



## TECHNICAL MEMORANDUM

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August 14, 2017

Prepared for: Edie Berghoff, Associate Planner  
City of Poulsbo  
200 NE Moe Street  
Poulsbo, WA 98370

File No.: 208.015

Re: Blue Heron: Wetland Mitigation Proposal Third Party Review

### 1 INTRODUCTION

The City of Poulsbo (City) contracted with Grette Associates<sup>LLC</sup> to assist in the review of a Wetland Mitigation Plan and Stream Buffer Enhancement Plan prepared by Ecological Land Services, Inc. (ELS). These documents were submitted to the City in support of an application to develop the property located on Kitsap County tax parcels 242601-4-034-2009, 242601-4-033-2000, and 242601-4-003-2006 (Project site). The Project site is located east of Noll Road NE in a portion of the southeast quarter of Section 24, Township 26 North, Range 1 East of the Willamette Meridian in Poulsbo, Washington.

### 2 BACKGROUND

Grette Associates previously reviewed the delineations and descriptions of the wetlands on the Mountain Aire site to the north (the Wyatt Wetland, see Grette Associates review memo from May 12, 2014), as well as the wetlands on the Blue Heron Plat site (review memo dated August 18, 2016). As the site conditions were accurately described in the reports reviewed for those applications, a site visit was not conducted as a part of this review. The review of the Blue Heron Plat in 2016 focused on the verification and categorization of the critical areas on and adjacent to the site.

### 3 REVIEW METHODS

#### 3.1 Document Review

A Grette Associates biologist conducted a thorough review of the Blue Heron Mitigation Plan and the Stream Buffer Enhancement Memo (prepared by ELS, dated June 30, 2017) submitted to the City. The review focused on verifying compliance with the current version of the Poulsbo Municipal Code (PMC) Chapter 16.20.

## 4 REVIEW RESULTS

### 4.1 Critical Areas Review

#### 4.1.1 Wetland Mitigation

The Mitigation Plan adequately describes the proposed project impacts to Wetland A, along with the proposed mitigation actions to offset those impacts. A Mitigation Sequencing section, consistent with PMC 16.20.240.A, also adequately describes the mitigation sequencing for the filling of Wetland A. The Plan also provides a functions assessment that describes the existing wetland functions within Wetland A and the proposed mitigation site in the Wyatt Wetland, in compliance with PMC 16.20.735.D.

As Wetland A is proposed to be completely filled and there are no other onsite wetlands capable of being enlarged or otherwise used for compensatory mitigation, offsite mitigation is proposed. The offsite compensatory mitigation is proposed to occur in a wetland immediately to the north, bordering the subject property. The proposed offsite wetland mitigation has a higher likelihood of success than onsite wetland creation, and will result in an overall increase in wetland function. This is in compliance with PMC 16.20.240.E.

According to the Plan, the applicant proposes to enhance 6,182 square feet of the Wyatt Wetland north of the property to compensate for the permanent and complete filling of 270 square feet of Wetland A. This equates to a mitigation ratio of approximately 23:1. This ratio is in compliance with PMC 16.20.240.D for the replacement of Category IV wetland functions. The Plan also proposes to enhance 6,839 square feet of wetland buffer associated with the Wyatt Wetland in the northeast portion of the property.

The Plan contains an adequate set of goals and objectives for the enhancement of wetland functions, and the performance standards proposed should verify that those goals and objectives are being met. The performance standards include survivorship, aerial coverage, and invasive species coverage. Given that the proposed enhancement includes removal of a heavy infestation of blackberry, the proposed invasive species coverage standard of no more than 10 percent coverage should provide adequate early warning of a reinfestation of that species.

The Plan proposes to utilize bare-root plantings to enhance the Wyatt Wetland. In our experience on sites where invasive species eradication is the primary goal of the enhancement strategy, larger potted plantings should be utilized to shorten the amount of time until the native plantings can outcompete invading nonnative species. Also, in order for the site to establish the canopy coverage called for in the performance standards, larger planting stock will likely be necessary. As such, we recommend planted material be no smaller than 2 gallon pots. Bare root material is typically smaller and will take longer to establish and provide the growth necessary to outcompete blackberry, even with aggressive maintenance.

PMC 16.20.735.D.3.h requires the posting of a performance bond for the proposed compensatory mitigation and monitoring program. The Plan should include a cost estimate for both implementation of the wetland mitigation and buffer enhancement as well as the seven year maintenance and monitoring program.

#### 4.1.2 *Stream Buffer Enhancement*

The applicant also proposes to voluntarily enhance a portion of the western buffer of Lemolo Creek adjacent to the site. This enhancement would encompass approximately 1.70 acres of the 150-ft stream buffer, and would include planning of native tree and shrub vegetation. Similar to the wetland enhancement plan, the stream buffer enhancement plan calls for the use of bare root planting material. We recommend the use of larger potted material to decrease the time to establishment of a canopy on the site to outcompete invasive vegetation. While no monitoring is proposed nor required for this enhancement, we recommend that plant survivorship be monitored for a period of three (3) years to document the success of the plantings. Should the plantings fail to survive, the buffer could be susceptible to colonization by invasive species. Adequate survival of the planted species would provide a measure of assurance that the site will eventually outcompete invasive species and provide the intended enhanced buffer functions.

### **5 SUMMARY AND RECOMMENDATIONS**

Upon thorough review, the Plan is largely compliant with the requirements of Chapter 16.20 of the PMC. The Plan provides adequate impact analyses and functional assessments, mitigation sequencing discussion, and mitigation goals and objectives. The Plan also adequately describes the implementation of the mitigation enhancement and provides performance standards and a monitoring period with which to evaluate the success of the mitigation.

Grette Associates recommends the applicant provide cost estimates for both the implementation of the wetland and buffer enhancement and for the monitoring of the mitigation actions. This information will be used in calculating the performance bond required under PMC 16.20.735.D.3.h.

Grette Associates also recommends the use of larger planting materials, particularly in the wetland enhancement area. The use of larger, potted planting material will provide the enhanced area with a “head start” on the invasive vegetation that will try to invade the area after planting. While aggressive maintenance will be essential to prevent reinfestation, the growth of the native plant community will be equally important in the vegetation being able to outcompete the invasive species by the end of the monitoring period.

The review of the Report was conducted using the best available scientific information and methodologies and the best professional judgment of Grette Associates staff wetland biologists. Final acceptance and approval of the report is at the discretion of City staff.

If you have any questions on the document review, please contact me at (253) 573-9300, or by email at [scottm@gretteassociates.com](mailto:scottm@gretteassociates.com).

Best Regards,

A handwritten signature in black ink, appearing to read "Scott Maharry". The signature is fluid and cursive, with a long horizontal stroke at the end.

Scott Maharry  
Senior Biologist  
GRETTE ASSOCIATES<sup>LLC</sup>