

DEVELOPMENT PERMIT NO. DP000869

MAPLEWOOD PROPERTIES LTD Name of Owner(s) of Land (Permittee)

2589 KENWORTH ROAD Civic Address

- This development permit is issued subject to compliance with all of the bylaws of the municipality applicable thereto, except as specifically varied or supplemented by this permit.
- 2. This development permit applies to and only to those lands within the municipality described below, and any and all building structures and other developments thereon:

Legal Description:

LOT 3, SECTION 20, RANGE 6, MOUNTAIN DISTRICT, PLAN 2815 EXCEPT THAT PART OF SAID LOT LYING TO THE EAST OF THE ROAD AS SHOWN ON SAID PLAN AND EXCEPT THOSE PARTS IN PLANS 25211, 22499 AND 33089

PID No. 006-396-267

3. The land described herein shall be developed strictly in accordance with the following terms and conditions and provisions of this permit and any plans and specifications hereto which shall form a part thereof.

Schedule A Location Plan

Schedule B Site Plan & Project Data

Schedule C Site Analysis and QEP Designated Zones

Schedule D QEP Executive Summary

Schedule E Landscape Plan

Schedule F Green Roof

Schedule G Coloured Building Elevations

Schedule H Building Elevations
Schedule I Building Sections

Schedule J Building Perspectives

- a) If the applicant does not substantially commence the development permitted by this permit within two years of the date of this permit, the permit shall lapse.
- 4. This permit is not a building permit nor does it constitute approval of any signage. Separate applications must be made for a building permit and sign permit.
- 5. The City of Nanaimo "ZONING BYLAW 2011 NO. 4500" is varied as follows:
 - Watercourse Leave Strip Setback (Diver Lake):

Part 6.3.1.1 requires a watercourse leave strip for Diver Lake of 15.0m, between the water's edge and a perpendicular line inland 15.0m from the wetland boundary (see Schedule C). The proposed watercourse setback is varied to 5.5m.

Front Yard Setback:

Part 13.4.1 – Siting of Buildings

The required front yard setback for the building siting is 4.5m. The proposed front yard for the building is varied to 0.0m.

• Maximum Allowable Building Height:

The maximum allowable building height is 12.0m. The proposed maximum allowable building height is varied to 18.44m.

The City of Nanaimo "DEVELOPMENT PARKING REGULATIONS BYLAW 2005 NO. 7013" is varied as follows:

Loading Spaces:

Part 14.8 - Parking Bylaw

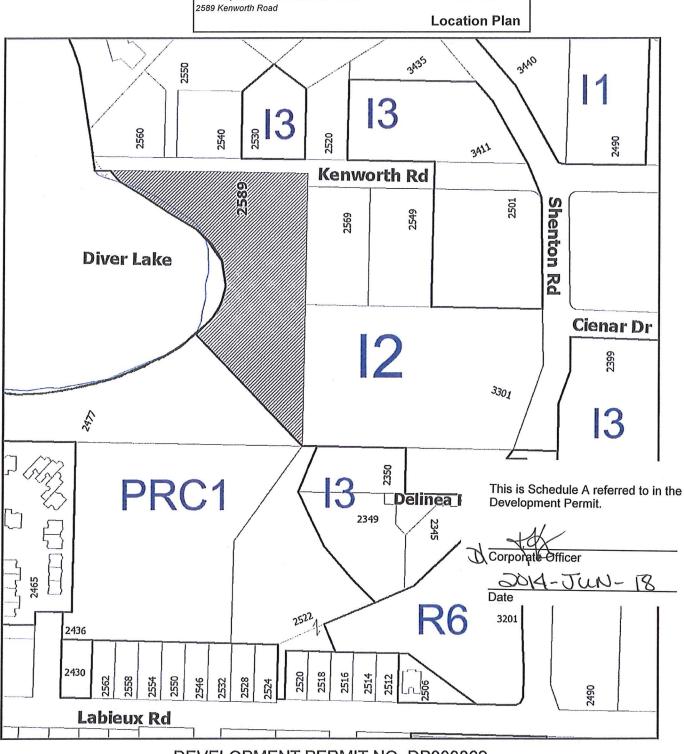
The industrial building gross floor area requires 3 loading spaces. The number of proposed loading spaces is varied to 2 loading spaces.

