



7 April 2016

TAL-1349D

Ms. Amanda Almgren
Associate Planner
City of Woodinville Development Services Department
17301 113rd Avenue NE
Woodinville, Washington 98072

REFERENCE: Woodinville Lumber Site, Woodinville, WA

SUBJECT: Response to Karen Walter Comments, Muckleshoot Indian Tribe Fisheries Department

Dear Amanda:

We received your letter containing the latest comments from Karen Walter on the proposed redevelopment of the Woodinville Lumber Site (hereinafter referred to as "Site"). Ms. Walter originally commented on the original BD Warehouse project to Ms. Erin Martindale, City of Woodinville, on 9 April 2013. These comments were forwarded to us from Ms. Martindale. Bill Shiels provided our responses to Ms. Walter in an email on 18 December 2013. Ms. Walter then replied back with additional comments to you on 10 January 2014. We did not respond to the additional comments when we received them due to the decision of the Client at that time to not pursue the project further. The project has since been acquired by Panattoni Development Corporation with the intent of using our previous mitigation concept. Ms. Walter has noted that the outstanding additional comments are still relevant. It is our custom to provide the text of comments verbatim in our response letters. However, the outstanding set of comments is a follow-up based on our previous responses. Responding in our typical fashion would be unwieldy and potentially confusing (not to mention resulting in a very long document). We will respond specifically to the follow-up comments with sufficient background information to place the responses in the appropriate context.

The first follow-up comment concerns the density of tree plantings around the wetland water quality facility to help prevent the warming of summertime stormwater prior to release into the Sammamish River. We agree that the shading of the aboveground portion of the stormwater system is very important to the health of the Sammamish River. However, the planting densities shown on our mitigation plan follow general industry planting density practices. Increasing (or maximizing) the planting density will not necessarily lead to more shading and cooling effects for the stormwater system. Rather, the increased plant densities will lead to resource competition between planted species, reduced vigor, and higher levels of plant mortality. The proposed planting density generally provides the fastest establishment of aerial vegetative coverage while minimizing plant mortality.

The second follow-up question concerns the sewer easement through the buffer. We agree that it must remain free of woody plant material since such plants can cause sewer line damage in the

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future. We can remove this area from the mitigation buffer calculations. We disagree that this sewer line easement should be removed from the buffer area calculation. While this area will likely not be vegetated with native trees and shrubs, it will not be unvegetated. Rather, the sewer line easement will be planted with native grasses and other herbaceous species and will provide some buffer function and services to the Sammamish River.

We understand the concern that the proposed trails and the relatively unvegetated sewer line easement could provide opportunity for poaching or harassment of adult salmon, although we believe that such activity would be unlikely. However, this is an issue that cannot reasonably be addressed by the proposed project in a way that would not also prevent the free movement of wildlife along the left bank of the Sammamish River. Casual access to the mitigation area and the sewer line easement will be restricted by required fencing. The project site is a commercial warehouse and will not necessarily be open to the general public. It is also common practice to have external video surveillance as a method of preventing theft. This surveillance will also record trespass of individuals who might attempt to access the mitigation area for the purposes of conducting illegal activities. It should be noted that there is a considerable amount of public access to the Sammamish River already, including areas where physical access to the water is easier than the project site and more secretive.

The third follow-up question concerns the ability of the 100-ft buffer to achieve the same level of function and service as a standard 115-ft buffer in terms of providing shade and future woody debris recruitment. Also, we may not have provided enough detail in describing existing conditions in the buffer areas. The existing 115-foot buffer off of the ordinary high water mark (OHWM) for the Sammamish River is a combination of invasive species (Himalayan blackberry and reed canarygrass dominating), landscape planting around an existing stormwater swale, some native trees and shrubs, and impervious surfaces. Impervious surfaces at the northeast corner of the property currently extend to within approximately 40 feet of the OHWM. The extent of impervious surfaces at the southeast corner of the property is approximately 85 feet. The area of slope leading down to the river's edge is vegetated alternately by patches of reed canarygrass and dense thickets of blackberry. Analysis of aerial imagery of the Site (Google Earth) shows that there are approximately 11 trees along the vegetated portion of the buffer over a distance of approximately 950 feet. Most of the trees are deciduous. These trees likely provide little to no shading over the Sammamish River until late afternoon during the summer time. During the remainder of the daylight hours past mid-morning, the Sammamish River receives full sunlight. Also, the paucity of trees within the existing buffer will not likely provide any large woody debris recruitment (See **Exhibit 1** for example of existing buffer conditions).



