Cribari Memorial Bridge
Project Advisory Committee (PAC)
Meeting #5

CTDOT State Project # 158-214

May 8, 2019
CRIBARI MEMORIAL BRIDGE
Meeting Agenda

- Welcome & Introductions
- Ground Rules & PAC Role Refresher
- PAC Meeting Purpose
- NEW Binder Contents
- Summary of Key Issues Discussed
- Summary of Alternatives & Open Discussion
- Next Steps & Timeline
Meetings will
• Start and end on time
• Focus on input from PAC members
• Showcase diverse perspectives

PAC members will
• Be courteous and respect all opinions. Rude behavior will not be tolerated
• Have one speaker at a time
• Provide honest input
• Respect recommendations discussed at previous meetings
• Review materials provided in advance

Purpose: Information Exchange
What Is Our Purpose Tonight?

Review Issues and Solicit Comments from PAC on Alternatives

Review Next Steps
NEW Binder materials

• Updated Comparison Matrix
• Clearance Diagrams
• Bridge Opening Information
• Meeting #4 Summary
• Meeting #5 Presentation
What You Have Told Us

Key Feedback on Alternatives Received

• Provide a simple method of comparing options
• Consider a conservation alternative
• Consider the height, width, and **scale** of alternatives
• Key environments to be considered:
  – property, historic, visual, community character, bike/pedestrian, traffic & parking, public safety, navigable waters, water quality, natural environment
  – others?
## CRIBARI MEMORIAL BRIDGE
### Review of Alternatives & Workshop

