## Appendix B4 Stormwater System and Potential Impact to Laughing Jacobs Creek Letter

Prepared by Wetland Resources, Inc.
September 10, 2021



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Tom Mullins Issaquah School District #411 5150 220th Ave SE Issaquah, WA 98209

## RE: High School #4 and Elementary School #17 - Stormwater System and Potential Impact to Laughing Jacobs Creek

Wetland Resources, Inc. (WRI) has reviewed the proposed stormwater management system design, memo prepared by AHBL, and comments received from the public regarding this project. Areas of concern raised in multiple comments include:

- The possibility the project will increase flows within the watershed and subsequently increase sedimentation and erosion within the Laughing Jacobs Creek basin
- Potential impact to salmonids and habitat within Laughing Jacobs Creek
- Modeling hydrology for the areas of the project within City of Sammamish and City of Issaquah separately could impact the hydrology of the overall watershed/basin

As described in the memo prepared by AHBL, the project's proposed stormwater management system will collect runoff from the school campus and detain the water underground in several different locations on the site. These detention systems will filter sediment and allow for treatment of water prior to being released. While the route stormwater travels between the site and the discharge location on Laughing Jacobs Creek will be different than the current conveyance routes, the discharge point will remain the same. The quantity and velocity of water leaving the detention areas will be metered, which will reduce the impact of large storm events in watercourses downstream of the site. Flow rates were determined based on peak flows for pre-developed conditions. Both the City of Sammamish and the City Issaquah require stormwater management systems, including detention sizing and flow rates of released water, to be calculated the same way. Assessment of the subbasins on and adjacent to a site is a fundamental component of stormwater management system design. The proposed design takes into consideration the existing basins and not jurisdictional boundaries.

The proposed stormwater system has been designed to maintain hydrologic flows to Laughing Jacobs Creek by matching the flow rates leaving the site to pre-development rates and discharging water to the current discharge location. Collecting and treating stormwater prior to releasing it

downstream will reduce pollutants and sediment moving through the downstream systems, improving water quality. By detaining stormwater underground, the system will keep collected water temperature as low as possible. Metering the volume of water released from the site will prevent erosion and flooding damage from large storm events downstream of the site. Considering these components of the proposed stormwater management system, this project will not have a negative impact on fish habitat in Laughing Jacobs Creek.

Should you have any additional questions, do not hesitate to contact our office at (425) 337-3174.

Wetland Resources, Inc.

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