2014 - JUN-18

AUTHORIZING RESOLUTION PASSED BY COUNCIL THE **9TH** DAY OF **JUNE**, **2014**.

GN/lb

Prospero attachment: DP000869



Development Permit No. DP000869

Schedule A





LOCATION PLAN

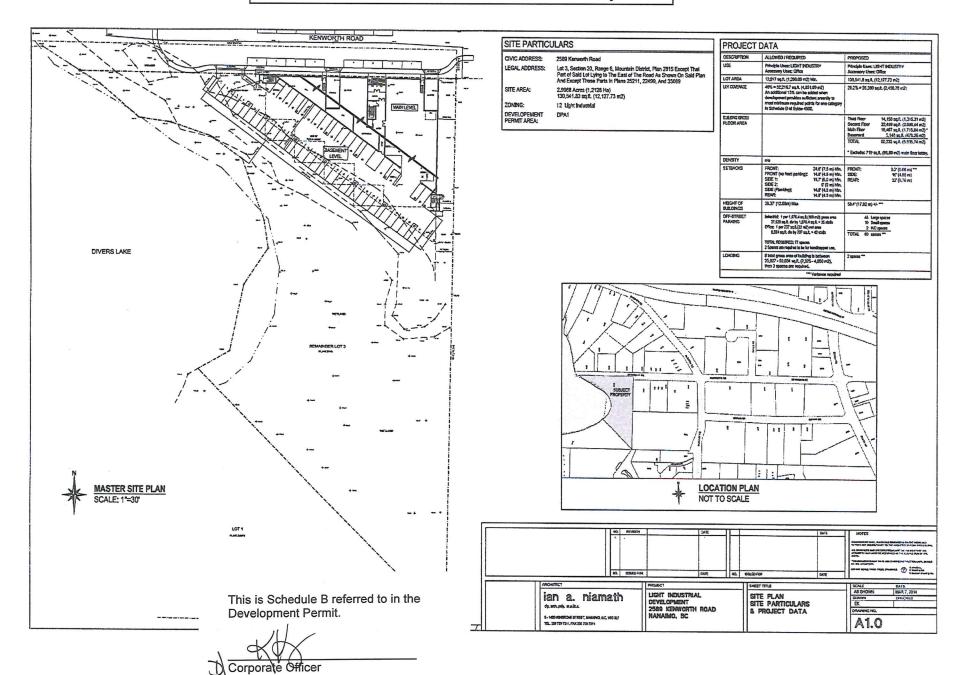


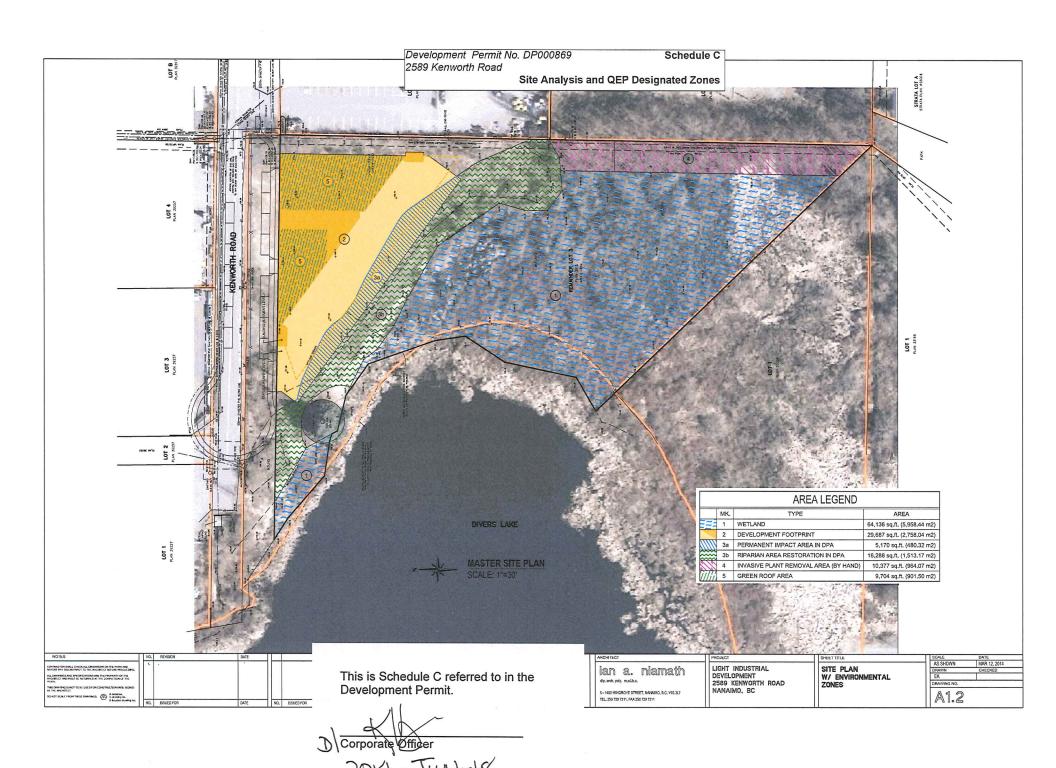
Subject Property

Civic: 2589 Kenworth Road
Lot 3, Section 20, Range 6, Mtn District, Plan 2815
Except Part of said Lot lying to the East of the Road
as shown on said Plan and Except those parts in
Plans 25211, 22499 and 33089

Schedule B

Site Plan and Project Data









May 12, 2014

City of Nanaimo 411 Dunsmuir Street Nanaimo, BC V9R 0E4

RE:

2589 KENWORTH ROAD

VARIANCE EXECUTIVE SUMMARY

This is Schedule D referred to in the Development Permit.

Corporate Office

Date .

1.0 BACKGROUND

The Science and Technology Building proposed to be constructed at 2589 Kenworth Road overlooking Diver Lake is designed to be an innovative and unique development for Nanaimo. The purpose of the building is to provide high-end commercial space for a science and technology business; the Nanaimo branch of Inuktun Services Ltd; an international company that designs world class remotely operated systems. As such, the building design is intended to reflect the technical creativity of the business which it will house. The design incorporates development Best Management Practices such as solar panels, a green roof, a rain garden and extensive riparian habitat restoration. Road design has included a turnaround that is reduced in size with a modified shape to avoid encroachment into the lake's setback area.