<table>
<thead>
<tr>
<th></th>
<th>No Build</th>
<th>Conservation</th>
<th>Rehabilitation</th>
<th>Replacement (On-Alignment)</th>
<th>Replacement (Off-Alignment)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Work Involved</strong></td>
<td>Minor repairs performed as required by DOT Maintenance force</td>
<td>Repair to bridge to its 1993 condition</td>
<td>Repair/widening of trusses</td>
<td>Replacement of the existing bridge with a new structure on a similar alignment</td>
<td>Replacement of the existing bridge with a new structure on an alignment located north of the existing</td>
</tr>
<tr>
<td><strong>Purpose &amp; Need</strong></td>
<td>Repairs made, however, limited by capabilities of DOT Maintenance</td>
<td>Load restrictions no longer required</td>
<td>Load restrictions no longer required</td>
<td>New structure supporting current load standards</td>
<td>New structure supporting current load standards</td>
</tr>
<tr>
<td><strong>Address Structural Deficiencies</strong></td>
<td>Fills height restriction caused by electric box</td>
<td>Vertical height raised, ranging from 19'-11&quot; to 16'-3&quot;</td>
<td>Vertical height raised to 16'-3&quot; (max.)</td>
<td>Lane width increased</td>
<td>Vertical height raised to 16'-3&quot; (min.)</td>
</tr>
<tr>
<td><strong>Address Functional Deficiencies</strong></td>
<td>Fills best horizontal truss members</td>
<td>New barrier system for bridge openings</td>
<td>New barrier system for bridge openings</td>
<td>Wider travel lane and shoulders</td>
<td>Wider travel lane and shoulders</td>
</tr>
<tr>
<td><strong>Increased Vehicular Safety</strong></td>
<td>Fills box</td>
<td>Crash tested railing</td>
<td>Crash tested railing</td>
<td>Wider travel lane and shoulder</td>
<td>Wider travel lane and shoulder</td>
</tr>
<tr>
<td><strong>Increased Bicycle/ Pedestrian Safety</strong></td>
<td>Fills horizontal truss members</td>
<td>Potential widening of sidewalk</td>
<td>Potential widening of sidewalk</td>
<td>Wider sidewalk</td>
<td>Wider sidewalk</td>
</tr>
<tr>
<td><strong>Improved Marine Traffic</strong></td>
<td>Fills box</td>
<td>Increased marine vertical clearance</td>
<td>Increased marine vertical clearance</td>
<td>Wider shoulder width</td>
<td>Wider shoulder width</td>
</tr>
<tr>
<td><strong>Considers Historic Character</strong></td>
<td>Fills box</td>
<td>Fender bridge openings</td>
<td>Fender bridge openings</td>
<td>Increased marine vertical clearance</td>
<td>Increased marine vertical clearance</td>
</tr>
<tr>
<td><strong>Resilient to Changing Climate</strong></td>
<td>No change as they are with periodic repair</td>
<td>Water-resistant mechanical equipment</td>
<td>Water-resistant mechanical equipment</td>
<td>Equipment raised from existing location</td>
<td>Equipment raised from existing location</td>
</tr>
<tr>
<td><strong>Design Considerations</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Roadway Vertical Clearance</strong></td>
<td>12'-10&quot; (electric box)</td>
<td>15'-10&quot;</td>
<td>15'-10&quot; to 16'-3&quot;</td>
<td>16'-3&quot; (min.)</td>
<td>16'-3&quot; (min.)</td>
</tr>
<tr>
<td><strong>Marine Vertical Clearance</strong></td>
<td>Less than 7'-0&quot;</td>
<td>Less than 7'-0&quot;</td>
<td>Less than 7'-0&quot;</td>
<td>Increased from existing</td>
<td>Increased from existing</td>
</tr>
<tr>
<td>Lane Width</td>
<td>15'-10&quot;</td>
<td>15'-10&quot;</td>
<td>16'-3&quot; (min.)</td>
<td>16'-3&quot; (min.)</td>
<td>16'-3&quot; (min.)</td>
</tr>
<tr>
<td>Bike Path/Shoulder width</td>
<td>5'-0&quot;</td>
<td>5'-0&quot;</td>
<td>5'-0&quot;</td>
<td>5'-0&quot;</td>
<td>5'-0&quot;</td>
</tr>
<tr>
<td>Intersection Improvements</td>
<td>No change from existing</td>
<td>Lengthening of right turn lane leading to Riverside Ave</td>
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</tr>
<tr>
<td>Sidewalks</td>
<td>0'-0&quot;</td>
<td>0'-0&quot;</td>
<td>0'-0&quot;</td>
<td>0'-0&quot;</td>
<td>0'-0&quot;</td>
</tr>
<tr>
<td>Bridge Openings</td>
<td>No change from existing</td>
<td>No change from existing</td>
<td>No change from existing</td>
<td>Radiated/sector bridge openings</td>
<td>Radiated/sector bridge openings</td>
</tr>
<tr>
<td>Rights-of-Way</td>
<td>Off-peak closures of bridge to perform maintenance</td>
<td>Temporary access for temporary bridge **</td>
<td>Temporary access for temporary bridge **</td>
<td>Permanent access for temporary bridge **</td>
<td>Permanent access for temporary bridge **</td>
</tr>
<tr>
<td>Construction Disruption to Property</td>
<td>Temporary impacts to north parking lot</td>
<td>Temporary relocation of driveway</td>
<td>Temporary impacts to north parking lot</td>
<td>Permanent partial take of parking lot</td>
<td>Permanent relocation of driveway</td>
</tr>
<tr>
<td>Wetland/Water Quality</td>
<td>Repairs to piers</td>
<td>Repairs to piers</td>
<td>Repairs to piers</td>
<td>Installation/removal of temporary bridge</td>
<td>Installation/removal of temporary bridge</td>
</tr>
<tr>
<td>Construction Question</td>
<td>As needed for maintenance</td>
<td>2-5 years</td>
<td>2-5 years</td>
<td>5 years</td>
<td>5 years</td>
</tr>
<tr>
<td>Anticipated Structure Service Life</td>
<td>20-25 years</td>
<td>25-30 years</td>
<td>25-30 years</td>
<td>75-100 years</td>
<td>75-100 years</td>
</tr>
<tr>
<td>Estimated cost ***</td>
<td>Maintenance costs as required</td>
<td>$19,500,000 - $19,500,000</td>
<td>$17,800,000 - $20,800,000</td>
<td>$15,200,000 - $22,900,000</td>
<td>$15,800,000 - $19,200,000</td>
</tr>
</tbody>
</table>

*Under consideration based on PAC discussion
**Exact values would be vetted out at design level if chosen
***Estimated costs are derived from the Rehabilitation Study Report dated June 2016, as these are only alternatives for impact analysis, and full designs for cost analysis have not yet been developed

04/11/19
CRIBARI MEMORIAL BRIDGE
Alternatives Screening Process

FULL RANGE OF ALTERNATIVES

Agency Coordination

Public Involvement

FINAL ALTERNATIVES FOR EVALUATION
# Alternatives Comparison Chart

<table>
<thead>
<tr>
<th>PAC Member Name/Organization:</th>
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CRIBARI MEMORIAL BRIDGE

Next Steps
CRIBARI MEMORIAL BRIDGE
NEPA/CEPA Process

Project Identification and Early Coordination
Early Agency Coordination
Conduct Public Scoping (Scoping Notice)
Develop/Refine Project Purpose and Need Statement

