

**SUBJECT** Stakeholder Working Group (SWG) Meeting No. 2  
Bridge concepts, consensus on alternatives to carry forward

**PROJECT** Feasibility Study for Arlington Avenue Bridges Replacement

**LOCATION** Remote Zoom Teleconference

**DATE/TIME** Thursday, November 5, 2020, 9:00 - 10:30 a.m.

**MODERATOR** RTC Project Manager Judy Tortelli

#### INVITATION

- Zoom meeting conference call invitation from RTC Project Manager Judy Tortelli

#### PREPARATION

- PowerPoint presentation distributed via email:
  - SWG-2 meeting purpose and agenda
  - project overview to reestablish scope, process, purpose and need, schedule and background
  - recaps of SWG-1 and TAC-1 and TAC-2 meetings
  - recommended bridge concepts

#### ATTENDANCE

- 20 attended
  - 1 area resident
  - 5 representing the City of Reno
  - 5 representing community organizations
  - 1 representing the Reno-Sparks Indian Colony
  - 1 representing the Carson Truckee Water Conservancy
  - 1 representing Nevada Department of Transportation (NDOT)
  - 1 representing the Federal Highway Administration (FHWA)
  - 9 representing RTC (project management) and design and outreach subcontractors

#### MEETING NOTES

Taken by court reporter Brandi Smith, Litigation Services, and provided as a pdf (attachment 2).

#### WELCOME - RTC Project Manager Judy Tortelli

- welcomed everyone and introduced herself
- introduced two members of the project team from Jacobs Engineering who assisted
  - Ken Greene on the environmental side and Mike Cooper on bridge concepts
- introduced Brandi Smith, court reporter from Litigation Services
- previewed the agenda, asking that questions be held for breaking points
  - presentation, including project overview, SWG-1 and TAC-1 and TAC-2 meeting recaps, and recommended bridge concepts
  - group discussion and consensus
- presented project team and stakeholders attending

#### PRESENTATION - RTC Project Manager Judy Tortelli

##### SWG-2 MEETING PURPOSES

- provided an overview on what's been done regarding bridge concepts
  - conveyed input from Technical Advisory Committees (TACs), small groups of specialized individuals who dive into project details based on broader SWG direction
- determine which bridge alternatives should be carried forward
  - goal: to reduce the range of alternatives that are carried forward into NEPA and design

##### PROJECT OVERVIEW REFRESH

- much of this information had been previously presented

##### SCOPE

- complete a feasibility study to define bridge options, identify constraints and determine costs
  - goal: to identify a bridge and aesthetic package to carry forward into environmental clearance and design
  - decisions to be documented using Planning and Environmental Linkages (PEL) process, which helps inform decision making, engages the public and stakeholders and streamlines future NEPA processes

##### PROCESS

- modeled after the Virginia Street Bridge process
- alternatives evaluated based on:
  - ability to meet project purpose and need
  - ability to avoid and minimize impacts to the natural and built environments
  - construction feasibility and costs
  - input from the Stakeholder Working Group (SWG), RTC Board, City of Reno Council and the public
- first public meeting (December 2019) provided great feedback that the team has looked at in more detail since and is keeping in mind
  - 78 comments: bridge types 35%, bridge aesthetics 35%, plus miscellaneous needs and elements

PRESENTATION continued - RTC Project Manager Judy Tortelli

#### PROJECT OVERVIEW REFRESH

PROCESS continued

- SWG-1 meeting (February 2020)
  - successfully defined environment and engineering constraints and criteria
- TAC-1 meeting (July 2020)
  - focused on permitting and regulatory requirements
- TAC-2 meeting (August 2020)
  - bridge and roadway elements
- future meetings
  - SWG-3 meeting to address the aesthetic theme
  - public meeting to present study information and get input

#### PURPOSE AND NEED

- address structurally deficient bridges
- provide safe and ADA-compliant multimodal improvements
- address hydraulic capacity needs
- respond to regional and community plans

#### SCHEDULE (adjusted due to COVID-19 delays)

- December 2019 | kickoff public meeting
- Currently | identifying and analyzing bridge and aesthetic concepts
- Early 2021 | public meeting to present findings
- June 2021 | finalize Feasibility Study
- June 2021-2025 | environmental NEPA and design permitting
- 2026 | construction start

#### STAKEHOLDER WORKING GROUP

##### MEMBERS

- major permitting agencies, groups and organizations
  - representing a larger component of Downtown and immediately adjacent property owners
  - defined at the beginning of the feasibility study