The site is currently undeveloped and shows evidence of historical impacts including fill placement and invasive plant species. Once the development is complete, the site will be significantly improved over its current degraded condition. Seen from above, the impermeable surface will be restricted to a series of small angular roof sections covered by solar panels and a small portion of the parking area.

2.0 RIPARIAN IMPACT SUMMARY

The property is 1.165ha (2.88 acres) in size located on the east side of Diver Lake surrounded by long established commercial and light industrial developments. The developable area of the site is restricted to a small, triangular upland area covering 24% of the lot as the remainder of the site is comprised of wetland and riparian habitat.

The building covers 2758m² of which 480m² (approx. 6m x 80m) lies within DPA1. In order to offset the impact and exceed the "no net loss" of habitat, 1,513m² of riparian habitat fronting the building will be replanted with native species – it is currently dominated by Himalayan

503 COMOX ROAD NANAIMO, BC V9R 3J2, 250-591-2258
CELL SARAH BONAR 250-714-8446 CHRIS ZAMORA 250-714-8864

blackberry; 964m² of riparian habitat along the east boundary will have invasive species removed; and a Green Roof covering 901m² will be installed. The total area of habitat restoration/creation is 3378m². The following table summarizes the riparian habitat impact as shown in Figure A1.2 by Ian A. Niamath:

