CORPORATION OF THE TOWNSHIP OF ESQUIMALT

DESIGN REVIEW COMMITTEE
AGENDA

WEDNESDAY, JULY 11, 2018
3:00 P.M.
ESQUIMALT COUNCIL CHAMBERS

I. CALL TO ORDER

II. LATE ITEMS

III. ADOPTION OF AGENDA

IV. ADOPTION OF MINUTES – June 13, 2018

V. STAFF REPORT

Rezoning and Official Community Plan Amendment
636 and 640 Drake Avenue
PID 002-923-157, Lot 2 of Suburban Lot 50 and 41, Esquimalt District, Plan 25565, and;
PID 002-923-211, Lot 3 of Suburban Lot 41, Esquimalt District, Plan 25565

Purpose of Application:

The applicant is requesting a change in Official Community Plan Land Use Designation from the current OCP designation Low Density Residential to Townhouse Residential, and a change in zoning from the current RD-1 [Two Family Residential] zone to a Comprehensive Development zone [CD]. These changes are required to accommodate the proposed eight strata townhouse residences, to be constructed in three buildings on the subject property.

The existing two duplexes would be demolished and the eight new dwelling units would be constructed. Should the rezoning be approved, the form and character of the buildings and landscaping would be controlled by a development permit that would be considered by Council at a future date.

Recommendation:

That the Esquimalt Design Review Committee [DRC] **provide Council with comments** on the proposed redevelopment of 636 and 640 Drake Avenue, for eight (8) townhouse type dwelling units built in three buildings; **and**

That **the Esquimalt Design Review Committee [DRC] recommends to Council that the application for a rezoning and OCP amendment**, authorizing eight (8) townhouse dwelling units as sited on the survey plans prepared by Powell and Associates stamped "Received June 1, 2018 and incorporating the height and massing consistent with the architectural plans provided by Burrows Holdings Ltd. and Dimma Pacific Properties Ltd., stamped "Received April 17, 2018", detailing the development proposed to be located at 636 and 640 Drake Avenue [PID 002-923-157, Lot 2 of Suburban Lot 50 and 41, Esquimalt District, Plan 25565 and PID 002-923-211, Lot 3 of Suburban Lot 41, Esquimalt District, Plan 25565], **be forwarded to Council with a recommendation to either approve, approve with conditions, or deny the application; and provide reasons for the recommendation.**

VI. NEXT REGULAR MEETING

August 8, 2018

VII. ADJOURNMENT

CORPORATION OF THE TOWNSHIP OF ESQUIMALT

ADVISORY DESIGN REVIEW COMMITTEE
MINUTES OF JUNE 13, 2018
ESQUIMALT COUNCIL CHAMBERS

PRESENT:	Roger Wheelock, Chair	Wendy Kay
	Ally Dewji	Robert Schindelka
	Graeme Verhulst	
ABSENT:	Cst. Rae Robirtis, Jill Singleton, Bev Windjack	
STAFF:	Bill Brown, Director of Development Services, Staff Liaison, Recording Secretary	

I. CALL TO ORDER

Roger Wheelock, Chair, called the Design Review Committee meeting to order at 3:05 p.m.

II. LATE ITEMS

No late items

III. APPROVAL OF AGENDA

Moved by Wendy Kay, seconded by Robert Schindelka: That the agenda be approved.
Carried Unanimously

IV. ADOPTION OF MINUTES – May 9, 2018

Moved by Robert Schindelka, seconded by Wendy Kay: That the minutes of May 9, 2018, be adopted as circulated. **Carried Unanimously**

V. STAFF REPORTS

Development Permit Application
1052 Tillicum Road

Russ Colins, Zebra Design and Bev Windjack, LADR Landscape Architects provided an overview of the Development Permit Application for 1052 Tillicum Road, presented a PowerPoint presentation and responded to questions from the Committee.

Committee comments included (*response in italics*):

- Will anything be done to address the issue of shiny silver vents stacks on the roof as in the case with the adjacent development to the north? (*This issue will be addressed*).
- Will residents of the rear units walk up the driveway? (*There will be a delineated pedestrian space on the driveway*).
- Units 1 and 2 buffer the other units from noise. Did you do anything to mitigate against noise for Units 1 and 2? (*In terms of design, it was important to address the street*).
- Concerned about the colour. The one to the north is to "reddy". Something more woody would be better. (*Will examine alternative colour*).
- Please discuss the slope of the driveway. (*The driveway slope is 11% behind the sidewalk*).
- Concerned about orientation of the backyards for units 1 and 2 with respect to noise. Another member of the DRC responded that a lot of noise mitigation depends on the building envelope.

RECOMMENDATION:

Moved by Robert Schindelka, seconded by Wendy Kay: The Esquimalt Design Review Committee [DRC] recommends to Council that the application for a Development Permit authorizing the form and character of the proposed development of five townhouse residential units contained in two detached buildings consistent with the architectural plans provided by Zebra Design, the Landscape Plan by LADR Landscape Architects and sited as detailed in the Land Surveyor's Site Plan prepared by Alan Powell, B.C.L.S, all stamped "Received April 5, 2018"; to be located at 1052 Tillicum Road, [Lot C, Section 10, Esquimalt District, Plan 11683] **be forwarded to Council with a** recommendation for approval because it represents a good quality addition to the street scape. **Carried Unanimously**

VIII. NEXT REGULAR MEETING

Wednesday, July 11, 2018

IX. ADJOURNMENT

The meeting adjourned at approximately 3:40 p.m.

CERTIFIED CORRECT

CHAIR, DESIGN REVIEW COMMITTEE
THIS 11th DAY OF JULY, 2018

ANJA NURVO,
CORPORATE OFFICER

CORPORATION OF THE TOWNSHIP OF ESQUIMALT

Municipal Hall, 1229 Esquimalt Road, Esquimalt, B.C. V9A 3P1
Telephone (250) 414-7100 Fax (250) 414-7111

DRC Meeting: July 11, 2018

STAFF REPORT

DATE: July 4, 2018

TO: Chair and Members of the Design Review Committee

FROM: Karen Hay, Planner
Bill Brown, Director of Development Services

SUBJECT: **Rezoning and Official Community Plan Amendment**
636 and 640 Drake Avenue
PID 002-923-157, Lot 2 of Suburban Lot 50 and 41, Esquimalt District, Plan 25565, and;
PID 002-923-211, Lot 3 of Suburban Lot 41, Esquimalt District, Plan 25565

RECOMMENDATION:

That the Esquimalt Design Review Committee [DRC] **provide Council with comments** on the proposed redevelopment of 636 and 640 Drake Avenue, for eight (8) townhouse type dwelling units built in three buildings; **and**

That **the Esquimalt Design Review Committee [DRC] recommends to Council that the application for a rezoning and OCP amendment**, authorizing eight (8) townhouse dwelling units as sited on the survey plans prepared by Powell and Associates stamped "Received June 1, 2018 and incorporating the height and massing consistent with the architectural plans provided by Burrows Holdings Ltd. and Dimma Pacific Properties Ltd., stamped "Received April 17, 2018", detailing the development proposed to be located at 636 and 640 Drake Avenue [PID 002-923-157, Lot 2 of Suburban Lot 50 and 41, Esquimalt District, Plan 25565 and PID 002- 923-211, Lot 3 of Suburban Lot 41, Esquimalt District, Plan 25565], **be forwarded to Council with a recommendation to either approve, approve with conditions, or deny the application; and provide reasons for the recommendation.**

BACKGROUND:

Purpose of the Application

The applicant is requesting a change in Official Community Plan Land Use Designation from the current OCP designation Low Density Residential to Townhouse Residential, and a change in zoning from the current RD-1 [Two Family Residential] zone to a Comprehensive Development zone [CD]. These changes are required to accommodate the proposed eight strata townhouse residences, to be constructed in three buildings on the subject property.

The existing two duplexes would be demolished and the eight new dwelling units would be constructed. Should the rezoning be approved, the form and character of the buildings and landscaping would be controlled by a development permit that would be considered by Council

at a future date.

Evaluation of this application should focus on issues relevant to zoning such as the appropriateness of the proposed height, density and massing, proposed unit sizes, siting, setbacks, lot coverage, useable open space, how the building relates to adjacent and surrounding sites and whether the proposed uses are appropriate and consistent with the overall direction contained within the Official Community Plan.

Context

Applicant: Jim Burrows, Burrows Holdings Ltd. and Dimma Pacific Properties Ltd.

Owners: Jim Burrows, Burrows Holdings Ltd., Inc. No. 459190; and Chris Travis, Dimma Pacific Properties Ltd.

Property Size: 636 Drake Ave.: [Lot 3]: Metric: 843.0 m^2 Imperial: 9074.0 ft^2
640 Drake Ave.: [Lot 2]: Metric: 784.0 m^2 Imperial: 8438.9 ft^2
Total: Metric: 1627.0 m^2 Imperial: 17512.9 ft^2

Existing Land Use: 636 Drake Ave.: Two Family Dwelling
640 Drake Ave.: Two Family Dwelling

Surrounding Land Uses:

North: Two Family Residential [Two Family Residential – RD-1]
South: Single Family Residential [Comprehensive Development District, 2 dwellings]
West: Single Family Residential [Multiple Family Residential zone - RM-1]
East: Two Family Residential [Two Family Residential – RD-1]

Existing Zoning: 616 Lampson St.: Comprehensive Development District No. 81
620 Lampson St.: Single Family Residential [RS-1]

Proposed Zoning: CD [Comprehensive Development District]

Existing OCP Designation: Low Density Residential [amendment required]

Proposed OCP Designation: Townhouse Residential

ISSUES:

Comments From Other Departments

The plans for this proposal were circulated to other departments and the following comments were received by the APC submission deadline:

Building Inspection: Construct to current BC Building Code and Municipal Building Code Bylaw, 2002, No. 2538. Subject to code and bylaw review at time of building permit application.

Engineering Services: Engineering has completed a preliminary review of the proposed development at 636 and 640 Drake Avenue. The developer should be aware that they may be required to provide Works and Services up to the road centre line, at the expense of the property owner. At a minimum new curb, and gutter along the frontage of the proposed development. The development is to have sewer, drain, catch basin and water service

connections, as well as underground hydro, telephone, and cable. Additional review and comments will be provided upon receipt of detailed engineering drawings. All proposed Works and Services shall be as per Bylaw, 1997, No. 2175. It is the responsibility of the applicant to hire a qualified professional for the design and construction supervision of all Works and Services, including construction costs, engineering fees, administrative fees and as indicated in Bylaw No. 2175.

Fire Services: Sprinklers will be required for this building as per Building Regulation Bylaw 2017, No. 2899. Driveway shall be constructed in a fashion that permits fire department access.

Parks Services: Comments as per Talbot and Mackenzie report; retain and protect trees as per tree protection bylaw. Apply for removals through the Parks department.

Director of Development Services: As this proposal situated on two lots, the lots would need to be consolidated prior to final adoption of the zoning amendment bylaw. Should this rezoning be approved, a Development Permit would be required.

Note: All projects are subject to compliance with the BC Building Code, Esquimalt Subdivision and Servicing Bylaw, Esquimalt Zoning Bylaw and other Regulations and Policies set by Council.

Zoning

Density, Lot Coverage, Siting and Setbacks: The following chart compares the setbacks, lot coverage and floor area ratio of this proposal with the requirements of the RM-3 [High Density Townhouse Residential Zone]:

	RM-3 [High Density Townhouse Residential]	**Proposed CD Zone 636 & 640 Drake Avenue**
Floor Area Ratio [F.A.R.]	0.60	0.70
Lot Coverage	25%	32%
Setbacks • **Front** • **Rear** • **Side (South)** • **Side (North)**	 7.5 m 7.5 m 4.5 m 4.5 m	 6.0 m 6.2 m 4.0 m (3.0 m to decks) 4.0 m (3.5 m to decks)
Building Height	9.0 m	9.0 m
Off Street Parking	2 spaces/ dwelling unit	1.5 spaces/ dwelling unit, [12 spaces] 12 full size [4 dedicated as visitor]
Usable Open Space	121.8 m²/ 1624 m^2 [7.5% of the area of the parcel]	60 m² [4 %] conforming to terms of Zoning Bylaw, 1992, No. 2050

The F.A.R. of the proposal at 0.70 is greater than the 0.60 F.A.R. permitted in the Multiple Family Residential [RM-3] [high density townhouse or low density apartment development] zone. The Official Community Plan allows for consideration of up to 0.70 F.A.R. for Townhouses. The proposed Lot Coverage at 32% is also greater than the maximum 25% permitted in the RM-3 zone.