#### MEETING-1 RECAP

- to organize alternative-specific constraints and criteria
- action items
  - need to determine whether lead agency is USACE or FHWA
  - need to determine/confirm whether the bridges are historic
  - need to determine the PEL checklist and who would sign it
- work product
  - environmental design constraints and criteria
  - engineering design constraints and criteria
  - to help project team prepare for TAC meetings

PRESENTATION continued - RTC Project Manager Judy Tortelli

## TECHNICAL ADVISORY COMMITTEE (TAC) MEETING -1 | PERMITTING AND REGULATORY REQUIREMENTS

### MEMBERS

- slightly different from SWG
  - 13 permitting/regulatory specialists defined at the beginning of the feasibility study

### MEETING -1 RECAP INTRODUCTION - RTC Project Manager Judy Tortelli

- hosted by the Army Corps of Engineers, 10 members attended
- project team presented permitting regulatory requirements associated with alternatives
  - identified subtle differences
  - discussed permit specifics, i.e., timeframes, scheduled impacts, needed coordination
  - asked the group for feedback

### MEETING -1 RECAP DETAILS - Jacobs Project Manager Ken Greene

- determinations per SWG-1 action items
  - lead agency FHWA
  - per NDOT, bridges are not historic; direct and indirect effects on adjacent historic properties to be determined during NEPA process
  - PEL checklist is being prepared and populated as the project progresses; to be signed by NDOT
- other determinations
  - DOT section 4 (f) is not applicable per FHWA
  - related to Section 408:
    - the local sponsor is the Carson-Truckee Water Conservancy District (CTWCD)
    - per CTWCD, flood risk modeling required, using their updated model; access for debris and sediment removal is key to a successful bridge type
- confirmations and updates to the summary of permitting and regulatory requirements for each of the major alternatives
  - City of Reno special use permit (SUP) will not be required
  - permits to be procured: 408, 404, storm water permit through NDEP, encroachment permit from NDSL, 401 water quality certification
  - other NDEP permits discussed, per experience with the Virginia Street Bridge Project: working and waterways and groundwater discharge
- other notes
  - additional requirements are possible during permitting and/or construction for single pier, tied-arch and elevated bridge concepts
- TAC-1 conclusions, based on meeting goal of moving toward fewer alternatives:
  - permitting and regulatory requirements are similar, except for tied-arch and elevated bridge concepts (more challenging permitting, viewshed impacts, maintenance and river access)
  - tied-arch not CTWCD's and City of Reno's design choice.

PRESENTATION continued - RTC Project Manager Judy Tortelli

## TECHNICAL ADVISORY COMMITTEE (TAC) MEETING-2 | BRIDGE AND ROADWAY ELEMENTS

### MEMBERS

- slightly different from SWG and TAC-1
  - 11 bridge/roadway specialists defined at the beginning of the feasibility study

### MEETING - 2 RECAP INTRODUCTION - RTC Project Manager Judy Tortelli

- hosted by the project team, 9 members attended
- scoring packet developed by the project team, based on SWG Meeting-1 feedback
  - qualitative attribute guidelines and concept evaluation summaries to assist with ranking
  - members asked to complete a scoring sheet prior to the meeting
- evaluation of nine concepts (three each) for the three major design themes
  - single pier: precast concrete girders, cast-in-place concrete box, steel I-girders
  - clear span: underdeck arch, rigid frame and tied-arch
  - elevated bridge: precast girders, cast-in-place concrete box, steel I-girders
- evaluation based on eight attributes plus 'Y' and 'Z' that members could add
  - construction cost
  - construction schedule and cost risk
  - existing infrastructure impacts
  - maintenance and inspection access
  - long-term maintenance costs
  - environment impacts
  - river recreation impacts
  - bridge aesthetics
- attributes ranked from 1 - poor to 10 - excellent
- three attributes added
  - permitting and ancillary impacts to Wingfield Park (scope creep), i.e., how much of the park is involved and do we have to address mitigation
  - crime prevention through environmental design
  - bridge design that discourages homeless camps, graffiti and illicit activity under it
- scores compiled and presented at the meeting
  - scores for added attributes not included because they would only subtly change rankings
- group reached consensus

### MEETING - 2 RECAP DETAILS - Jacobs Bridge Engineer Mike Cooper

- ranking method for the nine concepts
  - determined the average of each TAC member's scores for the attributes
  - totaled the averages
  - the higher the total, the better the ranking

