

Design Advisory Group Meeting #24

Magnolia United Church of Christ July 5, 2006, 4:00 – 5:30 PM

Summary Minutes

Agenda

- I. Welcome
- II. Project Updates
- III. Bridge Features
- IV. Public Comment
- V. Adjourn

Attendees

Design Advisory Group

- ✓ Dan Bartlett✓ Dan Burke✓ Fran Calhoun
- ✓ John Coney Grant Griffin Lise Kenworthy
- ✓ Doug Lorentzen Jose Montaño Mike Smith David Spiker
- ✓ Janis Traven
- ✓ Dan Wakefield Robert Foxworthy (alternate)

Project Team

- Lesley Bain, Weinstein A|U Dirk Bakker, KPFF
- ✓ Sarah Brandt, EnviroIssues
- ✓ Gerald Dorn, HNTB
- ✓ Brian Elrod, HNTB
- ✓ Cela Fortier, City of Seattle Gregg Hirakawa, SDOT Katharine Hough, HNTB Steve Johnson, Johnson Architects
- ✓ Kirk Jones, City of Seattle Don Samdahl, Mirai Associates Lamar Scott, KPFF Peter Smith, HNTB
- \checkmark Chelsea Tennyson, Enviro
Issues
- ✓ Marybeth Turner, City of Seattle
- ✓ K. Wendell Adams, KBA Terry Witherspoon, AMEC

Meeting Handouts

- ✓ Agenda
- ✓ DAG #23 Summary Minutes
- ✓ Criteria
- ✓ Bridge Columns
- ✓ Railings and Lighting



I. Welcome

Sarah Brandt, EnviroIssues

Sarah welcomed the group and thanked everyone for coming. She outlined the agenda (and related supporting materials), which included the following:

- Project Updates
- Bridge Features
- Next steps
- Public comment

She commented that Brian and Jerry would be walking the group through the packet of handouts they received on bridge features. She asked if anyone would like to make edits to the meeting minutes from the previous DAG meeting. Hearing no response, Sarah reminded the group that she would take edits via phone or email through the end of the week.

II. Project Updates

Kirk Jones, SDOT

Environmental Review Process

Kirk explained that the team is still waiting for WSDOT to approve the Cultural and Historic Resources Report. WSDOT has now requested contact with the author. Kirk noted that the team responded to every issue they raised, and therefore are expecting to get Washington State Department of Transportation (WSDOT) approval any day now. He went on to announce that the consultant team submitted the first draft of the Environmental Assessment (EA) to the city. Kirk is compiling edits from different city staff for the consultant to integrate. After this happens, the city will submit the document to WSDOT. He expects this process to take approximately two months, and anticipates printing and publishing the Draft EA for public comment by late September. Following the release of the Draft EA, the team will produce a Final EA, with the aim of adopting a Finding of No Significant Impact (FONSI).

Seattle Parks Department

Kirk explained the team's recent communication with the Seattle Parks Department. The team recently submitted a draft agreement to the Parks Department and plans to meet soon to discuss issues like column spacing and minimizing park impacts. Kirk noted that the project will affect the northerly edge of the park, which cannot be avoided. The current bridge replacement plan also encroaches on the upper park property 20 to 25 feet, and will require that a Federal Aviation Administration (FAA) tower building be acquired, taken down, and relocated.

Port of Seattle

Kirk and Dan Burke met recently to outline issues they would like to see contained in a white paper describing how the Port of Seattle and the City would work together in an emergency situation, as well as how they might work together during bridge construction and detour periods. The City will develop a draft white paper for the Port to review, as both agencies will need to agree that the direction it describes is appropriate. In regards to North Bay development progress, Dan said that issues are continuing to be worked through the

Mayor's office. While he did not have specific updates, he agreed to provide any additional information to Sarah to share with the DAG.

Discussion

- **Traven:** Kirk, is there any way to work with some of our constituents to help the project get funding?
- Jones: The financial folks are currently focusing on the budget to go to the Mayor and the Council. I expect towards the end of this month we will start focusing on how to acquire more funding for the project. We've also gotten this question via email, and I have relayed this to our director. We need to identify funding sources, but I wouldn't expect to have an answer until September at the earliest.