This proposal requires a 1.3 metre reduction to the front and a 1.5 metre reduction to the rear setback requirements of the RM-3 zone. Drake Avenue is a skinny street where the majority of buildings appear to be located away from the roadway.

The 'Useable Open Space'; as defined in the zoning bylaw, excludes areas used for front yards and parking, and areas with any dimension less than 6.0 metres. This proposal's provision of 60 m² [645.8 ft^2] [4% Useable Open Space] does not meet the 7.5 % Useable Open Space requirement contained in the RM-3 zone; though each unit is provided with a small private outdoor space at least 6 metres by 4 metres in area.

The height of the tallest proposed building at 9.0 metres equals the 9.0 metre maximum provided in the RM-3 zone. The four-unit building on this site is 37 metres (121 ft.) long.

The building provides for 8 resident garages, with 3 visitor spaces located towards the back of the site and one visitor spaces located between the two, two-unit buildings. The parking bylaw allows for up to 50% of parking spaces to be small car spaces this proposal has all full size spaces.

No garbage or recycling station is indicated, though an existing shed may be useful for this need. The location of the shed may be an issue for pick up of garbage, as it is at the back of the property.

Official Community Plan

This proposal requires an amendment to the Proposed Land Use Designation for the subject properties, from "Low Density Residential" to "Townhouse Residential".

The Official Community Plan supports the expansion of housing types in residential areas. The immediate neighbourhood contains a mix of single family and two-family housing types.

Section 5 Housing & Residential Land Use contains policies that are intended to ensure that concerns such as tree protection, parking, traffic, noise, effects on neighbouring properties, and neighbourhood character are addressed.

- Policy - Consider new townhouse residential proposals with a Floor Area Ratio of up to 0.70, and up to three storeys in height, in areas designated Townhouse Residential on the "Proposed Land Use Designation Map," provided the design responds effectively to both its site and surrounding land uses.

- Policy - Support the development of a variety of housing types and designs to meet the anticipated housing needs of residents. This may include non-market and market housing options that are designed to accommodate young and multi-generational families, the local workforce, as well as middle and high income households.

5.2 Low Density Residential Redevelopment
OBJECTIVE: Strive for redevelopment and infill development that improves and enhances the appearance and livability of neighbourhoods and the community as a whole.

- Policy - Proposed redevelopment or infill within present low density residential land use designated areas should be built to high quality design and landscaping standards and respond sensitively to existing neighbourhood amenities.

5.4 Affordable Housing
OBJECTIVE: To encourage a range of housing by type, tenure and price so that people of all ages, household types, abilities and incomes have a diversity of housing choice in Esquimalt.

- Policy - Encourage the provision of missing middle housing types such as two-unit dwellings (duplexes), townhouses and small lot infill as one avenue to address housing affordability.

OCP Section 23 provides Development Permit Guidelines for land contained within the Multi-Unit Residential Development Permit Area. As the Development Permit is not being considered at this time it would be inappropriate to address many of these guidelines, with the following exceptions that are relevant to the discussion of zoning and parking issues:

23.5.1. The size and siting of buildings that abut existing single- and two-unit and townhouse dwellings should reflect the size and scale of adjacent development and complement the surrounding uses. To achieve this, height and setback restrictions may be imposed as a condition of the development permit.

23.5.2. New buildings should be designed and sited to minimize visual intrusion on to the privacy of surrounding homes and minimize the casting of shadows on to the private outdoor space of adjacent residential units.

23.5.5. Surface parking areas in developments less than five storeys in height, will be situated away from the street and screened by berms, landscaping or solid fencing or a combination of these three.

23.5.9. Retention and protection of trees and the natural habitat is encouraged wherever possible.

23.5.10. Townhouses will be designed such that the habitable space of one dwelling unit abuts the habitable space of another unit and the common wall overlap between adjoining dwellings shall be at least 50 percent.

23.5.14. Provide for building occupants to overlook public streets, parks, walkways and spaces, considering security and privacy of residents.

The property is also included in the following OCP Development Permit Areas: Development Permit Area No. 1 – Natural Environment, Development Permit Area No. 7 – Energy Conservation and Greenhouse Gas Reduction, Development Permit Area No. 8 – Water Conservation. Many of these guidelines would be addressed at the Development Permit stage but the following are relevant to the discussion of zoning and parking areas, including in particular the siting of proposed buildings.

OCP Section 18 Development Permit Area No. 1 – Natural Environment

18.5.2 Natural Features
Natural features and areas to be preserved, protected, restored, and enhanced where feasible:

1. Retain existing healthy native trees, vegetation, rock outcrops and soil wherever possible.

4. Narrower manoeuvering aisles, fewer and smaller parking spaces can be considered where natural areas are being conserved.

18.5.5 Drainage and Erosion
Measures to control drainage and shoreline erosion. Where it is reasonable:

1. Preserve, restore and enhance treed areas. Trees are the most effective form of absorbent landscaping due to their extensive root zones and their ability to both absorb water from the soil and intercept precipitation on leaves, needles and branches. Consider that native conifers are well adapted to local wet winters.

2. Reduce the impact of surges in stormwater on shorelines by designing on-site stormwater retention systems to contain the first 3 centimetres [1.25 inches] of precipitation on site, per precipitation event; and incorporating rainwater collection systems into roof design and landscaping.

4. Maximize the ratio of planted and pervious surfaces to unplanted surfaces, and design paved areas to direct water towards vegetated areas, to help reduce surface run off. Where paved surfaces are needed, intersperse with drought resistant vegetation and trees, to help absorb stormwater, provide shade and reduce the local heat island effect.

<u>OCP Section 24 - Development Permit Area No. 7 – Energy Conservation and Greenhouse Gas Reduction</u>

24.5.1 Siting of buildings and structures. Where it is feasible:

1. Orient buildings to take advantage of site specific climate conditions, in terms of solar access and wind flow; design massing and solar orientation for optimum passive performance.

2. Build new developments compactly, considering the solar penetration and passive performance provided for neighbouring sites, and avoid shading adjacent to usable outdoor open spaces.

4. Provide space for pleasant pedestrian pathways between buildings.

5. Strategically site buildings to sustain and increase the community's urban forest tree canopy cover.

6. Provide space for significant landscaping including varying heights of trees, shrubs and ground covers.

24.5.2 Form and exterior design of buildings and structures. Where it is feasible:

1. Orient larger roof surfaces to the south for potential use of solar panels or photo-voltaic roofing.

2. Use roof designs that reduce heat transfer into neighbouring buildings, helping reduce the local heat island effect and the need for cooling of buildings in warmer months.

8. Add rooftop patios and gardens, particularly food producing gardens, as they can contribute to local resilience, livability, and reduction in greenhouse gas production by reducing food transportation costs.

24.5.3 Landscaping - Where it is feasible:

2. Choose open space and landscaping over dedicating space to the parking and manoeuvring of private motor vehicles.

3. Conserve native trees, shrubs and soils, thereby saving the cost of importing materials and preserving already sequestered carbon dioxide.

24.5.5 Special Features

4. Reuse of existing buildings and building materials is encouraged.

OCP Section 25 - Development Permit Area No. 8 – Water Conservation

25.5.3 Landscaping – Retaining Stormwater on Site (absorbent landscaping) Where it is feasible:

1. Preserve and restore treed areas. Trees are the most effective form of absorbent landscaping due to their extensive root zones and their ability to both absorb water from the soil and intercept precipitation on leaves, needles and branches. Consider that native conifers are well adapted to local wet winters.

3. Avoid disturbing, compacting and removing areas of natural soil, as these are naturally absorbent areas.

Green Building Features

The applicant has completed the Esquimalt Green Building Checklist [attached].

Public Notification

As this is an Official Community Plan Amendment and Rezoning application should it proceed to a Public Hearing, a notice would be mailed to tenants and owners of properties within 100m (328ft) of the subject property. In order to satisfy the requirements of the *Local Government Act,* a notice to relevant government and institutional stakeholders within the Capital Region would be required. Two signs indicating that the two properties are under consideration for a change in zoning have been installed on the Drake Street frontage. The signs would be updated to include the date, time, and location of the Public Hearing.

ALTERNATIVES:

1. Forward the application for OCP Amendment and Rezoning to Council with a **recommendation of approval including reasons for the recommendation**.

2. Forward the application for OCP Amendment and Rezoning to Council with a **recommendation of approval including specific conditions and including reasons for the recommendation**.

3. Forward the application for OCP Amendment and Rezoning to Council with a **recommendation of denial including reasons for the recommendation**.