Description	Area	Before	After			
3a. Building area in setback	480m²	Poor value, invasive dominant	Permanent impact area			
3b. Riparian restoration area	1513m ²	Marginal value, invasive dominant, few trees	Temporary impact area to remove invasive sp and prep soil. High value, multicanopy multi-species, native trees, shrubs.			
4. Invasive removal area	964m²	Moderate value, invasive species in ground cover.	High value, invasive species removed.			
5. Green Roof	901m ²	Fill pad dominated by scotch broom, few cottonwood regeneration.	High value, herbaceous dominant.			
NET BENEFIT 3378m ² restored, high quality habitat						

3.0 GREEN ROOF HABITAT CONNECTION

The green roof has been designed to integrate with the ecology of the Diver Lake ecosystem. The design includes a variety of shrub, grass and flowering plants to support birds and insects (bees, spiders, beetles) typical in the Diver Lake riparian area. Summer and fall-flowering herbaceous plants on the roof will extend the insect and bird foraging season and adds to overwintering habitat for beetles, spiders and bees, as well as nesting habitat for solitary bees. In other words, it will add an additional dimension of habitat diversity that would otherwise not exist in a typical riparian tree/shrub dominant zone.

Insects do very well on green roofs and are integral to lake habitats as a food supply and as pollinators. Many insects have aquatic larval or nymph stages and then metamorphose into flying adults (e.g. dragonflies). The lake edge and upland habitats are critical to both. Increasing the diversity of plants supports a wider variety of insects that live on them. Insects are food for fish, birds and bats that live and forage in these edge habitats.

A wide variety of plants creates microhabitats with height diversity and structure of the plants themselves i.e. leaf and flower shapes, stem shape, height etc. Seasonal changes from spring to fall attract a diverse population of insects and birds. Flying insects are food for aerial



insectivores such as swallows and bats flying over the lake in the evening. Fish also eat insects and can be seen surfacing during a larval hatch. The green roof will become more connected with the existing and new riparian vegetation over time as the surrounding trees and shrubs mature and gain in height.

The green roof will also connect to the lake via rainwater which will be captured in the roof garden and will be retained and absorbed by the soils and plants; some will evaporate and the excess will slowly flow off the roof into the rain garden where it will enter the lake. This design avoids typical storm water diversion though pipes and provides clean runoff.

4.0 REGULATORY TRIGGERS

No other regulatory review is triggered by this project. The 15m DPA from the edge of wetland is the same as the Riparian Areas Regulation (RAR) setback for lakes and wetlands. A RAR report was completed and submitted to the Province for this project.

Changes to the *Fisheries Act 2012* are significant and rely on the Professional Reliance Model. The DFO no longer reviews projects if the QEP determines there will be no *Serious Harm to Commercial, Aboriginal or Recreational Fisheries*. As a result, this has created a change to the RAR process for encroachment cases. If the project can be carried out with sufficient protection measures in place to prevent *Serious Harm*, the QEP signs off on the last page of the report as follows: 7a) there will be no Harmful Alteration Disruption or Destruction to the Features Functions or Conditions provided the proponent follows QEP recommendations.

5.0 MONITORING

The construction phase of this project is to be monitored by a suitably qualified Environmental Monitor to ensure that the protection and restoration measures identified in the report are carried out. Under the new *Fisheries Act* there is a *duty to notify* if Serious Harm does occur by accident or intent.

Annual monitoring of the site is to be completed to ensure survival of the plantings and invasive species removal areas. Any areas with more than 10% die-off are to be replanted. After a period of five years the site should be well established. Removal of invasive species over time will be on-going as part of the overall landscape management.