III. Bridge Features

Brian Elrod, HNTB

Brian provided an update on additional design work completed since the last DAG meeting. He reminded the group of Jerry Dorn's presentation of various possible design themes at the May DAG meeting, and noted that today's presentation is the next step in this process, focusing on the list of criteria used to evaluate elements such as bridge columns (piers), railings, and lighting. The list of criteria he presented included:

- Cost
- Aesthetics
 - Structure compatibility/material relationships
 - Context with existing and future development
 - o Level of excitement
 - o Color, texture, materials
 - Theme compatibility (marriage of maritime and progressive)
- Maintenance
 - o Life cycle cost
 - Ease of maintenance/repair
- Constructability
- Form
 - o Timelessness
 - o Hierarchy
 - o Scale
- Design performance

There are three basic bridge column types the design team is considering (please refer to the *Aesthetic Treatment Bridge Columns* handout for graphics displaying each type of bridge column). The three include the flared top columns, angular flare columns, and tapered double columns. Each of the bridge column types were evaluated using the criteria discussed

earlier to develop a list of advantages and disadvantages for each type. A summary of the advantages, disadvantages, and costs compared to baseline (low costs would be similar to the baseline design costs, while moderate to high costs would be up to 5% above baseline) can also be found in the *Aesthetic Treatment Bridge Columns* handout.

Brian then provided more information on each of the three column types and the six aesthetic treatments that could potentially be paired with each. He commented that with the flared top and angular flare columns, the team looked at various textures to break up the scale. Brian also noted that with the tapered top column, the team considered adding a base with ivy or plants to help reduce the scale, although this raises some concern about maintenance. There are also some potential constructability issues with the tapered top. Inverted tapered columns are structurally inefficient.

Brian noted that at the last DAG meeting, the team heard an interest in a maritime theme. He commented that the team has been playing with a flared top integrated with some sort of rope pattern treatment. This treatment would add texture, depth, and shadows. Options 1 and 3 reflected maritime industry. When the team considered two column designs, such as the tapered double columns, they found that adding texture made the design a bit too busy.

Discussion

Burke:	Is it more expensive to have the double column, instead of just one column?
Dorn:	The costs are comparable.
Jones:	Round columns get into trouble with forms. It is easy to do forms for angular columns. What is being proposed is a rectangular form. This is purely from a constructability perspective.
Wakefield:	Are we to assume the costs are relatively the same between angular and round columns?
Jones:	Yes.
Wakefield:	What is the price difference between bridge column types?
Dorn:	2-5% on the column portion only. It's not a big cost saver.
Coney:	All are equally unimpressive to me in terms of design and architecture. Why are we not considering pre-stressed girders with an arch under the deck for the structure type?
Dorn:	A straight arch doesn't fit well through the roadway curve. The height off the ground doesn't lend itself well to this type either. So it really doesn't gain us anything to have an arch underneath.
Coney:	It wouldn't allow a longer span?

Dorn:	No, because of the roadway curve.
Burke:	One of the issues we discussed last meeting is that the bridge will likely be in close proximity to buildings behind and in front of it. Because of this, you might not even be able to appreciate details like arches in the future.
Coney:	There would be buildings underneath it?
Jones:	No, there could potentially be buildings in front or back.
Dorn:	The arch shape is really not any longer. We can get longer spans with a straight or haunched structure than with an arch shape. The arch span requires more columns, so it is really more open without an arch.
Coney:	There are quite a few roadway structures built on columns. All are abysmal as seen from underneath. There are attractive support columns on the Aurora Bridge. We should be using that for a model.
Elrod:	The intent was to carry the theme of application (texture, etc.) all the way through and apply it to the bottom of the walls.
Burke:	Which one of the bridge columns that you are showing is most similar to Galer Street?
Dorn:	The single round column with the cap at the bottom.
Burke:	If it's a totally different style from the Galer Flyover, maybe it will or won't look good.
Wakefield:	I think a lot of what we will look at is the understructure. They are all going to be unattractive underneath.
Coney:	It would be a good idea to make bird roosting difficult under the bridge.
Lorentzen:	Walls should also be treated to discourage graffiti.
Elrod:	Applying pigment and sealer to those would be a good idea. We discussed graffiti at length. Graffiti artists are less inclined to tag something attractive.

Brian then discussed the figures presented in the handout *Aesthetic Treatment, Railing and Lighting*, which depicted four options for railing and up to four options each for accent, roadway, and pedestrian lighting. There are several options for pedestrian lighting, for example, some more traditional and some better reflecting Magnolia's community feel. In addition, the railing needs to be higher above the railroad for safety (e.g., a "throw fence") than elsewhere along the alignment.

Kirk Jones noted that, as Lesley Bain has often suggested, the team may consider widening the bridge sidewalks at certain locations over columns to create "viewpoints," rather than widen the whole bridge at considerable expense. Small pedestrian art pieces could also be incorporated along the alignment in these locations.

