



## AGENDA

**MILWAUKIE  
DESIGN & LANDMARKS COMMITTEE  
PLANNING COMMISSION  
JOINT SESSION  
Wednesday June 1, 2011, 6:30 PM**

**MILWAUKIE PUBLIC SAFETY BUILDING  
3200 SE HARRISON STREET**

**1.0 Call to Order - Procedural Matters**

DLC Chair Greg Hemer

**2.0 Minutes – Motion Needed**

2.1 March 17, 2011 PC/DLC Joint Session (*for DLC approval*)

**3.0 Information Items**

**4.0 Audience Participation** – This is an opportunity for the public to comment on any item not on the agenda

**5.0 Joint Session Items**

5.1 Summary: Portland to Milwaukie Light Rail Project – Early review of the design for the proposed bridge over Kellogg Creek and McLoughlin Blvd  
Presenter: Susan Shanks, Senior Planner; TriMet PMLR design team

**6.0 Worksession Items – None**

**7.0 Forecast for Future Meetings:**

**Planning Commission**

June 14, 2011 1. Public Hearing: ZA-11-01/CPA-11-01 Natural Resource Regulation Amendments *continued from 4/26/11*

June 28, 2011 1. Joint study session with City Council on Residential Standards project and other land use items  
2. Worksession on electronic sign regulations

**Design & Landmarks Committee**

June 22 2011 1. Storefront improvement program application review  
2. Proposed bylaw revisions – review

July 5, 2011 1. City Council Joint Session

July 27, 2011 1. Storefront improvement program application review  
2. Proposed bylaw revisions – review

### Milwaukie Planning Commission Statement

The Planning Commission serves as an advisory body to, and a resource for, the City Council in land use matters. In this capacity, the mission of the Planning Commission is to articulate the Community's values and commitment to socially and environmentally responsible uses of its resources as reflected in the Comprehensive Plan

1. **PROCEDURAL MATTERS.** If you wish to speak at this meeting, please fill out a yellow card and give to planning staff. Please turn off all personal communication devices during meeting. For background information on agenda items, call the Planning Department at 503-786-7600 or email [planning@ci.milwaukie.or.us](mailto:planning@ci.milwaukie.or.us). Thank You.
2. **PLANNING COMMISSION MINUTES.** Approved PC Minutes can be found on the City website at [www.cityofmilwaukie.org](http://www.cityofmilwaukie.org)
3. **CITY COUNCIL MINUTES** City Council Minutes can be found on the City website at [www.cityofmilwaukie.org](http://www.cityofmilwaukie.org)
4. **FORECAST FOR FUTURE MEETING.** These items are tentatively scheduled, but may be rescheduled prior to the meeting date. Please contact staff with any questions you may have.
5. **TME LIMIT POLICY.** The Commission intends to end each meeting by 10:00pm. The Planning Commission will pause discussion of agenda items at 9:45pm to discuss whether to continue the agenda item to a future date or finish the agenda item.

#### Public Hearing Procedure

Those who wish to testify should come to the front podium, state his or her name and address for the record, and remain at the podium until the Chairperson has asked if there are any questions from the Commissioners.

1. **STAFF REPORT.** Each hearing starts with a brief review of the staff report by staff. The report lists the criteria for the land use action being considered, as well as a recommended decision with reasons for that recommendation.
2. **CORRESPONDENCE.** Staff will report any verbal or written correspondence that has been received since the Commission was presented with its meeting packet.
3. **APPLICANT'S PRESENTATION.**
4. **PUBLIC TESTIMONY IN SUPPORT.** Testimony from those in favor of the application.
5. **NEUTRAL PUBLIC TESTIMONY.** Comments or questions from interested persons who are neither in favor of nor opposed to the application.
6. **PUBLIC TESTIMONY IN OPPOSITION.** Testimony from those in opposition to the application.
7. **QUESTIONS FROM COMMISSIONERS.** The commission will have the opportunity to ask for clarification from staff, the applicant, or those who have already testified.
8. **REBUTTAL TESTIMONY FROM APPLICANT.** After all public testimony, the commission will take rebuttal testimony from the applicant.
9. **CLOSING OF PUBLIC HEARING.** The Chairperson will close the public portion of the hearing. The Commission will then enter into deliberation. From this point in the hearing the Commission will not receive any additional testimony from the audience, but may ask questions of anyone who has testified.
10. **COMMISSION DISCUSSION AND ACTION.** It is the Commission's intention to make a decision this evening on each issue on the agenda. Planning Commission decisions may be appealed to the City Council. If you wish to appeal a decision, please contact the Planning Department for information on the procedures and fees involved.
11. **MEETING CONTINUANCE.** Prior to the close of the first public hearing, *any person* may request an opportunity to present additional information at another time. If there is such a request, the Planning Commission will either continue the public hearing to a date certain, or leave the record open for at least seven days for additional written evidence, argument, or testimony. The Planning Commission may ask the applicant to consider granting an extension of the 120-day time period for making a decision if a delay in making a decision could impact the ability of the City to take final action on the application, including resolution of all local appeals.

*The City of Milwaukie will make reasonable accommodation for people with disabilities. Please notify us no less than five (5) business days prior to the meeting.*

#### Planning Commission:

Lisa Batey, Chair  
Nick Harris, Vice Chair  
Scott Churchill  
Chris Wilson  
Mark Gamba  
Russ Stoll

#### Design & Landmarks Committee:

Greg "Frank" Hemer, Chair  
Jim Perrault, Vice Chair  
Becky Ives  
Patty Wisner  
Chantelle Gamba

#### Planning Department Staff:

Katie Mangle, Planning Director  
Susan Shanks, Senior Planner  
Brett Kelter, Associate Planner  
Ryan Marquardt, Associate Planner  
Li Alligood, Assistant Planner  
Alicia Stoutenburg, Administrative Specialist II  
Paula Pinyerd, Hearings Reporter

**CITY OF MILWAUKIE**  
**PLANNING COMMISSION**  
**DESIGN & LANDMARKS COMMITTEE**  
**Joint Session**  
**MINUTES**  
**Milwaukie Public Safety Building**  
**3200 SE Harrison Street**  
**THURSDAY, March 17, 2011**  
**6:30 PM**

**COMMISSIONERS PRESENT**

Jeff Klein, Chair  
 Nick Harris, Vice Chair  
 Scott Churchill  
 Lisa Batey  
 Mark Gamba  
 Russ Stoll

**STAFF PRESENT**

Katie Mangle, Planning Director  
 Kenny Asher, Community Development Dir.  
 Susan Shanks, Senior Planner

**COMMISSIONERS ABSENT**

Chris Wilson

**DESIGN & LANDMARK COMMITTEE MEMBERS PRESENT**

Greg Hemer, Chair  
 Becky Ives, Vice Chair  
 Chantelle Gamba  
 Jim Perrault  
 Patty Wisner

**1.0 Call to Order – Procedural Matters**

**Chair Klein** called the meeting to order at 6:33 p.m. and read the conduct of meeting format into the record.

**DLC Chair Hemer** called the Design and Landmarks Committee (DLC) meeting to order.

**2.0 Minutes**

**2.1 Planning Commission – January 11, 2011**

**Commissioner Batey** corrected Page 6, Line 178 to state that Les Poole as a resident of Unincorporated Clackamas County. He was not a resident of Milwaukie.

**Commissioner Stoll** moved to approve the January 11, 2011, Planning Commission minutes as amended. **Commissioner Batey** seconded the motion, which passed unanimously.

**2.2 Design and Landmarks Committee – February 23, 2011**

**DLC Chair Hemer** noted Lines 81 through 83, which listed items regarding the zoning, should

be corrected to make clear for the public record that a transit center was not allowed in that zone.

**DLC Member Ives moved to approve the DLC notes dated February 23, 2011, as amended. DLC Vice Chair Perrault seconded the motion, which passed 4-0-1 with DLC Member Gamba abstaining.**

### **3.0 Information Items**

**Katie Mangle, Planning Director**, welcomed new members Russ Stoll to the Planning Commission and Chantelle Gamba to the DLC.

**4.0 Audience Participation** – This is an opportunity for the public to comment on any item not on the agenda. There was none.

### **5.0 Joint Session Items**

5.1 Summary: Portland to Milwaukie Light Rail Project – Early review of the design for the proposed bridge over Kellogg Creek and McLoughlin Blvd  
Presenter: TriMet PMLR design team

**Ms. Mangle** explained that the joint worksession provided an early opportunity for the Planning Commission and DLC to comment on a very important part of the light rail project. Light rail was proposed to open in 2015 and the proposed bridge would be one of the first elements to be constructed as part of the project and therefore one of the first to get permitted. TriMet hoped to submit the application this summer and the public hearings on the needed land use applications would be held in the summer/fall. The light rail project would involve applications regarding Willamette Greenway, downtown Design Review, and Natural Resource review, currently known as Water Quality Resource review. The Commission was the decision-maker for these applications; however, the DLC was a strong advocate and advisor to the Commission on Design Review. She provided an overview of the timeframe for the project applications and reviews, noting the urgency in finalizing certain design elements in order to meet the goals for the light rail completion. No formal actions would be taken, but feedback and direction was being requested by TriMet about some specific elements for the bridge design.

**Jeb Doran, Urban Designer, TriMet**, explained the Preliminary Engineering (PE) process focused on defining a cost range for the Kellogg Bridge, and the alignment which considered

going from the Lake Road Station, across Kellogg Lake and McLoughlin Blvd, and landing at the Trolley Trail. The bridge was a significant structure for the area and they extended the PE to focus some of the important design considerations for the bridge.