636 – 640 Drake Avenue - air photo


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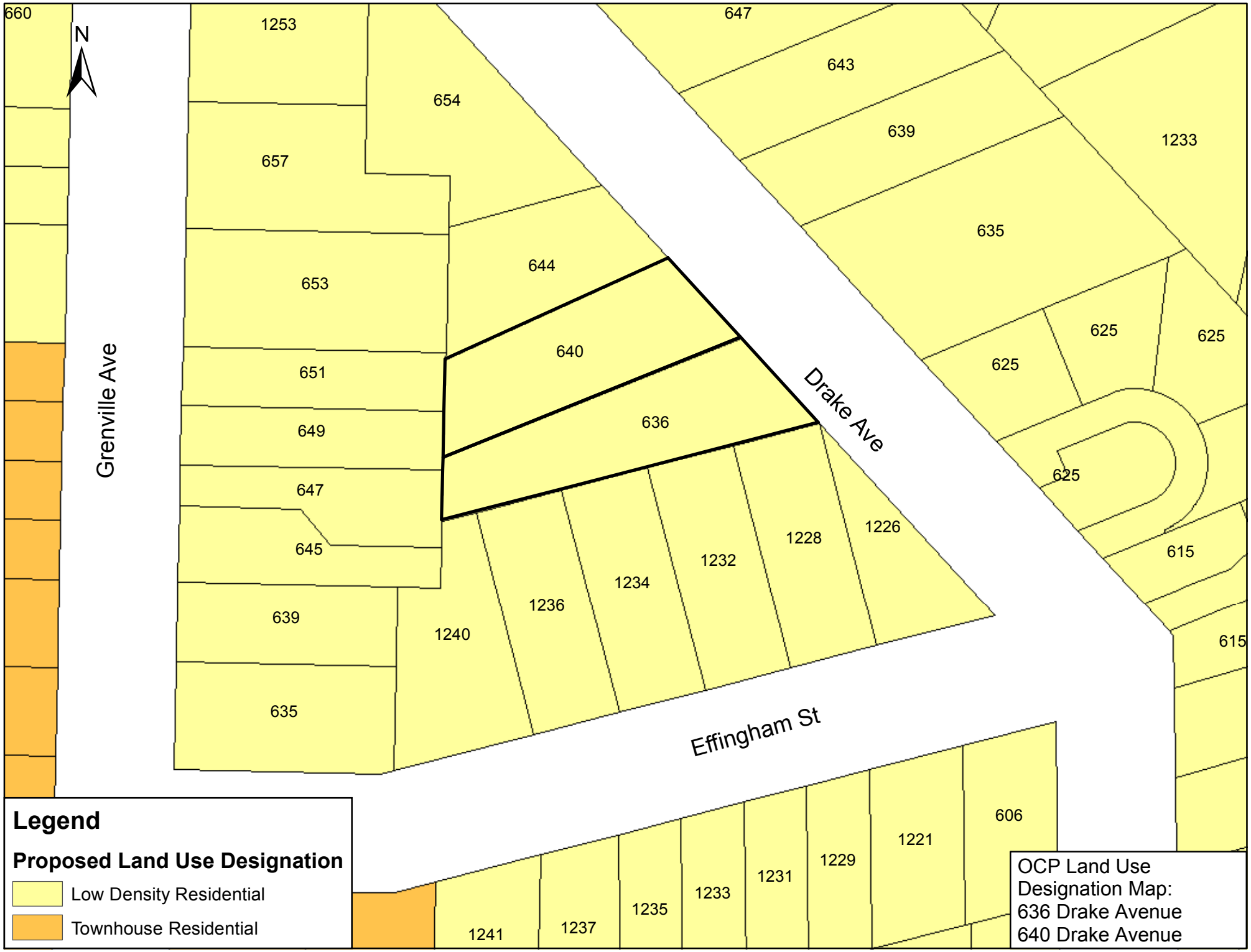
Subject Property Map:
636 Drake Avenue
640 Drake Avenue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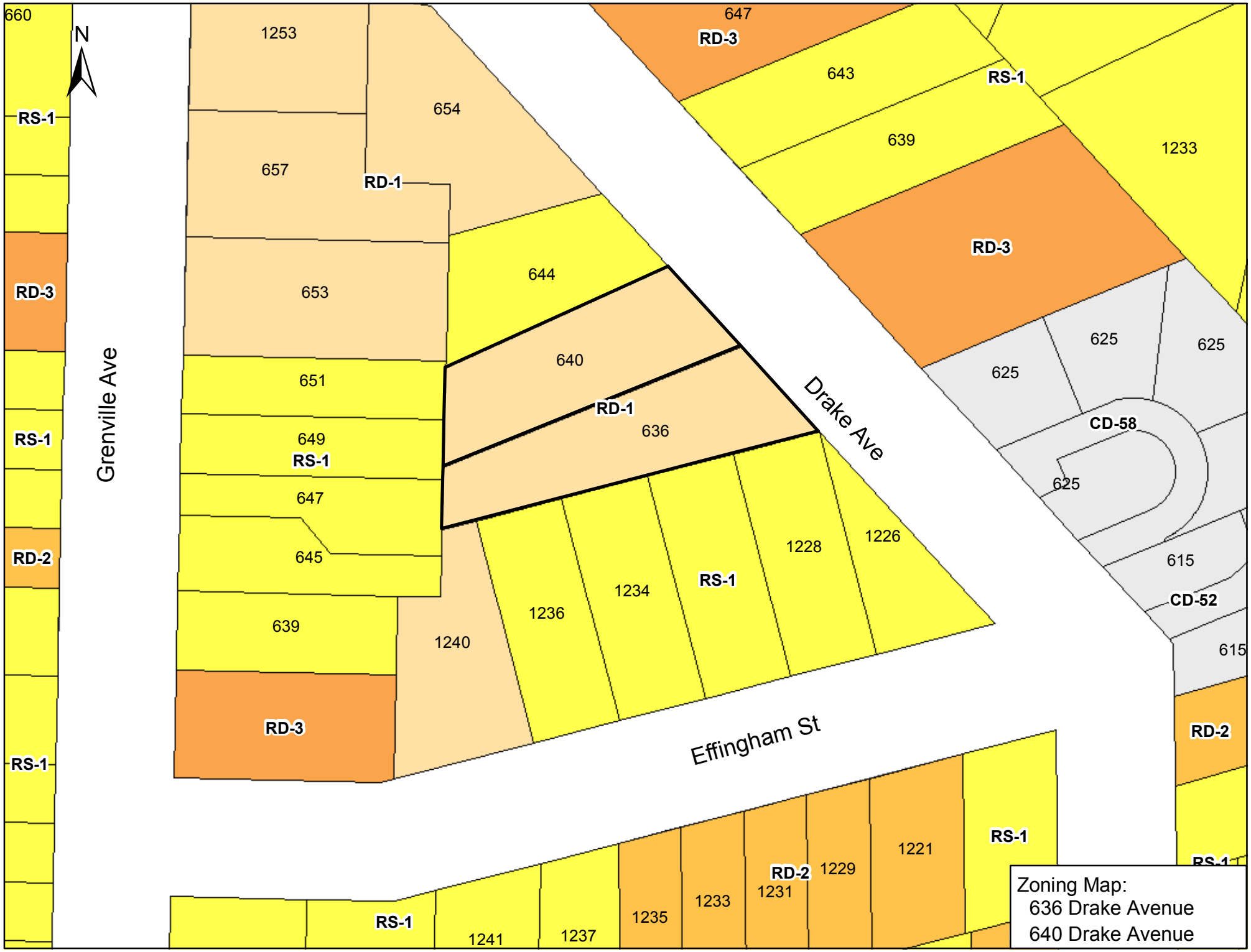
Proposed Land Use Designation
Low Density Residential
Townhouse Residential
OCP Land Use Designation Map:
636 Drake Avenue
640 Drake Avenue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Zoning Map:
636 Drake Avenue
640 Drake Avenue

Township of
ESQUIMALT

GREEN BUILDING CHECKLIST

The purpose of this Checklist is to make property owners and developers aware of specific green features that can be included in new developments to reduce their carbon footprints to help create a more sustainable community.

Creating walkable neighbourhoods, fostering green building technologies, making better use of our limited land base and ensuring that new development is located close to services, shops and transit are some of the means of achieving sustainability.

The Checklist which follows focuses on the use of **Green Technologies** in new buildings and major renovations. The Checklist is not a report card, it is a tool to help identify how your project can become 'greener' and to demonstrate to Council how your project will help the Township of Esquimalt meet its sustainability goals. It is not expected that each development will include all of the ideas set out in this list but Council is looking for a strong commitment to green development.

There are numerous green design standards, for example, Built Green BC; LEED ND; Living Building Challenge; Green Shores; Sustainable Sites Initiative. Esquimalt is not directing you to follow any particular standard, however, you are strongly encouraged to incorporate as many green features as possible into the design of your project .

As you review this checklist, if you have any questions please contact **Development Services at 250.414.7108** for clarification.

New development is essential to Esquimalt. We look forward to working with you to ensure that development is as green and sustainable as possible.

Other documents containing references to building and site design and sustainability, which you are advised to review, include:

- Esquimalt's Official Community Plan
- Development Protocol Policy
- Esquimalt's Pedestrian Charter
- Tree Protection Bylaw No. 2664
- A Sustainable Development Strategic Plan for the Township of Esquimalt

Adopted on January 10th, 2011

"One-third of Canada's energy use goes to running our homes, offices and other buildings. The federal government's Office of Energy Efficiency (Natural Resources Canada) reports that a corresponding one-third of our current greenhouse gas (GHG) emissions come from the built environment."
[Green Building and Development as a Public Good, Michael Buzzelli, CPRN Research Report June 2009]

Please answer the following questions and describe the green and innovative features of your proposed development. Depending on the size and scope of your project, some of the following points may not be applicable.

Green Building Standards

Both energy use and emissions can be reduced by changing or modifying the way we build and equip our buildings.

1 Are you building to a recognized green building standard? If yes, to what program and level? Yes (No)

2 If not, have you consulted a Green Building or LEED consultant to discuss the inclusion of green features? Yes (No)

3 Will you be using high-performance building envelope materials, rainscreen siding, durable interior finish materials or safe to re-use materials in this project? If so, please describe them. (Yes) No

4 What percentage of the existing building[s], if any, will be incorporated into the new building? 0 %

5 Are you using any locally manufactured wood or stone products to reduce energy used in the transportation of construction materials? Please list any that are being used in this project.
Stone manufactured in abbotsford.

6 Have you considered advanced framing techniques to help reduce construction costs and increase energy savings? (Yes) No

7 Will any wood used in this project be eco-certified or produced from sustainably managed forests? If so, by which organization? No

For which parts of the building (e.g. framing, roof, sheathing etc.)? Possibly Roof Sheathing

8 Can alternatives to Chlorofluorocarbon's and Hydro-chlorofluorocarbons which are often used in air conditioning, packaging, insulation, or solvents] be used in this project? If so, please describe these. Yes (No)

9 List any products you are proposing that are produced using lower energy levels in manufacturing.

10 Are you using materials which have a recycled content [e.g. roofing materials, interior doors, ceramic tiles or carpets]? Yes (No)

11 Will any interior products [e.g. cabinets, insulation or floor sheathing] contain formaldehyde? Yes (No)

Water Management

The intent of the following features is to promote water conservation, re-use water on site, and reduce storm water run-off.

Indoor Water Fixtures

12	Does your project exceed the BC Building Code requirements for public lavatory faucets and have automatic shut offs?	Yes	(No)
13	For commercial buildings, do flushes for urinals exceed BC Building Code requirements?	Yes	(No)
14	Does your project use dual flush toilets and do these exceed the BC Building Code requirements?	(Yes)	No
15	Does your project exceed the BC Building Code requirements for maximum flow rates for private showers?	Yes	(No)
16	Does your project exceed the BC Building Code requirements for flow rates for kitchen and bathroom faucets?	Yes	(No)

Storm Water

17	If your property has water frontage, are you planning to protect trees and vegetation within 60 metres of the high water mark? [Note: For properties located on the Gorge Waterway, please consult Sections 7.1.2.1 and 9.6 of the Esquimalt Official Community Plan.]	Yes	No	(N/A)
18	Will this project eliminate or reduce inflow and infiltration between storm water and sewer pipes from this property?	(Yes)	No	N/A
19	Will storm water run-off be collected and managed on site (rain gardens, wetlands, or ponds) or used for irrigation or re-circulating outdoor water features? If so, please describe. _____	Yes	(No)	N/A
20	Have you considered storing rain water on site (rain barrels or cisterns) for future irrigation uses?	(Yes)	No	N/A
21	Will surface pollution into storm drains will be mitigated (oil interceptors, bio-swales)? If so, please describe. _____	Yes	No	(N/A)
22	Will this project have an engineered green roof system or has the structure been designed for a future green roof installation?	Yes	No	N/A
23	What percentage of the site will be maintained as naturally permeable surfaces?	20 %		

Waste water

24	For larger projects, has Integrated Resource Management (IRM) been considered (e.g. heat recovery from waste water or onsite waste water treatment)? If so, please describe these. _____	Yes	No	(N/A)

Natural Features/Landscaping

The way we manage the landscape can reduce water use, protect our urban forest, restore natural vegetation and help to protect the watershed and receiving bodies of water.

25	Are any healthy trees being removed? If so, how many and what species? Possibly 1 FIR.	Yes	No	N/A
	Could your site design be altered to save these trees?			
	Have you consulted with our Parks Department regarding their removal? not yet.			

26	Will this project add new trees to the site and increase our urban forest? If so, how many and what species? Landscape Plan	(Yes)	No	N/A
27	Are trees [existing or new] being used to provide shade in summer or to buffer winds?	(Yes)	No	N/A
28	Will any existing native vegetation on this site be protected? If so, please describe where and how. under arborist Supervision	Yes	No	N/A
29	Will new landscaped areas incorporate any plant species native to southern Vancouver Island?	(Yes)	No	N/A
30	Will xeriscaping (i.e. the use of drought tolerant plants) be utilized in dry areas?	(Yes)	No	N/A
31	Will high efficiency irrigation systems be installed (e.g. drip irrigation; 'smart' controls)?	(Yes)	No	N/A
32	Have you planned to control invasive species such as Scotch broom, English ivy, Himalayan and evergreen blackberry growing on the property?	Yes	(No)	N/A
33	Will topsoil will be protected and reused on the site?	Yes	(No)	N/A

Energy Efficiency

Improvements in building technology will reduce energy consumption and in turn lower greenhouse gas [GHG] emissions. These improvements will also reduce future operating costs for building occupants.

