



Design Advisory Group Meeting #27

Magnolia Community Center
October 4, 2006, 4:00 – 5:30 PM

Summary Minutes

Agenda

- I. Welcome
- II. Project Updates
- III. Design Team Recommendations
- IV. Design Advisory Group Input
- V. Next Steps
- VI. Public Comment
- VII. Adjourn

Attendees

Design Advisory Group

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

Project Team

- Lesley Bain, Weinstein A|U
- ✓ Dirk Bakker, KPFF
- ✓ Sarah Brandt, EnviroIssues
- ✓ Matt Dalton, HNTB
- ✓ Gerald Dorn, HNTB
- ✓ Brian Elrod, HNTB
- Katharine Hough, HNTB
- Steve Johnson, Johnson Architects
- ✓ Kirk Jones, City of Seattle
- Don Samdahl, Mirai Associates
- Lamar Scott, KPFF
- Peter Smith, HNTB
- ✓ Lauren Stensland, EnviroIssues
- ✓ Yuling Teo, City of Seattle
- ✓ Marybeth Turner, City of Seattle
- K. Wendell Adams, KBA
- Terry Witherspoon, AMEC

Meeting Handouts

- ✓ *Agenda*
- ✓ *Draft DAG #26 Summary Minutes*
- ✓ *Open House Summary – September 13, 2006*
- ✓ *Structure Types Matrix – September 13, 2006*

I. Welcome

Sarah Brandt, EnviroIssues

Sarah welcomed the group and introduced a new Design Advisory Group (DAG) member, Darrell Vange from the Seattle Design Commission. Kirk Jones (Seattle Department of Transportation, or SDOT, project manager) introduced Matt Dalton, the new deputy project manager from HNTB. Sarah outlined the agenda for the meeting, including:

- Public meeting input recap
- Design team recommendation
- Feedback from the DAG
- Next steps
- Public comment

Sarah asked for edits to the meeting minutes from the previous DAG meeting. Janis Traven asked if there are any plans to widen 15th Avenue West and how the City will consider that in plans for the new Magnolia Bridge. Janis explained that from the Bridging the Gap meetings it sounded like they are planning to widen 15th Avenue West to put in a dedicated bus lane. Kirk responded that he thought the City would be removing the current parking lanes to create a dedicated bus lane and that the planned bridge columns would not interfere with that type of additional widening.

Darrell Vange introduced himself and let the group know that he is a commercial developer working on a goodwill project in which TRF is a partner firm. TRF is also working on an Interbay development project. Darrell shared that he has no involvement with or interest in the Interbay project and he wanted to be clear with the group about his involvement.

Lise Kenworthy, Mike Smith, and Kirk discussed freight mobility in the Magnolia Bridge corridor. Kirk agreed to further explore how plans to include new bus rapid transit lanes in the corridor are progressing, whether freight would be permitted to use these lanes, and the effects of these plans on the Magnolia Bridge design.

Janis Traven asked about bridge funding. She explained that when the Bridging the Gap package was reduced and direct funding for two-way Mercer was removed, she asked if two-way Mercer was a higher priority than the Magnolia Bridge replacement and was informed that it was not. Now the two-way Mercer project is being funded from parking and employee taxes and she wonders if Magnolia Bridge could find similar funding. Kirk responded that since Bridging the Gap is focused on moving people and traffic during viaduct construction, that solution was unlikely. He said he would bring that comment back to the Mayor's office. Janis said that if Magnolia is going to be paying large property taxes, it would be nice to have some of that funding go toward the Magnolia Bridge.

Sarah reminded the group that she will take edits to the minutes through next week.

II. Project Updates

Kirk Jones, SDOT

Retrofit Option

Kirk reported back to the group in response to John Coney's question about retrofit costs versus the cost of building a new bridge over 15th Avenue West. He said it would take an estimated \$2.5 million to retrofit the portion of the bridge over 15th Avenue West. Building that section new would cost approximately \$3 million and the new bridge provides more room between the columns for widening. Jerry Dorn added that the \$2.5 million retrofit figure also doesn't include the cost of matching up the elevation of a retrofitted bridge with that of the planned mainline segment (which would cost more money).