- TriMet sought to define better options for the bridge type to create a ribbon in the landscape rather than just a highway on/off ramp bridge style. Staff provided feedback about the community's preferences, and TriMet developed some options that were presented to the public at the community outreach meetings. The public seemed to prefer steel as a building material, but was concerned about the shape of the bridge and how the architectural elements related to things on the ground.
- TriMet sought feedback from the Commission and DLC about the material type, steel vs. concrete; and if steel was the preference, direction about the shape of that material, such as more rhythm and texture or cleaner lines, etc. Input was also wanted about the how the piers interact differently with these elements. Structural decisions were very important right now. Making these decisions would help the architecture and urban design teams further develop their responses regarding the design for presentation in early April.
  - Shortly after returning in April, TriMet would come in for a preapplication meeting, focusing on getting to the 60% design, which was a key time for major decisions on the project; where the project was cost-wise; and if elements could be added back into the project, etc.
  - In July, TriMet would submit a land use application and begin working through the hearings process for approval hopefully by the end of 2011. Many of the elements in the south portion of the light rail line would start quickly. The Trolley Trail and Kellogg Bridge would be some of the first items built, starting in about February 2012, with some advanced utility work being carried out prior to that. Some of the stations would be coming later in 2012 and continuing into 2013.
- The proposed Kellogg Bridge would be 1,700 ft long. Images displayed later in the presentation would provide context as to how the feature connected to familiar community elements. He was not certain of the length or height of the I-205 Johnson Creek overpass but would find out that information in order to provide a familiar scale reference. He believed the overpass was longer than the proposed bridge.

**Carol Mayer-Reed, Landscape Architect/Urban Designer**, briefly reviewed the station locations and proposed light rail alignment using an aerial photograph from the 1950s, which

showed a pedestrian bridge crossing Kellogg Lake. She indicated key features and properties near the rail line and bridge site, noting the trestle bridge and identifying the view corridors anticipated along the route.

**Mark Mikolovich, Design Architect, Waterleaf Architecture**, stated he worked primarily on the station areas and station platforms on the alignment but also on the bridge structure with Ms. Mayer-Reed, TriMet, and a group of bridge structural engineers.

- He noted the only intention of the bridge was to carry a light rail vehicle across Kellogg Lake and McLoughlin Blvd. It was not intended to have any pedestrian access with the exception of maintenance personnel.
- The bridge would also support a pedestrian bridge that would cross Kellogg Lake, and although that had not been the team's focus, some images would show some consideration for such a bridge.
- The bridge would be a significant visual element in the landscape, similar to the trestle. It would be an exceptional part of the larger alignment and frame the foreground to Milwaukie, creating a gateway when arriving from the south.
- Objectives in developing the design of the bridge was a simple, elegant connector between the south end of Milwaukie and the Park Avenue Station while bringing a sense of craft to otherwise standard bridge elements. The bridge was being considered from different vantage points, particularly from the point of view of someone riding or walking on the Trolley Trail or along future paths in the park at Kellogg Lake. These people would more intimately experience the underside of the bridge and its supporting elements.

**Mr. Mikolovich** presented the PE scheme and three proposed Kellogg Bridge designs via PowerPoint, during which he and the TriMet team responded to questions and comments from the Commission and DLC as noted:

- The PE scheme regarded the engineering effort leading to the 30% documents and involved the bridge's location and some design elements. Key engineering elements included the concrete slab deck that supports the rail, safety railing, beams or spanning elements, columns, and in some designs, crossbeams to support the spanning elements. In each scheme, column elements would be concrete, and spanning elements could be either steel or concrete.

- 145 • He confirmed the concrete deck had been modified to extend beyond the spanning  
146 elements. The sides of the deck were pulled in as much as possible to create more of a  
147 ribbon-like element.
- 148 • Concrete supporting structures last longer and have fewer maintenance issues than  
149 steel support elements.
- 150 • To achieve a ribbon-like effect, a graceful line curving through the landscape and a  
151 consistent spanning material, either all concrete or all steel, was needed. At the level of  
152 pedestrians/bicyclists, TriMet hoped to create textural/sculptural effects to project that  
153 sense of craft.
- 154 • Concrete Tub scheme. The displayed scheme was comprised of a concrete deck, open  
155 railing, concrete tubs as support beams; simple, round, unadorned columns, 5 to 6 ft in  
156 diameter; and a concrete crossbeam supporting the spanning beams.
  - 157 • Several views of the proposed bridge were shown, as seen from different locations to  
158 indicate how the bridge would look on the site.
  - 159 • He noted that if a concrete scheme were chosen, it was likely they could achieve a  
160 consistent concrete material even along the curve spanning over McLoughlin Blvd.
  - 161 • The pedestrian bridge structure shown on one slide had not been designed yet, but  
162 was simply a placeholder. A pair of columns was represented on each bank of  
163 Kellogg Lake and the pedestrian bridge would span the distance between them.
  - 164 • One advancement the team was trying to attain was to eliminate a column in Kellogg  
165 Lake, which afforded advantages with regard to permitting and cost.
  - 166 • An example was shown of an elevated light rail alignment in the Seattle area with all  
167 concrete piers that curved over a roadway, which was similar to the Kellogg Bridge  
168 structure. The main difference between the structures was that the Seattle railway used  
169 a single tub, which was a little deeper with a slightly different configuration. The precast  
170 double concrete tubs used for Kellogg Bridge would be crisper; and not as canted at the  
171 edges. The proposed tubs were more efficient for the proposed project which was wider  
172 with double light rail tracks.
  - 173 • **Mr. Mikolovich** speculated that the Seattle example could use a single, narrower tub  
174 because it was deeper. The shallower and wider tubs being proposed would produce a  
175 thinner profile on the landscape.
  - 176 • The traffic clearance on McLoughlin Blvd was also an issue. About 18 feet of  
177 clearance was required from any part of the ground plane to the underside of the

- 178 structure, and could be one reason a shallower tub was being considered. Also, a  
179 higher structure would require a steeper track, and therefore a longer length to reach  
180 grade. Extending the track would negatively impact the Trolley Trail.
- 181 • Comparison information was requested by the Commission about the simplicity of the  
182 Seattle structure versus the proposed double tub system. Retaining components to  
183 ensure an attachment mechanism was available for a pedestrian bridge was critical.
  - 184 • Steel tub scheme. The main difference was that the material was a weathering steel that  
185 naturally weathers to a rust-colored patina and needs no painting. Dual tubs and 5-ft round  
186 columns supported a concrete deck, which had a flared edge, creating a finer profile for the  
187 bridge. The handrails were also constructed of weathering steel. Because of the columns'  
188 simplicity, a textural effect would be probably used on the columns. Examples were shown  
189 of different patterns that would enrich the visual experience at the pedestrian level.
  - 190 • The structural design of the bridge had not advanced to the degree to know for sure  
191 whether the crossbeams would be used or if the column could tuck up right under the  
192 spanning elements.
  - 193 • Depending upon the spans, which varied from about 110 to 200 ft or more, the tub  
194 elements would come in sections about 60 or 70 ft long. At third points, splice joints  
195 which are a plate applied to the outside with a series of bolt heads, would be seen. In  
196 some ways, this would enhance the ribbon effect by giving a rhythmic textural element  
197 along the spanning element.
  - 198 • The tubs were premanufactured offsite and lifted by crane onto the supporting  
199 structure where they were held in place by temporary shoring at the splice points  
200 until spliced. The temporary shoring would then be removed to reveal the finished  
201 bridge. A beam was at the same elevation as the main beams to provide enough  
202 support without the crossbeam; it was just not visible in the slide.
  - 203 • Looking at the underside, one could appreciate either the detail or the more  
204 continuous look overall.
  - 205 • The pairs of tubs were moved as closely as possible to almost right under the tracks  
206 resulting in a lot more extension of deck over the top which made the deck look  
207 lighter, whether steel or concrete. This provided a bigger reveal and emphasized the  
208 thin profile of the deck.
  - 209 • With many similar bridges, the distance from the face of the beam to the outer  
210 edge of the deck was sometimes 1 ft or 2 ft. Pushing the tubs closer together

gave the effect of a lighter silhouette for the overall bridge and the eye was drawn to the very narrow line at the outer edge, supporting the ribbon concept.

- Shrouding the columns in steel was suggested to reduce mass of the columns. This would help control fracturing of the concrete and increase the strength without increasing the interior structural elements, possibly decreasing the column dimension.
  - The team had begun exploring the idea of using a weathering steel pipe as the casement and formwork for the concrete center, but had not determined the cost implications or whether the size of the columns would be reduced.
  - The columns in this scheme were smaller than the PE scheme because 5 ft was determined to be safe for all the columns, and they could be as small as 4 ft in diameter, which was something they would be considering.
  - Smaller diameter columns helped with the ground plane relate to the human scale, and help with sight lines. The difficulty was the overall proportion of the columns. The tubs had to be sized to carry the loads and their thickness would direct the proportion of the rest of the bridge to a great degree. If it was too thin structurally, it would look like it was going to tip over.
- The weathering steel material would be darker than concrete which would recede in the landscape. The reddish brown color was also sympathetic to the natural setting of Kronberg Park.
  - Staining the concrete the same color as the weathering steel was currently being investigated. They wanted to be sure the coloring was even and would be consistent over time. The stain would be within the concrete itself so would not change color when things such as graffiti were removed.
- Views of the steel tub bridge were also presented from different perspectives.
- Changing from double piers to single piers midway through the bridge seemed jarring visually. Had the option been explored to continue with double piers?
  - Continuing with single piers had actually been studied, but some structural issues existed in terms of supporting the bridge that had not been fully investigated yet. The bridge had to be centered on the columns, whether single or double. The single-centered column would be at each end of the bridge, but the deck would come off the bridge before reaching the column.

