Development and Subdivision Covenant (Section 219 Covenant)

THIS AGREEMENT	dated for	reference	the	day of	,	202*.

BETWEEN:

1237932 BC LTD.

(Incorporation No. BC1237932)

a company incorporated under the laws of British Columbia, and having a registered office at 4566 Cordova Bay Road, Victoria, BC V8X 3V5

(the "Transferor")

OF THE FIRST PART

AND:

CORPORATION OF THE TOWNSHIP OF ESQUIMALT,

a municipality incorporated under the laws of British Columbia, and having an office at 1229 Esquimalt Road, Esquimalt, BC V9A 3P1

(the "Transferee")

OF THE SECOND PART

WHEREAS:

A. The Transferor is the registered owner in fee-simple of those lands and premises located within the Township of Esquimalt, in the Province of British Columbia, that are legally described as:

PID 030-353-556 LOT 1 SECTION 10 ESQUIMALT DISTRICT PLAN EPP78715

(the "Lands").

- B. The Transferee is a municipality incorporated under the laws of the Province of British Columbia.
- C. Under the terms of a Purchase and Sale Agreement dated for reference October 21, 2020, the Transferee agreed to sell, and the Transferor agreed to purchase, the Transferee's right, title, and interest in and to the Lands on terms and conditions which included the Transferor's agreement to enter into and register this agreement against the title to the Lands, as a covenant in favour of the Transferee pursuant to section 219 of the Land Title Act.
- D. In order to permit the use and development of the Lands as contemplated under this Agreement, the Council for the Corporation of the Township of Esquimalt has amended the Township of Esquimalt Zoning Bylaw, 1992, No. 2050, as it applies to the Lands, as

- provided for in the Township of Esquimalt Zoning Bylaw, 1992, No. 2050, Amendment Bylaw No. 3042.
- E. Section 219 of the *Land Title Act* provides that a covenant, whether of negative or positive nature, in respect of the use of land or the use of a building on or to be erected on land, or that land is not to be built on or subdivided except in accordance with the covenant, may be granted in favour of the Transferee and may be registered as a charge against the title to the Lands.

NOW THEREFORE THIS AGREEMENT WITNESSES that under Section 219 of the *Land Title Act*, and in consideration of the premises and the mutual covenants and agreements contained herein, and the sum of TEN (\$10.00) DOLLARS of lawful money of Canada now paid to the Transferor by the Transferee (the receipt and sufficiency of which is hereby acknowledged), and for other good and valuable consideration the parties covenant and agree each with the other as follows:

1.0 INTERPRETATION

1.1 In this Agreement:

- (a) "Affordable Rental Unit" has the meaning ascribed to that term in the Housing Agreement;
- (b) "Agreement" means this Agreement and all Schedules to this Agreement;
- (c) "Building Permit" means a building permit issued or to be issued pursuant to the Township of Esquimalt Building Regulation Bylaw, 2017, No. 2899, authorizing construction of the Housing Project;
- (d) "Bylaws" means the bylaws of the Strata Corporation;
- (e) "Development Permit" means means the development permit for the Housing Project issued by the Township of Esquimalt under Division 7 of Part 14 of the Local Government Act;
- (f) "Development Plan" means the development plans for the Housing Project that are attached to this Agreement as Schedule "A";
- (g) "Director of Development Services" means the Director of Development Services for the Corporation of the Township of Esquimalt, as appointed from time to time:
- (h) "Director of Engineering and Public Works" means the Director of Engineering and Public Works for the Corporation of the Township of Esquimalt, as appointed from time to time:
- (i) "Dwelling Unit" has the same meaning as under the Zoning Bylaw;

- "Effective Date" means the day on which this Agreement is registered against title to the Lands in the Land Title Office:
- (k) "GVHS" means the Greater Victoria Housing Society;
- (I) "GVHS Lands" means the lands immediately to the east of the Lands, with the civic address of 874 Fleming Street, Esquimalt, and which are legally described as:

