

January 16, 2018

Mr. Bill Brown

Director of Development Services
 Township of Esquimalt
 1229 Esquimalt Road
 Esquimalt, BC, V9A 3P1



**Re: 337 Victoria View Road
 Mcloughlin Point Wastewater Treatment Plant**

Dear Mr. Brown,

As previously discussed some months ago, the development of the engineering design and ongoing consultation with the CRD on the Mcloughlin Point Wastewater Treatment Plant has resulted in some deviations from the approved Development Permit.

This letter is to be read in conjunction with the application submitted for an Amendment to the Development Permit. The deviations from the approved Development Permit and their rationale is outlined below for your review and consideration.

- 1) The DAF structure at the south west of the secondary treatment plant has been deleted.

Rationale and result:

Through engineering refinements, the DAF was replaced with a different technology utilizing two MBBR (Moving Bed Biofilm Reactor) cells in place of two BAF (Biological Aerated Filters) cells directly following the primary treatment functions.

The result is the deletion of the highly visible DAF structure at the southwest, and shifting of the main electrical room southward by one BAF cell to allow the required vertical clearance above the MBBRs. Also, since the DAF structure has been deleted, the associated translucent panel in the structure's east side is deleted.

The electrical room is now clad in the lighter metal panels rather than the darker panels as previously.

Overall, the actual and visual mass of the plant has been significantly reduced.

- 2) The 2nd floor of the Operations and Maintenance (O&M) building has been raised 1.24m.

Rationale and result:

The required clearance under the drive aisle was confirmed to be higher than what was anticipated during schematic design. In addition, refinement of the Post-Disaster structural design resulted in a deeper structure above the drive aisle.

The resulting small increase in the roof elevations still falls well within the zoning requirements. The raised second floor and roof results in the O&M building effectively masking more of the view of the Treatment plant beyond.

- 3) The translucent panels have been deleted from the east side of the highest enclosures along the east edge of the treatment plant.

Rationale and result:

The Treatment plant and the O&M building need to be separate 'buildings' in order to meet the zoning requirement for LEED Gold certification for the Operations and Maintenance building. To achieve this separation, the east wall of the plant is required to be a firewall between the plant and the O&M building. A firewall cannot have unprotected openings such as glazing panels.

The result is the deletion of the translucent panels along the east face of the treatment plant. This is mitigated by planting on the adjacent upper green roof of the O & M building.

- 4) Translucent panels have been added to the odour control room at the NE of the treatment plant.

Rationale and result:

Additional natural daylight is desired to illuminate the working space.

The result is a more interesting façade.

- 5) The cladding on the top of the stairwell at the tertiary treatment has been revised to dark metal cladding from light metal cladding.

Rationale and result:

This was changed to follow the rhythm of contrasting the tones of the metal cladding against the next adjacent building volume.

The result is a clear visual rhythm from east to west and north to south.

- 6) The green roof at the north end of the O&M building has been extended to fill in the open concrete trellis in the Development Permit.

Rationale and result:

Additional green roof area was required to offset losses to rooftop mechanical equipment and rooftop 'light-pipes' to provide daylight to occupied spaces on Level 1. The green roof remains in conformance to the zoning bylaw of 1,600 square metres minimum area of green roof and minimum 80% of the O&M building roof covered by the green roof.

The result is the green roof has been extended further to the north providing the visual perception of more planted roof area on the O&M building.

- 7) The area under the expanded green roof at the north end of the O&M building has been removed from the landscaped buffer area between the building and the high water mark.

Rationale and result:

The shelter of the roof above means planting below would not survive without irrigation which impacts LEED.

The result of this roof is shelter for bicycle parking and protected access to the adjacent workshop.

The area of the landscape buffer around the shore remains in conformance to the requirements of the zoning bylaw of 1,250 square metres minimum area of landscape buffer between the building and the high water mark.

- 8) The size and scope of the required electrical equipment on the west side of the plant has increased.

Rationale and result:

The refinement of the engineering calculations and design requires larger emergency generators and other electrical switchgear mounted at grade. Also required are access vaults to underground valves. The zoning allows these items to be located in the front setback.

The result is revisions to the design and scope of the landscape on the west side of the plant.

We assert the deviations from the approved Development Permit do not depart materially from the approved Development Permit. We believe the result is a reduction of the visual impact of the plant building and a more cohesive architectural expression while conforming to the requirements of the zoning bylaw.

Thank you for your consideration of this application to amend the Development Permit for this project.

Sincerely,



Jim Mann

HDR | CEI Architecture