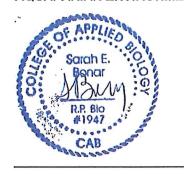


6.0 TRAIL

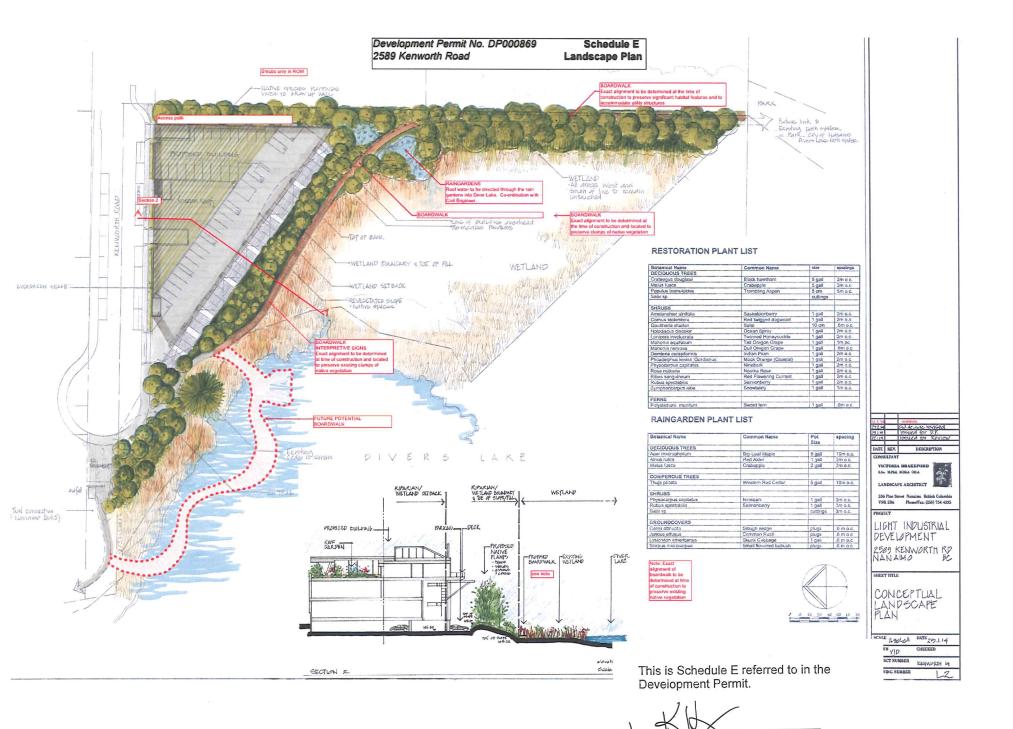
The developer is agreeable to the idea of a public trail or boardwalk through the property as part of the City Park's future plan of a public trail system to circumnavigate Diver Lake. Interpretive signage would provide educational opportunities for the public to learn about Divers Lake and its ecology.