PRESENTATION continued -  
TECHNICAL ADVISORY COMMITTEE (TAC) MEETING-2 | BRIDGE AND  
ROADWAY ELEMENTS

MEETING - 2 RECAP DETAILS - Jacobs Bridge Engineer Mike Cooper

- ranking results
  - Clear Span, rigid frame was the highest ranked alternative; did very well
  - Single Pier, precast concrete girders was next
  - Single Pier, cast-in-place box and Clear Span, underdeck arch followed closely
  - Single Pier concepts did not do as well in comparison to Clear Span, rigid frame
  - all three Elevated Bridge concepts didn't do well
- group agreement on concepts to carry forward
  - no for Elevated Bridge concepts
  - yes for Clear Span, rigid frame and no for the other two Clear Span alternatives
  - yes for Single Pier cast-in-place concrete box and precast concrete girders
- key points for recommended bridge concepts
  - Single Pier concept
    - presents fewer obstructions in the river than existing north end three-span structure
    - precast concrete girders design does not require falsework for superstructure to build over the river
    - cast-in-place concrete box girder design does require falsework for superstructure construction that would need to accommodate river flows
  - Clear Span rigid frame concept
    - no obstructions in the river
    - falsework for superstructure for cast-in-place concrete type bridge
- plan views and elevations of recommended bridge concepts with descriptions of what is represented

QUESTIONS - moderated by RTC Project Manager Judy Tortelli

- question, Adam Carmazzi, Michael Baker International (not a member of the SWG) - Was flood elevation taken into account with the different alternatives as well as the depth of the superstructure?
  - answer, Mike C, RTC - what is there today has been compared to depth of superstructures. No potential for debris collecting on a pier with Clear Span, rigid frame concept, but may be difficult to keep the ends of the bridge out of flood flow depending on depth of support structure. Single Pier concepts will provide clearance over the flood elevation without impacting roadway profile above (a constraint since the project ties into intersections at both ends).

#### QUESTIONS (continued) - moderated by RTC Project Manager Judy Tortelli

- questions, Greg Erny, Architects + - have alternatives been evaluated for discouraging graffiti? In precast concepts, is there a concern about inviting birds, bats, etc. or making them homeless? Some may consider them an amenity, some a nuisance.
  - answer, Judy T, RTC - need to consider graffiti factor moving forward.
  - answer, Mike C, RTC - there will be access underneath the north bridge, but form liner treatment (rough surface) and anti-graffiti coatings can be used. Roosting areas for birds may be a maintenance concern with a girder-style bridge.
  - comment, Kerrie Koski, City of Reno - as far as the City is concerned less maintenance is preferred. Graffiti protection materials could be incorporated into the maintenance and operations manuals. Theresa Jones keeps good records for the bridge program.

#### CONSENSUS - moderated by RTC Project Manager Judy Tortelli

- TAC-1 permitting and regulatory meeting recommendations, based on permitting challenges
  - Single Pier, Clear Span and Underdeck Arch concepts potentially less cumbersome
- TAC-2 bridge and roadway elements meeting recommendations
  - Single Pier, precast, Single Pier, cast-in-place, and Clear Span, rigid frame
- Elevated Bridge and Tied-arch concepts not carried forward from either meeting
- project team believes moving forward with TAC-2 recommendations makes the most sense
  - SWG-2 group concurred

#### MOVING FORWARD - RTC Project Manager Judy Tortelli

- SWG-3 meeting
  - will be polling the group for available dates, hopefully before Christmas to maintain the project schedule
  - focused on three different aesthetic themes for the bridge
    - 1) matching Downtown Reno Streetscape Master Plan
    - 2) matching what is in the area now
    - 3) something specific to the Arlington Avenue Bridges
  - question, John L'Etoile, NDOT - Can you articulate the existing area theme?
    - answer, Barb Santner, City of Reno - Downtown Streetscape standards are art deco but don't address bridge design specifically. Styling could also be driven by historic match to surrounding buildings. Public preference, i.e., open railings, could also be an influence.
    - comment, Mike C, RTC - a concrete railing could be designed and detailed to be a vehicle barrier with a more open look. Wider sidewalk congregation areas might also be a desirable feature but would require the Single Pier alternative.
    - question/consideration, Barb S, City of Reno - Since other Downtown bridges will need to be replaced, should there be a "family" of bridges or should each one be unique?
    - comments, Claudia Hanson, City of Reno - Establishing a hierarchy is a good concept, respecting each other's architecture with the Virginia Street Bridge being the grand one.