- 242 • The pedestrian bridge was approximately level with the top of the bank of the river or  
243 lake. That image illustrated one pair of the double piers; the other pair would be at  
244 the other end of the pedestrian bridge.
- 245 • TriMet began exploring the idea of having no column in the lake because the  
246 experience of the lake was more open and accessible with one less set of columns.
- 247 • An image of an existing project was displayed to show the color of the weathering  
248 steel and how the splice plates and bulkheads looked in reality.
- 249 • Steel I-beams scheme. This third option used the weathering steel spanning element with  
250 steel I-beams instead of tubs. The beams are about the same depth as the other two  
251 schemes at about 6.5 to 7 ft deep for the actual spanning element. It had the same concrete  
252 deck with a slightly more sculptural column support.
- 253 • All the schemes were in the same cost range but with some tradeoffs.
- 254 • The steel tubs were slightly more expensive than the I-beams, and the sculptural  
255 column was more expensive than the simple column. If the tubs were a priority, a  
256 simpler column would be used; if the sculptural column element was more of a  
257 priority, the less expensive I-beam spanning elements would be used.
- 258 • This scheme was more sculptural in that the column flared slightly from the bottom to top  
259 where a steel crossbeam element acted as a transitional element from the column to the  
260 bridge spanning elements.
- 261 • The aesthetic material qualities were the same as the tub scheme in the weathering  
262 steel. This scheme had more of an industrial feel, and a more open, less finished  
263 presence to the underside of the spanning elements.
- 264 • While flaring sonotubes out a little bit at the top would not cost that much, anything other  
265 than a round form required custom form work and increased costs. The structural  
266 engineers had advised that no matter what shape the concrete column, a 5-ft core would  
267 be cast with a sonotube. The sono tube would be torn off, additional form work would be  
268 put outside, and then the special shape would be cast.
- 269 • The preliminary costing for the 13 columns in the PE scheme showed an additional  
270 \$500,000 to get that shape for the columns, which would be traded off against the  
271 less expensive I-beams. TriMet was considering being able to remove 3 columns,  
272 which would save money in concrete, footings, and form work.

- Using shotcrete as the skin for the flared columns was a great idea that would be brought to the structural engineer. This material provided a more textural element as well.
- The issue of birds was brought up; the 1,700 linear feet on each of the 4 I-beams would create a lot of nesting area, unlike the tub scheme.
- On I-beam bridges, the outer beams were fairly clean, but the inner beams got very dingy, which might be a greater maintenance issue long term.
- In Chicago, cyclone fences were erected to keep the homeless from gathering in the I-beams and prevent homeland security issues, such as explosives being placed in the beams. The fences looked ugly and attracted garbage.
- Was fencing being considered where the bridge adjoined the Trolley Trail.
  - TriMet had discussed the bird issue, but not issues about keeping people out. Mr. Mikolovich noted the team was aware of the issues and would take them into consideration with regard to this scheme.
- Examples of typical I-beam schemes were displayed.
- Not represented in the model were cross braces at 1/3 or 1/2 points that could be cross braces or a solid element. The cross braces would be every 70 ft or so. This was true of the tub scheme as well, and would probably be a solid, cross bracing element in that scheme.

Comments and questions regarding the proposed Kellogg Bridge continued from the Commission and DLC with responses from the TriMet design team as follows:

- The pedestrian bridge was relatively parallel to Kronberg Park and its elevation was quite level. The north bank was a bit lower than the south bank but not as severe as one might think. Boardwalks would run through the Kronberg Park landscape and connect at some point to each end of the bridge.
- More detail was requested about the catenaries system, which could potentially look like part of the structure or just more tacked on.
  - The distance between the catenary support poles varied along the length of the structure, but averaged 90 to 100 ft on center. Typically, single poles would be used. The poles were intended to be center mounted and round. The system was a significant element. The round shape created less shadow and helped reduce the mass. For the

material, black steel was being considered to match the downtown Milwaukie color scheme.

- The proposed, clean looking, renderings did not reflect the details of the system seen in the Seattle example.

- The vertical supports of the railing system needed to be 5-ft on center with a top rail, and the other horizontal elements would be cable. This would make for a very transparent appearance, providing light rail riders a bigger experience of the landscape and contributing to the sense of a less massive bridge.

- **Mr. Mikolovich** preferred that the railing colors match the bridge, not the poles, because that repetitive element helped enforce the ribbon concept.

- While a cable would keep someone from falling off as well as a handrail, a cable was not as comfortable; however, safety was a bigger concern than comfort. The building code and OSHA regulations would be checked regarding the possible use of cable as opposed to a handrail. The cable option fit in with the lightness being sought and put less visual clutter between the passenger and landscape.

- The railing was intended for employees so intrusion protection was being considered, similar to that used in tunnels and other TriMet structures, to keep people off the bridge. Sensors would be placed to indicate when something entered the bridge and an alert would be sent to the safety and security personnel who would use a camera to see if it was a deer or a person, in which case, security would be dispatched.

- Noise was a concern given the metal-on-metal wheel noise and reverberation off the concrete. Perhaps having more of a wall instead of a cable railing system would be better.

- A noise study was conducted as part of the Final Environmental Impact Statement (FEIS) and the locations of noise sound walls along the alignment were considered. No issues were identified for portion of the bridge going over the lake and stretching around, so TriMet moved toward keeping it more open. Another factor was the sight line considerations at the Lake Road Station, so having the railing more transparent would help people see the trains and the train operators see people.

- To address squeal noise, a track lubricator was already factored into the design that kicked in for any curve under a certain radius. The system would dispense track lubrication with every passing train to avoid wheel squeal. This was already in place at multiple other light rail locations based on the gradient of the curve.

- 337 • None of the three design schemes seemed consistent with or complementary to the  
338 adjoining structures, such as the trestle, but were in stark contrast to them. Were other  
339 design concepts explored?
- 340 • The TriMet team started with the fact that the trestle was an artifact and icon for the  
341 community. They looked at railroad tradition, complementary structures and ways to  
342 mimic that form. The trestle was very complex and muscular and yet it possessed  
343 transparency and light, which was difficult to mimic with today's construction materials  
344 and technology. Different forms and column shapes were considered, but many were too  
345 big to conform to the sight clearance lines. The team concluded that it would be best to  
346 put something very simple and plain next the trestle to feature the trestle rather than  
347 mimic it.
- 348 • If they tried too hard to mimic the trestle or aspects of its character, it could tend to  
349 diminish the trestle. One thing attractive about the trestle was the play of light and  
350 shadow that all the stick work created. Some early schemes had a series of thin  
351 elements alluding to the character of light and shadow, but it was difficult to make  
352 sense of it cost-wise and structurally.
- 353 • Kellogg Bridge was a structure in its own right, and the contrast would allow the  
354 trestle to stand on its own.
- 355 • Decisions made tonight would help guide the artists, who are from Oakland, CA, in creating  
356 public art for the project. The artists were very engaged in the idea of creating pattern,  
357 whether columns, fences, or the underside of the bridge. The artists had discussed sleeving  
358 the structure, which was a wrap over each element, but this was expensive, and a wrapped  
359 bridge could not be inspected. The artists were waiting for decisions about materials, and for  
360 the architectural and structural issues to have some more definitive direction before deciding  
361 how to approach the project.
- 362 • With \$250,000 being allocated to the large conceptual artists, why spend more money on  
363 weathered steel if the steel was going to be covered up? Would the artwork be permanent  
364 or removed in 5 years? If a concrete scheme was chosen, where would that savings over  
365 the weatherized steel go?
- 366 • The artists were interested in the interactions where points of circulation connect, such  
367 as where the bridge met the roadway, the Trolley Trail, smaller roads, etc. The tub  
368 option would provide more opportunity to do more with their limited budget and interact

with the structure a bit more in those locations. There was not enough funding to completely cover the steel. The art would provide a sort of accent at those locations.

- The artists' ability to interact diminished a bit with the I-beam option because it required some type of substructure to connect those points to do what they were interested in. If the I-beam option was chosen, the artists might want to look at other locations or just have a smaller impact.
- The artists' focus was on the main points of view: pedestrian and traffic interactions. They were interested in the flow of movements with cars and pedestrians.
- Putting shapes and movements and other things on the bridge busied up Kellogg Lake, because it added to everything happening with the trestle. The TriMet team felt the same way and would be discussing that with the artists.
- It was fascinating that the pedestrian crossing was not part of TriMet's project, but was the City's project.
  - **Leah Robbins, Project Manager, TriMet**, clarified that the City and TriMet submitted a TE Grant application for this whole portion of the project, the pedestrian crossing, and the boardwalk at Kronberg Park. The TriMet commitment with the design of the structure was that, whether it was built with the TE grant funds or later, TriMet had incorporated additional costs into the structure during PE to hold the bones of the pedestrian structure.
  - The City was matching funds for parts of the boardwalk at the park. The project was named among the finalists for the TE Grant, and the review committee requested additional visuals, which had been provided. The decision would be rendered in about a month.
  - The pedestrian bridge seemed like an afterthought.
- As a non-car oriented world, a pedestrian crossing of the lake made a lot of sense in the 1950s. The goal was to move back to a non-car oriented world. Pedestrian and bicycle crossings were planned into the bridge across the Willamette River that was going to be paid for and built by TriMet. How was this missed? Why was this not built into the original design of this bridge?
- The cost consideration of \$500,000 was discussed for tapered versus non-tapered columns, yet the City was fighting to get a pedestrian bridge.
- **Ms. Robbins** responded that during the preliminary hearings, TriMet looked at all the connections from the Trolley Trail to downtown Milwaukie and whether the grade of