Sincerely,

AQUAPARIAN ENVIRONMENTAL CONSULTING LTD



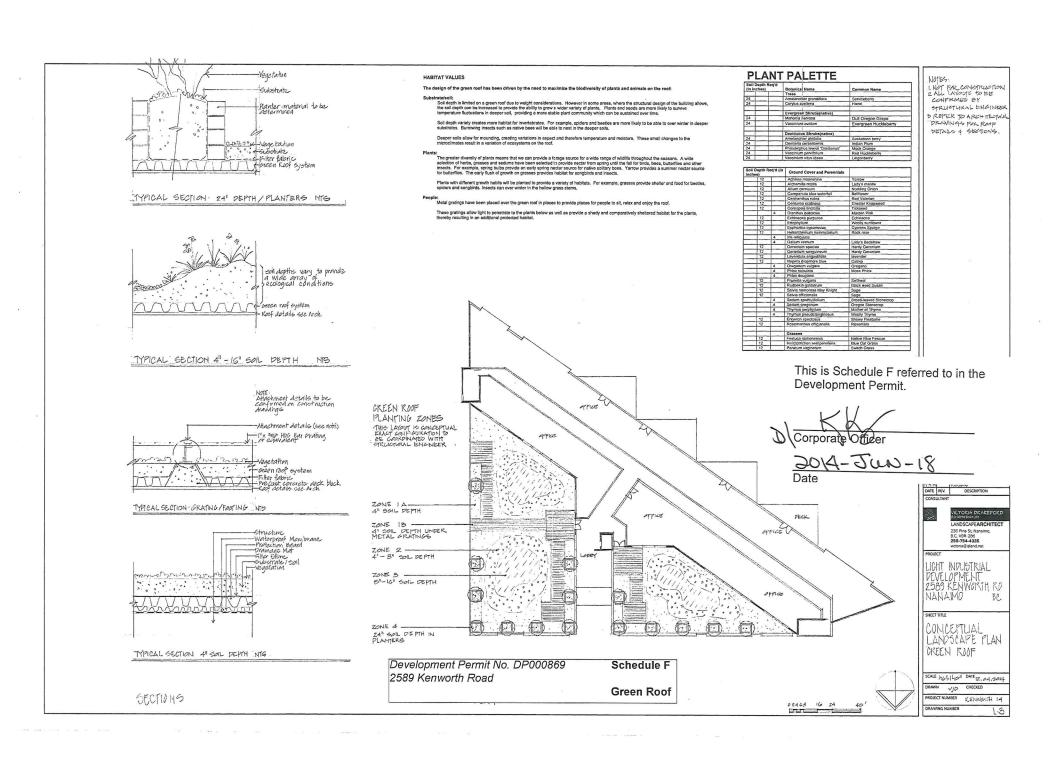
Sarah Bonar, R.P.Bio. Principal



Corporate Officer

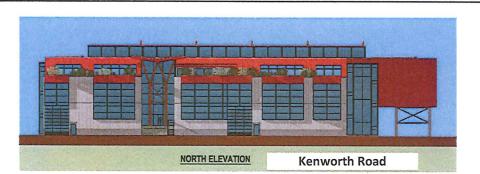
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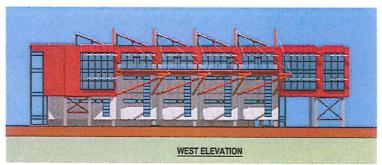
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Schedule G

Coloured Building Elevations





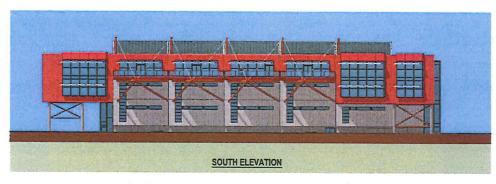


This is Schedule G referred to in the Development Permit.

A4.1

Corporate Officer

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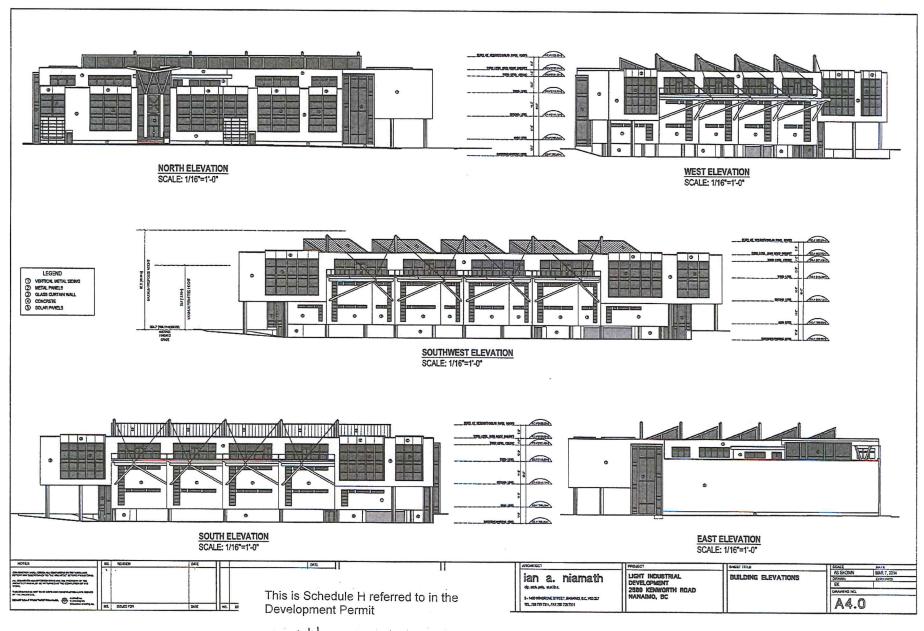