Cultural & Historic Resources Report and Biological Assessment

Kirk told the group that the most recent Cultural and Historic Resources discipline report is approved. The team was asked to coordinate with the Navy and has several meetings lined up. He expects that by the end of this month these will be completed. They also have a consultant on board that met yesterday with the City permitting team and a U.S. Fish and Wildlife Service representative to talk about the plans for the Magnolia Bridge that involve in-water construction near Pier 91. They discussed how many foundations will be in that shoreline area and the meeting was very positive. It seems that the construction of the new bridge will be an overall benefit to that area. Next week the project team's biological consultant will take a field trip to the site during low tide and take pictures for the Biological Assessment (BA).

Draft Environmental Assessment (Draft EA)

Kirk reported that with the Navy meetings and the biological assessment making good progress, they should be able to have a Draft EA sent to the Washington State Department of Transportation (WSDOT) by the end of the year. The Draft EA should be published late spring and there will be a hearing on it at that time.

Port of Seattle

Kirk explained that the project team is meeting next week with the Port of Seattle's cruise terminal team to talk about rebuilding the pier underneath where the new bridge will be located. After a bridge type is selected by SDOT they can show the cruise terminal planners the exact pier foundation locations. There will be another meeting with the Port in the next two weeks.

Discussion

Kenworthy: Has the Port followed up on our request for emergency access?

Jones: Yes. I have a draft document for Dan [Burke] and they've agreed that we could have a temporary access road in an emergency situation. There is some language to work out. If they have the north bridge in place, and the old Magnolia Bridge is not functional, we'd want to use the north bridge, rather than bringing a road through the damaged bridge area. Those are the scenarios we're laying out, but we've agreed on the basic concepts.

Kenworthy: Could we put some time frames around this? Would it be fair to say you'll get back to the Port next week?

Jones: No, it will be two or three weeks.

Kenworthy: We're in no man's land right now and we need to have something concrete. Could we say you'll have them something within the month?

Jones: Yes.

Seattle Parks Department

Kirk informed the group that his team and the Parks Department have a coordination agreement for FHWA; they are working together to jointly develop the two facilities over the park.

Project Open House

Kirk reminded the group that the project open house was on September 13th and directed everyone to the open house summary included in the meeting packet. He explained that many of the questions during the presentation related to traffic operations rather than bridge types, but that during the open discussion time the public shared comments about preferred bridge types. There were a lot of favorable comments about the haunched option for the Magnolia Bluff structure. Curved flare columns also received more support than other column types.

Discussion

Coney: I'm reminded that I asked for a comparison between the retrofit option and the girder option for over 15th Avenue.

Jones: Yes. The cost for a retrofit there is around \$2.5 million, compared to \$3 million for the brand new bridge. So a retrofit saves around \$600,000.

Brandt: Did Jerry [Dorn] mention earlier that there would be some other costs?

Dorn: A retrofitted bridge would not match up to the new bridge segment in terms of elevation, so there would be some additional costs to fix that.

Coney: As a member of the Bridging the Gap citizen committee I'm often asked for a cost estimate for the new Magnolia Bridge – what is the estimate?

Jones: We're still using \$196 million [based on the 2004 estimate]. Once we selected a bridge type we'll do the CEVP [Cost Estimate Validation Process] and make a new estimate based on our design.

Coney: At what percentage is our engineering at this point?

Jones: Around 5 percent. When we complete the Type, Size & Location report at the end of this year we'll be at the ten percent level.

III. Design Team Recommendations

Jerry Dom, HNTB

Jerry explained how the design team arrived at their recommendations for bridge structure types. The team talked about cost, aesthetics, and function for each segment of the bridge, as well as future development, future public access, sightlines from which the bridge would be seen, and constructability. At 15th Avenue they settled on a straight cast-in-place concrete box and considered moving the pier locations to create a balanced look over 15th Avenue. The concrete box allows a longer span over the roadway. They considered the haunched cast-in-place concrete box, but felt that for the added cost they were not gaining much.

For the mainline structure, they selected the straight cast-in-place concrete box as well. The box type can be adjusted to the changing structure width, eliminates the bird roosting problem, and creates a smooth appearance for future use under the bridge. Over the railroad they would use a steel box girder or a pre-cast piece, so that it can be set in place. This piece will have the same general appearance as the straight concrete box. In addition, the support columns might be perpendicular with this type, rather than skewed, improving their performance in an earthquake.

For the Magnolia Bluff, the concrete box with the haunched shape was preferred by the design team and the public. The concrete box is more expensive, though not hugely so because the prestressed girder type has more piers. Having used the concrete box for these three segments, it made sense for the 23rd Avenue ramps to match the rest of the bridge and also use the concrete box form.