- bringing pedestrians up onto the light rail structure made sense given the connections and the scale of the city. They looked at it both from the Trolley Trail connection and also the pedestrian connection and discussed where the right level was to bring pedestrians. It was not an afterthought but rather an outgrowth of the overall look at the pedestrian connections from Island Station, Trolley Trail, and downtown Milwaukie.
- The Willamette River bridge was likened to a 7- course meal while Milwaukie was getting ala carte.
  - Was the option of a pedestrian bridge considered, and then decided not to proceed with it?
    - The bones of the pedestrian bridge had been incorporated, more environmental efforts were then added from the permitting agency, and whether it should be a separate structure or attached to the light rail structure was considered. It was part of the mix going forth, but it was not part of the original concept that created the overall budget.
    - Why was the pedestrian bridge not part of the original concept?
      - The project's focus was connecting the light rail alignment over McLoughlin Blvd versus future pedestrian connections. Fundamentally, the structure would be there and everyone had aspirations that funding would be available to make the pedestrian bridge work, but not at the light rail part of the project.
  - **Commissioner Stoll** asked how some of the City's design recommendations were going to be addressed in the design; for example, "Design, and scale, and details of the structure to be an asset to the Island Station neighborhood." He wanted to see a rendering from the Island Station neighborhood at ground level and a rendering showing what the bridge would look like coming down River Road and going under the structure. It was a gateway for travelers into Milwaukie. He wanted to see additional perspectives, especially more aerial perspectives from the riverfront and Island Station. At the next presentation, he hoped for a lot more information to make aesthetic judgments. He hated concrete tubs, which looked like a highway interchange. He was willing to go for steel tubs or I-beams. He wanted the structural tubs or I-beams as narrow as possible for the greatest reveal. He did not want straight cylinders either; they should be flared.
  - **Mr. Doran** explained that the intent of tonight's meeting was to get feedback on material and shape. Universally, it seemed steel was the preferred direction, and that

- tubs were preferred to I-beams. TriMet would take this information to the design team, focus on those architectural treatments, and start looking at land use requirements and all the guidelines to begin making responses. It was hard for the architect to make those choices before decisions were made about materials and shape.
- While concrete I-beams were more common and the most cost-effective, in the three proposed designs, concrete or steel tubs, or steel I-beams, the structural spanning members followed the curve of the track above to achieve a ribbon effect.
  - The Commission and DLC were being asked to pick a generic material and preferred shape, as well as feedback about the railing type, fence shape, and to address some of the guidelines, etc. The designs presented were not the actual designs.
  - Because of traffic going underneath the bridge and the angle presented, there was not enough clearance to create a visual transition using gently curved arches going from column to column to support the tubs.
  - A lot of criteria were involved in terms of material choices, structural elements, and the bridge design in addition to the marriage of architecture and structure, aesthetics and proportion. While some details needed to be considered, the design team needed to be released to develop the structure to 60% very soon, and they had to have a direction. This project needed to be narrowed down to one structure type. That direction was critical at this point.
  - **Mr. Mikolovich** explained that if the I-beams were preferred but were considered too plain, ribs could be added to the outside of the I-beam members structurally, probably at about 7 or 8 ft on center, to give the effect of light and shadow and possibly lighten the structure to a certain extent. If that type of direction was given, the TriMet team could begin exploring those issues with the engineers and return with something in response.
- Chair Klein** called for a break at 8:20 p.m. and reconvened the meeting at 8:37 p.m. He called for any public comment.
- Fred Nelligan**, stated that he represented Oak Grove on the Citizen Advisory Committee. He noted that Oak Grove considered this as a gateway to their community and appreciated everything being done. He asked the City to remember this was a holistic project that would really benefit both communities and possibly bring them together. He liked the weathered steel

tub look; the idea of dressing the columns, whether cylindrical or tapered, with the weathered steel sounded very interesting.

Discussion continued as follows:

- It was noted that Historic Milwaukie Neighborhood District Association (ND) Chair Dion Shepard expressed concerns at the NDA meeting about sound and the train headlights sweeping through various bedrooms in the community. Mr. Nelligan had been doing a lot of work on the issue of headlights coming into or out of McLoughlin Blvd and shining into windshields, homes, and businesses and had spent 7 months working on the issue.
  - **Mr. Doran** acknowledged this was an issue especially along McLoughlin Blvd, and they understood that the lights are hard to look at. TriMet hoped to do what they can help screen that corridor, and perhaps put some larger trees around that area to help with the issue. It was hoped this could be discussed with ODOT and other jurisdictions.
- Going south on I-205, the train headlight shined directly into southbound traffic, which prevented drivers from seeing in front of them. It was suggested that the light be aimed away or have a blinder installed.
  - TriMet's safety and security people had given a little feedback on that issue. Adding the light to the trains significantly increased the security and decreased safety issues by alerting people and helping minimize impacts.
- As one was headed southbound on McLoughlin Blvd, headlights would be in drivers' eyes on both sides of the road.
  - **Mr. Doran** explained that the trees along McLoughlin Blvd would be a great solution to help green up the street and also in some ways extending the Trolley Trail.
- The relationship between the Trolley Trail and light rail was unclear since the rail was actually grounded as it headed toward the park. This would help with understanding this as it related to the headlights as well as the train and traffic.
  - **Mr. Doran** replied the team would definitely look at all that in more detail, specifically the Trolley Trail, walls, plant design, etc.
- Information was requested about whether shielding direct emanation of noise from the track toward the neighborhoods would be effective. The shielding could be done along the edge of the deck.

- 500 • Ms. Shepard also inquired about any speed restrictions on the bridge, just as speed  
501 restrictions existed in certain other zones. This would help reduce noise as well.
- 502 • The curve of the rail effectively was a speed restriction as it was a 25 mph designed  
503 curve. South of the curve at the park, the train could speed up, but going northbound  
504 crossing McLoughlin Blvd on that curve, the train would slow to the design speed of  
505 that curve.
- 506 • Did the sound study consider the fact that there was a waterway and valley with the train  
507 above it, which would cause an echo chamber effect?
- 508 • That echoing and discussion about any noise the steel tubs and structure made  
509 came up at the outreach meeting. The issue was discussed with the structural  
510 engineer, and in this case it would not be an issue because it was not boxed enough  
511 to cause sound to echo.
- 512 • **Commissioner Churchill** noted that nothing in the Portland Metro area was equivalent  
513 to this condition with a train over the lake. On Hwy 101 in Mill Valley, CA, as it crossed at  
514 Richardson Bay, the reverberation effect was a factor. He would like to understand a  
515 little more about the studies that concluded that this would not be a problem.
- 516 • **Mr. Doran** agreed to provide additional information about the studies.
- 517 • The location where the bridge came back around along McLoughlin Blvd and hit grade was  
518 indicated on the aerial photo; it was not as far down as the ODOT gravel site. The abutment  
519 was also indicated, as well as walls on each side of the track that tapered back down to  
520 grade and the Trolley Trail.
- 521 • TriMet had to acquire the ODOT gravel pit site due to the change in access. The Trolley  
522 Trail diverged from being totally tangent with the light rail, into the gravel pit site, and  
523 around one of the large Sequoia trees. The rest of that ODOT property could be used for  
524 many things or sold.
- 525 • Although some people who lived in that area wanted some of the pavement to be taken  
526 up, the City was not aware of any discussions to do that at this time.
- 527 • A local example of the weathered steel could be found on the Springwater Corridor; the  
528 bridge east of the big orange bridge that went over the freight track was rusted steel. It was  
529 not the same structure type, but it was the same material.
- 530 • Were there degrees of weathering features in the steel? Coreten steel had been a popular  
531 option, or was it degrees of weathering, or variations of it used?

- 532 • Was there an example of a tub construction that was close in scale to get an idea how the  
533 proposed bridge would look with that much surface area?
- 534 • Although the beams were different than structures supporting rail or vehicles, the  
535 pedestrian bridge actually had probably a four or five section. The team agreed to find  
536 an example of a more similar structure.
- 537 • The difference between the depths of the I-beam and tub schemes was a matter of 4 or 5 in  
538 and not really perceivable. The span was the driver of that depth.
- 539 • The tubs maintained the same height all the way through the structure, but could change  
540 in size because the spans were different to some degree. In trying to achieve that  
541 continuous ribbon effect, the tubs would be the same depth consistently across the  
542 1,700 ft. A thicker steel plate was used in the tub where the spans were larger. The  
543 external appearance was a continuous, same depth section.
- 544 • There was an abutment at the south end, and the tubs did start to come down to grade. But  
545 since the Trolley Trail came in front of that abutment, about 14 or 15 ft of clearance existed  
546 where the tubs land on that abutment. The abutment had retaining walls that tapered down  
547 to the ground. The I-beams and the concrete tubs would all be uniform in that same way.

548  
549 **Commissioner Churchill** stated he was not a major supporter of the alignment, but was  
550 pleased with the design team. The devil would be in the details. He was withholding praise until  
551 after the budget process. If he learned that the budget had killed all this effort regarding  
552 weathering steel, he would be quite upset. He was pleasantly surprised with the results of the  
553 redirections. He liked the weathering steel tub with the tapered column, possibly with a beam at  
554 the top that supported it. The bridge would be a great feather in the cap of TriMet to have a  
555 successful bridge that did not look like the Johnson Creek overpass, and reflected the effort that  
556 everyone made on the design.

557  
558 **Chair Klein** directed the Commission and DLC to address the following items in their  
559 comments:

- 560 • Structure shape: I-beam or tubs
- 561 • Structural material: weathered steel or concrete
- 562 • Column shape: round or tapered
- 563 • Other comments/feedback on the relationship to the environment, railings, etc.

564

**Commissioner Churchill** favored tapered columns and ideally with Coreten steel, or possibly with shotcrete to get texture and color. He favored steel tubs as the structural shape.