PID 002-900-246

Lot B, Section 10, Esquimalt District, Plan 25267

- (m) "Housing Agreement" means the housing agreement pursuant to section 483 of the Local Government Act that applies to the Lands, as authorized by [insert title and number of authorizing bylaw];
- (n) "Housing Project" means the housing development shown on the Development Plan, consisting of a building containing 42 dwelling units that will be rental Dwelling Units, and 3 Dwelling Units that may be owner-occupied, and includes all parking, services, utilities, heating, ventilating, air-conditioning, plumbing, electrical and mechanical systems and equipment, and landscaping, required for and connected with the Housing Project;
- (o) "Housing Project Frontage Works" means the hammer-head vehicle turnaround and pathway within and adjoining the Fleming Street road allowance, as described in Schedule "D" to this Agreement, including all items listed in the cost estimate prepared by CALID Services Ltd. that is attached to this Agreement as part of Schedule "D", the final design and construction of which shall conform to the Design and Construction Specifications prescribed under the Township of Esquimalt Subdivision and Development Control Bylaw 1997, No. 2175;
- (p) "Land Title Act" means the Land Title Act, R.S.B.C. 1996, Chapter 250;
- (q) "Local Government Act" means the Local Government Act, S.B.C. 2015, Chapter 1;
- (r) "Market Affordable Rental Unit" has the meaning ascribed to that term in the Housing Agreement;
- (s) "Market Rental Unit" has the meaning ascribed to that term in the Housing Agreement;
- (t) "Occupancy Permit" means an occupancy permit issued or to be issued by a Building Official under the authority of the Township of Esquimalt Building Regulation Bylaw, 2017, No. 2899;
- (u) "Owner-occupied Units" means the three (3) dwelling units within the Housing Project that may be owner-occupied, and that will each be shown as a separate

- Strata Lot on the strata subdivision plan that is referred to in section 5.2 of this Agreement;
- (v) "Parking Space" has the same meaning as under the Township of Esquimalt Parking Bylaw, 1992, No. 2011;
- (w) "Rental Units" means the 42 Dwelling Units within the Housing Project that are to be used and occupied as rental accommodation throughout the Term, as required under the Housing Agreement;
- (x) "Replacement Sewer Main" means the new sewer main to be constructed by the Transferor as referred to in section 10.1 of this Agreement;
- (y) "Strata Corporation" means a strata corporation formed upon the filing of the Strata Plan;
- (z) "Strata Lots" means the strata lots in the Strata Plan;
- (aa) "Strata Plan" means a strata plan under the Strata Property Act:
- (bb) "Strata Property Act" means the Strata Property Act, S.B.C. 1998, c. 43;
- (cc) "Subdivide" means to divide, apportion, consolidate or subdivide the Lands, or the ownership or right to possession or occupation of the Lands, into two or more lots, Strata Lots, parcels, parts, portions or shares, whether by plan, descriptive words or otherwise, under the Land Title Act or the Strata Property Act:
- (dd) "Tenant" means a tenant of a Rental Unit:
- (ee) "Term" means the period of time commencing on the day that this Agreement is registered in the Land Title Office, and ending on the day that is twenty-five years after the day on which the Occupancy Permit for the Housing Project is issued;
- (ff) "Tree Protection Bylaw" has the meaning given in section 7.1;
- (gg) "Transportation Demand Management Measures" or "TDM Measures" means the measures to be implemented by the Transferor to reduce the demand for parking generated by the Housing Development, as listed in Schedule "B" to this Agreement; and
- (hh) "Zoning Bylaw" means the Township of Esquimalt Zoning Bylaw, 1992, No. 2050, as amended or replaced from time to time.
- 1.2 The following Schedules are attached to and form part of this Agreement:
 - (a) Schedule A Development Plan;
 - (b) Schedule B TDM Measures:

- (c) Schedule C Landscaping Plans;
- (d) Schedule D Housing Project Frontage Works;
- (e) