TECHNICAL MEMORANDUM

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City of Poulsbo
200 NE Moe Street
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File No.: 208.015

Re: Blue Heron PRD - Lemolo Creek Assessment: Third-Party Review

1 INTRODUCTION

Grette Associates is under contract with the City of Poulsbo (City) to assist in the review of the Lemolo Creek Assessment (the "Assessment", dated January 25, 2018) prepared by Ecological Land Services, Inc. (ELS) that was prepared in support of the Blue Heron PRD project. The intent of the Assessment is to document the existing conditions of the segment of Lemolo Creek downstream of the proposed stormwater outfall and provide an analysis to assess potential impacts associated with the proposed discharge from the project's stormwater facility.

The purpose of this review is to evaluate the Assessment against the City of Poulsbo's 2007 Critical Area Ordinance (Chapter 16.20 of the City Poulsbo Municipal Code [PMC]). This review is not intended to fulfill potential Section 10 Endangered Species Act (ESA) consultation requirements or supersede regulatory discussions from federal agencies.

2 SITE ASSESSMENT

Grette Associates completed an evaluation of the segment of Lemolo Creek in the vicinity of the proposed stormwater outfall associated with the proposed project's stormwater facility on July 27, 2018. Based on this evaluation, the Assessment accurately characterizes the existing stream and habitat conditions as well as the existing stormwater features in the vicinity of the proposed stormwater outfall.

In summary, the segment of Lemolo Creek below Heron Pond Lane flows through a moderately-sized channel (approximately 7 feet in average width) and contains a series of pools and riffles. In addition, there is a small natural ravine west of where Lemolo Creek flows beneath Heron Pond Lane. The base of the ravine contains a seasonal channel that appears to convey stormwater from Blue Heron Horse Farm and Stables (ELS 2018). The Washington Department of Natural Resources' (WDNR) Forest Practices Application Mapping Tool on-line mapper and the Washington Department of Fish and Wildlife's (WDFW) SalmonScape on-line mapper do not map a natural water feature in the general area where the ravine is situated (WDNR 2018 and WDFW 2018).

3 STORMWATER REVIEW

According to the Assessment, all stormwater that falls within the proposed project area will be collected and conveyed through a network of gutters, catch basins, and stormwater lines to the stormwater treatment facility. Prior to discharging into the stormwater detention pond, collected stormwater will discharge into a bioretention facility for water quality treatment. Once treated, said stormwater will be conveyed to the stormwater detention pond. The stormwater detention pond has been designed to detain 50 percent of the 2-year, 10-year, 100-year, 24-hour, and type 1A storm flow rates and will discharge stormwater at a level that mimics 50 percent of the 2-year, 10-year, 100-year pre-development rates (ELS 2018). The stormwater detention pond is designed to discharge into the identified ravine west of Lemolo Creek through a 24-inch culvert that will replace the 12-inch culvert beneath Heron Pond Lane. The stormwater pipe that will convey discharge from the stormwater detention pond will be equipped with a control structure to prevent excessive discharge velocities. In addition, the stormwater detention pond will be equipped with an overflow structure that will be installed near the pond's outlet. The inlet of the overflow structure will be constructed at the designed 100-year flood elevation.

4 CONCLUSION

The purpose of this review is to evaluate the conclusion of the Assessment with regards to potential impacts to Lemolo Creek and to critical fish and wildlife habitat conservation areas as required per Chapter 16.20 of the PMC.

The project site is currently utilized for livestock purposes (horse farm and stables). As a result, the site lacks significant vegetation and contains barns, paddocks, pastures, and corrals. Stormwater that currently falls within the project site is collected and conveyed via a series of ditches through the horse farm to a ditch along Heron Pond Lane and to the existing culvert beneath Heron Pond Lane, ultimately into the identified ravine and into Lemolo Creek.

As summarized above, upon completion of the proposed project, all stormwater that falls within the project area will be collected, conveyed, and treated prior to discharging into the stormwater detention pond. Furthermore, designed discharge flow rates from the pond to the culvert beneath Heron Pond Lane will discharge stormwater that mimics 50 percent of the 2-year, 10-year, 100-year pre-development rates and discharge velocities will be regulated by a stormwater control structure (ELS 2018).

Based on the lack of existing stormwater management features and current land use of the project site, Grette Associates concurs with the conclusion of the Assessment that the proposed stormwater management system will be an overall improvement to water quality compared to existing water quality that discharges into the ravine west of Lemolo Creek. Furthermore, stormwater discharge will be regulated to resemble pre-development flow rates to prevent erosion and sediment laden runoff from flowing downstream.

In addition, the Assessment has adequately demonstrated that the segment of Lemolo Creek does not provide habitat for salmonids, more specifically, Puget Sound steelhead. There is a total blockage (dam) downstream of the segment of Lemolo Creek evaluated. Therefore, in the event of any unforeseen circumstance that may occur, salmonid habitat would not be affected due to the absence of the mapped distribution of salmonids and fish barriers downstream.

Upon review of this Assessment, Grette Associates recommends that the City accepts this document.

The review of this Assessment was conducted to determine compliance with Chapter 16.20 of the PMC. This review is not intended to absolve the applicant from any responsibilities regarding federal permits or authorizations including those arising from the ESA. It is the responsibility of the applicant to determine if consultation with the federal Services (i.e., U.S. Fish and Wildlife Service and/or NOAA Fisheries) through Section 10 of the ESA is necessary or appropriate to protect against take of ESA-listed species.

The review of this Assessment was conducted using the best available scientific information and methodologies and the best professional judgement of Grette Associate's staff biologists. Final acceptance and approval is at the discretion of City staff.

If you have any questions from this review, please contact me at (253) 573-9300, or by email at chadw@gretteassociates.com.

Regards,

Chad Wallin
Biologist

References:

Ecological Land Services, Inc. 2018. The Quadrant Corporation – Blue Heron PRD: Lemolo Creek Assessment. Prepared for Quadrant Corporation. January 25, 2018.

Washington Department of Fish and Wildlife (WDFW). 2016b. SalmonScape [map online]. All SalmonScape Species. Queried August 2, 2018. URL: http://wdfw.wa.gov/mapping/phs/.

Washington Department of Natural Resources (WDNR). 2017. Forest Practices Application Mapping Tool [map online]. Streams and Water Type Breaks. Queried August 2, 2018. URL: https://fortress.wa.gov/dnr/protectiongis/fpamt/index.html