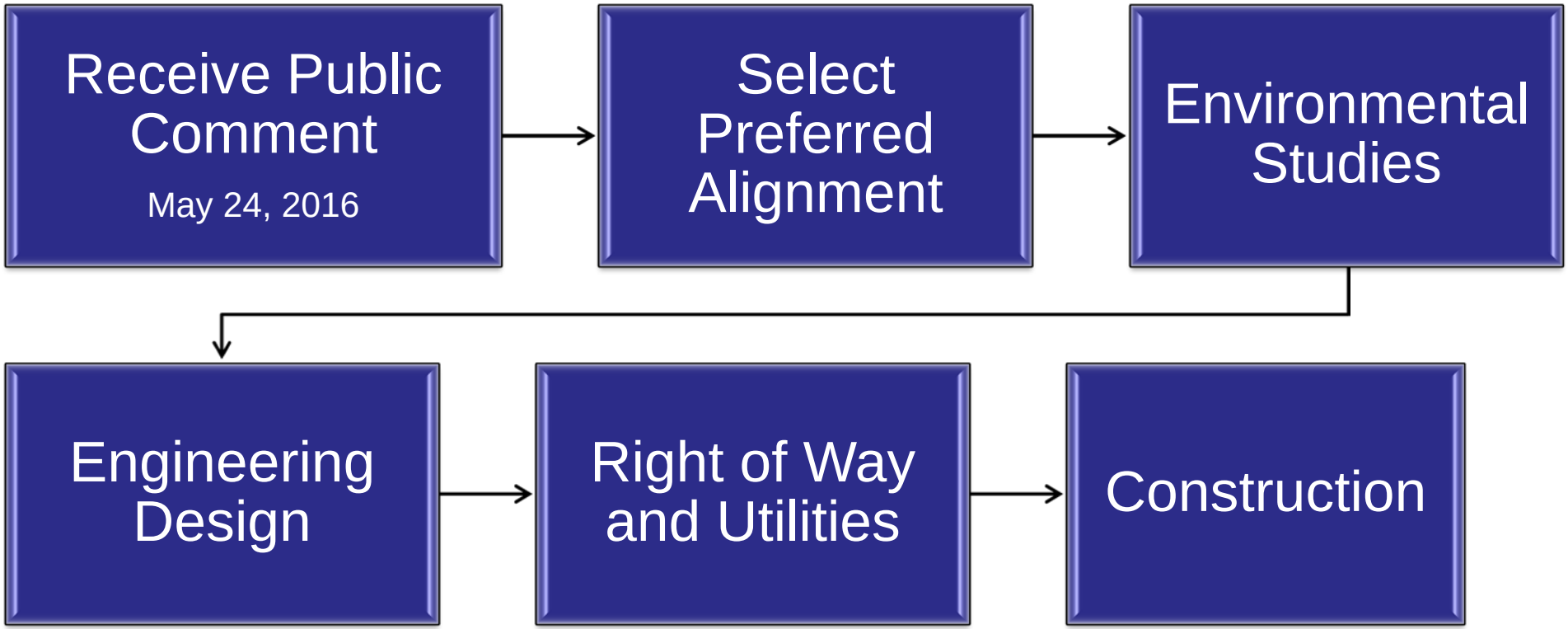
## Impacts and Options Addressed

- NEPA Background
- Section 4(f), 6(f), and 106 Information
- Existing Bridge Conditions
- Bridge Repair or Replacement Alternatives
- SH-123 Alignment Options and Impacts

## Next Step

- Public Comments and Input
  - Rank Impacts on the Comment Card
    - 1 “Not Important” to 5 “Most Important”
  - Rank Alignments and Bridge Options on Comment Card
    - 1 “Not Important” to 5 “Most Important”

# Project Schedule



# Thank You

## Please Submit Your Comments by May 24, 2016

Leave Your Comment Form Here Tonight

Mail the Comment Form Back to ODOT:

Environmental Programs Division
Oklahoma Department of Transportation
200 NE 21st Street
Oklahoma City, OK 73105

Fax Your Comments to (405) 522-5193

Email Your Comments to ODOT-ENVIRONMENT@ODOT.ORG

Submit Online at www.ODOT.org/PublicMeetings

**QUESTIONS?**