## MOVING FORWARD (continued) - RTC Project Manager Judy Tortelli

- SWG-3 meeting (continued)
  - comments, Claudia Hanson, City of Reno (continued) - On the wider area feature, it's already provided by the manmade island. On design, the Downtown design concepts overall have not been revisited in some time. Need to fully explore and make sure bridge design works with the rest of downtown, also respecting nearby architecture (three mid-century modern buildings, McCarran Mansion, Cathedral).
  - comment, Kerrie K, City of Reno - Agreed with Claudia H and supported Barb S "family" design. Would like to think about that for the future (Sierra Street and Lake Street) and believes the concept would have community support.
  - comment, Judy T, RTC - Liked the "family" idea as bridges are replaced.
  - comment, Kerrie K, City of Reno - maintenance and operations folks will appreciate not dealing with specialty items on every bridge.
  - comment, Claudia H, City of Reno - the community will also appreciate that the group is looking at a consistent approach into the future.
  - comment, Barb S, City of Reno - no above-grade support design is a big decision that already helps define the "family." Also addresses another cherished aspect of Downtown: maintaining the view of the mountains in the background when you're looking at the river.
  - comments, Kerrie K, City of Reno - an arch design in the railing (an offshoot of Virginia Street Bridge), while keeping openness, could tie aesthetics together. Agreed that view to the west is important. Also view of Downtown (to the east).
  - comment, Claudia H, City of Reno - view to the east would be the Virginia Street Bridge.
  - comment, Barb S, City of Reno - But if every bridge has an above-grade train, then it makes it harder to see past that next block. That supports Virginia Street leading with the above-grade arch while the other bridges don't have that.
  - question and comments, Greg E, Architects + - How do we define "family"? Similar structural concepts and/or characteristics? Cost effectiveness? Means and methods for the work? We should consider the context for each bridge and respect the activities for the locations. For example, the Arlington Bridges area is a big community gathering site with the bridges connecting the islands that would be the widening area. Making the bridges an extension of the islands is worth considering, allowing the bridges to be closed off for events.
  - comment, Judy T, RTC - all excellent feedback and a start on putting together material for the SWG-3 meeting.
  - comment, Kayla Dowty, Carson-Truckee Water Conservancy District (joined late) - reiterated, for CTWCD and the City of Reno, the importance of access from the bridge to the river, one of the priorities, to keep the channel clear.
  - response, Kerrie K, City of Reno - access has been discussed. SWG supports access from the banks to the river.
  - response, Judy T, RTC - Access for maintenance was a big point at TAC-1 meeting. Will continue to be on the priority list.



MOVING FORWARD (continued) - RTC Project Manager Judy Tortelli

- SWG-3 meeting (continued)  
response, Theresa Jones, City of Reno - Along with access for maintenance, access for bridge inspection by NDOT has also been an important point. The ability to get underneath to inspect all the girders needs to be considered.  
response, Judy T, RTC - SWG will key in on access for maintenance, inspection and debris removal as we go through the feasibility study, carrying it forward into design and NEPA.
- inform the public
  - SWG-1 work product
  - TAC-1 and TAC-2 recommendations
  - SWG-2 consensus
  - SWG-3 consensus, high-level description of what the bridge will look like, what people are likely to be the most vocal about
- finalize feasibility study

PUBLIC COMMENT - moderated by RTC Project Manager Judy Tortelli

- opened to non-SWG members  
miscellaneous questions and comments, Toni Harsh, area resident -  
How will closures (Ralston and Stevenson developments) affect traffic for the project?  
The Downtown streetscape has not been reviewed in a long time. Applauding the concept of putting this together with the other bridges, especially those within sight of each other.  
When will the Council people - Wards 5 and 1 and Councilperson at large - be brought up to date? They can contribute the public (It's their money.) input they receive even before your public presentation.  
response to Toni H, Judy T, RTC - thanks to Toni.  
Closures will be on the feasibility study radar.  
We may go outside the three aesthetic themes a little since the Downtown Streetscape Master Plan doesn't cover the bridge.  
After SwG-3 meeting, we will compile everything and present to the City of Reno Council and RTC Board, then go to the public. After the public meeting, we will update the City of Reno Council and RTC Board on feedback before finalizing the feasibility study.  
response to Toni H, Kerrie K, City of Reno - Appreciated Toni H's comments.  
City of Reno is aware of Stevenson abandonment and has spoken to the developers about working together. We are addressing specific developer needs, such as traffic, with those coming to the area. Not sure what the plan will be for the Riverside Ralston.  
RTC staff and City staff meet regularly with Council members internally to update them.

CONCLUSION - RTC Project Manager Judy Tortelli

- great feedback today; things are moving forward
- email coming soon to schedule SWG-3 about aesthetics, hopefully before Christmas

THANKS FOR PARTICIPATING (and reviewing this recap)

PROJECT WEB PAGE

- <https://www.rtcwashoe.com/engineering-project/arlington-avenue-bridges-project/>