City of Portland
Historic Landmarks Commission
Design Commission

Design Advice Request

SUMMARY MEMO

Date: **March 31, 2021**

To: **Heather Catron, HDR**
Megan Neill, Multnomah County

From: **Hillary Adam, Design Review**
503-823-8953 | hillary.adam@portlandoregon.gov

Re: **EA 21-007324 DA – Earthquake Ready Burnside Bridge – Bridge Type Selection (HLC)**
EA 21-007685 DA – Earthquake Ready Burnside Bridge – Bridge Type Selection (DC)
Joint Design Advice Request Commission Summary Memo – March 4, 2021

Thank you for taking advantage of the opportunity to hold a Design Advice Request regarding your project. I hope you find it informative and valuable as you continue with your project development. Following, is a summary of the comments provided by the Historic Landmarks Commission and the Design Commission at the March 4, 2021 Design Advice Request. This summary was generated from notes taken at the public meeting and a subsequent review of the public meeting recordings. To review those recordings, please visit: https://efiles.portlandoregon.gov/Record/14393212/.

These Historic Landmarks Commission and Design Commission comments are intended to guide you in further design exploration of your project. These comments may also inform City staff when giving guidance over the course of future related land use reviews. It should be understood that these comments address the project as presented on March 4, 2021. As the project design evolves, the comments, too, may evolve or may no longer be pertinent.

Design Advice Requests are not intended to substitute for other Code-required land use or legislative procedures. Please keep in mind that the formal Type 3 and Type 4 land use review process [which includes a land use review application, public notification and a Final Decision] must be followed once the Design Advice Request meetings are complete, if formal approval for specific elements of your project is desired.

Please continue to coordinate with me as you prepare your future Land Use Review Applications.

Encl:
Summary Memo

Cc: *Historic Landmarks Commission*
Design Commission
Respondents

Executive Summary. Consensus was achieved across both Commissions that the preferred bridge types are as follows: West approach – Girder; Central span – Bascule; East approach – Cable-stayed. The Commissions believed that adequate clearance could be achieved at the west end with the girder option while preserving views and the existing relationship between the bridge and the historic district. The bascule bridge at the center also allows for open views from the center of the river. The cable-stayed bridge at the east responds to the dynamic nature of this developing part of the City. The Commissions noted that the differing contexts on the west and east, as well as the technical requirements due to the differing geology and existing built environments on the west and east precipitates the need for asymmetrical engineering which allows the opportunity for an asymmetrical design response. They stated that a girder-bascule-cable-stayed design accommodates this asymmetry in a more cohesive and elegant way than the other options.

Commissioners Present.
Historic Landmarks Commission: Kristen Minor, Matthew Roman, Andrew Smith; Maya Foty provided written comments prior to the DAR; Absent – Foty, Ernestina Fuenmayor.
Design Commission: Julie Livingston, Sam Rodriguez, Don Vallaster, Jessica Molinar, Brian McCarter, Chandra Robinson; Absent – Zari Santner.

Summary of Comments. Following is a general summary of Commission comments by design tenet. Please refer to the attached Community Design Guidelines matrix for a summary of the concept's response to future approval criteria.

CONTEXT

- Many commissioners noted that the bridge is located at the cardinal center of the city with a historic district on the west side of the river and a new neighborhood being built on the east side of the river. They also noted that the built environment and the engineering requirements on either side of the bridge were remarkably different. Differences noted include: shorter historic buildings on the west vs. taller contemporary buildings on the east, open space on the west vs freeways and railroads on the east, a blunt seawall edge on the west vs a more sloping approach on the east; a relatively narrower area of liquefiable soils on the west vs on the east.
- Several commissioners identified values of the existing bridge that they would like to see brought forward into any new design, including expansive views and its direct connections with the city grid. Some Commissioners noted that the existing bridge lands on the street grid and therefore responds to so many of the Central City Fundamental Design Guidelines; and that it is a great starting point for the design of any future bridge that it will share this commonality.
- One Commissioner noted that most great bridges have their grand design moment at the center and here, we have to have those moments on the approaches, which leaves the center to appear as an afterthought. He noted the engineering requirements create a challenging design problem.
- Several Commissioners noted that the context and the technical requirements are informing us of what the bridge needs to be, which is an asymmetrical response to the disparate contexts (architectural and geotechnical) on either side of the river. One Commissioner noted that the arrival on the west needs calmness to meet the context of the historic district whereas on the east, the context allows for more exuberance. Another Commissioner noted that, due to the geotechnical concerns and the existing built environment, we can't have a perfectly balanced bridge and we should embrace that; the beauty of its expression could be in an unbalanced form.