**Ms. Gamba** stated that after reading through the Design Guidelines for downtown Milwaukie, she preferred the tapered steel tub columns and recommended either a stained concrete or a steel wrap so the coloring of the tubs was carried further down into the pedestrian experience. She was disappointed that the bridge was not pedestrian-ready. She believed all steps needed to be taken to push forward with that, because the guidelines were very much about pedestrian experience.

**Commissioner Stoll** liked the steel, tapered columns and the idea of putting them inside a steel wrap. Using a steel form was an interesting idea. He was agnostic as to I-beams or tubs, but wanted the bridge to be narrow, so there was a big reveal on the deck.

**Ms. Wisner** stated they needed to do whatever possible to prevent the bridge from looking like a huge monolithic pile of concrete. She advocated weathered steel and opposed the excessive use of concrete. She would like to see the steel or stained concrete create a cohesive unified unit from the tubs or I-beams down to the total length of the support columns.

- The I-beams had a really interesting linear feel, and tended to have more of a historic feel in relationship to the trestle, because the trestle was very skeletal. She was concerned about birds nesting, and did not want this to become an eyesore, so she understood the issue with maintenance. The more they could do to make it look good for long periods of time with less maintenance the better.
- She advocated for the steel tubs and preferred that the columns be as minimized as possible. She did not advocate a heavy cross support beam because that would add heaviness to the overall design. She would like to see a tapered column on the lighter side, so there was a transition going up into the load-bearing area of the tubs, so it would not look like a stick stuck onto a horizontal beam. She would also like to see the structure all as one weathering earth tone that would blend with the surrounding environment through the seasons and blend in with the color of the trestle.

**Commissioner Batey** agreed with comments made about the material. She originally liked the beams, but in retrospect, the tubs made more sense. She preferred that the tubs be as close together as possible so the reveal was as wide as possible to minimize the visual impact. She

599 liked the steel tubs and the railing that matched the tubs. She was agnostic about the taper or  
600 no taper on the supports; however, not having them be in plain concrete was important, whether  
601 wrapped in steel or stained.

- 602 • The neighbors in the Island Station neighborhood were concerned about the new PGE  
603 poles. It would be useful to have a visual from coming down River Road that showed the  
604 poles and the proposed Kellogg Bridge for the next open house.
- 605 • She would also like to see any examples that were as close as possible to the steel being  
606 used in a tub final version, which she would drive to see, as well as physical examples to  
607 check out the sound issue, especially on elevated curves

608  
609 **Ms. Ives** favored the steel tubs. She was not concerned about the shape of the column and  
610 agreed that scale was more important than shape.

611  
612 **Commissioner Gamba** definitely wanted weathered steel, and would like to see using it  
613 explored from the ground through the catenaries, with the platform being the only concrete  
614 visible. He was agnostic as to tubs versus I-beams. He initially liked the I-beams because they  
615 were a nod to the trestle with a more industrial, skeletal look; he was still not convinced this was  
616 not the right way to go. He had become more comfortable with the tubs, and could live with  
617 them if that was the general consensus.

- 618 • The steel wrap was really intriguing, and would be a finishing touch that would really work.  
619 The tapering with a cross member was the right way to go, but with the steel wrap or at least  
620 the staining.
- 621 • He noted that the pedestrian emphasis of the Design Guidelines stated, "Reinforce and  
622 enhance the pedestrian system," not the pedestrian experience, but the pedestrian system,  
623 "so that the pedestrian is the priority in all development projects." This was actually written  
624 into the Design Guidelines. He would have a really hard time approving anything that did not  
625 have a pedestrian bridge across the lake. It needed to be in the design. If they didn't get the  
626 grant, they needed to start scrambling, because he wanted to see it built with the bridge; by  
627 all measures of sticking to the Design Guidelines, it would have to be.
- 628 • He would also like to see the construction methods and any considerations for sustainability  
629 addressed; keeping the lake clean and the parks from being damaged permanently.  
630 Keeping sustainability in mind throughout the project was critical.

**Mr. Perrault** liked the idea of the I-beams at first, but saw the inherent problems. He was okay with the tubs, but believed they should be brought closer together so more of the deck was exposed and there was less of a big shadowed area. He was a fan of the weathered steel and tapered columns.

- The finish of the deck itself had not been addressed. If steel or stained columns were used with the weathered steel tub and a crisp white deck, it would be the equivalent of a farmer's tan.
- Another very important issue to take into consideration was to only disturb the environment once and construct the pedestrian bridge with the rest of the project so Kellogg Lake would not be built over twice. With the lake being intended to become a salmon habitat sooner than later, the construction should only be done once so as to lessen the impact on that environment.

**DLC Chair Hemer** preferred tubs, weathered steel, straight versus tapered columns, and some sort of designer coloring on the columns.

- He commented that it seemed there was a protection or nondescript overall general view and everybody was protected, but then all of a sudden a decision was made that was not really what was wanted, and pretty soon it was done and over and any input was lost.
- He understood there were budget issues and that other areas of the project would take precedence over the bridge. He hated to see it all fall to the wayside and feared that their opinions would not be heard.
- He worried about pedestrian bridges and narrow planned steel I-beams because somebody from National Oceanic and Atmospheric Administration (NOAA) or the Army Corps of Engineers would say predatory fish habitat was being created in the lake because of the big shadow line. He hoped that issue would be resolved quickly so it was off the table right away, because those agencies had the last look, and could deny the project.
- He appreciated how TriMet was handling things. He hoped that they followed through, that everything went according to plan, and that TriMet listened to the input about the designs.

**Chair Klein** liked the tubs, the steel and tapered columns; however he had a number of concerns. In the decision making process, it made people feel important when they could make decisions; however the decisions presented before this body were not overly crucial.

- 664 • He was concerned that they were worried and concerned about \$500,000 in a \$1.5 billion  
665 project. In the overall cost, this was a miniscule amount. If at this stage they were looking at  
666 rationing it down and tying this dollar amount down, that was somewhat of a concern.
- 667 • He felt a bit like he was trying to buy a car and wanted a really nice Prius with GPS, etc., but  
668 he was just looking at the frame, which looked pretty cool, but in reality in 6 months or 3  
669 years, he would end up with a Yugo that was not all that great. This was his concern.
- 670 • He believed Milwaukie would get what they would get because they were afforded and not  
671 necessarily because that was what the community wanted. This was an ala carte type thing,  
672 and once things were done further up the light rail line, Milwaukie would get the left over  
673 scraps.
- 674 • Though a bit off topic, creating a Master Plan for Kronberg Park was absolutely important  
675 and needed to be done before this project started. As confident as people were in getting  
676 the grant to build the walkway underneath Kellogg Bridge, they could go out and look for  
677 funds to be able to develop the area as a park. He was making a pretty big assumption, but  
678 it was only logical that the park would be used as a staging area. As TriMet and the  
679 construction crews were leaving that area, it should be built into the park.

680  
681 **Chair Klein** summarized the consensus of the Commission and DLC in providing direction for  
682 the TriMet team: tubs for the structure shape, weathered steel as the material, and tapered  
683 columns.

684  
685 **Commissioner Gamba** added that everyone wanted the columns to be steel cased or at the  
686 very least stained to match the weathered steel.

687  
688 **Chair Klein** noted that in Bend, the main corridor had concrete form retaining walls that were  
689 not a consistent color and looked like natural stone. It was beautiful and looked like the type of  
690 rock found in that area. He believed this could be incorporated on this project; but if they were  
691 worried about \$500,000, it would take that much to integrate it into the environment. He certainly  
692 hoped \$500,000 was not the issue; that really scared him.

693  
694 **Mr. Doran** thanked the Commission and DLC, adding that it was refreshing that the group was  
695 so engaged, asking good questions, and providing good feedback. The team was leaving with a

positive outlook and he was optimistic knowing what was being done behind the scenes and what the team was capable of doing.

**Commissioner Churchill** stated that with regard to budget, as much passion and support that TriMet had for the current direction, if they returned with the decision that the bridge was going to be concrete, there would be three times that much passion in the wrong direction.

**Ms. Mangle** noted that the Commission was the decision maker on the Willamette Greenway, Design Review, and Natural Resource applications; the DLC was the chief recommending body for the Design Review. As the designs were developed over the next several months, she sought feedback about whether they wanted to continue to have joint meetings, a subcommittee, or Commissioners joining the DLC.

- She understood that one design featuring or one structure material type would be presented that would continue to be refined in terms of its different elements, such as the railing.
- There would probably be one more meeting between now and the hearings with more information than would probably be presented at the open house. It was important that the Commission and DLC got the information they needed.

**Ms. Wiser** asked if a little variation was possible in that TriMet could show how the comments would be culminated and show different options with a straight column, a slightly tapered column, and a more pronounced taper to the column providing a stepped view indicating the options.

**Mr. Doran** stated that TriMet would take the comments, look at the cost impacts, and see what needed to be considered further. They will talk to the design team, taking into consideration all the land use issues, Design Guidelines, etc., and start making those responses. He proposed evolving those designs with staff and return to the group to discuss the details of that progression. Now that the structural issue was addressed, they wanted to lay the foundation for the architectural decisions soon and get a lot of that evolution resolved early in order to get the preapplication decisions made. The TriMet team wanted to return to this group soon with some of those decisions, and then the details would continue to be tweaked in the coming months.

**DLC Chair Hemer** inquired whether the Commission wanted the DLC to view what the scale was and make the changes as they saw fit, or should they all meet together.

**Commissioner Gamba** stated that however it was done scheduling-wise, it would be a good idea for both bodies to be together in the same room.

**Ms. Mangle** said they would see how it played out in terms of schedule and she would contact everyone about how to get everybody back together when the time was right.

