

SUBJECT Stakeholder Working Group (SWG) Meeting No. 3
Aesthetic themes and elements, what to carry forward for additional analysis

PROJECT Feasibility Study for Arlington Avenue Bridges Replacement

LOCATION Remote Zoom Teleconference

DATE/TIME Tuesday, December 15, 2020, 1:00 - 3:15 p.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:
 - overview of downtown bridges, conditions and planned replacements
 - photographic examples of aesthetic elements
- recaps of SWG-1 and SWG-2 and TAC-1 and TAC-2 meetings

ATTENDANCE

- 29 (see Zoom log-ins attachment), including:
 - 3 area residents
 - 7 representing the City of Reno
 - 6 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.

WELCOME - RTC Project Manager Judy Tortelli

- welcomed everyone and introduced herself
- introduced two project team members who assisted with the presentation
 - Barb Santer, Stantec Senior Landscape Architect
 - Mike Cooper, Jacobs Structural/Bridge Engineer
- introduced Brandi Smith, court reporter from Litigation Services
- previewed the agenda, asking that questions be held for breaking points
 - review Arlington Avenue Bridges-specific history, downtown bridges' existing conditions, and design goals, opportunities and constraints
 - presentation on eight aesthetic elements in three categories (Barb Santer)
 - presentation on recommended bridge concepts (Mike Cooper), which affect aesthetic elements
 - group discussion and consensus
- Barb Santer and Mike Cooper re-introduced themselves

PRESENTATION INTRODUCTION - RTC Project Manager Judy Tortelli

SWG-3 MEETING PURPOSE

- discuss aesthetic elements for the project
 - presented at a high level to maintain some flexibility
- eight proposed aesthetic elements in three categories
 - overall theme and lighting
 - railing and widening sidewalk space
 - surface textures
- determine what to carry forward for additional analysis
 - in preparation for the next phase of the project: NEPA and design

BACKGROUND/HISTORY

- aesthetic theme possibilities identified at the beginning of the project
 - following the Downtown Streetscape Master Plan
 - mimicking the Virginia Street Bridge
 - "family of bridges" for this project and future replacements
 - developing a Wingfield Park-specific theme
- feedback at the end of the SWG-2 meeting
 - the Downtown Streetscape Master Plan doesn't specifically address bridges and would limit flexibility
 - a "family of bridges" standard could be helpful as there will be several downtown replacements in the near future
- preliminary theme agreed upon: modern design elements with a nod to the art deco historical context

PRESENTATION continued - RTC Project Manager Judy Tortelli

"FAMILY" OF DOWNTOWN BRIDGES

- map showing bridge locations (presentation slide 2) from west to east: Booth Street, Keystone Avenue, Arlington Avenue, Sierra, Virginia, Center and Lake Streets
 - Virginia Street Bridge recently replaced
 - Arlington Avenue, Keystone Avenue and Sierra Street Bridges to be replaced (RTC 2040 Regional Transportation Plan) between 2022 and 2026
 - Lake Street Bridge to be replaced between 2027 and 2040 (scheduled later to address flooding after "band-aid" installed in 2020)
- with four upcoming bridge replacements, the "family of bridges" aesthetic theme looks appealing and achievable

PRESENTATION AESTHETIC ELEMENTS - Barb Santer, Stantec Senior Landscape Architect
ARLINGTON AVENUE BRIDGES-SPECIFIC STUDY