- Several Commissioners noted that while it is important to preserve the existing open relationship between the bridge and the buildings on the west side, the context of the east side buildings allows for a totally different design; something more dynamic to add to the existing sense of drama. One Commissioner noted that while he initially believed that symmetry was virtuous, the asymmetrical context requires an asymmetrical response; he noted that with the girder-bascule-cable-stayed option you have amplitude on the east side and it calms itself as you move west across the river and into the historic district.

PUBLIC REALM

- Several Commissioners noted that when one arrives in Old Town, you should be able to see into Old Town without the bridge structure blocking views, and the clearance below should be maximized to the greatest extent possible.
- Commissioners noted that there are tradeoffs with the girder, as originally presented. One Commissioner noted that there is so much repair work that needs to happen under the bridge that reduced clearances may not help; however, she also noted that because of the amount of repair that needs to occur under the bridge, the additional two feet of clearance that are gained with the tied-arch and cable-stayed options are not enough to compensate for the losses that those above-deck structures would have on the west side on-bridge experience.. (The Commissioners were later shown a drawing with the slimmed-down girder option on the west and four sets of columns between the MAX line and the river that would allow clearances comparable to those with the tied arch and cable-stayed options.) Commissioners believed that a few more columns to accommodate a slimmer girder was acceptable in order to preserve the experience on the top of the bridge.
- One Commissioner suggested that, if the columns in the Naito Parkway median could be removed, perhaps PBOT might consider establishing the area under the bridge crossing Naito as a more pedestrian-oriented space, such as with continuous paving and traffic calming measures and controls.
- One Commissioner suggested integrating pedestrian lighting into the balustrade, similar to bridges in Paris which carry the street lighting over the bridge and add pedestrian scale; this would be preferable to auto-oriented cobra heads. Other commissioners agreed.

BRIDGE AESTHETIC

- Many of the comments noted under “Context” translate directly to the Commissions’ comments on “Bridge Aesthetic”.
- The Commissions noted that because the built contexts on either side of the river are so disparate and because the geotechnical requirements are also so different, the form of the bridge can respond to these variations by having dissimilar forms. They noted that these asymmetrical conditions require an asymmetrical response. Specifically, they unanimously voiced support for a girder on the west, bascule in the middle, and cable-stayed on the east.
- One Commissioner noted the cable-stayed bridge lends itself to this idea of asymmetry; he noted he would like to see longer more graceful cables extending to the bascule piers on the west side of the towers with shorter steeper cables on the east side. He also noted that a tied arch lacks the grace of a through arch bridge like the Alsea Bay Bridge.
- One Commissioner noted that an asymmetrical approach places the “exclamation point” of the bridge over the freeways which draws attention from the mung below to the bridge itself in a way that the existing bridge does not.

- In discussing the asymmetry of the preferred types, one Commissioner noted that the bridge could be designed to "taper" from east to west. Another Commissioner noted that the control tower could be at the end of the cables to help transition to the relative openness of the west side.
- Another Commissioner noted that, on the east, the cable-stayed bridge lends itself to the context of the existing buildings which are all doing some sort of gymnastics with their massing or facades or both. She noted it is also the most elegant option if symmetry is off the table, that it fits within the asymmetrical context, and it allows the best views to the river.
- One Commissioner noted that the girder-bascule-tied-arch option looks like three bridges bandaged together and is a less cohesive image than the girder-bascule-cable-stayed option which, while needing refinement, somehow lends itself more to the story of asymmetry. He noted that we can emphasize the moment on the east side, with shorter steeper cables on the east and longer cables on the west for added drama.
- One Commissioner noted bascule supports could be more like Delta piers to be more elegant in their design. Another Commissioner noted that perhaps the form and shape of the river piers, whether delta or prow, could be used to make sure that the depth of the spans can transition more smoothly and can help bring the three distinct parts of the bridge together. He noted that the aesthetic of the river piers will be important because they will tie everything together.
- Several Commissioners expressed interest in the design of a future bridge carrying forward some inspiration from the existing bridge. One Commissioner suggested this could be done by taking cues from and capturing the essence of its character-defining features which include the openness, the balustrade, the prows at the piers. Another Commissioner noted that a consistent balustrade (similar to the existing bridge) would add coherency and character to a new bridge, particularly when viewed from perpendicular streets.
- One Commissioner noted the idea of towers on the east side for a cable-stayed bridge with a bascule in the center was almost reminiscent of a drawbridge. He noted that the prow shape of the existing piers is romantic and responsive to context of the flow of the river. He stated that not having too many vertical elements helps it feel less cluttered which is appropriate for the bridge's location as the cardinal center of the city.
- All Commissioners noted support the girder option on the west, stating that it is the most responsive to the context of the historic district, and encouraged the use of additional columns to allow for a shallower girder.
- In looking at page 20 of the packet, one Commissioner noted that the bottom image showing a girder on the west and a cable-stayed approach on the east, almost looks like the Burnside Bridge because of the minimal amount of above-deck structure and the thinness of the cables. He noted that with a bridge like this, you could feel like you are on the bridge, rather than enveloped in its structure.
- One Commissioner wondered if more of a truss design at the underside of the bridge could be deployed on the west side as a response to the Skidmore/Old Town Design Guidelines and to create a more open feel. Upon explanation by the project team that a truss would have to be deeper, most Commissioners noted that a girder was preferred over a truss. It was also noted that tapering cantilevers at the edges would allow additional light below and give the appearance of a slimmer girder.
- One Commissioner noted that the cable-stayed may make it easier to integrate the fall protection fencing that is currently attached to the bridge where it crosses the freeway.