Winter 2019
Prepare EA/EIE

Winter 2020
Publish Notice of Availability of EA/EIE

Fall 2019
Commence Impact Analyses

Winter 2020
Circulate EA/EIE for Agency/Public Review

Summer 2019
Select and Define Proposed Action Alternative

Winter 2020
Conduct Public Hearing

Existing Conditions & Alternatives Analysis

Spring 2020
Prepare Finding/CEPA Record of Decision

Spring 2020
Respond to Comments/Edit Document

Final Design and Construction
Federal and State Permitting

Scoping Phase
Data Collection and Documentation Process
Review Phase
Finalization Phase
CRIBARI MEMORIAL BRIDGE
Alternatives Screening Process

FULL RANGE OF ALTERNATIVES

Agency Coordination

Comparative Screening

Initial Screening

Public Involvement

Detailed Screening

Alternative Refinement

FINAL ALTERNATIVES FOR EVALUATION
• Evaluate potential impacts to resources, identify measures to avoid or minimize impacts and propose mitigation for impacts that cannot be avoided.

• Resources include, but are not limited to:
  - Rights-of-way & acquisitions
  - Land use, zoning & parking
  - Consistency with local, regional & state plans
  - Traffic
  - Air quality
  - Noise
  - Historic/cultural
  - Section 4(f)/106 resources
  - Visual/aesthetics
  - Socio-economics
  - Community cohesion, bike/ped. considerations
  - Public safety & security
  - T&E Species
  - Water resources & quality
  - Navigable waters
  - Coastal resources, floodplains & wetlands
  - Public utilities
  - Energy requirements
  - Hazardous materials
QUESTIONS
Thank you for your participation
Alternative snapshots for discussion
CRIBARI MEMORIAL BRIDGE
Rehabilitation Section

APPRAOCH SPAN SECTION
BRIDGE REHABILITATION CONCEPT

REHABILITATION
Draft Concept for PAC Discussion
CRIBARI MEMORIAL BRIDGE
Rehabilitation Section

SWING SPAN SECTION
BRIDGE REHABILITATION CONCEPT

REHABILITATION
Draft Concept for PAC Discussion
CONSERVATION
Draft Concept for PAC Discussion
CONSERVATION MEMORIAL BRIDGE
Rehabilitation Section

3'-7\(\frac{3}{4}\)" (CLEAR)
SIDEWALK

9'-9" LANE

19'-6" CURB TO CURB

APPROACH SPAN SECTION
CONSERVATION BRIDGE REHABILITATION CONCEPT

SCALE: \(\frac{\frac{3}{4}}{\frac{1}{5}} = 1\'-0"\)
CRIBARI MEMORIAL BRIDGE
On-Alignment Replacement

On-Alignment Bridge Replacement
No Scale

Legend:
- NEW PAVEMENT
- NEW STRUCTURE
- NEW SIDEWALK
- NEW RETAINING WALL
- EXISTING RETAINING WALL
- EXISTING ROW
- WETLANDS
CRIBARI MEMORIAL BRIDGE

On-alignment Replacement

SWING SPAN SECTION
BRIDGE REPLACEMENT CONCEPT

ON-ALIGNMENT REPLACEMENT
Draft Concept for PAC Discussion
ON-ALIGNMENT REPLACEMENT
Draft Concept for PAC Discussion

CRIBARI MEMORIAL BRIDGE
Replacement
ON-ALIGNMENT REPLACEMENT
Draft Concept for PAC Discussion
CRIBARI MEMORIAL BRIDGE

On-

alignment Replacement

OFF ALIGNMENT REPLACEMENT
Draft Concept for PAC Discussion
OFF-ALIGNMENT REPLACEMENT
Draft Concept for PAC Discussion
OFF-ALIGNMENT REPLACEMENT
Draft Concept for PAC Discussion

MOVEABLE SPAN SECTION
OFF-ALIGNMENT BRIDGE REPLACEMENT CONCEPT
CRIBARI MEMORIAL BRIDGE
On-alignment Replacement

PARALLEL OFF-ALIGNMENT REPLACEMENT REPLACEMENT
Draft Concept for PAC Discussion

LEGEND
NEW PAVEMENT
NEW STRUCTURE
NEW DRIVEWAY
NEW SIDEWALK
NEW RETAINING WALL
TEMPORARY ROADWAY PAVEMENT
EXISTING ROW
WETLANDS
PARALLEL OFF-ALIGNMENT REPLACEMENT
Draft Concept for PAC Discussion
PARALLEL OFF-ALIGNMENT REPLACEMENT
Draft Concept for PAC Discussion
PARALLEL OFF-ALIGNMENT REPLACEMENT
Draft Concept for PAC Discussion

SWING SPAN SECTION
PARALLEL OFF-ALIGNMENT BRIDGE REPLACEMENT CONCEPT

SCALE: 3/4" = 1'-0"