- SITE HISTORY HIGHLIGHTS (presentation slide 3)
 - Wingfield Park has been an important Reno park since its development as Belle Isle (1909) with a resort-like atmosphere and amusement rides
 - the north bridge structure, Nevada's oldest T-beam bridge was constructed in 1912
 - Banker George Wingfield bought the property and donated it to the city in 1920
 - natural beauty of Wingfield Park illustrated in the 1945 novel, *The City of Trembling Leaves*, by Walter Van Tilberg Clark
 - potential to connect the aesthetic elements to the site's history and natural beauty
- ARCHITECTURAL CONTEXT OF EXISTING DOWNTOWN BRIDGES AND RIVERWALK
 - Booth Street Bridge (presentation slide 4): single-pier type with smooth abutment wall; riprap for slope reinforcement; smooth, solid concrete railing; globe accent lighting; textured, solid concrete wall with a sidewalk; pedestrian access to Idlewild Park
 - Keystone Bridge: different style (no details)
 - North and South Arlington Avenue Bridges (presentation slides 5 and 6) - texture created by boulders added for kayak park; view of river pools and riffles (wildlife, Reno's largest swimming hole)
 - North Arlington Avenue Bridge (presentation slides 5 and 6): two piers; natural rock texture, transitioning to solid concrete floodwalls; sidewalk adjacent to solid concrete barrier rail; pedestrian access underneath; riprap added with kayak park; lights at either end removed but not replaced after a flood
 - South Arlington Avenue Bridge (presentation slides 5 and 6): solid, smooth concrete railing panels; pilasters; view of the Riverwalk; view of the gates for kayak competitions

PRESENTATION AESTHETIC ELEMENTS - Barb Santer continued

- ARCHITECTURAL CONTEXT OF EXISTING DOWNTOWN BRIDGES AND RIVERWALK
 - Sierra Street Bridge (presentation slide 7): double, smooth-textured piers; smooth-textured flood wall; concrete railing with openings (meeting current accessibility requirements) and pedestrian-scaled lights; art-deco-look pilasters; sidewalk adjacent to railing; railing design and globe lights continue along floodwall
 - Virginia Street Bridge (presentation slide 8): recently replaced/reopened; clear-span (tied arch); large concrete arches that have a layered-concrete-look art-deco feature at the end; widened (bowed-out) deck for more pedestrian gathering space; double (for vehicle protection) dark gray, powder-coated railing in arch design that ties into the bridge arches; railing features stainless steel top and built-in lighting; four-lights clusters at four corners, salvaged from historic bridge; night lighting of the railings and arches, concrete and brick sidewalk paving with some tie-in to earlier Downtown Streetscape standards (not current)
 - South Center Street Bridge (presentation slide 9): replaced circa 1996; art deco design in context of the nearby downtown Post Office (chevron features); double railing due to widened bridge deck (for pedestrian viewing area), transparent art-deco top on the outside and concrete vehicular-rated on the inside with globe lights
 - Lake Street Bridge (presentation slide 10): may be replaced in 2027 timeframe; more utilitarian, removable metal railing due to flooding; four decorative lights (similar to the Sierra Street Bridge) on pilasters
 - Riverwalk (presentation slide 11): two segments, first, between Virginia and Sierra Streets, completed in early 90s; dark cherry powder-coated metal railing in several designs; dark cherry metal also used for pergola caps; stainless chain and bollard barriers; natural stone veneer on floodwall with natural granite cap on concrete; pedestrian-scaled lights; benches under arbors; custom granite pedestrian surfaces; dark cherry pedestrian bridge to Wingfield Park; treatment extended in second phase from Sierra Street to Arlington Avenue, pedestrian surfaces replaced with stamped, ashlar concrete
- PUBLIC ART PROGRAM CONTEXT (presentation slide 12)
 - heart of the arts and culture district
 - pieces at Bicentennial Park, the Nevada Museum of Art and City Plaza
 - murals throughout downtown
- ARLINGTON AVENUE BRIDGES SITE INVENTORY (presentation slide 13)
 - plan view map shows two bridges and surrounding points of interest, including Wingfield Park, West Street Plaza and Barbara Bennett Park
 - other context illustrated by photos: art at Bicentennial Park, the kayak park, under-bridge pathway, sports courts, a mural, the Wingfield Park amphitheater, street trees, and one or three nearby pedestrian access/bridges

PRESENTATION BRIDGE CONCEPTS - Mike Cooper, Jacobs Structural/Bridge Engineer

- REVIEW OF THREE RECOMMENDED CONCEPTS after TAC-1 and TAC-2 and SWG-1 and SWG-2 meetings
 - clear span rigid-frame structure (presentation slides 15-17)
 - | advantages: no obstructions in the north branch of the Truckee (currently two supports in the river) and no surfaces for tagging
 - | challenges: sidewalk expansion due to thin section at mid-span, less headroom for pedestrian under-bridge access
 - | rendering showing clear span over the river (no in-channel supports) and under-bridge pathway in Wingfield Park
 - two single-pier (center), two-span concepts (presentation slides 18-20)
 - | cast-in-place, concrete box girder (solid slab from underneath)
 - | precast concrete girders (placed during construction, individual lines from underneath)
 - | similar advantages for both: can support a wider deck (sidewalk expansion), shallower structure that will help mitigate roadway profile changes and provide more headroom for under-bridge pathway
 - | similar challenges for both: one obstruction in the river, pier wall tagging surface
 - | renderings

PRESENTATION AESTHETIC ELEMENTS - Barb Santer continued

- OPPORTUNITIES AND CONSTRAINTS (presentation slide 14)
 - plan view map shows elements for analysis: pedestrian access areas including three foot bridges and below the north bridge, bicycle access, deteriorating flood walls (possible replacement, form liner patterns, treatment consistency), Riverwalk connection to Wingfield Park, mismatched railings, potential street elevation adjustments (regarding) and replacement trees
 - plan view map indicates other considerations: views of the Truckee River, large grass areas, tree-lined pathways, river recreation, Wingfield Park amphitheater (premier summer destination especially during July Art Town), Whitewater Park, existing stone steps (difficult access), existing utility boxes (eyesore), street closure (between Island Avenue and West First Street) for pedestrian traffic and booths during multiple special events
- DESIGN GOALS developed from opportunities and constraints (presentation slide 21)
 - use cohesive design language with consistent form and design elements to unify the experience on and viewing the north bridge and south bridge and to establish a project theme for the bridge and landscape elements
 - enhance pedestrian experience
 - | with Arlington Avenue as an urban plaza (unified materials between sidewalk and street)
 - | by maintaining vantage points of the river and landscape
 - | with more shade trees; decorative lighting, railings and paving; some sculptural and artistic features

PRESENTATION AESTHETIC ELEMENTS - Barb Santer continued

- DESIGN GOALS (presentation slide 21) continued
 - create contextual and historical relevance by using structural elements relevant to the urban context and by paying homage to Reno's history while representing a new age of bridge development
 - incorporate innovation and sustainability with low impact development (LID) strategies, such as infiltrating stormwater with permeable pavements or concrete pavers and using energy-saving LED lighting
- PROPOSED AESTHETIC ELEMENTS (presentation slide 24) to be presented individually for comments and questions
- FIRST TWO ELEMENTS presentation - Barb Santer
- modern design with a nod to art deco (presentation slide 25)
 - decorative elements focused on pedestrian lighting, railings, under-bridge lighting, sculptural elements, and possibly applied to under-bridge form liner, pilasters and girders
 - reference images: concrete design, grillwork, railings, pedestrian and bridge lighting
- lighting (presentation slides 26-28)
 - protected from vandalism, flood water and debris
 - taking into account how it affects aquatic species
 - pedestrian-scaled lighting on bridges
 - | examples from art deco to modern art deco to modern; fixed in pilasters or bridge posts, along walkway and in railings
 - | lighting elements could continue between north and south bridges to create unity
 - | globe light used on the Center Street Bridge is also along Truckee River Avenue from Bicentennial Park to Booth Street and on the north side flood wall
 - bridge accent lighting
 - | girder lighting to unify the north and south bridge
 - under-bridge lighting
 - | combined aesthetic and pedestrian safety
 - lighting concept that could be applied to other downtown bridges
 - aesthetic lighting experience viewing and walking along bridges
- FIRST TWO ELEMENTS discussion - moderated by Barb Santer
 - comment, Anne Buja, St. Thomas Aquinas. Loves the visually interesting idea of juxtaposing modern bridges with art deco theme. Question: how vulnerable to vandalism is under-bridge lighting?

- FIRST TWO ELEMENTS discussion continued - moderated by Barb Santer
 - comments, Kerrie Koski, City of Reno. Likes the idea of lighting emphasizing art deco elements. Believes under-bridge lighting could be designed to be easy to maintain but hard to vandalize. Would like to consider changeable lighting, i.e., different colors for different events. For on-bridge lighting, believes globe lights concept could carry through the “family of bridges.” On bridge structure, now prefers center pier to give the bridges character and allow wider sidewalks.
 - comments, Alex Stettinski, Downtown Reno Partnership. Thinks wider sidewalks are key for the flow of visitors to the neighborhood. Agrees with changeable colors for under-bridge lighting, could unite the look of the bridges at night. Emphasized that paths need to be well lit to make people feel safer. Believes the combination of history with a modern overlay will be “stunning.”
 - comments, John L'Etoile, Department of Plans and Architecture, NDOT. Agrees with the theme. Giving art deco a contemporary appeal will resonate. Cautions against creating a “wow” factor with lighting. Likes the idea of color to tie the area together, but with a subdued approach. Lighting that enhances the beauty of the structure or the natural features of the area and the river itself (the center piece). Prefers the clear-span bridge so the river can be seen from more vantage points.
 - comments, Father Durante, St. Thomas Aquinas. Loves the modern-art deco theme. Also prefers the clear-span (no center pier) bridge. Broader sidewalks may not be needed because the street is often closed to cars for events. Question: will the walls (railings) along the sidewalks be high enough so (inebriated) guests won't fall off the bridge?
 - response, Barb S., Stantec (confirmed by Mike Cooper, Jacobs). 42 inches tall is the current requirement for the bridge railings.
 - comments, Greg Erny, Architects Plus. Let's enhance pedestrian access to Wingfield Park and the island. Likes the idea of lighting but agrees that it should be subtle, focusing on the features of the area not the light source. LED lighting accommodates color changes. Prefers the clear-span bridge to enhance views from above and from the river. Would like design to allow utilities (or other items in the future) to cross the river within the bridge.
 - comment, Anne B., St. Thomas Aquinas. Looking at other bridges, I found lighting on the outside that frames the structure to be really attractive, as opposed to underneath that could draw the eye to parts we don't want to emphasize.
 - comments Michon Eben, Reno-Sparks Indian Colony. Lighting should be limited for the natural rhythm of the surroundings. Question: can there be a historical marker recognizing the connection between the Truckee River and native, indigenous culture? Maybe this is for the NEPA document.
 - comment, Matt Brezina, City of Reno Parks Department. Walking path underneath the bridge is an important aspect of the park plan and the bridge plan. Height should be taken into account in relation to bridge style.

- FIRST TWO ELEMENTS discussion continued - moderated by Barb Santer
 - question, Kerrie K., City of Reno. Can someone speak to that in general terms? Also sidewalk widths and rail height with or without a center pier?
 - response, Mike C., Jacobs. In preliminary layouts, it's eight-foot sidewalks across the bridges, which could be widened to 12 feet or more with center pier providing support for the wider area. The rigid-frame, clear-span structure gets support from thickened ends/abutments. How much headroom that takes up and what the grades would look like would be part of further studies.
 - question, John L., NDOT. Could you get a 10-foot-wide sidewalk with a clear-span?
 - response, Mike C., Jacobs. It's possible by thickening a section to support the sidewalk, but the idea of the clear-span is to minimize the structure depth over the river.
 - comment, Barb S., Stantec. Eight feet with a clear-span is not bad considering that standard commercial width would be five feet.
 - question, John L., NDOT. If there is no grading between the bridges, would there be an opportunity to look at the point of connection between the pedestrian walks and the sidewalk along Arlington?
 - response, Judy T., RTC. Once we determine what the bridge footprint will be, we'll look at all connections into existing pathways, a key project component. Right now, we're not sure.
- SECOND SERIES OF ELEMENTS presentation - Barb Santer
- railings (presentation slide 29)
 - important to establish some transparency in the design
 - public request to be able to see the river on Virginia Street and Center Street Bridge replacements
 - design possibilities
 - | cutouts in concrete railing
 - | vehicular-rated metal guardrail with chevron art deco detail
 - | hybrid of concrete railing with cutouts on the bottom and transparent railing on top; may want to avoid this double railing to make it easier to walk back and forth across the street during special events
- maintain pedestrian accessibility (presentation slide 30)
 - avoid double railing like Center Street Bridge
 - if Arlington Avenue elevation needs to be raised, regrade those areas into the park, making grass areas slightly steeper; no small retaining walls that would interrupt pedestrian movement
 - raising Arlington Avenue elevation/regrading could be an opportunity for street tree planting
 - provide graffiti coating for maintenance/easy removal (protection with accessibility)
 - create a nice pedestrian space