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Schedule H

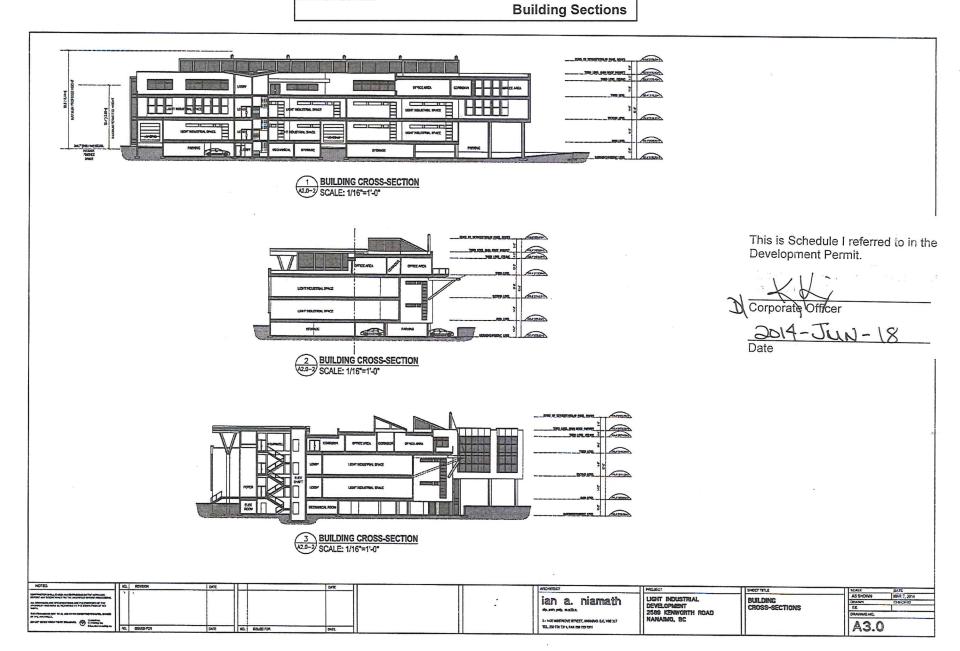
Building Elevations



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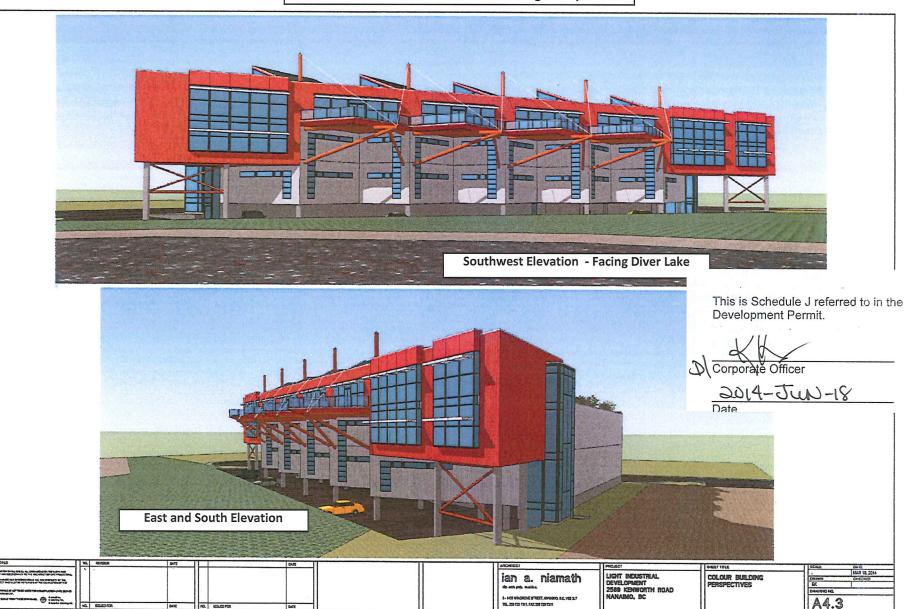
Development Permit No. DP000869 2589 Kenworth Road Schedule I



Development Permit No. DP000869 2589 Kenworth Road

Schedule J

Building Perspectives







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5-1409 VINGROVE STREET, NAVABIO, B.C. VIS 327 TEL 250 729 7311, FAX 250 721 7311 LIGHT INDUSTRIAL
DEVELOPMENT
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