



August 3, 2022

Mr. Chris Beale, AICP, Senior Planner
City of Puyallup
333 S Meridian
Puyallup, WA 98371

Re: East Town Crossing Project: Habitat Technologies' Revised Conceptual Stream Corridor Restoration and Enhancement Program Third Party Review

Dear Chris:

Confluence Environmental Company (Confluence) has reviewed the Revised Conceptual Stream Corridor Restoration and Enhancement Program report submitted by Habitat Technologies for the East Town Crossing project (P-21-0034) located at the southeastern corner of the intersection of Pioneer Way East and Shaw Road East, Puyallup, Washington (Restoration Plan; Habitat Technologies 2022). It is our understanding that the Restoration Plan has been revised to address the third party review comments made by Confluence regarding the initial plan (Habitat Technologies 2021a).

Confluence understands that a floodplain map amendment was approved and the site is not within a floodplain. We also understand that The City's concerns related to stormwater (especially regarding the bioretention facility) have not been completely addressed at the time this report was prepared. It should be noted that if changes to the stormwater system alter hydrology of the Type III stream buffer, modifications to the plant species may be needed. This can be addressed in an as-built report rather than revising the Restoration Plan again.

COMPLETENESS REVIEW

Confluence found that the Restoration Plan was complete according to the regulations outlined in Puyallup Municipal Code (PMC) Chapter 21.06 for Critical Areas Regulations.

TECHNICAL REVIEW

Confluence reviewed the Restoration Plan and has the following comments/questions:

- **Critical Areas Determination:** A wetland delineation report for the off-site restoration area has not been submitted. The previously submitted wetland delineation reports (JCA 2020 and Habitat Technologies 2021b) did not include the off-site restoration area in the studies. With the proposed relocation of the Type IV stream farther south, a wetland

delineation in this area will need to be prepared and submitted. Should wetlands be present in the restoration area, the proposed plants will likely need to be revised to provide species more adaptable to wetter conditions.

▪ **Selected Development Action:**

- **Impact Analysis:** Confluence agrees that the proposed buffer restoration plan will provide better functioning buffer than what currently exists. However, there still is not a quantitative summary of impacts and mitigation. Specifically, the report needs to state the square footage of Type III and Type IV stream buffer on the property and within the right-of way along Pioneer using the standard 50-foot and 35-foot buffers, respectively, as well as the total square footage of stream buffer proposed. This is needed to document there is no net loss of stream buffer area.

The table on page 11 of the Restoration Plan is a bit confusing. Is the table summarizing the existing and proposed channel lengths (which should be expressed as linear feet) or stream area (expressed as square feet)? Additionally, the Restoration Plan documents the Type III stream as being 221 linear feet along the property, but Landscape Plan Sheet L2, has it identified as 252 feet. These numbers should be consistent.

- **Stream Corridor Restoration and Enhancement Program:** The plant schedule in the report has tufted hairgrass listed as a shrub species. This is a grass and should be replaced with a shrub species. Snowberry (plugs) is also listed in the last row but is not listed in the landscape plans.

Some of the plant species chosen may not be the most appropriate for the area. An area dominated by reed canarygrass suggests wetter conditions than what many of these species can tolerate. Additionally, some species may not do well in the full sun, exposed conditions that the site is located in. We suggest adding or replacing some species with red alder (*Alnus rubra*) and willow (*Salix* sp.)

Based on square footages shown in L1, a total of 86,033 square feet of buffer will be planted (43,408 + 12,121 + 21,735 + 8,769). Based on the plant schedule in the Restoration Plan (page 17) and Landscape Plan Sheet L2, a total of 1,752 plants are proposed to be installed. This is a spacing of 7 feet on center. While neither the City of Puyallup nor Pierce County provides guidance on plant spacings for mitigation/restoration areas, other agencies do. Washington Department of Fish and Wildlife (WDFW 2003) recommends spacing at 5-foot on center for 1-gallon containers. King County (2012) recommends 5-foot on center for 1-gallon potted