34	Will the building design be certified by an independent energy auditor/analyst? If so, what will the rating be? _____	Yes	(No)	N/A
35	Have you considered passive solar design principles for space heating and cooling or planned for natural daylighting?	(Yes)	No	N/A
36	Does the design and siting of buildings maximize exposure to natural light? What percentage of interior spaces will be illuminated by sunlight? 10 %	Yes	No	N/A
37	Will heating and cooling systems be of enhanced energy efficiency (ie. geothermal, air source heat pump, solar hot water, solar air exchange, etc.). If so, please describe. Heat Pump If you are considering a heat pump, what measures will you take to mitigate any noise associated with the pump? Quiet units + Proper placement	(Yes)	No	N/A
38	Has the building been designed to be solar ready?	(Yes)	No	N/A
39	Have you considered using roof mounted photovoltaic panels to convert solar energy to electricity?	(Yes)	No	N/A
40	Do windows exceed the BC Building Code heat transfer coefficient standards?	(Yes)	No	N/A
41	Are energy efficient appliances being installed in this project? If so, please describe. energy Star			
42	Will high efficiency light fixtures be used in this project? If so, please describe.	(Yes)	No	N/A
43	Will building occupants have control over thermal, ventilation and light levels?	(Yes)	No	N/A
44	Will outdoor areas have automatic lighting [i.e. motion sensors or time set]?	(Yes)	No	N/A
45	Will underground parking areas have automatic lighting?	Yes	No	(N/A)

Air Quality

The following items are intended to ensure optimal air quality for building occupants by reducing the use of products which give off gases and odours and allowing occupants control over ventilation.

46	Will ventilation systems be protected from contamination during construction and certified clean post construction?	(Yes)	No	N/A
47	Are you using any natural, non-toxic, water soluble or low-VOC [volatile organic compound] paints, finishes or other products? If so, please describe. Prefinished Siding, Latex Paint.	(Yes)	No	N/A
48	Will the building have windows that occupants can open?	(Yes)	No	N/A
49	Will hard floor surface materials cover more than 75% of the liveable floor area?	(Yes)	No	N/A
50	Will fresh air intakes be located away from air pollution sources?	(Yes)	No	N/A

Solid Waste

Reuse and recycling of material reduces the impact on our landfills, lowers transportation costs, extends the life-cycle of products, and reduces the amount of natural resources used to manufacture new products.

51	Will materials be recycled during demolition of existing buildings and structures? If so, please describe. recycle some existing material.	(Yes)	No	N/A
52	Will materials be recycled during the construction phase? If so, please describe. Wood waste to supply firewood Cardboard & Metal recycle.	Yes	No	N/A
53	Does your project provide enhanced waste diversion facilities i.e. on-site recycling for cardboard, bottles, cans and or recyclables or on-site composting?	(Yes)	No	N/A
54	For new commercial development, are you providing waste and recycling receptacles for customers?	Yes	No	(N/A)

Green Mobility

The intent is to encourage the use of sustainable transportation modes and walking to reduce our reliance on personal vehicles that burn fossil fuels which contributes to poor air quality.

55	Is pedestrian lighting provided in the pathways through parking and landscaped areas and at the entrances to your building[s]?	(Yes)	No	N/A
56	For commercial developments, are pedestrians provided with a safe path[s] through the parking areas and across vehicles accesses?	Yes	No	(N/A)
57	Is access provided for those with assisted mobility devices?	(Yes)	No	N/A
58	Are accessible bike racks provided for visitors?	(Yes)	No	N/A
59	Are secure covered bicycle parking and dedicated lockers provided for residents or employees?	(Yes)	No	N/A

60 Does your development provide residents or employees with any of the following features to reduce personal automobile use [check all that apply]:

- ☐ transit passes
- ☐ car share memberships
- ☐ shared bicycles for short term use
- ☐ weather protected bus shelters
- ☑ plug-ins for electric vehicles

Is there something unique or innovative about your project that has not been addressed by this Checklist? If so, please add extra pages to describe it.

Talbot Mackenzie & Associates
Consulting Arborists

636-640 Drake Ave, Esquimalt

Construction Impact Assessment &

Tree Preservation Plan

PREPARED FOR: Dimma Pacific Properties Ltd.
Suite 1-1702 Quadra Street
Victoria, BC
V8W 2L8

PREPARED BY: Talbot, Mackenzie & Associates
Noah Borges – Consulting Arborist
ISA Certified # PN-8409A

DATE OF ISSUANCE: April 13, 2018

Box 48153 RPO - Uptown Victoria, BC V8Z 7H6
Ph: (250) 479-8733
Fax: (250) 479-7050
Email: tmtreehelp@gmail.com

Talbot Mackenzie & Associates
Consulting Arborists

Jobsite Property: 636-640 Drake Ave, Esquimalt

Date of Site Visit: February 27, 2018

Site Conditions: Two residential lots. No construction activity present. Decreasing in elevation from northeast to southwest.

Summary: Three trees will require removal as a result of this development: Douglas firs #70 and #72 and Grand Fir #71. We also recommend Western Red Cedar #68 be removed, as pruning for building clearance will remove a significant portion of its canopy and we anticipate a decline in the health of the tree associated with the proposed excavation within its critical root zone. Grand Fir #73 may be able to be retained if working room can be minimized around the northwest corner of unit 5 and if the stump of fir #72 is ground rather than pulled. Arbutus #74 may have to be removed if landscaping plans require the existing grades being modified within the tree's critical root zone. A large number of roots from Western Red Cedar #68 are likely to be severed during excavation for unit 4 and clearance pruning will remove a large portion of the canopy. If our recommended mitigation measures are followed, all other trees can be retained without being significantly impacted.

Scope of Assignment: To inventory the existing bylaw protected trees and any trees on neighbouring properties that could potentially be impacted by construction or that are within 3 meters of the property line. Review the proposal to demolish the existing single-family dwellings and accessory buildings, and construct eight new units with accompanying driveways. Comment on how construction activity may impact existing trees. Prepare a tree retention and construction damage mitigation plan for those trees deemed suitable to retain given the proposed impacts.

Methodology: We visually examined the trees on the property and prepared an inventory in the attached Tree Resource Spreadsheet. Each by-law protected tree was identified using a numeric metal tag attached to its lower trunk. Municipal trees and neighbours' trees were not tagged. Information such as tree species, DBH (1.4m), crown spread, critical root zone (CRZ), health, structure, and relative tolerance to construction impacts were included in the inventory. The by-law protected trees with their identification numbers were labelled on the attached Site Plan. The conclusions reached were based on the information provided within the attached building and landscape plans.

Limitations: No exploratory excavations have been requested and thus the conclusions reached are based solely on critical root zone calculations and our best judgement using our experience and expertise. The location, size and density of roots are often difficult to predict without exploratory excavations and therefore the impacts to the trees may be more or less severe than we anticipate.

Locations of new underground service alignments to the proposed units were not available for comment. We recommend that service connections should be designed to preserve the critical roots of trees to be retained.

Summary of Tree Resource: 19 trees and shrubs were inventoried, including several trees within three metres of the north property boundary.

Trees to be Removed: We recommend four trees be removed as a result of the proposed construction:

- The base of **Douglas fir #70** partially overlaps with the footprint of the proposed retaining wall to be constructed north of the asphalt driveway.

- **Grand Fir #71** is within the footprint of unit 5.

- **Douglas fir #72** will be in the area of excavation for the construction of unit 5.

- **Western Red Cedar #68:** This tree is located 3.5m from the footprint of unit 4. A large mass of roots is likely to be encountered during excavation (which, given 1m of working room, will occur 2.5m from the base of the tree), potentially resulting in significant health impacts. In addition, a significant proportion of the crown will have to be pruned for building clearance. The main floor deck is approximately 2.5m away and the crown extends 6m from the fence line. (The crown is already limited in some areas due to competition with surrounding trees). Given that Cedars typically exhibit poor tolerance to disturbance, we anticipate this tree will show signs of significant health stress as a result of the proposed root loss and pruning. Therefore, we recommend it be removed. If the tree is under shared ownership with the south neighbouring property, the homeowner should be notified of proposed impacts.

Potential Impacts on Trees to be Retained and Mitigation Measures

- **Grand Fir #73:** This tree may be able to be retained if excavation for unit 5 does not occur beyond the stump of Douglas fir #72. Large, critical roots from Grand Fir #73 are likely to be encountered northwest of fir #72. We recommend the stump of fir #72 be ground rather than pulled to limit root impacts to tree #73. Furthermore, if possible, we recommend limiting the amount of working room on the west side of unit 5's footprint to minimize the likelihood of encountering roots. Landscape plans indicate that only minor grade changes are required within the tree's CRZ. An arborist should be on site to supervise any construction-related activity within the tree's critical root zone.

  If the portion of the driveway that encroaches within the critical root zone of the tree requires excavation down to bearing soil within its footprint and roots are encountered in this area, the health of the tree could be significantly impacted. We recommend a raised permeable driveway be constructed in the area where the driveway crosses over the critical root zone of the trees. The "floating driveway" specifications are attached.

The objective is to avoid root loss and to instead raise the driveway and its base layer above the roots. This may result in the grade of the "floating driveway" being up to 30cm above the existing grade (depending on how close roots are to the surface and the depth of the driveway base layers). It may also mean that some of the A horizon soil layer (rich in organic material and roots) will be left intact below the driveway.

To allow sufficient water to drain into the root systems below, we would also recommend that the driveway not be made of concrete or asphalt. Instead the surface should be made of a permeable material such as permeable asphalt, paving stones or other porous paving materials such as those utilized by Grasspave, Gravelpave, and Grasscrete.

We also recommend the wood fence south of the tree and any other landscape features to be constructed be designed to limit root impacts (e.g. fence posts installed in areas that avoid large roots). If irrigation is to be installed within the CRZ of the tree, we recommend an arborist be consulted to advise on how best to mitigate impacts to critical roots and tree health.

- **Arbutus #74:** Depending on the required grade changes at the east end of the property, this tree may be significantly impacted. If landscaping plans require a significant amount of fill to be added within the critical root zone of the tree, the tree should likely be removed. The survival rates of transplanted Arbutus trees are low.

- **Trees #66-67:** These trees are 2.5-3.5m from the edge of the proposed driveway. If the new driveway requires excavation down to bearing soil within its footprint, we recommend a raised permeable driveway be constructed in the area where the driveway crosses over the critical root zone of the trees.

- **Grand Fir #69:** This tree is 3-3.5m from a proposed retaining wall to the west. Large roots are likely to be encountered during excavation at this distance from the tree. To minimize root impacts, we recommend the area be dug by hand or a combination of hydro-vac, small excavation machinery, and hand-digging, and that the wall be designed and constructed to preserve large roots. An arborist should be on site during any excavation and for the removal of the existing driveway and retaining walls. We also recommend that the existing grades be maintained where possible within the tree's critical root zone. No fill should be placed against the tree's trunk.

- **Trees NT3-NT5:** Roots from these trees may be encountered during excavation for construction of unit 7. We recommend an arborist be on site to supervise any excavation within the tree's critical root zones and that additional space around the building footprint for working room be minimized. Barrier fencing should be erected as close to the building footprint as possible to limit soil compaction within their critical root zones. The neighbour should be notified that the trees may incur minor health impacts.

- **Arborist Supervision**: All excavation occurring within the critical root zones of protected trees should be completed under supervision by the project arborist. Any roots encountered must be pruned back to sound tissue to reduce wound surface area and encourage rapid compartmentalization of the wound.

- **Barrier fencing:** The areas surrounding the trees to be retained should be isolated from the construction activity by erecting protective barrier fencing. Where possible, the fencing should be erected at the perimeter of the critical root zones. The barrier fencing must be a minimum of 4 feet in height, of solid frame construction that is attached to wooden or metal posts. A solid board or rail must run between the posts at the top and the bottom of the fencing. This solid frame can then be covered with plywood, or flexible snow fencing. The fencing must be erected prior to the start of any construction activity on site (i.e. demolition, excavation, construction), and remain in place through completion of the project. Signs should be posted around the protection zone to declare it off limits to all construction related activity. The project arborist must be consulted before this fencing is removed or moved for any purpose.

- **Methods to avoid soil compaction:** In areas where construction traffic must encroach into the critical root zones of trees to be retained, efforts must be made to reduce soil compaction where possible by displacing the weight of machinery and foot traffic. This can be achieved by one of the following methods:

    - Installing a layer of hog fuel or coarse wood chips at least 20 cm in depth and maintaining it in good condition until construction is complete.
    - Placing medium weight geotextile cloth over the area to be used and installing a layer of crushed rock to a depth of 15 cm over top.
    - Placing two layers of 19mm plywood.
    - Placing steel plates.