Coney: Did you look at the Magnolia neighborhood standards for streetlights? The streetlights in Magnolia look like a birdcage and are from the 1940s. They are only in certain parts of Magnolia. We might consider trying to incorporate something like that. Jones: That's a great idea, John. We'll look at those. Are there any strong feelings about the railing types presented? Any concerns? Lorentzen: My immediate reaction, just looking at the pictures, is that I don't like Option 1 with the curved railing. It doesn't look like you can walk under it. That seems like an awful lot of concrete to have a curved fence. Coney: Option 1 has an anti-suicide effect, if that is a concern. Suicide on the Golden Gate Bridge is actually somewhat encouraged because there are no streets or buildings to land on. Here the preferred bridge is the Aurora Bridge. It would have to be a higher railing to achieve an anti-suicide effect. Wakefield: I like the baseline railing option. Coney: We went through a similar design process for the Fremont Bridge. The "1%" for art" funding was spent on the railings. My response was to save money on the railings and spend more money on intricate posts and actually make significant art. Lorentzen: There is no "1% for art" funding on this project, correct? Jones: That's correct. This project does not donate to the "1% for art" fund, but there may be the opportunity for that fund to contribute to our project. A combination of something that both pedestrians and cars could enjoy would be good. Are there any comments about the general direction we are headed in? Lorentzen: There are multiple options I find attractive, except for the curved railing. Option 4 for lighting doesn't seem to gain anything for the extra money. Burke: For some of these, it is hard to see how the light is shooting. This could be an issue for the neighboring residents. Lorentzen: I like Option 3's lighting fixture. Jones: If it's going to be maintained by the city, which this bridge will be, City Light either has to have an inventory of the fixture, or as part of the project, we

	would have to purchase an inventory and/or forms. I know there was an issue with the globe lights in Pioneer Square. They ended up having to buy forms to make them. We will have to face these kinds of issues if we get into something unusual.
Coney:	You should look at City Light's list. Lower Queen Anne has cheap plastic light fixtures. Personally, I like the Magnolia cage design.
Burke:	I think the team has done a good job of presenting realistic ideas. What are the next steps?
Jones:	We have to start moving forward on design. As far as specifics, such as bridge railings, we are looking for feedback on which types you and the general public prefer. Once we have an indication on your preferences, we can do more research. We don't have to select specifics like the exact railing to get us through the Type, Size, and Location (TS&L) Study.
Elrod:	The next step will be to develop a three-dimensional model. That will help us see how the different design elements work together.
Coney:	All of these appear to be equal in terms of aesthetics, so I will emphasize the importance of selecting a style with the most seismic resistance. I also think it would be good to eliminate possible dangers for North Bay by making it difficult for birds to nest. Anti-graffiti features should be taken into account.
Burke:	Do we need to determine one type of column and bridge structure for the TS&L Study? When does this have to happen?
Dorn:	Yes, that's correct. We would hopefully make those selections by the end of September. At the time of the open house, we will have three different structure types with models to display for the public.
Burke:	Do you want a formal response from the DAG before the August open house?
Dorn:	Yes, providing feedback now will help to narrow the alternatives.
Jones:	We'd like to show you what we plan to take to the public before we go to the open house.
Coney:	Maybe you should run the options by NBBJ [the Port's design firm for North Bay redevelopment]. Which bridge columns are the most seismically sound?
Dorn:	All designs will be up to current standards and will perform in the event of an earthquake. Double columns do have some redundancy. A single column works just like a lollipop. It moves around but doesn't get damaged. All of the lower level structures will all have multiple columns.

- **Burke:** Is it correct to think that because of how far we will have to drill down for the columns, we will use fewer columns and therefore have a less expensive and easier bridge to maintain?
- **Dorn:** That's not necessarily true because the total weight of the structure, or total vertical load, that needs to be supported is the same. Sometimes when you space columns out farther you get a better vertical performance. So we are just now analyzing that aspect. We don't know what's more economical yet. We expect to have cost estimates in August.

IV. Public Comment

Kirk Jones, SDOT

There were no members of the public in attendance.

V. Next Steps *Kirk Jones, SDOT and Sarah Brandt, EnviroIssues*

The next DAG meeting will be on August 2nd from 4:00 to 5:30 pm at the Magnolia United Church of Christ. The team is also planning for a public open house in late August, tentatively August 22nd. In addition, project staff will be at the Magnolia Farmer's Market on July 15 and September 16, and at the Summer Festival on August 4 and 5.

Conclusion: With no further comment from the project team or DAG members, the meeting was adjourned.