- shrubs and 9-foot on center for 2-gallon potted trees. Due to the nature of the site (e.g. exposed area, existing high infestation of reed canarygrass), a 5-foot on center spacing is more appropriate to ensure meeting performance standards.
- **Project Monitoring:** According to Puyallup City Code 21.06.630, a period longer than 5 years should be considered if a forested plant community is the intended outcome. Therefore, a 10-year monitoring program will be required.
 - **Temporary Irrigation:** The City will not allow hand watering on a site this large. A temporary irrigation system will be required.
 - **Financial Guarantee:** A financial guarantee will be required for this project. Please provide a cost estimate for both Part One and Part Two, as described in the Restoration Plan.
 - **Appendix A Landscape Plans:** The plant schedule in the report and Landscape Plan sheets both have tufted hairgrass listed as a shrub species. This is a grass and should be replaced with a shrub species. On Sheet L2, there are no plant quantities listed for the 3 emergent species. The planting schedule should have a plant spacing of 5-foot on center to meet plant spacing guidance.

On Landscape Plan Sheet L3, there are 3 snags within the Type III buffer. Please remove these 20-foot tall snags. In discussions with the City, these snags may pose a safety risk and therefore will not be required.

CORRECTIONS REQUIRED

- Please submit a wetland delineation report for the off-site restoration area associated with the Type IV stream and stream buffer enhancement.
- Please update the impact analysis section to provide area calculations to document there is no net loss of stream buffer (Type III and Type IV buffers, combined) from the project.
- Please correct the table on page 11 of the Restoration Plan and associated discrepancy between table, report, and Landscape Plan Sheet L2 for the length of the Type III stream.

- Please update the plant schedule table in the Restoration Plan as follows:
 - Remove tufted hairgrass from the list of shrubs.
 - Remove snowberry plugs from the table or add them to Landscape Plan Sheets L2 and L3.
 - Add red alder and willow.
 - Provide quantities for a 5-foot on center spacing.
- Please update the Restoration Plan to provide 10 years of monitoring.
- Please update the Restoration Plan to clarify that temporary irrigation will be installed (and remove reference to hand watering).
- Please provide cost estimates for the Part One and Part Two financial guarantee, as described in the Restoration Plan.
- Please update landscape plans as follows:
 - Remove snags from the Type III stream buffer.
 - Add plant quantities for the 3 emergent species.
 - Remove tufted hairgrass from the list of shrubs.
 - Add red alder and willow.
 - Provide quantities for a 5-foot on center spacing.
- Make sure the planting schedule in the Restoration Plan is consistent with Landscape Plan Sheet L2.

If you have any comments or questions, please feel free to contact me.

Respectfully yours,



KERRIE McARTHUR, PWS, CERP, FP-C

Managing Senior Biologist

206.999.6201

kerrie.mcarthur@confenv.com

REFERENCES

- Habitat Technologies. 2022. Conceptual stream corridor restoration and enhancement program, East Town Crossing, Revised. Prepared for @ East Town Crossing, Puyallup, Washington, by Habitat Technologies, Puyallup, Washington.
- Habitat Technologies. 2021a. Conceptual stream corridor restoration and enhancement program, East Town Crossing. Prepared for @ East Town Crossing, Puyallup, Washington, by Habitat Technologies, Puyallup, Washington.
- Habitat Technologies. 2021b. Wetland delineation report, East Town Crossing. Prepared for the East Town Crossing, Puyallup, Washington, by Habitat Technologies, Puyallup, Washington.
- JCA (John Comis Associates, LLC). 2020. Verification report for the wetland & stream delineations at “East Town Crossing.” Prepared for the Abbey Road Group, Puyallup, Washington, by JCA, Tacoma, Washington.
- King County. 2012. Critical areas: restoration & enhancement in King County. Available at: <https://kingcounty.gov/~media/depts/permitting-environmental-review/dper/documents/forms/lg-guide-rest-pdf.ashx?la=en> (accessed August 1, 2022).
- WDFW (Washington Department of Fish and Wildlife). 2003. Integrated streambank protection guidelines. Available at <https://wdfw.wa.gov/sites/default/files/publications/00046/wdfw00046.pdf> (accessed August 1, 2022).

C_Puyallup_001395\001395.009_Task 9_ East Town Crossing\Reports