- **Demolition of the existing buildings:** The demolition of the existing houses and any services that must be removed or abandoned, must take the critical root zone of the trees to be retained into account. If any excavation or machine access is required within the critical root zones of trees to be retained, it must be completed under the supervision and direction of the project arborist. If temporarily removed for demolition, barrier fencing must be erected immediately after the supervised demolition.

- **Mulching**: Mulching is an important proactive step to maintaining the health of the trees to be retained and mitigating construction related impacts and overall stress. Mulch should be made from a natural material such as wood chips or bark pieces and be 5-8cm deep. As much of the area within two times the dripline of the tree should be mulched, both inside and outside of the critical root zone. No mulch should be touching the trunk of the tree. See "methods to avoid soil compaction" if the area is to have heavy traffic.

- **Landscaping and Irrigation Systems:** The planting of new trees and shrubs should not damage the roots of retained trees. The installation of any in-ground irrigation system must take into account the critical root zones of the trees to be retained. Prior to installation, we recommend the irrigation technician consult with the project arborist about the most suitable locations for the irrigation lines and how best to mitigate the impacts on the trees to be retained. This may require the project arborist supervise the excavations associated with installing the irrigation system. Excessive frequent irrigation and irrigation which wets the trunks of trees can have a detrimental impact on tree health and can lead to root and trunk decay.

- **Arborist Role:** It is the responsibility of the client or his/her representative to contact the project arborist for the purpose of:
    - Locating the barrier fencing
    - Reviewing the report with the project foreman or site supervisor
    - Locating work zones, where required
    - Supervising any excavation within the critical root zones of trees to be retained
    - Reviewing and advising of any pruning requirements for machine clearances

- **Review and site meeting**: Once the project receives approval, it is important that the project arborist meet with the principals involved in the project to review the information contained herein. It is also important that the arborist meet with the site foreman or supervisor before any site clearing, tree removal, demolition, or other construction activity occurs and to confirm the locations of the tree protection barrier fencing.

Please do not hesitate to call us at (250) 479-8733 should you have any further questions. Thank you.

Yours truly,

Talbot Mackenzie & Associates
ISA Certified Consulting Arborists

Encl. 2-page tree resource spreadsheet, 1-page site survey with trees, 6-page site and building plans, 1-page landscaping plans, 1-page barrier fencing specifications, 1-page floating driveway specifications

Disclosure Statement

Arborists are professionals who examine trees and use their training, knowledge and experience to recommend techniques and procedures that will improve their health and structure or to mitigate associated risks.

Trees are living organisms, whose health and structure change, and are influenced by age, continued growth, climate, weather conditions, and insect and disease pathogens. Indicators of structural weakness and disease are often hidden within the tree structure or beneath the ground. It is not possible for an Arborist to identify every flaw or condition that could result in failure or can he/she guarantee that the tree will remain healthy and free of risk.

Remedial care and mitigation measures recommended are based on the visible and detectable indicators present at the time of the examination and cannot be guaranteed to alleviate all symptoms or to mitigate all risk posed.

Tag	Common Name	Latin Name	DBH (cm) ~ approximate	CRZ (m)	Crown Spread (m)	Health	Structure	Relative Tolerance	Remarks and Recommendations	Retention Status
69	Grand Fir	*Abies grandis*	81	12.0	12	Fair	Fair/poor	Poor	Pruned heavily for line clearance. Multiple codominant leaders. Likely upheaving driveway	Retain
70	Douglas fir	*Pseudotsuga menziesii*	70, 56	15.5	12	Fair	Fair	Poor	Pruned for line clearance. Pitch exudation	X
NT1	Cedar hedge	*Thuja spp.*	Multistem	1.5	1	Fair	Fair	Poor	Neighbour's. 9 plants. Approximately 10cm DBH. Browning foliage	Retain
NT2	Garry oak	*Quercus garryana*	~60	6.0	14	Good	Fair	Good	Neighbour's. 3m from PL	Retain
NT3	Norway spruce	*Picea abies*	~40	6.0	6	Fair/poor	Fair/poor	Poor	Neighbour's. Adjacent to fence. Trunk bend. Dieback	Retain
NT4	Weeping sequoia	*Sequoiadendron giganteum 'pendulum'*	~25	4.0	5	Fair	Fair	Poor	Neighbour's. Adjacent to fence.	Retain
NT5	Norway spruce	*Picea abies*	~25, 20	5.5	6	Fair	Fair/poor	Poor	Neighbour's. Adjacent to fence. Codominant union at base. Dieback	Retain
68	Western Red Cedar	*Thuja plicata*	53	8.0	10	Good	Fair	Poor	Possibly shared with south neighbour. Multiple leaders.	TBD
NT6	Dogwood	*Cornus spp.*	~30	4.5	10	Good	Fair	Poor	Neighbour's. Adjacent to fence.	Retain
67	Garry oak	*Quercus garryana*	66	6.5	14	Fair	Good	Good	Some deadwood	Retain

Prepared by:
Talbot Mackenzie & Associates
ISA Certified, and Consulting Arborists
Phone: (250) 479-8733
Fax: (250) 479-7050
email: Treehelp@telus.net

Tag	Common Name	Latin Name	DBH (cm) ~ approximate	CRZ (m)	Crown Spread (m)	Health	Structure	Relative Tolerance	Remarks and Recommendations	Retention Status
66	Cherry	*Prunus spp.*	25, 23, 23...	6.5	14	Fair/poor	Fair/poor	Moderate	6 stems. Dieback	Retain
NT7	Holly	*Ilex spp.*	~30	3.0	6	Good	Fair	Good	Neighbour's. 2m from fence	Retain
71	Grand Fir	*Abies grandis*	67	10.0	10	Good	Poor	Poor	Codominant union at 3m. 1 stem topped. Severe trunk bends	X
72	Douglas fir	*Pseudotsuga menziesii*	91	13.5	14	Good	Fair	Poor	Ivy at base.extended limbs.	X
73	Grand Fir	*Abies grandis*	75	11.5	8	Fair	Fair/poor	Poor	Ivy at base. Dieback. Likely topped at apex	TBD
NT8	Apple	*Malus spp.*	~20	2.5	2	Fair	Poor	Moderate	Neighbour's. Adjacent to fence.	Retain
NT9	Apple	*Malus spp.*	~15, 10	2.5	2	Fair	Poor	Moderate	Neighbour's. Adjacent to fence.	Retain
NT10	Leyland Cypress hedge	*Cupressus x leylandii*	Multistem	2.0	3	Good	Fair	Good	Neighbour's. Adjacent to fence. 20 stems, 7-30cm DBH. Overhangs 1m.	Retain
74	Arbutus	*Arbutus menziesii*	4	0.5	3	Good	Fair	Poor	Young tree	TBD

Prepared by:
Talbot Mackenzie & Associates
ISA Certified, and Consulting Arborists
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email: Treehelp@telus.net

BC LAND SURVEYORS SITE PLAN OF:

640 Drake Avenue

Legal: Lot 2, Suburban Lots 50 and 41, Esquimalt District, Plan 25565

Parcel Identifier: 002-923-157 in the Municipality of Esquimalt

The following non-financial charges are shown on the current title and may affect the property.

A84872 – Right of Way
A79868 – Right of Way
C4872 – Easement

636 Drake Avenue

Legal: Lot 3, Suburban Lot 41, Esquimalt District, Plan 25565

Parcel Identifier: 002-923-211 in the Municipality of Esquimalt

The following non-financial charges are shown on the current title and may affect the property.

A84872 – Right of Way

Summary of Unit Type		
Unit	Type	Size
1	3 BED + GARAGE	151 M2
2	3 BED + GARAGE	145 M2
3	3 BED + GARAGE	151 M2
4	3 BED + GARAGE	168 M2
5	3 BED + GARAGE	146 M2
6	3 BED + GARAGE	146 M2
7	3 BED + GARAGE	156 M2
8	3 BED + GARAGE	146 M2

636-642 DRAKE AVE	PROPOSED		all 09 are
ZONE R1-B			
LOT SIZE	1625 M2		2070 M2
TOTAL FLOOR AREA	12795 SQ FT.	1188 M2	15374 SQ FT. 1428 M2
FLOOR SPACE RATIO	72 %		69%
LOT COVERAGE	9444 SQ FT.	876.8 M2	
LOT COVERAGE	58%		59%
OPEN SITE SPACE			
BUILDING HEIGHT A	29.92'	9 M	31.9' 9.6 M
BUILDING HEIGHT B	27.07'	8.29 M	31.9' 9.6 M
BUILDING HEIGHT C	27.52'	8.55M	31.9' 9.6 M
NUMBER OF STORIES	3		3
NUMBER OF PARKING STALLS	12		12
NUMBER OF BIKE STALLS	6 MIN.		
SETBACKS FRONT	20'	6 M	9 M
REAR	20'4"	6.2M	9 M
SIDE	13'	4.0 M	5.8-9.5M
COMBINED SIDEYARD	26'	8	
NUMBER OF UNITS	8		8
UNIT TYPE	3 BEDROOM		
HARD SURFACE AREA			
TOTAL LANDSCAPED AREA			

AVERAGE GRADE CALCULATIONS

BUILDING A

POINT A 27.6
POINT B 27.6
POINT C 24.6
POINT D 29

1094.5 26.2 AVE GR
BUILDING HEIGHT 8.4

BUILDING B

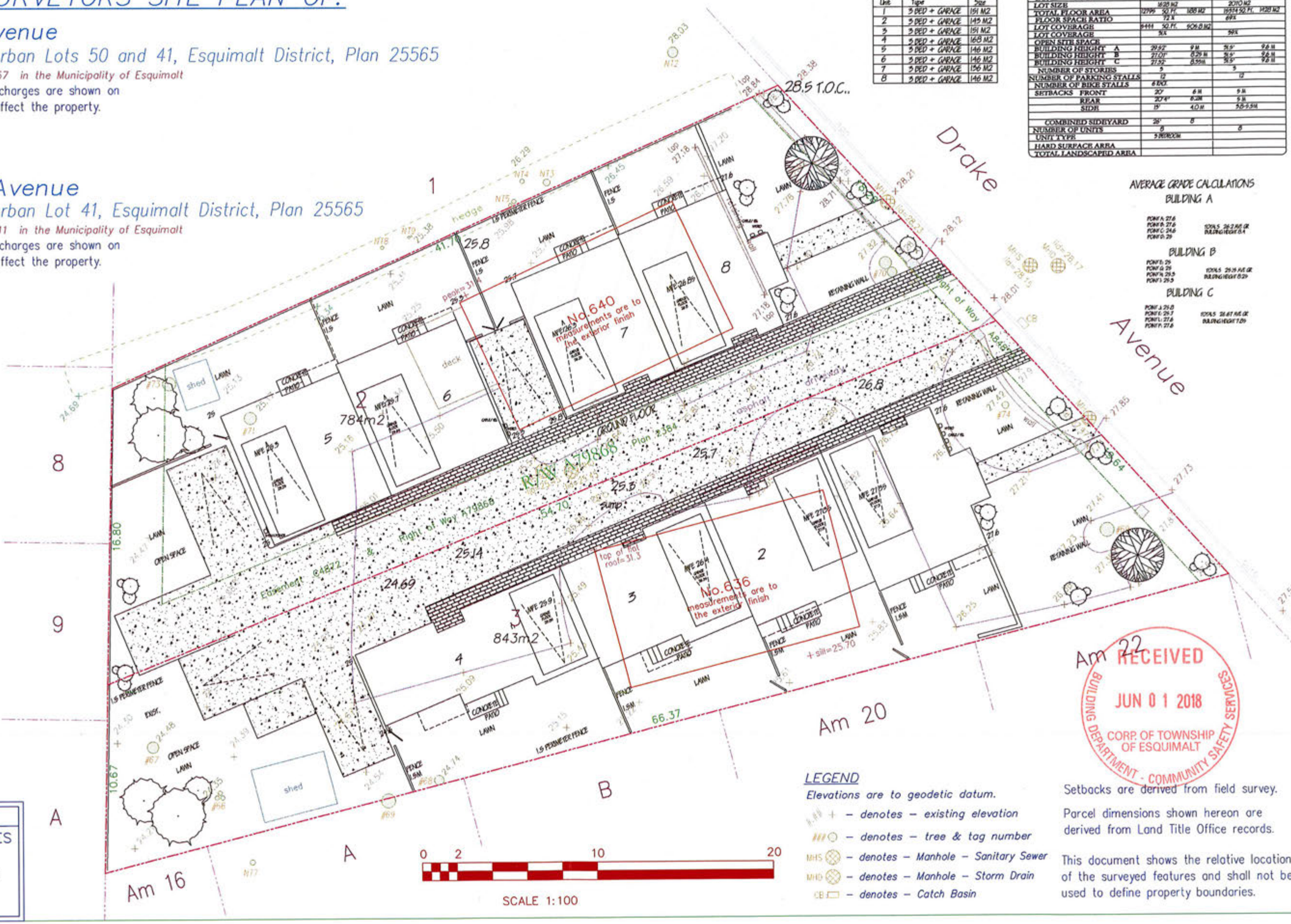
POINT E 29
POINT G 29
POINT H 29.3
POINT I 29.3