Exhibit 1. Existing Conditions of 100-foot Sammamish River Buffer.

(Image dated April 2009 from Google Earth Pro. The 2009 image was chosen due to its clarity in displaying existing vegetation.)

It is important to remember that if the Client were to provide the standard 115-foot buffer along the Sammamish River, there would be no regulatory pressure to mitigate and enhance the vegetative component. The portion of the standard 115-foot buffer that is currently impervious surface would likely be restored to a vegetated state, but that restoration would occur farther away from the OHWM compared to the current buffer mitigation plan. There would be no significant increase in the buffer's ability to provide shading to the river, nor would there be any significant increase in the recruitment of woody debris.

Reducing the Sammamish River buffer from 115 feet to 100 feet with no mitigation will have no effect upon the buffer's ability to provide shade and woody debris recruitment based on current existing conditions. However, the act of reducing the buffer from 115 feet to 100 feet forces the Client to provide mitigation in compensation for the impact. The area of the 100-foot buffer that is currently impervious surface will be restored to a vegetated condition. The remainder of the buffer will be enhanced by removal of non-native weedy species and planted with a variety of native trees and shrubs. At maturity, the trees being planted will provide significantly more shade to the Sammamish River compared to existing conditions. The potential for woody debris recruitment will also be significantly greater compared to existing conditions.

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We are cognizant of the water temperature issues within the Sammamish River; we have commented on water temperature in Biological Evaluations for this property and others on the Sammamish River. Any additional shading that can be provided to the river will benefit anadromous fish. However, the potential for the Site to provide significant shading to the Sammamish River is limited to mid- to late-afternoon due to the orientation of the Site in relation to the river (the river flows in a northwesterly direction adjacent to the Site and an insignificant amount of shade is provided by trees on the right bank of the Sammamish River during the morning hours). The Sammamish River from its origin at Lake Sammamish to the Site has been placed within a relatively straight channel the flows predominantly in a northerly direction. There is very little tree cover along either of the banks of the river from Redmond down to Woodinville. This means that during the summer months, the river is exposed to direct heating from the sun from mid-morning to mid-afternoon. While our mitigation plan at maturity will help provide some shading to the Sammamish River in the mid- to late-afternoon, the effects, while significantly greater compared to existing conditions, are likely to have a negligible impact on water temperatures adjacent to the site and relegated primarily to not making the problem any worse. Tree planting on the Site will not likely improve this situation.

The solution to the Sammamish River's warm water and anadromous fish issues lies not so much with extensive planting of trees along its buffer, but with the restoration of the river's natural sinuosity. This solution will require significant public support and expenditure of capital. Given the rising value of land between Redmond and Kirkland, the potential of this solution is rapidly diminishing.

On a final note, we have been in discussions with the Client and have proposed to them to plant large willow slips waterward of the OHWM of the Sammamish River along the site's eastern property line. This is non-compensatory mitigation and provided solely to reduce the amount of reed canarygrass and Himalayan blackberry that currently grows along the river's edge. The area of planting will be approximately 950 feet long and approximately 10 feet wide. As these willows grow and mature, they will help to shade out the reed canarygrass and Himalayan blackberry, while providing organic input to the river system. As a side benefit, the willow will also provide a source of food for beaver and foraging habitat and cover for small birds.

In summary, the Woodinville Lumber Site project's buffer mitigation plan is a balance of buffer reduction, buffer restoration, and buffer enhancement that will, at maturity, provide significantly better habitat value and buffering functions and services compared to existing conditions.

We trust that the information presented here is sufficient to fully address Karen Walter's additional comments letter. If you have any questions or require more information, please feel free to call Bill Shiels or me at (425) 861-7550.

Sincerely,

TALASAEA CONSULTANTS, INC.



David R. Teesdale, PWS
Senior Wetland Ecologist.

cc: Matt Buchannon
Bob Fadden