

Attachment 4

Floodplain Regulations Compliance Memorandum

Memorandum

April 22, 2020

To: Nick Tennant, Aquilini Investment Group (dba US Golden Eagle Farms LP)

From: Joshua Sexton, PE, Anchor QEA, LLC

cc: Greg Summers, Anchor QEA, LLC

**Re: US Golden Eagle Farms LP Property Drainage Modifications Restoration Project –
Floodplain Regulations Compliance**

This memorandum is being provided on behalf of US Golden Eagle Farms LP (Golden Eagle Farms) to provide documentation that the proposed actions associated with the Property Drainage Modifications Restoration Project (Project) will not cause a 1 foot or greater rise in the base flood elevation (BFE) pursuant to the City of Everett Floodplain Overlay Districts and Regulations per Everett Municipal Code (EMC) Chapter 19.30. The Project is located on multiple parcels comprising approximately 55 acres and located to the west of the Marshland Canal and east of Larimer Road. The affected parcels include the following:

- Golden Eagle Farms: 28050800101400, 28050800101700, 28050900200800, 28050900200900, and 28050900300300
- Daniel and Shavonne Tonnes: 28050900300300, 28050800400300, 28050800400600, and 28050800400800
- Utility easement: 28050800101500

The following provides a brief Project background and description followed by an impacts evaluation of the Project on the BFE and flood-carrying capacity of the ditches, including one unnamed tributary (UNT), that will be modified by the Project.

Background

The Project parcels were purchased by Golden Eagle Farms in 2013 to support agricultural activities (the development of a blueberry farm). A Project area survey, hydraulic flood analysis, geotechnical analysis, and restoration plan have been prepared and are being submitted to bring the property into compliance with EMC and a Settlement Agreement between Golden Eagle Farms and Daniel and Shavonne Tonnes after drainage ditches within the Project area were previously rerouted. Restoration activities are proposed to stabilize the rerouted drainage ditches surrounding the adjacent Tonnes property and establish a riparian buffer along the banks of the UNT and Ditch 3.

Project Summary

The Project is proposed to stabilize new drainage ditches and address erosion that has been occurring on and near the Project area. Specifically, the restoration activities are planned to include the following actions:

- Fill in the UNT located at the southern boundary of the Project area, between the US Golden Eagle Farms property and the Tonnes property, and seed and vegetate this area to ensure soil stability.
- Relocate the UNT from its current east-west location so that it runs north-south and extends to the northern boundary of the Golden Eagle Farms property.
- Fill in approximately 200 feet of the south end of the ditch on the east side of the Tonnes property boundary that is shared with the Golden Eagle Farms property (Ditch 3) and seed and vegetate this area to ensure soil stability.
- Relocate the remainder of Ditch 3 to the east so that it is at least 15 feet from the Tonnes property boundary. This area will also be seeded and vegetated to ensure soil stability.
- Fill the 15 feet to the level of the Tonnes property to alleviate slope stability concerns.

Soil augmentation on the Tonnes property is also proposed, which includes importing and distributing a 60/40 topsoil mix to a depth of 6 inches across areas that have been filled. The topsoil will then be extended another 25 feet onto the Tonnes property and will taper in depth from 6 inches to 0 inches where it meets the existing grade. The estimated amount of fill for soil augmentation is 1,355 cubic yards. The topsoil area will then be seeded with a pasture mix.

Base Flood Elevation Impacts Evaluation

The properties are located within a Special Development Area (SDA) per EMC 19.30.020 and as shown on the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map number 53061C1045F (FEMA 2005). The standards for SDAs in EMC 19.30.040 apply to allowed uses consistent with the underlying City of Everett *Shoreline Master Program* (SMP; City of Everett 2019) shoreline environment. The Project supports ongoing agricultural uses at the properties, which are an allowed use per the underlying Urban Conservancy Agriculture SMP designation. The SDA development standards in EMC 19.30.040 also require allowed uses to comply with the standards for flood hazard reduction in EMC 19.30.050, which require the applicant to demonstrate that the cumulative effect of any proposed development, where combined with all other existing and proposed development, shall not increase the water surface elevation of the BFE more than 1 foot at any point in the community (per EMC 19.30.050.C.1).

The Project is located within or adjacent to the FEMA floodplain designated as "Zone AE" (FEMA 2005). Areas designated as "Zone AE" indicate those areas subject to inundation by the 1%-annual-chance flood. The BFE in this area is at approximately 8 feet National Geodetic Vertical

Datum of 1929 (NGVD29). The Project is anticipated to have no measurable effect on the BFE in the floodplain in which it is located. The project will result in a net imported clean fill volume of approximately 1,355 cubic yards related to soil augmentation activities on the Tonnes property as required as part of the Settlement Agreement. The Project is located in a floodplain that is over 5,000 acres in area. The import of 1,355 cubic yards of fill (36,585 cubic feet) was calculated to result in a BFE rise of approximately 0.0002 foot (0.002 inch). Even if just the Tonnes and Golden Eagle Farms properties were considered, the BFE would only rise by approximately 0.012 foot (0.1 inch).

Watercourse Alteration Notifications and Flood-Carrying Capacity

EMC 19.30.060 requires the applicant to notify adjacent communities, the Washington Department of Fish and Wildlife (WDFW), and the Washington Department of Ecology (Ecology) prior to the alteration of a watercourse. It additionally requires the applicant to demonstrate that the flood-carrying capacity of an altered or relocated watercourse is not diminished. Prior to the modifications that relocated the UNT, the stream was approximately 1,685 feet long from the boundary with the Tonnes property and its outlet at the drainage canal. The average cross-sectional area of the UNT prior to the modifications was approximately 30 to 40 square feet. After the proposed restoration of the UNT, the length will be approximately 2,050 feet with an average cross-sectional area of approximately 100 square feet. The proposed restoration activities are expected to increase the flood-carrying capacity of the UNT.

A notification will be provided to adjacent communities through the City of Everett's State Environmental Policy Act (SEPA) review process. A SEPA Checklist was prepared and will be submitted with this memorandum to the City of Everett to initiate the review. Similarly, application materials will be submitted to WDFW and Ecology for approval prior to construction of the Project. Evidence of the notifications will be provided to the City of Everett's floodplain administrator.

References

- City of Everett, 2019. *Everett Shoreline Master Program*. Prepared by the City of Everett Community, Planning and Economic Development Department. October 2019. Available at: <https://everettwa.gov/DocumentCenter/View/19658/Shoreline-Master-Program-October-2019>.
- FEMA (Federal Emergency Management Agency), 2005. FEMA Flood Insurance Rate Map (FIRM) for Snohomish County, Washington, and Incorporated Areas. Community Panel Number 53061C1045F, Number 1045 of 1575. Map revised September 16, 2005.