1094.5 29.15 AVE GR
BUILDING HEIGHT 8.29

BUILDING C

POINT J 29.8
POINT K 29.7
POINT L 27.6
POINT M 27.6

1094.5 28.67 AVE GR
BUILDING HEIGHT 7.89



RECEIVED
JUN 01 2018
BUILDING DEPARTMENT - COMMUNITY SAFETY SERVICES
CORP. OF TOWNSHIP OF ESQUIMALT

March 5, 2018

File : 12,537 – 19

POWELL & ASSOCIATES
B C Land Surveyors
250-2950 Douglas Street
Victoria, BC V8T 4N4
phone (250) 382-8855

LEGEND

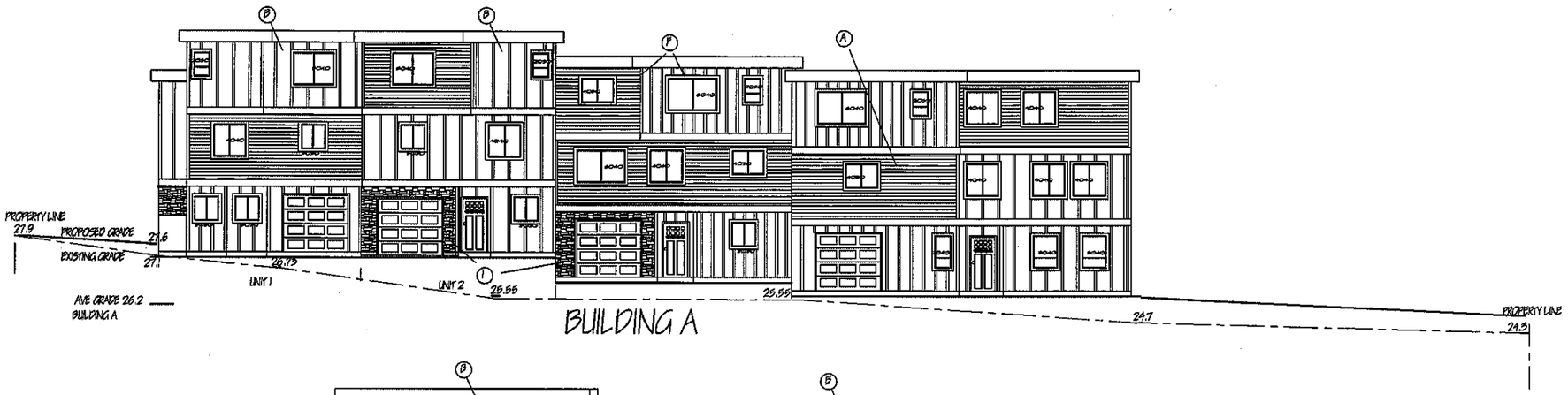
Elevations are to geodetic datum.

- *denotes – existing elevation*
- *denotes – tree & tag number*
- MHS *denotes – Manhole – Sanitary Sewer*
- MHD *denotes – Manhole – Storm Drain*
- CB *denotes – Catch Basin*

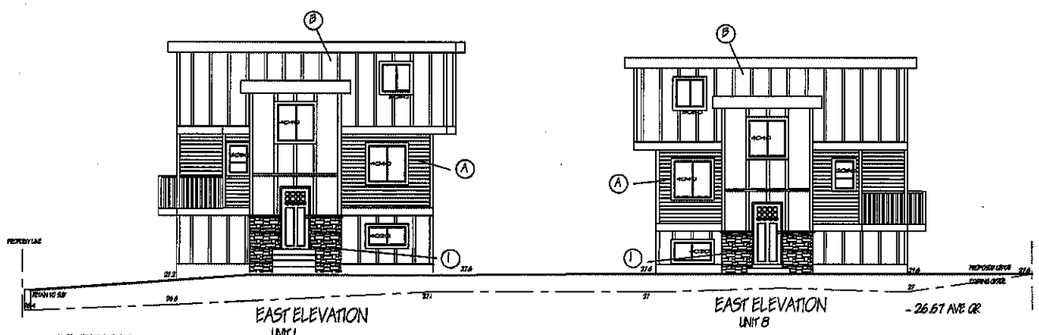
Setbacks are derived from field survey.

Parcel dimensions shown hereon are derived from Land Title Office records.

This document shows the relative location of the surveyed features and shall not be used to define property boundaries.

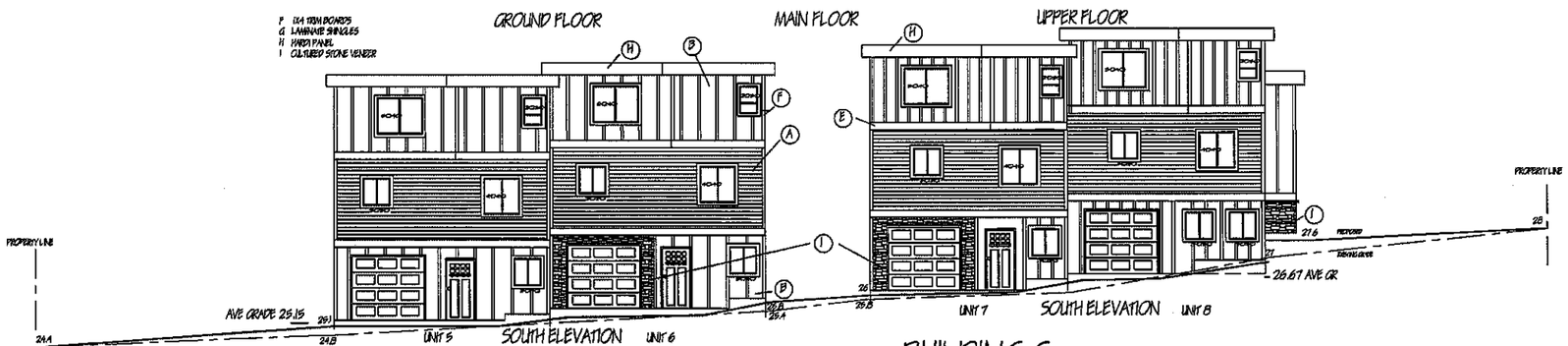


BUILDING A



BUILDING A

BUILDING C



BUILDING B

BUILDING C

No.	Revision/Issue	Date

Burrows Holdings Ltd
2614 Otter Pt Rd Sooke BC V9Z 0J1
250-642-5715

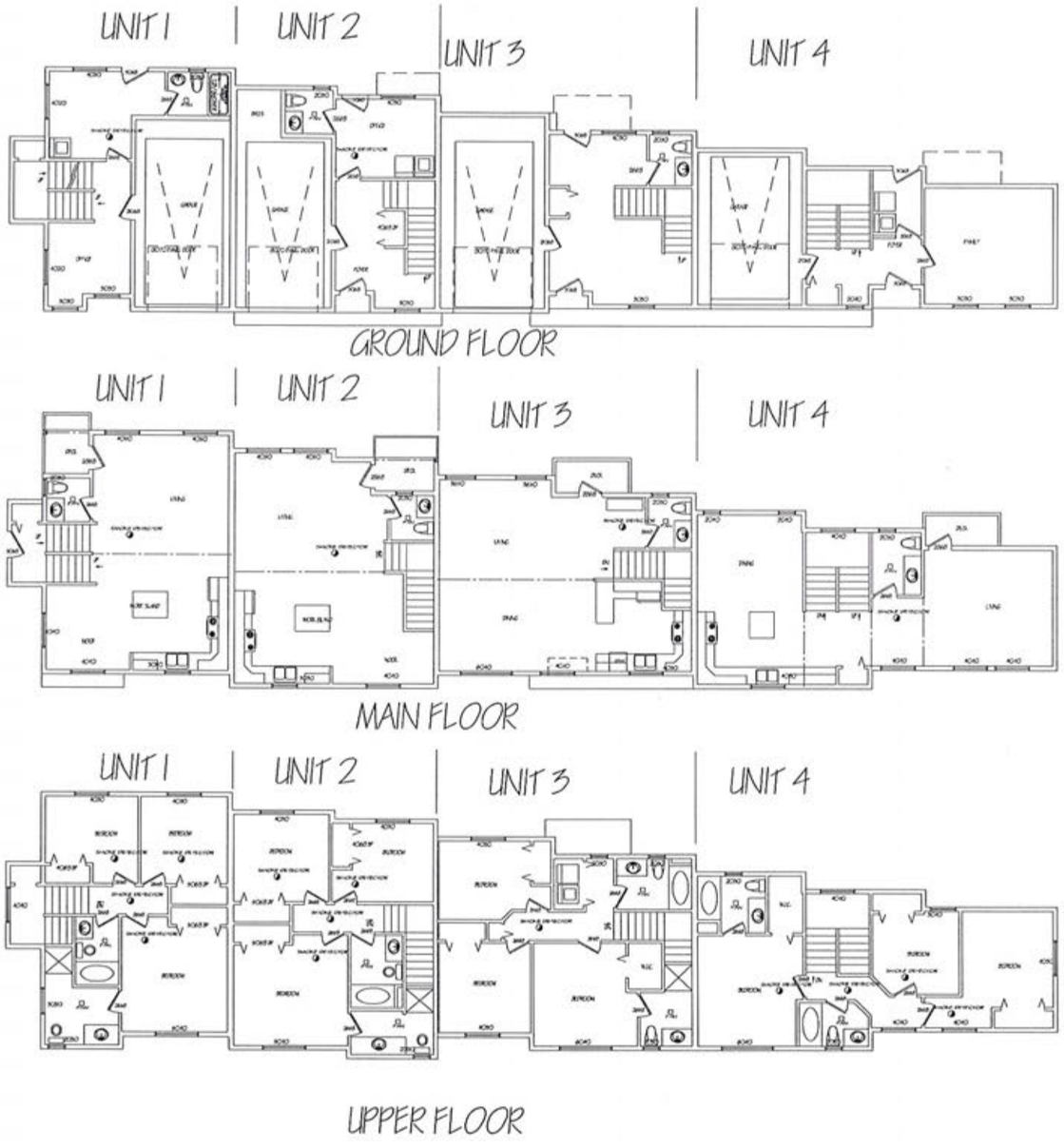
Project Name and Address

636-642 DRAKE AVE
DIMMA PACIFIC PROPERTIES LTD

Project	Robert's Mews	Sheet 7
Date	MAY 28/2018	
Scale	1:100	

REVDATE

USER



General Notes

1. Contractor to verify all dimensions and details prior to start of construction and notify designer of and errors or discrepencies.
2. Dimensions to take precedence over scaled drawings.
3. Exterior dimensions from face of sheathing/concrete.
4. Where Eng. is specified, all stuctural components shall be certified by by strucural engineer.
5. All work to be carried out using good construction practice and shall conform to local bylaws and current British Columbia Building Code 2006.
6. It is Owner/Contractors responsibility to ensure site is inspected for substandard soil conditions resulting in special foundation design.
7. Provide attic and crawl space ventilation and access in accordance with BCBC 2006 Part 9.
8. All wood framing to be #2 or better SPF unless otherwise noted.
9. Provide 8" min. clearance from grade to wood cladding materials.
10. All wood lintels and joists to conform to current wood council of BC span tables
11. Install smoke detectors in accordance with BCBC 2006 Part 9.
12. All wood plates in contact with concrete shall be pressure treated or shall be seperated by a sill gasket.
13. Concrete shall be min. 20 mPa for walls and 30 mPa for slabs.
14. Windows shall be installed according to details outlined by warranty provider.
15. All hand rails to be graspable and installed 36" above nosing.
16. All guard rails to be installed as per BCBC 2006.
17. Garage door shall come with self closer and weatherstripping to provide gas tight seal.
18. Provide heating and ventilation in accordance with local bylaws and BCBC 2006.
19. All Bedrooms to have min egress as detail in BCBC 2006.
20. Bathroom fans to be 1.5 sone 100 cfm and have 5" smoothwall ducting.