- SECOND SERIES OF ELEMENTS presentation continued - Barb Santer
- widened bridge deck (presentation slide 31)
 - to allow for greater pedestrian viewing
 - needs bridge with single pier in the river
 - clarification from Mike C, Jacobs: a wider sidewalk over the full length of the clear-span, rigid-frame structure could be accommodated; may cause other conflicts
 - Center Street Bridge and Virginia Street Bridge have widened segments
- SECOND SERIES OF ELEMENTS discussion - moderated by Barb Santer
 - questions
 - | do we want the transparent railings?
 - | should we avoid double railings to maintain smooth pedestrian movement?
 - | should the bridge deck be widened?
 - comments, Kayla Dowty, Carson-Truckee Water Conservancy District (local sponsor for 408 permit). Cantilevered sidewalks and cable railing (like Virginia Street Bridge and Center Street Bridge) allow virtually no large equipment access to the river from the bridge to mitigate flood impacts (clear debris) or for general maintenance. Potential problem for 408 permit application. Another way for the City of Reno to access the river to remove sediment buildup from kayak park features would also be beneficial.
 - response, Judy T., RTC. Thanks to Kayla D. Project team will be keeping access in mind as they determine what the bridge footprint will be.
 - comments, Theresa Jones, City of Reno. Piggybacking on Kayla D.'s comment, NDOT's very large under-bridge inspection trucks (UBIT) will also need access. Also assuming that bridge is being modeled and designed to pass the 100-year flood event.
 - response, Mike C., Jacobs. A thinner structure might do better at providing flood capacity and have less impact on the profile of the roadway above. Profiles are constrained at both ends of the project: north bridge and south bridge tie into intersections, cannot step on adjacent properties.
 - comments, Anne Buja, St. Thomas Aquinas. The single railing helps to set the Virginia Street Bridge apart from other bridges with lower-profile railings. Likes visually opening up the railings (transparent).
 - comments, John L., NDOT. Transparent railings for sure. For safety, instead of double railings, maybe an aesthetic pilaster or bollard so that pedestrians can move back and forth easily but a car couldn't come up on the sidewalk. On widening the bridge deck, possibly closer to the abutment (two or four corners) where the structure is more robust.
- THIRD SERIES OF ELEMENTS presentation - Barb Santer
- textured abutment walls (presentation slide 32)
 - as opposed to flood walls, abutment walls are right underneath on the only downtown bridge with pedestrian access below it
 - currently smooth; texture would enhance pedestrian/river-user experience

- THIRD SERIES OF ELEMENTS presentation continued - Barb Santer
- textured abutment walls (presentation slide 32) continued
 - myriad of possible textures
 - | cobble texture already being used on the Riverwalk and oldest flood walls
 - | custom, stylized “form liner”
 - | natural cotton tree bark look
 - | repeated, stylized element, i.e., the Greek key from the downtown post office
- flood walls (presentation slide 33)
 - not a lot of replacement in this project
 - variety of flood walls in downtown, most common smooth concrete with pilasters and globe art deco lights
 - there should be some consistency between bridges
 - textures, horizontal reveals, railing, pilasters and lighting should also be consistent
 - south flood wall texture could match cobble along the Riverwalk
 - narrow planting along the base of the walls could soften the height, but may not be ideal from the engineering or maintenance side
- plaza street (presentation slide 34)
 - concept could unify park areas if the street between bridges needs to be replaced
 - unify paving, i.e., permeable pavers that would create a seamless transition from street to sidewalk and provide stormwater infiltration
 - | one paver style already on the northwest corner of the existing Arlington Avenue bridge
 - create a theme with a unique stamp or sandblast for sidewalk paving
- THIRD SERIES OF ELEMENTS discussion - moderated by Barb Santer
 - questions
 - | textured or smooth concrete abutment walls?
 - | for flood walls, should there be design consistency between bridges?
 - | what should north side flood walls look like? and south side?
 - | should we create a plaza street if the street between the bridges needs to be replaced?
 - comments, Kerrie K., City of Reno. From an engineer, on the plaza street concept, need to keep in mind that Arlington Is a street first and that textures shouldn't interfere with everyone's ability to access/navigate the plaza. Flood walls should be consistent, but also low maintenance.
 - comment, Matt Brezina, City of Reno Parks Department. Agrees with Kerrie K. Simple is better and easier, from color schemes to decorative textures that may have to be painted over due to graffiti.
 - comments, Anne Buja, St. Thomas Aquinas. Will what is done feel timeless? Similar to what NDOT has done along the highways, could we do local flora and fauna along the flood walls in a simple paint style that's easy to maintain?