- Several Commissioners expressed a desire to see views from different points rather than just downriver or from waterfront park, specifically pedestrian views.

ADDITIONAL COMMENTS

- Prior to the presentation and joint discussion on March 4, 2021, Landmarks Commissioner Foty provided the following comments, which were also read into the record:
  "Preference 1a for Tied Arch approach.
  Cable supported too much like Tillikum and the Truss a poor imitation of the Hawthorne Bridge. And not transparent enough.
  Preference 1b is the West Span Girder approach. On the one hand the west span looks like a highway, on the other hand it has a lighter touch on the historic district and is takes away the issue of the smaller arch, which if badly done could be annoying. And the west side looks a little more like the current bridge condition, so I guess you argue the condition matches historic a little better. There could be something cool about the one arch scheme. Several Commissioners expressed a desire to see views from different points rather than just downriver or from waterfront park, specifically pedestrian views."

PUBLIC COMMENTS

- John Czarnecki provided comments the entire existing bridge is under the purview of the Historic Landmark Commission and noted that the staff memo did not adequately address the existing bridge's historic status. He encouraged retention of the existing bridge.
- Peggy Moretti, Restore Oregon, provided comments noting disappointment in the approach of the discussion, assuming demolition of the existing bridge and encouraged the City and the County to consider the environmental cost of demolishing and replacing the existing bridge. She noted a desire for more considerations of the bridge's impact on the Skidmore/Old Town Historic District, rather than focusing on Waterfront Park.
- Paul Weir, noted concerns with the presentation and discussion focusing on the preferred alternative rather than considering retention of the existing bridge. He advocated for retention of the center piers and advocated for enhancing livability of the underside of the bridge on the west by extending the park in this area.

Exhibit List

A. Applicant's Submittals
   1. Original Submittal
B. Zoning Map
C. Drawings
   1. Packet for March 4, 2021 Joint DAR
D. Notification
   1. Posting instructions sent to applicant
   2. Posting notice as sent to applicant
   3. Applicant's statement certifying posting
   4. General information on DAR process included with e-mailed posting/notice
E. Service Bureau Comments
   1. PBOT response
F. Public Testimony

1. John Czarnecki, provided written comments in support of retaining the existing bridge.

G. Other
1. Application form
2. Staff memo to Historic Landmarks Commission, dated February 25, 2021
3. Emailed comments from Commissioner Maya Foty, received March 4, 2021
4. Staff presentation, dated March 4, 2021

City of
Portland, Oregon
Bureau of Development Services
FROM CONCEPT TO CONSTRUCTION

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Design Advice Request

DISCUSSION MEMO

Date: **February 25, 2021**

To: **Historic Landmarks Commission and Design Commission**

From: **Hillary Adam, Design / Historic Review Team**
503-823-8953 | hillary.adam@portlandoregon.gov

Re: **EA 21-007324 DA – Earthquake Ready Burnside Bridge – Bridge Type Selection (HLC)**
EA 21-007685 DA – Earthquake Ready Burnside Bridge – Bridge Type Selection (DC)