No.	Revision/Issue	Date

RECEIVED
APR 17 2018
CORP. OF TOWNSHIP OF ESQUIMALT
DEVELOPMENT SERVICES

Burrows Holdings Ltd
2614 Otter Pt Rd Sooke BC V9Z 0J1
250-642-5715

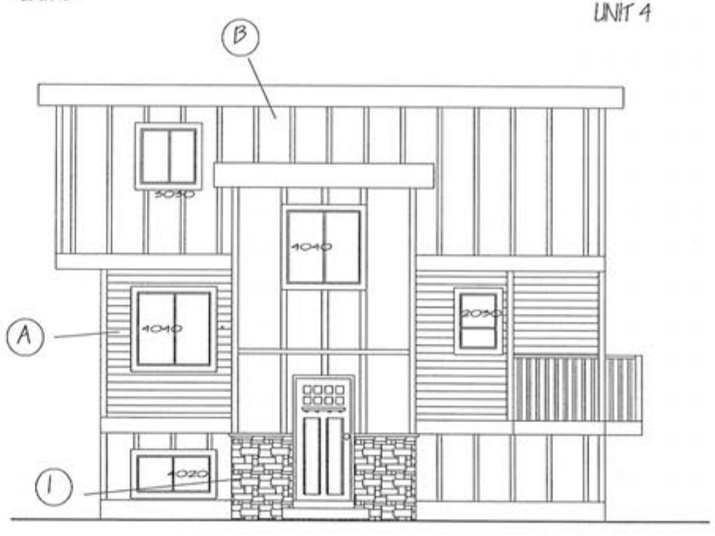
Project Name and Address
656-642 DONE AVE
DIMMA PACIFIC PROPERTIES LTD

Project: Robert's Mews	Sheet: 1
Date: April 10/ 2018	
Scale: 1/4" = 1'	

USER PNAME REVDATE

NORTH ELEVATION

EAST ELEVATION
UNIT 1



EAST ELEVATION
UNIT 8

A HARDIPLANK SIDING
B HARDIPANEL SIDING C/W 1X4 BATTENS
C HARDI SHINGLE
D HARDIPANEL SIDING C/W 1X2 BATTENS
E 2X10 COMB FACE
F 1X4 TRIM BOARDS
G LAMINATE SHINGLES
H HARDI PANEL
I CULTURED STONE VENEER

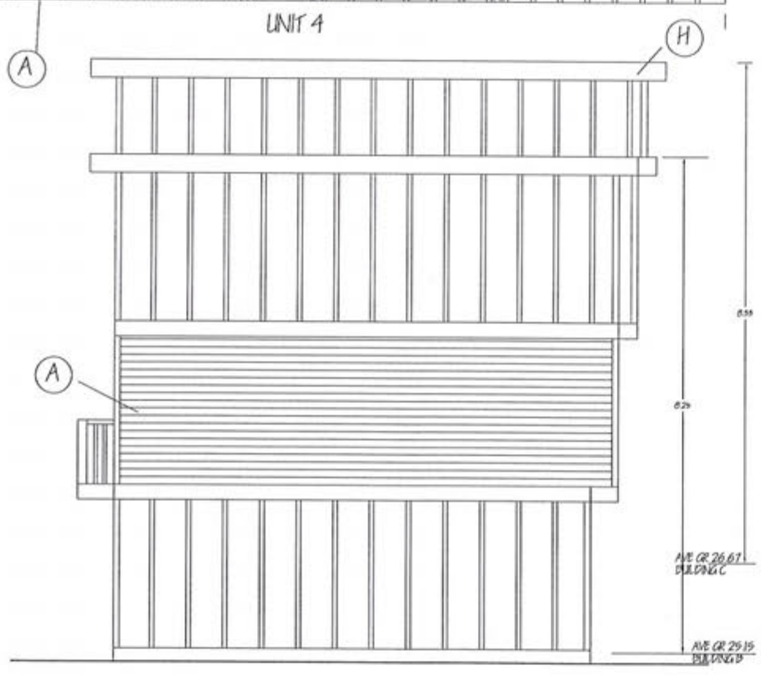
No.	Revision/Issue	Date

Burrows Holdings Ltd
2614 Otter Pt Rd Sooke BC V9Z 0J3
250-642-5715

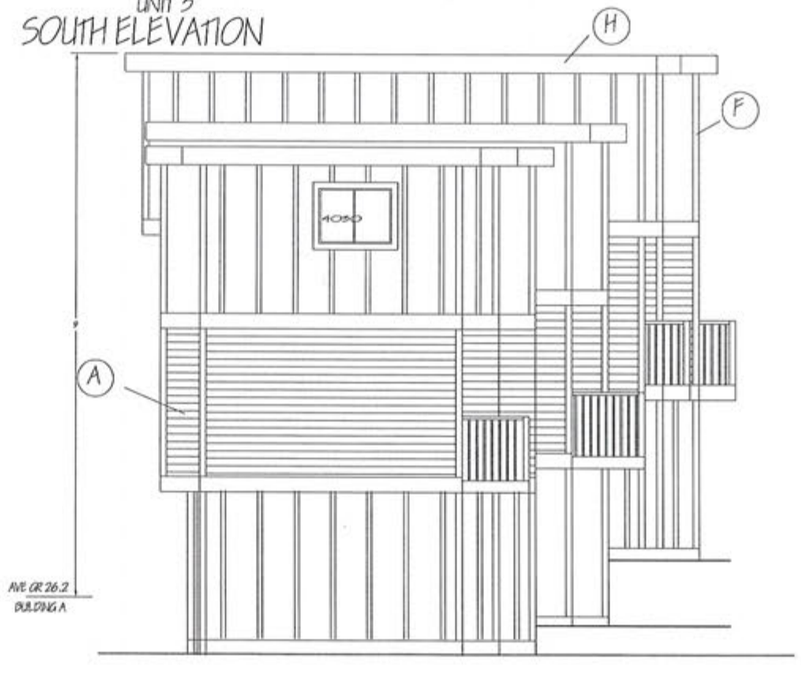
Project Name and Address
636-642 DRAKE AVE
EMMA PACIFIC PROPERTIES LTD

Project: Robert's News
Date: April 10/ 2018
Scale: 1/4" = 1'
Sheet: 2

USER FNAME REVDATE



WEST ELEVATION UNIT 5



WEST ELEVATION UNIT 4

SOUTH ELEVATION

A HARDIPLANK SIDING
B HARDIPANEL SIDING C/ W 1X4 BATTENS
C HARDI SHINGLE
D HARDIPANEL SIDING C/ W 1X2 BATTENS
E 2X10 COMB FACE
F 1X4 TRIM BOARDS
G LAMINATE SHINGLES
H HARDI PANEL
I CULTURED STONE VENEER

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DEVELOPMENT SERVICES

No.	Revision/Issue	Date

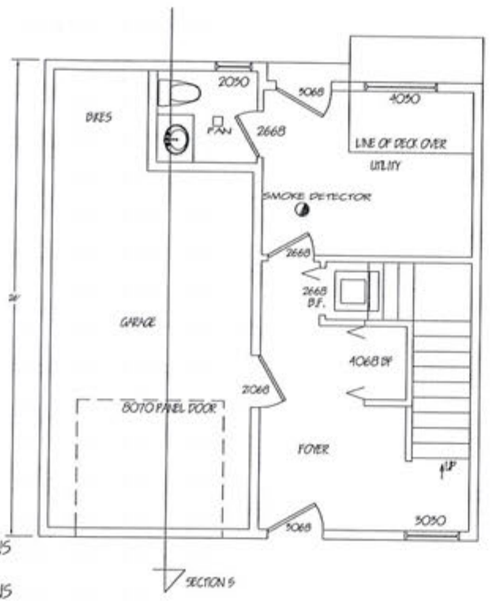
Burnaco Holdings Ltd
2614 Otter Pt Rd Sooke BC V9Z 0J1
250-642-5715

Project Name and Address
656-642 DRAKE AVE
DIMMA PACIFIC PROPERTIES LTD

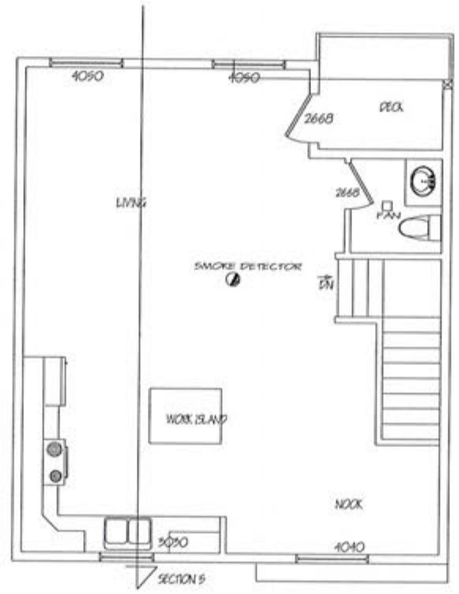
Project Robert's Mews
Date April 10/ 2018
Scale 1/4" = 1'
Sheet 3

FNAME
REVDATE
USER

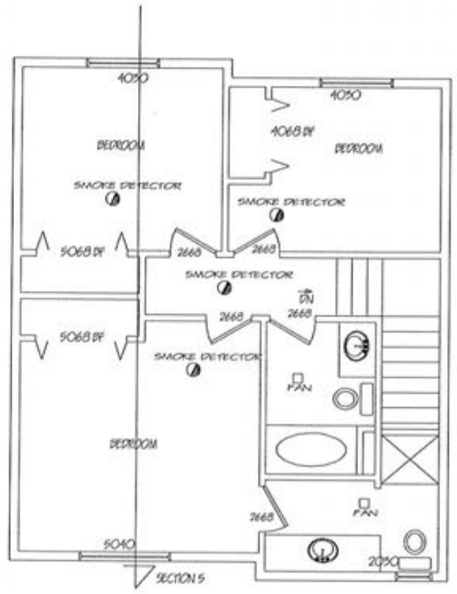
UNIT 5 & 6



GROUND FLOOR



MAIN FLOOR



UPPER FLOOR

A HARDIPLANK SIDING
B HARDIPANEL SIDING C/ W 1X4 BATTENS
C HARDI SHINGLE
D HARDIPANEL SIDING C/ W 1X2 BATTENS
E 2X10 COMB FACE
F 1X4 TRIM BOARDS
G LAMINATE SHINGLES
H HARDI PANEL
I CULTURED STONE VENEER

UNIT 5 SOUTH ELEVATION UNIT 6

UNIT 7 SOUTH ELEVATION UNIT 8

No.	Revision/Issue	Date

Burrows Holdings Ltd
2614 Otter Pt. Rd Sooke BC V9Z 0J8
250-642-5719

Project Name and Address
636-642 DRAKE AVE
DAMMA PACIFIC PROPERTIES LTD

Project: Robert's Mews
Date: April 10/ 2018
Scale: 1/4" = 1'
Sheet: 4

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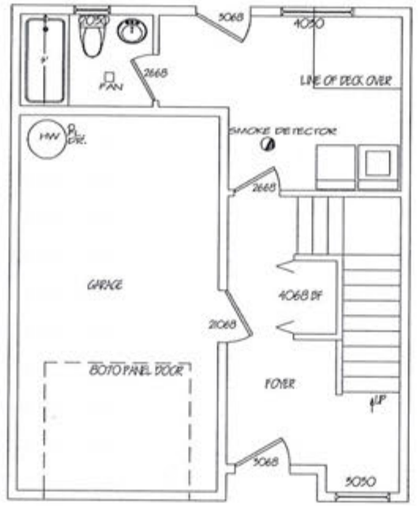
CORP. OF TOWNSHIP OF ESQUIMALT
DEVELOPMENT SERVICES