**Ms. Mayer-Reed** stated the next public meeting would be held on April 4<sup>th</sup> and the design team would probably not be able to push the design to another level by that point. It would probably be okay to show some of the similar images at that open house that were shown here tonight, and basically endorse the direction. It would take time to evolve the designs according to the direction provided. She appreciated there being such unanimity about the direction, adding it was really a pleasure to work with the group.

**DLC Chair Hemer** urged the Commission to please keep the Sellwood neighborhood and traffic in mind when it came time to look at the Tacoma Station, as well as what ODOT could do to make that project better. It was a snarling nightmare. He was disappointed that the Commission would not review that project. He hoped that the traffic, lighting, security, and everything involved with that site did not discourage it from being used.

- **Mr. Doran** assured that Chair Hemer's statements would be considered.
- **Ms. Robbins** explained that TriMet would be going to the City of Portland's design review for updates and would be able to convey the concerns as the design developed. She announced that funding had been secured and ODOT was going to put in a left-hand turn lane, and that change would be effected before the Kellogg Bridge project was built.

## **6.0 Worksession Items – None**

## **7.0 Forecast for Future Meetings: Planning Commission**

- |                |                                                                                     |
|----------------|-------------------------------------------------------------------------------------|
| March 22, 2011 | 1. Public Hearing: ZA-11-01/CPA-11-01 Natural Resource Regulations                  |
| April 12, 2011 | 1. Public Hearing: WQR-11-01 Johnson Creek Confluence project -<br><i>tentative</i> |

**Ms. Mangle** briefly reviewed the future meetings forecast, and encouraged the Commission to contact Mr. Kelter with any questions regarding the Natural Resource Regulations.

**Design & Landmarks Committee**

March 23, 2011    1. Meeting Cancelled

April 27, 2011    1. TBD

Meeting adjourned at 8:53 p.m.

Respectfully submitted,

Paula Pinyerd, ABC Transcription Services, Inc. for  
Alicia Stoutenburg, Administrative Specialist II

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Lisa Batey  
Planning Commission Chair

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Greg "Frank" Hemer  
DLC Chair



# MILWAUKIE

*Dogwood City of the West*

**To:** Planning Commission  
Design and Landmarks Committee

**From:** Katie Mangle, Planning Director *KM*  
Susan Shanks, Senior Planner

**Date:** May 23, 2011, for June 1, 2011, Worksession

**Subject:** Early Review of Portland to Milwaukie Light Rail bridge over Kellogg Creek and McLoughlin Blvd

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## ACTION REQUESTED

TriMet staff is requesting early review and direction regarding the design of the Portland to Milwaukie Light Rail bridge that will cross over Kellogg Creek and McLoughlin Blvd. The comments received during this meeting will guide the project designers as they prepare the final application materials to be reviewing during a public hearing in the autumn of 2011. Since the bridge will undergo permitting review by both the Design and Landmarks Committee (DLC) and the Planning Commission (PC), early design direction from both bodies is important.

## BACKGROUND INFORMATION

The Portland Milwaukie Light Rail (PMLR) project has met several milestones over the past year, including designing to a 60% level of completion (and refine the cost estimate accordingly). Generally the urban design of the project is following the ambitions outlined in the Conceptual Design Report (CDR) that was presented in 2010 (see Attachments 1 for the City's findings on that report).

Some elements of the project will require land use approvals and construction permits. The Planning Commission and DLC will play an important role in the City's review of these permit applications. However, since light rail is already an approved use per the 2008 Land Use Final Order (LUFO), the City's land use review and permitting process will focus on the physical characteristics of the project to ensure that it meets the City's various design standards and guidelines, fits into the existing fabric of the City with minimal disruption, and enriches Milwaukie's unique small-town identity. Generally speaking, LUFO approves the construction of light rail in the location of the final alignment, including the location of specific key elements, i.e. stations, bridges, park and ride facilities, etc. LUFO does not, however, override the City's

authority to issue most development approvals that are triggered by the project or conditions that are required by the Planning Commission, during design, engineering, and construction.

#### **A. History of Prior Actions and Discussions**

- **January, 2010:** DLC worksession on the PMLR project, focusing on the elements that will go through Design Review, and the Committee's role in advising the City on the design of the project.
- **January 26, 2010:** Staff briefed the PC on the PMLR light rail project, focusing on the Commission's role in the permitting of the project.
- **March 9, 2010:** PC and DLC held a joint session at which TriMet staff provided a briefing on the PMLR project and the Conceptual Design Report.
- **February 22, 2011:** Staff briefed the PC on the status of the Kellogg bridge structure and the schedule for public input on the design.
- **February 23, 2011:** Staff briefed the DLC on the status of the Kellogg bridge structure and the schedule for public input on the design.
- **March 17, 2011:** The Planning Commission and DLC held a joint meeting to review the preliminary bridge design. And provide guidance on preferred shape and materials to be used to construct the bridge.

#### **B. Proposed Bridge Over Kellogg Creek**

Though the alignment from Portland to Milwaukie isn't expected to open until 2015, the major design elements of the project will be established this spring. The discussions that have been underway with the Design and Landmarks Committee and Planning Commission members will inform what the project will look like in Milwaukie.

One of the largest single elements of the PMLR project in Milwaukie will be the new bridge that will cross over Kellogg Creek, Kronberg Park, and McLoughlin Blvd. This structure will extend from the southern edge of the light rail platform at Lake Rd to just south of 22<sup>nd</sup> Ave. Most of the bridge will fall within the City's Downtown zoning district and the Willamette Greenway Overlay, and will therefore be subject to the following land use reviews: Design Review (DLC and PC), Willamette Greenway review (PC only), Water Quality review, and Habitat Conservation Area review (PC only). See Attachment 2 for a summary of review criteria that will be applied to the bridge during the Design Review and Willamette Greenway Review process.

#### **Summary of Comments and Questions from March**

During the meeting on March 17, TriMet staff presented the bridge design and received the following preliminary comments from the PC and DLC members about the bridge design.

- The weathering steel tub structural system was preferred over concrete.
- Tapered columns were preferred over plain round columns. Consider cladding or staining the columns to match the tubs.

During this meeting, project staff and designers will explain how those comments were considered and, where possible, incorporated into the 60% design documents. TriMet provided the following summary of the current bridge design, which will be presented at the meeting:

- *The weathering steel tub structural system has been carried forward as the basis for the design of the Kellogg Bridge structure, beams and column caps.*
- *After a great deal of study into the alternatives, the design team recommends that natural concrete color and finish be used for all of the concrete elements. The concrete deck will contrast with the weathering steel elements, highlighting the rich, earthy color of the steel. Staining the concrete to match or complement the color of the weathering steel will diminish the visual character and authenticity of both the steel and the concrete.*
- *The team's research into applied stains indicates that staining in place has environmental risks which could impact the soils and water quality of Kellogg Creek. The stain product itself is not an environmentally benign product and should be avoided in a sensitive habitat environment. Further, the surface preparation necessary to obtain a uniform result will require an acid etch and rinse that could have additional environmental impacts. Integrated color in the concrete is very expensive to incorporate into the mix; it's difficult to achieve consistency and control on a large scale project.*
- *There was interest in a tapered concrete column shape. Further structural analysis has shown that the structural core of the concrete columns must be 6 feet in diameter, a foot larger than previously assumed. When a minimum 6" thick concrete shell is added over this core, the exterior diameter of the column becomes 7 feet, increasing as the column flares upward. Adding shot-crete layers as a construction method also increases the girth of the column. Since this bridge is not very high, the result is a series of broad, squat, columns that appear to be overly thick and poorly proportioned. In addition to aesthetics, sight lines at McLoughlin and the Trolley Trail are important safety considerations. Therefore, the smallest possible 6 foot diameter column is recommended.*
- *The design team has studied textural treatments on the columns that will provide tactile qualities, visual interest and a fine-scale play of light and shadow, thereby helping to reduce the apparent breadth of the column. A deeper relief treatment cast into the concrete at the base of the columns will provide further visual interest and deter tagging.*
- *Weathering steel wraps or applied strips were considered on the concrete columns; but the design team found that the applied steel created an overly busy visual effect that detracted from the texture and simple character of columns.*
- *The safety railing system will utilize weathering steel flat bar stanchions at approximately 5 feet on center with a round galvanized steel guardrail at the top of the stanchions and stainless steel cable between. The railing will maximize transparency while blending with the other bridge materials. Currently, additional noise analysis is underway to determine the need of changing from the transparent railing to a low solid parapet wall in the affected segment of the bridge.*
- *The pedestrian/bike bridge has been studied enough to assure its integration into the bridge structure when added in the future. To accommodate the pedestrian/bike bridge, two pairs of columns will be used on the banks of Kellogg Lake, with no structural supports required in the lake.*

- *Vertical textural treatments of abutment walls will break up large vertical wall surfaces. Wherever practical, clinging vines (Boston ivy) will be planted on walls to reduce graffiti.*
- *ODOT will require traffic rated guardrails At McLoughlin Blvd. at two locations to protect the bridge columns. Exact locations are proposed to be as minimal as possible while meeting the safety requirements. Weathering steel is the material being proposed by the design team.*
- *Demonstration of sustainable practices includes use of weathering steel, a recyclable and recycled content material. Weathering steel is notable for its low maintenance and long life cycle.*
- *Tall evergreen and deciduous tree plantings have been added to the west side of McLoughlin Blvd. where it is expected that train lights will shine toward on-coming traffic. Additional study of this condition is underway.*

At the meeting, the TriMet design team will also provide more information on the following:

- Lake Road Station design and bridge abutments
- Trolley Trail design, landscape and lighting
- Public art project on the bridge
- Options for the overhead electrification system (OCS) poles on both the Kellogg Bridge and the entire line section

## **ATTACHMENTS**

1. City Council Recommendations on the Conceptual Design Report (“Exhibit A”)
2. Summary of Applicable Design Review and Willamette Greenway Criteria

## EXHIBIT A

### Conceptual Design Report – City of Milwaukie Recommendations

The Milwaukie City Council requests that TriMet, in collaboration with City staff, finalize the Conceptual Design Report, to be reviewed by the Planning Commission (PC), Design and Landmarks Committee (DLC), and City Council prior to the completion of the project's final design phase. The report should describe how the project will respond to the following City of Milwaukie recommendations:

#### A. Safety and Security Recommendations

##### A1. Crime Prevention Through Environmental Design (CPTED)

- a. Coordinate with City staff to review the inclusion and design of CPTED features at and around Milwaukie-area stations (and parking structures).
- b. Design the light rail trackway to discourage pedestrian access and trespassing in the freight and light rail corridor and clearly designate safe routes.
- c. Ensure the Lake Road “tunnel” (under the light rail structure) is designed to best practice CPTED standards.
- d. Support the City of Milwaukie efforts to put eyes on the downtown Milwaukie Station through development of the adjacent property with the provision of space for Milwaukie Police presence.