The team chose the curved flare column as their preferred option. There was very little cost difference between the options – except in the bluff structure when comparing double columns to single columns – and the strong aesthetic preference was the curved flare.

IV. Design Advisory Group Input

Kirk Jones, SDOT & Sarah Brandt, EnviroIssues

Discussion

Jones: This group [the Design Advisory Group] is a key element in the decision process and then tomorrow we're meeting with the Seattle Design Commission to get their opinion. We'd like your feedback.

Brandt: Let's start at this end of the table, with Dan Wakefield, and hear from everyone.

Wakefield: I agree with the design team's choices. Those are also my choices.

Jones: Any concerns?

Wakefield: No, I don't think so. I think those are the logical choices for combining cost savings and aesthetics.

- Vange:** I have a question. You suggested that at 15th Avenue the straight concrete box is preferred because of cost. The costs appear the same in this matrix [*Structure Types Matrix – September 13, 2006*].
- Dorn:** Within our rounding to the nearest hundred thousand and our minimal design so far, those options are close in cost. The haunched would be more expensive.
- Vange:** Your design recommendations seem to make sense. I wouldn't be surprised if the Seattle Design Commission challenges you to use the haunched shape at both ends [over 15th Avenue and to ascend Magnolia bluff], though no one will view the whole span.
- Jones:** We'll show tomorrow how the bridge is between buildings and how at the low level the haunched feature doesn't seem noticeable.
- Vange:** At 15th Avenue you do interact with the bridge, so the haunched shape is more important.
- Brandt:** We appreciate your input.
- Kenworthy:** On the matrix, it says the haunched concrete box option has a longer construction time than does the straight concrete box option. How much longer?
- Dorn:** About four to six months overall. But the parts of the construction that take longer with the haunched option are mostly those where we'll be using the existing bridge as a detour. The portion of construction where we'll be in full detour mode – over 15th Avenue and the railroad crossing – will have similar construction times with either concrete box type.
- Jones:** Right, the four to six months is for the whole bridge. We'll do a bunch of construction before we shut the existing bridge. We had said fourteen to twenty months for the detour and we're getting down to closer to a year. The part with the full detour would be one or two months longer with the haunched option.
- Montaño:** From a design standpoint, I feel option B [the haunched cast-in-place] makes the most sense over 15th Avenue. It is more consistent with the design of the bridge. With such a long span, the straight option could make it look like the bridge is cambered or sagging. I think this structural design is the important aspect and it will last much longer than the lighting or other things. This is the basic foundation, like the foundation of a house.
- Calhoun:** I was going to say it looks fine, but now I like Jose [Montaño]'s idea of the haunched option over 15th Avenue.

- Wakefield:** I think I agree with Jose also, when the cost difference is not very much.
- Brandt:** Fran [Calhoun], are you comfortable with the rest of the recommendations?
- Calhoun:** Yes.
- Traven:** I agree with Jose also and I have a question about the column types. It says in the matrix [*Structure Types Matrix – September 13, 2006*] that the curved flare may require post-seismic repair? What is meant by that?
- Dorn:** Bridges are designed so that columns absorb the energy of an earthquake. In an earthquake, some of the extra shaping on the curved flare column might crack or break. It won't affect the strength of the column. Typically, if that happens you can go fill in those cracks. Or, you can soften the tops of the column by creating little gaps that prevent cracking.
- Traven:** It's not a structural concern.
- Dorn:** Right, it's not structural.
- Coney:** I think the haunched over the public park is far preferable for possible recreational development under that section. I'm asked often why this project is not on the Bridging the Gap funding package, and now that we see it's close to \$200 million, I think it's very clear why it's not on the ballot. I think the City should have a low-cost alternative ready because in this transportation funding climate it will be very difficult to fund this project. You should work more with the Port on West Armory Way so that it could be a potential option if needed. I agree that a new bridge is the best alternative for Magnolia, but I do have a fear that because it's such a big project it will be hard to fund.
- Kenworthy:** If aesthetics are the only consideration I agree with Jose that a haunched design over 15th Avenue is best. I think we should not ignore impacts on the ground for people traveling. I'm also concerned that we don't have particularly good detour alternatives.
- Jones:** At this time, we have lots of time to work on that. I think we have a couple of good options and we need to get some contractors on board to come up with more ideas. I'm not trying to put off your question, but we really are at the stage of deciding what you'd like to see us build at this time.
- Kenworthy:** I understand that, but I wouldn't want our remarks to be a blank check. Getting transportation projects together is very difficult and the detour issue is fundamental.
- M. Smith:** Just one clarification about the 15th Avenue structure. Are the piers differently spaced with the straight cast-in-place versus the haunched cast-in-place?