Design Advice Request Memo – Thursday, March 4, 2021

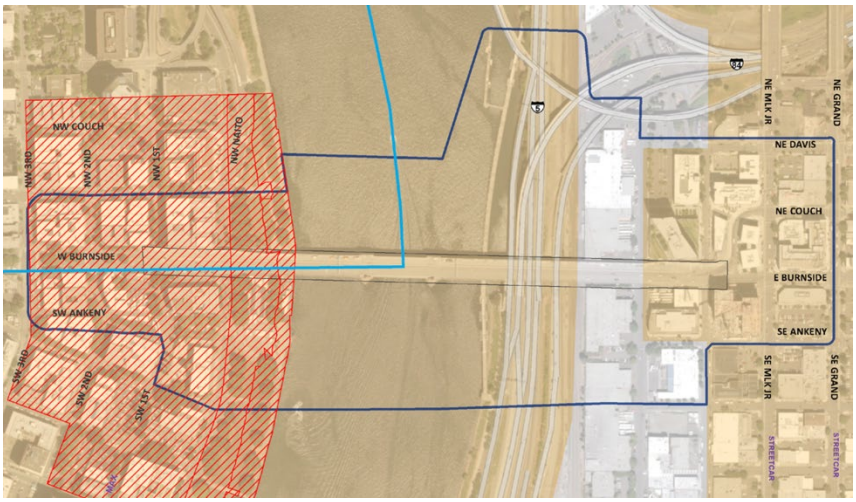
Attached is a drawing set for the Design Advice Request meeting scheduled on March 4, 2021. Please contact me with any questions or concerns.

I. PROGRAM OVERVIEW

Design Advice Request for the Bridge Type Selection for a possible future Burnside Bridge. The bridge is comprised of three parts – the west approach, movable span, and east approach. The center movable span must be either a bascule or vertical lift bridge. The west approach may be either: tied arch, cable-supported, truss, or girder. The east approach may be either: tied arch, cable-supported, or truss. See page 11of the presentation.

II. FUTURE HISTORIC RESOURCE REVIEW and DESIGN REVIEW APPROVAL CRITERIA:

- (HR and DZ) Central City Fundamental Design Guidelines – entire bridge
- (HR only) Skidmore/Old Town Historic District Design Guidelines – (red hatch)
- (DZ only) River District Design Guidelines – NW corner of bridge not within historic district (light blue line, but not within red hatch)
- (DZ only) Central Eastside Design Guidelines – eastern end to 2nd Avenue (tan shading at east end of bridge)



III. DEVELOPMENT TEAM BIO

Applicant	Heather Catron | HDR
Owner's Representative	Megan Neill | Multnomah County
Project Valuation	$ 825 million

IV. STAFF ANALYSIS & RECOMMENDED DAR DISCUSSION TOPICS

Staff advise you consider the following among your discussion items on March 4, 2021. Staff has provided matrixes to each Commission, specific to that Commission's purview. Please note:

- Applicable future approval criteria are in **bold**; criteria not applicable are not in bold and indicated with "N/A".
- The Central City Fundamentals apply within each Commission's purview and are on a white background.
- Criteria specific to each Commission's purview are in color and should be discussed separately and solely by the Commission that will apply those criteria. For the Landmarks Commission: criteria applicable within the Skidmore/Old Town Historic District are in color. Within the design zone, River District criteria are in blue and applicable to a very small area; Central Eastside criteria are in tan and applicable to a very small area.
- Approval criteria specifically related to architectural integrity and reuse of structures are noted as not applicable as this DAR assumes the existing bridge will not be retained.

CONTEXT

1. **Policy**. The following summarizes key policy context as it applies to the subject site.

   a. **Plan – 2035 Comprehensive Plan.**

   Policy 6.1.b of CC2035 states: "Retrofitting. Encourage the retrofitting of buildings and infrastructure to withstand natural hazards…Support Multnomah County's efforts to seismically retrofit Central City bridges, recognizing the Burnside Bridge as the regionally-designated priority."