- THIRD SERIES OF ELEMENTS discussion continued - moderated by Barb Santer
 - comment, Barb S., Stantec. Maybe reference the cottonwood or the trembling leaves, a significant component of the Truckee Meadows, an oasis in the middle of the Great Basin. Natural elements could tie in, too with Michon's (Eben, Reno-Sparks Indian Colony) thoughts about referencing the importance of the Truckee River to the tribes. Do it in a timeless, subtle way.
 - comment, Anne Buja, St. Thomas Aquinas. Not tacky.
 - comment, John L., NDOT. A little abstract so it resonates with the river, the cultural and the history of the Tribes.
 - comment, Anne Buja, St. Thomas Aquinas. Reference the Paiute people.
 - comments, John L., NDOT. On the patterns/textures, Greek symbol works better with an architectural element rather than the river. Agrees on keeping the walls similar throughout the river corridor. Deeper texture/pattern does impede graffiti.

CONSENSUS - RTC Project Manager Judy Tortelli

- everyone complimented Barb on an amazing presentation
- great discussion that indicates almost all proposed aesthetic elements should be carried forward for further review related to feasibility (finer details for NEPA and design)
 - exception: double railing won't be carried forward because it limits pedestrian accessibility
- call for additional ideas. Brian Stewart, RTC project team, suggested exploring the feasibility of a wider clear-span bridge, abutment to abutment, brought up by Mike C., Jacobs.

NEXT STEPS - Judy Tortelli

- summarize notes from two TAC meetings and three SWG meetings
- present findings and comments to the City of Reno Council and the RTC Board
- refine renderings of bridge concepts
- put together aesthetic elements to be shown for feedback at the second, final public meeting in February or March
- incorporate public feedback in the feasibility study and present to the City of Reno Council and RTC Board again before finalizing

PUBLIC COMMENT opened to non-SWG members - moderated by Judy Tortelli

- miscellaneous comments, Toni Harsh, area resident. Proportion of lights, related to whether they will be on pedestals or at street level, has been overlooked previously. Likes the idea of different motifs for the north side and south side flood walls, less repetitious, canyon feel. Addressing debris sweep upstream could clean up a lot of the situations with bridge structures downtown. Add ADA access to plan view map on the south side across from Barbara Bennett Park. Agrees that lighting should not be overwhelming. Consider shading issue (slippery areas) for pedestrian safety. Community wants to interact with the river.

PUBLIC COMMENT - moderated by Judy Tortelli

- miscellaneous questions and comments, Honor Jones, area resident. Wondered why elevated bridge concept was dropped and if it should be reconsidered. Could eliminate some issues, such as access for maintenance and debris removal. Would also mimic the Virginia Street Bridge elevated look and accommodate increasingly popular outdoor activities at Wingfield Park. And could prevent emergency vehicles from being caught by road closures/people in the street. Make sure flat surfaces are ADA compliant with no niches or grooves in which wheels can get stuck. Likes the increased lighting, should mimic the curve of the river and park.
 - response, Judy T, RTC. Recap of SWG-2 meeting and TAC-2 meeting explain why the elevated bridge concept was not recommended to be carried forward. Will reach out to Ms. Jones when those are posted on the website.

CONCLUSION - Judy Tortelli and Barb Santer

- again great feedback today; got through a lot of material in a short time
- happy holidays to everyone

THANKS FOR PARTICIPATING (and reviewing this recap)

PROJECT WEB PAGE

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