ATTACHMENT F

Integrated Rainwater Management Plan Summary

Overview:

An Integrated Rainwater Management Plan (IRMP) has been developed by the Proponent in consultation with City staff and their consultants. Work has been completed in draft and is currently undergoing review by the City and it's Consultant's for the Proponent to finalize.

Existing Hydrologic Systems

The existing hydrologic system of the CNP are complex with a myriad of streams, undulating and sometimes steep topography, and range of ground and soil conditions, the presence of some wetlands, and both shallow and deep groundwater flow. Minimizing impacts to these systems will require a similarly complex management system.

Management Strategy

The Proponent is proposing a multi-layered management approach to meet the goals outlined in the Development and Subdivision Control Bylaw 5650-2017.

Goal #1 – Reduce the risk of health hazards, loss of life and property damage.

Goal # 2 – Preserve and improve the environment for present and future generations.

Goal # 3 – Conserve social and financial resources.

To achieve these goals, the proposed management systems will involve the following components:

- 1. Highly distributed Best Management Practices on both private lands to retain frequent flows and return that to ground and to remove pollutants prior to discharge to receiving watercourses.
- 2. A conventional storm sewer network to convey flows that can-not be retained on-site.
- 3. Numerous control structures at creek crossings to provide important low flows to the creek but avoid release of damaging high flows.
- 4. Two high-capacity trunk sewer diversions with outfall directly to the Fraser River to keep harmful flows out of local creeks and to not worsen the lowland area between Silverdale Road and Lougheed Highway.
- 5. Possible small scale detention ponds for some development in the Glade area that is not serviceable by the trunk storm sewer diversion (item 4 above).

The high-capacity trunk sewer diversions are consistent with the Master Infrastructure Strategy (MIS) and in lieu of large-scale communal detention facilities and deemed more appropriate for this complex landscape.

For protection of the natural systems to be achieved, the City must accept that a complex management system with controls located on both private property and in public roadways will be required.

Next Steps

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There are still a number of outstanding technical issues to resolve with the proponent that will influence placement, function, sizing and costs of infrastructure, but the City believes that the fundamental components of the management system can support the proposed land use plan.