##### A2. Security Operations Plan

- a. Coordinate with Milwaukie Police to develop an operating plan for monitoring and patrolling the three Milwaukie-area stations (and two parking structures).
- b. Provide security cameras and lighting at Milwaukie-area stations (and park-and-rides) and share research results related to best practices for monitoring security cameras (per 2008 MOU).
- c. Work with area public and private schools to develop a safety education process for students and schools in the vicinity of light rail.

## **B. Planning and Permitting Recommendations**

### **B1. Station Development Strategies**

- a. Coordinate with the City of Milwaukie, affected property owners, and other public and private partners on comprehensive station development strategies for the Tacoma, Downtown Milwaukie and Park Avenue stations in support of redevelopment desired by the local jurisdictions.
- b. Coordinate with City staff on the disposition, reuse and redevelopment of remnant or other TriMet-owned parcels in the City of Milwaukie, including the railroad right-of-way west of the existing freight tracks between Adams and Lake Road.

### **B2. Bus Service Planning**

- a. Undertake a conceptual bus plan to evaluate Milwaukie's transit service needs for 2015-2020, prior to opening of light rail. The plan should include options for future service for Main Street north of Harrison Ave, and new east-west bus service options for the Johnson Creek Blvd corridor.
- b. Demonstrate an increase of new Milwaukie bus service (i.e. non-light rail) equivalent to service hours saved by terminating line 33 in Milwaukie (see Milwaukie Comprehensive Plan Transit Savings Reinvestment Policy, Chapter 7 pg 11).
- c. Identify new location for line 70 and 75 bus layovers currently using 21<sup>st</sup> Ave and Jackson St near City Hall.

### **B3. City of Milwaukie Review Process**

- a. Ensure the project complies with the terms of TriMet's June 2008 MOU with Milwaukie concerning future transit improvements in the City of Milwaukie.
- b. Ensure the project is properly evaluated through Milwaukie's adopted land use review and permitting processes to allow for staff, DLC, and PC examination and public comment opportunities.
- c. Ensure that project elements comply with all applicable design review criteria, zoning standards and Public Works Standards (including downtown streetscape standards as described in the Downtown Milwaukie

Public Area Requirements and the undergrounding of overhead utilities in downtown, as described in the Public Works Standards).

- d. Coordinate with Milwaukie Planning staff regarding Milwaukie's ongoing projects to improve its development codes. Review and provide comment on draft revisions to assure that project-specific needs are addressed to avoid unnecessary variance requests or specific code amendments in the future.

#### B4. Public Utilities and Streets

- a. Design sidewalks, street crossings, vehicle lane widths, and streetscapes to comply with Milwaukie Public Works Standards (PWS). Street improvements shall include but are not limited to: sidewalks, curbs, travel lanes, planter strips, pavement markings, parking strips, bike lanes, signage, crossing protections, driveways and ramps, road bed, street furniture, utility infrastructure, and all other elements within the public right-of-way.
- b. Coordinate with Milwaukie Engineering and Operations Departments to clearly identify impacts to the public right-of-way, and develop design and construction plans to mitigate for identified impacts to all rail crossings of City streets
- c. Coordinate with Milwaukie Engineering and Operations Departments to clearly identify impacts to the municipal water and sanitary sewer systems, and provide mitigation in accordance with the City of Milwaukie Public Works Standards (PWS). Waterlines and sewer lines impacted by station location, rail crossings, or other project construction will be relocated outside of freight and light rail trackway, per the PWS, and encased as required. Costs for utility relocation will be included in the PMLRT project budget.
- d. Coordinate with Milwaukie Engineering and Operations Departments to clearly identify impacts to the storm drainage system along the entire alignment in Milwaukie. Design and provide mitigation in accordance with the City of Milwaukie PWS and Water Quality Standards.

## **C. Urban Design Recommendations**

### C1. North Industrial Structure

- a. Coordinate with City staff on the design of the elevated structure in the North Industrial area. Design the structure to include graffiti-proof finishes and minimize the visual changes experienced by residents of the adjacent Ardenwald neighborhood by using, for example, plant screening vegetation where warranted and feasible.

### C2. Kellogg/McLoughlin Structure

- a. Design the bridge over Lake Road to create a well-lit pedestrian-oriented passage beneath the structure along Lake Road.
- b. Coordinate with the City on the bridge design over Kellogg Lake to anticipate the future restoration of the creek and riparian corridor and installation of a pedestrian bridge beneath the structure.
- c. Design the bridge over Kellogg Lake to enhance the feeling of the area and to meet the intent of the Willamette Greenway Zone.
- d. Design the bridge over McLoughlin and 21<sup>st</sup> Avenue to serve as a gateway for northbound travelers into Milwaukie, protect views into downtown and toward the Willamette River.
- e. Design the scale and details of the structure to be an asset to the Island Station neighborhood. Investigate alternative approaches to scale, depth of reveals, choice of materials (color, lighting, detailing), and placement and shape of columns west of McLoughlin.
- f. Work with City staff and affected property occupants and owners to mitigate the impacts of the project between Kellogg Lake and River Road, especially with regard to the placement of bridge columns and changes to visibility to and from commercial and residential properties.
- g. Design the entire structure to appear as seamless and coherent as possible, with architectural treatments that recognize the “gateway” aspect of the structure at the south end of downtown Milwaukie.

### C3. Bicycle and Pedestrian Access

- a. Provide adequate pedestrian and bicycle access to the three Milwaukie-area stations. Integrate Tacoma, Downtown Milwaukie and Park Avenue stations to adjacent neighborhoods by providing safe and direct bike/ped access through the provision of adequate sidewalks, bike zones, lighting, signage, street crossings, track crossings, public art, bicycle parking, etc.
- b. Continue working to resolve bicycle conflicts along the alignment and improve bike and pedestrian connections from adjacent neighborhoods to station areas. Pay particular attention to the bicycle and pedestrian access along SE 21<sup>st</sup> Ave into the Downtown Milwaukie station.
- c. Support the development of the Trolley Trail as part of right-of-way acquisitions and final design.
- d. Identify locations for expanded bike parking at stations beyond what is included in the current project scope.

### C4. Connections to Parks and Green Space

- a. Coordinate with Portland and Milwaukie to design and plan for improved connections to the existing Springwater Corridor trail to ensure safe and direct access between the station and the trail.
- b. Design the bridge over Kellogg Lake to accommodate a future pedestrian bridge under the light rail tracks, and to connect to future paths in Kronberg Park and along the restored Kellogg Creek.
- c. Design the Downtown Milwaukie station with pedestrian connections at both platform ends to facilitate easy and clear access between the platform and the City's future plaza and Dogwood Park at the south end of Main Street.
- d. Coordinate with Clackamas County and Milwaukie to design and plan for improved connections to the Trolley Trail to ensure safe and direct access and use of the trail.

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C5. Public Art

- a. Work in collaboration with the Regional Arts and Culture Council, the Milwaukie Arts Committee, Clackamas County Arts Alliance, and the communities along the alignment with regards to public art.
- b. Explore creative incorporation of art along the alignment and at stations.

C6. Greenscaping

- a. Make extensive use of plantings/vegetation to soften the visual impact along the alignment where appropriate to mitigate the effects of light rail.
- b. Prior to 60 percent design completion, identify the size and condition of all trees to be removed in the City of Milwaukie. Develop a plan for tree protection, removal and replacement. The plan should estimate the affect on the canopy and resulting visual changes to surrounding properties.

C7. Finish, Fixtures and System Elements

- a. Design the finishes and system elements to be pedestrian scale and to lend the streetscape a sense of permanence and care. Finishes should comply, with or come closest to matching, those listed in the City's downtown Public Area Requirements document.
- b. Develop a menu of design options which support the basic urban design principles of the City of Milwaukie. The menu should include design options for fences, walls, overhead catenary systems, crossing arm barricades, substations, electrical cabinets, railings, stairs, bollards and lighting.

C8. On-Street Parking

- a. Coordinate with City staff on the design and implementation of on-street parking spaces to support downtown activities and help compensate for the loss of on-street parking resulting from the light rail project.
- b. Coordinate with City departments before, during and after construction of the light rail project to deter "park and hide" parking in Milwaukie neighborhoods. This may include supporting the city's implementation of neighborhood parking permit programs and increased levels of enforcement by TriMet.

- c. Coordinate with City staff on the provision and location of light rail quick drop areas.