- Jones:** We couldn't get the haunched option to have visually-balanced piers over 15th Avenue. The piers would be slightly skewed to the west.
- Dorn:** We were struggling with trying to keep it balanced. With the haunched you gain clearance in the middle but lose it on the ends, so you might have to raise the bridge roadway to make it fit correctly.
- Jones:** This route is the overweight and over-height vehicle route, so we need a 20-foot space. We're going to ask if you can have a 20-foot curve or if there's a certain span length that needs to have 20-foot clearance.
- M. Smith:** So at this point I'm going to stick with what the design team prefers. I think the haunched option over 15th Avenue looks good, but 15th Avenue is too important to risk problems. Whatever works best with the columns is my preference.
- Kenworthy:** I'm going to change my opinion to support that.
- Traven:** If the haunched over 15th Avenue can work for mobility, than we support that design, but otherwise don't do it.
- Jones:** I'm optimistic that we can make it work.
- Coney:** I'll second leaving room for extra lanes. 15th Avenue could be a candidate for extra lanes somewhere down the line.
- Jones:** Related to that issue, I think that if 15th Avenue widens, they'll take most of the widening to the west because of the properties on the east side. Just to keep that in the back of our minds.
- Coney:** The City could require extra setback.
- Brandt:** It sounds like there is energy to look at the haunched option over 15th Avenue, but only if we preserve functionality. Then we have John [Coney]'s request to consider a low-cost alternative.
- Dorn:** And then construction time.
- Brandt:** Yes. And the next steps at this point?
- Jones:** We're meeting with the Seattle Design Commission and showing the concrete box girder with the question of haunched or not over 15th Avenue. So that's the basic decision. Then we can set the column locations and move on to the design. Next we'll move on into the details of railing, lighting, and how we might treat those columns. So those are all issues we'll be working on as we move further into the design process.

I have a meeting with Grace Crunican [SDOT Director] on October 16th and we'll present our design and get a final decision from her. After that we'll begin the cost estimation process and hopefully be going full tilt with WSDOT and FHWA to have the Draft EA published by spring next year. That's a lot of grind work and then we'll have something to bring to the DAG in January. At this point we're not planning to meet until then.

M. Smith: Do you do any pre-planning for the detours that you can present to contractors?

Jones: Yes, those design team ideas are given to the contractor and we'll get help from them on cost estimates and other information. The basic idea of a temporary ramp using the existing bridge came from a contractor.

M. Smith: At that point this group might want to talk to whatever contractor is doing the work.

Jones: That's a good idea. In January we'll be showing more specific detour times and have better figures.

Kenworthy: What's the plan to inform us of the decision Grace Crunican makes?

Jones: We'll send you an email, and if any of your groups want us to talk about the decision we'll come and do that.

Coney: Is there any way to work with Metro to coordinate the transit stop near 15th Avenue? Could SDOT do the foundations, paths, or power hookups since there are two big projects in one location?

Jones: In terms of timing, they'll be there before we're starting construction, so anything we can do to facilitate their operation we'll do. There's not much we can do in advance.

Montaño: If we want to meet the contractor, would that be a conflict of interest?

Jones: No, we'll be fairly far along then and we'd be using them as a consultant.

Montaño: It would be clear they are consulting only?

Jones: Yes, that's right. We've done that before and it worked.

Kenworthy: Have you written the Request for Proposal for the contractor?

Jones: No, we're not to that stage yet.

V. Next Steps

Kirk Jones, SDOT and Sarah Brandt, EnviroIssues

The next DAG meeting will be in January 2007.

VI. Public Comment

Kirk Jones, SDOT

There were no members of the public in attendance.

VII. Adjourn

Kirk Jones, SDOT

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

Action Items:

- Kirk Jones to investigate planning efforts for bus rapid transit options along 15th Avenue W, and inquire if freight could also use those lanes
- Kirk Jones to progress agreement with the Port of Seattle for emergency access across Interbay by the end of October
- Project team to email DAG members describing Grace Crunican's decision about the final bridge design (meeting scheduled for October 16)