   Policy 5.3 of CC2035 states: "Dynamic skyline. …Allow taller buildings at bridgeheads and encourage contextually sensitive heights within historic districts. Encourage heights and building forms that preserve sunlight on public open spaces and parks."

   b. **Development Standards – Base Zone / Plan District.** *Heights do not apply in the rights-of-way.*

   c. **Streets.** *Burnside Street is an Emergency Response route in the City's Transportation Plan. In 1996, Metro declared that all 19 miles of Burnside Street, including the bridge, is a regional lifeline route which allows emergency services to respond after a major earthquake or other disaster.*

2. **Natural or Built Context**. *The bridge forms the central crossing of the Willamette River, linking the west and east sides of the City; Burnside defines the north and south halves of the city. The location of the Burnside Bridge is at a bend in the river which allows unique views up and down river from the bridge as well unique views of the bridge itself in its context among other bridges from the riverbanks, especially on the east side.*

3. **New Bridge in Context.** *The bridge connects two distinctly different parts of the city – the Skidmore/Old Town Historic District on the west which ends at the seawall and the eastern Burnside Bridgehead which features several new buildings with a varied and modern aesthetic. If the existing bridge is demolished, a new bridge will need to fit within the City's context of the historic district on the west, the contemporary design district on the east, and the family of bridges along the Willamette. A new bridge will also have to be approved by both the Historic Landmarks Commission and the Design Commission (as well as many other agencies*

and committees) so there will need to be some agreement between both Commissions as to the right response for this important future landmark, which will define the cardinal center of the City – the connection between its oldest and newest neighborhoods, and the city's lifeline. Please note the guidelines primarily speak to the architecture of buildings and less so about structures; therefore, staff advises that the bridge should be considered for its merits as a bridge and a distinct entity and notes that many of the above-mentioned approval criteria may not be applicable.

PUBLIC REALM

1. **On-bridge Experience**.
   - **At the Center.** Many have noted that the openness of the existing bridge provides a full 360° view of the City from the intersection of its north/south and west/east dividing lines. Whether bascule or vertical lift, a future bridge will allow similar views from its center, though a vertical lift will create some impediments to the current open views. On one hand, a vertical lift has the opportunity to create dynamic towers that could be intriguing, but on the other, vertical towers may feel a bit cluttered or imposing when combined with other vertical structures above deck which is a certainty on the east side.
   - **At the Approaches.** Other than the girder option at the west side, any other option would create a distinctly different experience than the open unobstructed experience of the existing bridge. The truss option is similar to what is experienced on the Hawthorne or Broadway Bridges. The tied arch option would be similar to the Sauvie Island Bridge or the Fremont Bridge, which is generally not experienced by pedestrians except during special events like Bridge Pedal. A cable-supported option would be similar to the Tilikum Crossing Bridge. Each option has different levels of potential transparency through the structure and each option's structure will have a different relationship at the bridge deck related to massing and girth, frequency, and rhythm of elements at the pedestrian level. These approaches serve as entry points into each side of the river and these gateways have the potential to lend a distinct feeling of entry to these bridgeheads.
2. **Below Bridge Experience**.
   - **West side.** On the west side of the river, the bridge crosses over Waterfront Park. The current clearance under the existing bridge is 23' clear. Of the proposed bridge types, the cable-supported and tied arch options show a clearance of 25' clear while the girder option only allows 17' clear. Portland Parks & Recreation has indicated a desired for maximum clearance and has also expressed a desire for minimizing or eliminating columns in the park, as this will allow maximum opportunities for visibility, safety, and programming of this space. Regardless of which option is selected, the number of columns between the seawall and SW 1st Avenue will be significantly reduced from the current condition. Please note that location of the primary structural columns determines where over-deck structures will be located and therefore how those elements will interface with existing buildings on either side of the river. Consider images on pages 12, 15, 18, 19, and 22.
   - **East side.** The east side of the river offers different below deck experiences including along the Esplanade near the water surface, views from the freeway, and at and near the Burnside Skatepark, which is located between 2nd and 3rd. The bridge is much higher above the pedestrian level at the Esplanade than it is at the skatepark or at Waterfront Park on the west side. Consider images on pages 13, 14, 16, 17, 20, and 21.

Bridge Aesthetic

1. **Coherency of Form.** *Due to the length of each approach, a future bridge will not be perfectly symmetrical and above deck structures will be of different heights, as engineering required.*

Coherency of the overall form, however, is important. To that end, please provide comments as to whether each approach needs to share a common bridge type.

2. **Statement.** *As noted at the top of the memo, the Burnside Bridge is located at the symbolic heart of the city and any new bridge would be replacing a landmark individually listed on the National Register. Some commissioners have previously stated that any new bridge needs to be as good or better than the bridge it would be replacing – a bridge worthy of future landmark status. A new bridge at the cardinal center of the City has the potential to symbolically define the City, much as the historic Portland Oregon sign does today. Commissioners may wish to consider whether or not this is something worth considering and if it is, whether one of the proposed bridge types has greater potential to make such a statement.*