## **D. Station Design Recommendations**

### **D1. Tacoma Station**

- a. Explore opportunities for redevelopment of the site with complementary uses, in addition to the park-and-ride structure. Design the final site plan to allow for redevelopment of the adjacent Bishop property.
- b. Coordinate with City staff, adjacent neighborhoods, and the Johnson Creek Watershed Council to improve the final park-and-ride design through material selection, screening, lighting, and artwork. Develop a site restoration plan that enhances the Johnson Creek riparian area.
- c. Continue to coordinate with Portland, ODOT, Milwaukie, and adjacent neighborhood residents on the final package of transportation improvements to SE Johnson Creek Boulevard, SE Tacoma and SE McLoughlin required to mitigate traffic from the Tacoma park-and-ride.
- d. Continue exploring grant opportunities for funding of enhancements of the site.

### **D2. Downtown Milwaukie Station**

- a. Coordinate station design with Milwaukie's South Downtown development plans.
- b. Design the station in anticipation of a joint development project to occur on the "triangle site" adjacent to the northbound platform.
- c. Consult with the DLC on the design of the station to ensure that the design supports future development on adjacent parcels and enhances pedestrian connections in the area.
- d. Develop the station design to ensure that platform infrastructure and amenities are located outside of the 21<sup>st</sup> Ave public right-of-way.
- e. Coordinate with City staff to design transit shelters and furnishings that are distinctive and complement the character of downtown Milwaukie.

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- f. Coordinate with City staff to improve the design of access to both platforms. Emphasis should be placed on designing the access at the north end of each platform to be safe, universally accessible, and welcoming. Pedestrian access at the south end of the platform should be designed to minimize the construction of large retaining walls or ramps.
- g. Given the size, shape and grade changes on the “triangle site,” explore options for providing appropriate ADA access to the platforms and consider alternatives to TriMet standards.
- h. Integrate station lighting to provide a safe nighttime environment on the platform and under the bridge over Lake Road, such that lighting becomes a defining feature of the station.
- i. Coordinate with City staff and affected property owners to evaluate additional design options for the re-grading of the Adams Street right-of-way east of the LRT tracks. Evaluate alternative access changes to affected properties.

D3. Park Avenue Station

- a. Coordinate with City and County staff and adjacent neighborhoods to identify needed improvements to enhance bicycle and pedestrian connectivity to the station.
- b. Coordinate with the City and County staff, and adjacent neighborhoods and organizations to integrate Urban Green design elements into the park-and-ride construction plans.

**E. Light Rail Construction**

E1. City of Milwaukie Quiet Zone

- a. Include supplemental safety measures in project design and construction required to implement a City of Milwaukie Quiet Zone on the Tillamook Branch at the Mailwell, Harrison, Monroe, Washington and Adams crossings. Support the City of Milwaukie application requesting FRA designation of a Quiet Zone for these crossings.
- b. Make use of shrouds, directional bells and other technologies available to reduce ambient noise levels (i.e. undirected noise) from the sounding of gate-arm bells.

## E2. Property Impacts

- a. Minimize impacts to existing businesses and properties along the corridor.
- b. Work with City staff to relocate Milwaukie businesses impacted by property acquisition within the City of Milwaukie.
- c. Consider the future economic viability of acquired sites and parcels in project design.
- d. Minimize right-of-way acquisitions.
- e. Minimize the loss of on-street parking.
- f. Minimize the loss of access to properties.
- g. Minimize noise impacts.
- h. Where partial property impacts are necessary, coordinate with City staff and affected property owners to evaluate changes to property access, on-site parking, setbacks, and other aspects that may create nonconforming situations.
- i. Work with City staff to develop a lease arrangement for temporary construction staging on Kronberg Park.
- j. Coordinate with the City to plan for the future use and/or restoration of the ODOT yard in the Island Station neighborhood.

## E3. Sustainability

- a. Coordinate with City staff to develop a sustainability plan that details how TriMet will incorporate sustainable practices in the design and construction of the PMLR project. Elements should include: reuse of materials from the careful dismantling/deconstruction/demolition of buildings; waste management practices that enable reuse and recovery of construction materials; incorporation of storm water plantings, vegetation and trees; reduced energy consumption; alternative power renewable energy sources; and low-emission vehicles and equipment.



**To:** Katie Mangle, Planning Director  
**From:** Li Alligood, Assistant Planner  
**Date:** February 4, 2011  
**Subject:** TriMet overview of approval criteria for projects in the Kellogg Lake area

The purpose of this memo is to provide an overview of the design-related standards and guidelines for work in and around Kellogg Lake and related structures.

## **BACKGROUND**

The subject site is located within the Downtown Open Space Zone DO and the Willamette Greenway Zone WG. Per the Milwaukie Municipal Code (MMC) Title 19 Zoning Ordinance, development in and around Kellogg Lake is subject to the design standards and guidelines of the following sections of the Milwaukie Municipal Code (MMC):

- MMC Chapter 19.312 Downtown Zones: All new construction in the downtown zones is subject to objective development and design standards and design review, which requires approval by the Planning Commission with a recommendation from the Design and Landmarks Committee (DLC).
- MMC Chapter 19.320 Willamette Greenway Zone WG: New construction within the WG zone is permitted conditionally and requires approval by the Planning Commission.

## **APPLICABLE REGULATIONS RELATED TO STRUCTURE DESIGN**

The project will have to meet the following guidelines and criteria, so they should be considered throughout the design effort. Additional criteria related to other parts of the Municipal Code (e.g., Water Quality Resources) may apply in addition.

### **Downtown Zones**

- All development in the downtown zones, including design standards and design review, is subject to the regulations of MMC Chapter 19.312, which can be found at [http://www.ci.milwaukie.or.us/sites/default/files/fileattachments/DowntownDesignGuidelines\\_0.pdf](http://www.ci.milwaukie.or.us/sites/default/files/fileattachments/DowntownDesignGuidelines_0.pdf).

### Design Review

- All new construction in the downtown zones is subject to design review.
- Applications for design review for new construction are subject to Minor Quasi-Judicial review and approval by the Planning Commission with a recommendation by the Design and Landmarks Committee (DLC).

- Projects are evaluated against consistency with the Downtown Design Guidelines, which can be found at [http://www.ci.milwaukie.or.us/sites/default/files/fileattachments/DowntownDesignGuidelines\\_0.pdf](http://www.ci.milwaukie.or.us/sites/default/files/fileattachments/DowntownDesignGuidelines_0.pdf).
- Relevant Design Guidelines (references to buildings read as references to structures):
  1. Milwaukie Character Guidelines
    - Reinforce Milwaukie's Sense of Place = Strengthen the qualities and characteristics that make Milwaukie a unique place.
    - Integrate the Environment = Building design should build upon environmental assets.
    - Consider View Opportunities = Building designs should maximize views of natural features or public spaces.
    - Consider Context = A building should strengthen and enhance the characteristics of its setting, or at least maintain key unifying patterns.
    - Use Architectural Contrast Wisely = Contrast is essential to creating an interesting urban environment. Used wisely, contrast can provide focus and drama, announce a socially significant use, help define an area, and clarify how the downtown is organized.
    - Integrate Art = Public art should be used sparingly. It should not overwhelm outdoor spaces or render building mere backdrops. When used, public art should be integrated into the design of the building or public open space.
  2. Pedestrian Emphasis Guidelines
    - Reinforce and Enhance the Pedestrian System = Barriers to pedestrian movement and visual and other nuisances should be avoided or eliminated, so that the pedestrian is the priority in all development projects.
    - Define the Pedestrian Environment = Provide human scale to the pedestrian environment, with variety and visual richness that enhance the public realm.
    - Protect the Pedestrian from the Elements = Protect pedestrians from wind, sun, and rain.
    - Integrate Barrier-Free Design = Accommodate handicap access in a manner that is integral to the building and public right-of-way and not designed merely to meet minimum building code standards.
  3. Architecture Guidelines
    - Wall Materials = Use materials that create a sense of permanence.
    - Green Architecture = New construction or building renovation should include sustainable materials and design.
  4. Lighting Guidelines
    - Exterior Building Lighting = Architectural lighting should be an integral component of the façade composition.

- Landscape Lighting = Lighting should be used to highlight sidewalks, street trees, and other landscape features. Landscape lighting is especially appropriate as a way to provide pedestrian safety during holiday periods.
- Sign Lighting = Sign lighting should be designed as an integral component of the building and sign composition.

#### 5. Sign Guidelines

- Wall Signs = Signs should be sized and placed so that they are compatible with the building's architectural design.

Information and Guide Signs = Directional signs should be small scale and of consistent dimensions, and located in a visually logical order. These signs should also provide on-site directional information.

#### **Willamette Greenway Overlay Zone WG**

- All construction the WG zone is subject to the regulations of MMC 19.320, which can be found at [http://www.qcode.us/codes/milwaukie/view.php?topic=19-19\\_300-19\\_320&frames=off](http://www.qcode.us/codes/milwaukie/view.php?topic=19-19_300-19_320&frames=off).
- All uses and accessory structures in the WG zone are subject to the provisions of MMC Chapter 19.600 Conditional Uses, which can be found at [http://www.qcode.us/codes/milwaukie/view.php?topic=19-19\\_600&frames=off](http://www.qcode.us/codes/milwaukie/view.php?topic=19-19_600&frames=off).
- New construction in the WG zone is subject to Minor Quasi-Judicial review and approval by the Planning Commission with a recommendation by the DLC.
- Design-related approval criteria
  - Compatibility with the scenic, natural, historic, economic, and recreational character of the river
  - Protection of views both toward and away from the river
  - Landscaping, aesthetic enhancement, open space, and vegetation between the activity and the river, to the maximum extent practicable
  - Public access to and along the river, to the greatest possible degree, by appropriate legal means
  - Maintain or increase views between the Willamette River and downtown