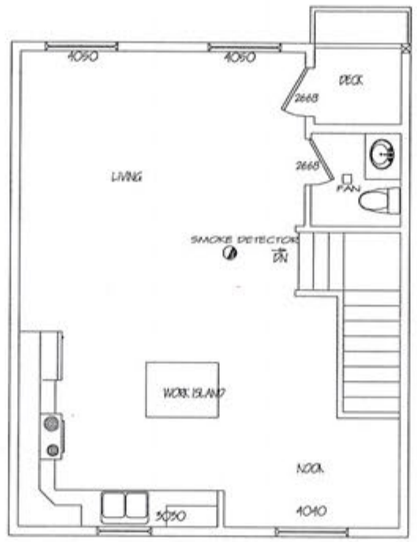
USER REVDATE FNAME

UNIT 7

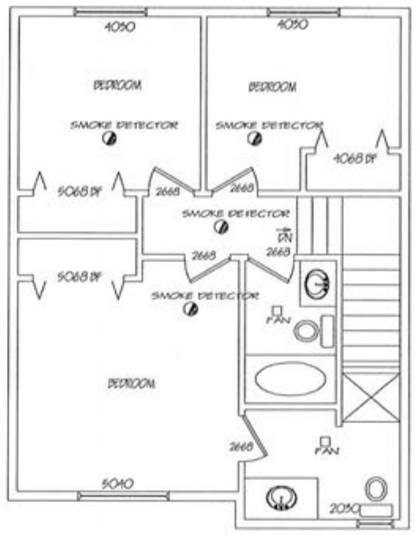
- A HARDIPLANK SIDING
- B HARDIPANEL SIDING C/W 1X4 BATTENS
- C HARDI SHINGLE
- D HARDIPANEL SIDING C/W 1X2 BATTENS
- E 2X10 COMB FACE
- F 1X4 TRIM BOARDS
- G LAMINATE SHINGLES
- H HARDI PANEL
- I CULTURED STONE VENEER



GROUND FLOOR



MAIN FLOOR



UPPER FLOOR

UNIT 8 NORTH ELEVATION UNIT 7

UNIT 6 NORTH ELEVATION UNIT 5

No.	Revision/Issue	Date

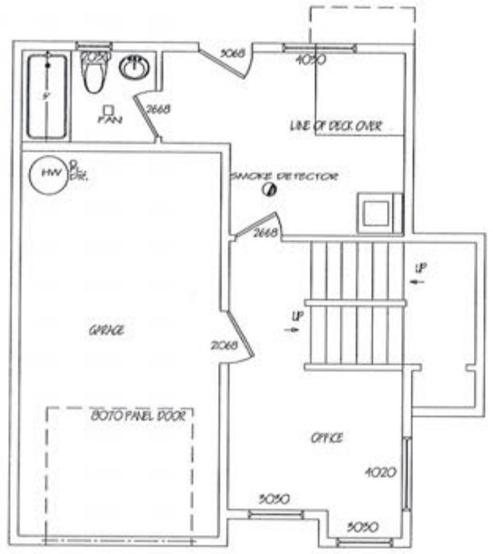
Burrows Holdings Ltd
2614 Otter Pt Rd Sooke BC V9Z 0J8
250-642-5715

Project Name and Address
636-642 DRAKE AVE
DIMMA PACIFIC PROPERTIES LTD

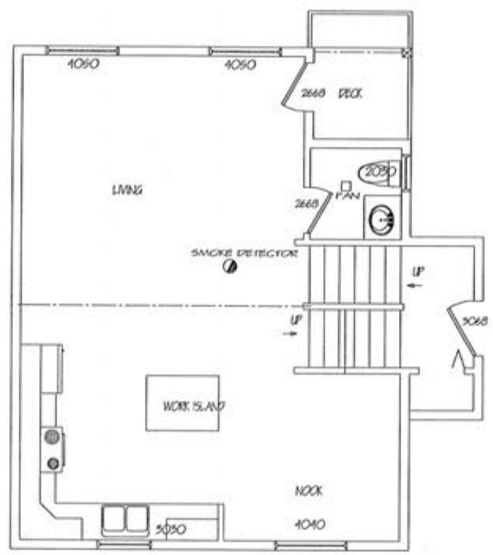
Project	Robert's Mews	Sheet 5
Date	April 10/2013	
Scale	1/4" = 1'	

RECEIVED
APR 17 2013
CORP. OF TOWNSHIP OF ESQUIMALT
DEVELOPMENT SERVICES

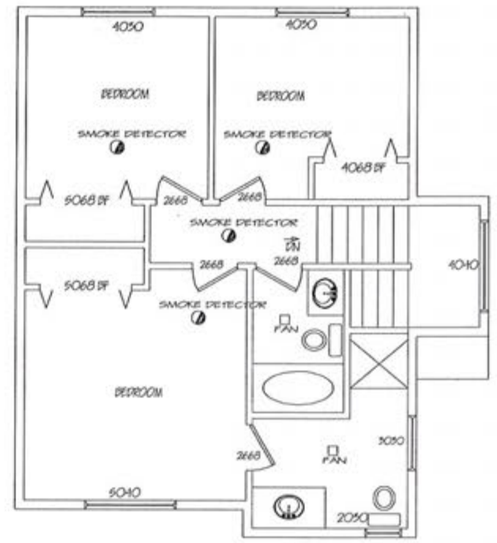
USER FNAME REVDATE



GROUND FLOOR

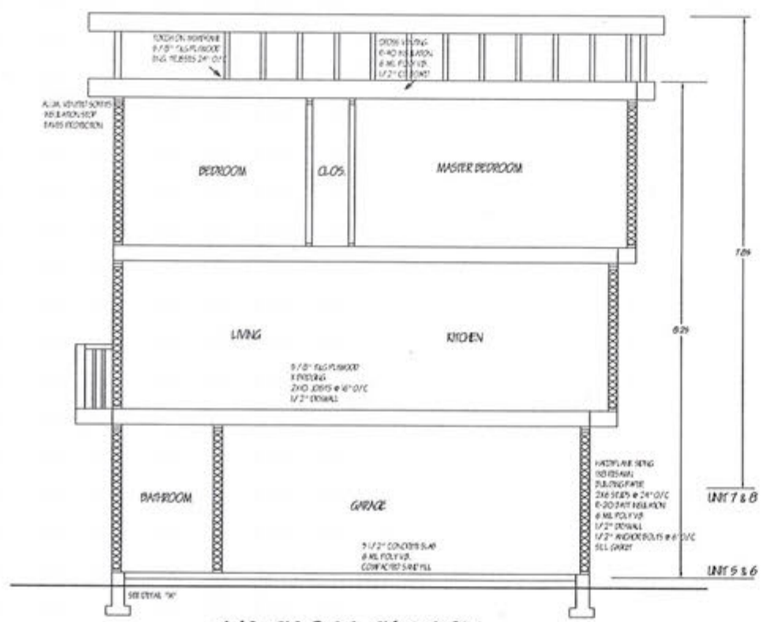


MAIN FLOOR



UPPER FLOOR

UNIT 8



TYP CROSS SECTION UNIT 5

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DEVELOPMENT SERVICES

No.	Revision/Issue	Date

Burrows Holdings Ltd
2684 Otter Pt Rd Sooke BC V9Z 0J1
250-642-5715

Project Name and Address
656-642 DRAKE AVE
DIMMA PACIFIC PROPERTIES LTD

Project	Robert's Mews
Date	April 10/2018
Scale	1/4" = 1'
Sheet	6

FNAME
REVDATE
USER

LEGEND

Elevations are to geodetic datum.

+ – denotes – existing elevation

O – denotes – tree & tag number

MHS – denotes – Manhole – Sanitary Sewer

MHD – denotes – Manhole – Storm Drain

CB – denotes – Catch Basin

LEGEND

LARGE DECIDUOUS TREES:
QUERCUS COCCINEA (SCARLET OAK),
ACER RUBRUM (RED MAPLE),
SIZE 5.0 CM. CAL., QUANTITY - 8.

SMALL DECIDUOUS TREES:
ACER CIRCINATUM (VINE MAPLE),
SYRINGA VULGARIS (LILAC),
MAGNOLIA X BETTY (BETTY MAGNOLIA)
SIZE 2.5 M. HT., QUANTITY- 4.

MEDIUM SHRUBS:
RHODODENDRON SP. (RHODODENDRON),
VACINIUM OVATUM (EVERGREEN HUCKLEBERRY),
PIERIS JAPONICA (JAPANESE PIERIS),
MAHONIA AQUIFOLIUM (OREGON GRAPE),
SKIMMIA JAPONICA (JAPANESE SKIMMIA),
SIZE #2 & #3 POTS, QUANTITY - 101.

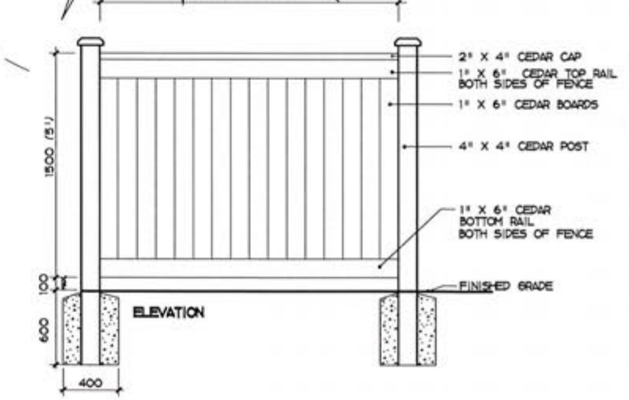
SMALL SHRUBS:
MAHONIA NERVOSA (DWARF MAHONIA),
CORNUS KELSEYII (DWARF REDTWIG DOGWOOD),
LAVANDULA SPICA (LAVANDER),
POLYSTICHUM MUNITUM (SWORD FERN),
FESTUCA GLAUCA (ORNAMENTAL GRASS)
SIZE #1 POTS, QUANTITY - 157.

GROUND COVER:
ARCTOSTAPHYLOS UVA-URSI "VANCOUVER JADE"
(KINNIKINNICK),
SIZE 10 CM. POT , SPACE 45 CM. O.C.

CRITICAL ROOT ZONE
TREE TAG
EXISTING CONIFEROUS TREE TO BE RETAINED
EXISTING DECIDUOUS TREES TO BE RETAINED
EXISTING TREES TO BE REMOVED
EXISTING SPOT ELEVATIONS
PROPOSED SPOT ELEVATIONS

NOTES

- SEE ARBORIST REPORT PREPARED BY TALBOT MACKENZIE & ASSOCIATES, DATED APRIL 2018 FOR TREE RESOURCE INFORMATION.
- NEW ON SITE PLANTING AREAS TO BE IRRIGATED WITH A WATER EFFICIENT AUTOMATIC UNDERGROUND IRRIGATION SYSTEM.
- PLANTING TO BE INSTALLED TO THE STANDARDS IDENTIFIED IN THE BRITISH COLUMBIA LANDSCAPE STANDARD - 2012 EDITION.



WOOD PERIMETER FENCE
NTS

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DEVELOPMENT SERVICES

north

SHEET TITLE: LANDSCAPE PLAN

DRAKE AVENUE TOWNHOUSES
636 - 640 DRAKE AVENUE, VICTORIA, B.C.

KEITH N. GRANT LANDSCAPE ARCHITECTURE LTD.

NO.	DATE (DD/MM/YR)	DESCRIPTION & REVISIONS
1	18/04/16	SUBMITTED FOR DEVELOPMENT PERMIT

SCALE: 1:100 PLOT: 1 = 100

DRAWN: K. GRANT
CHECKED:
DATE: APRIL 11, 2018
PROJECT NO: 570 18 01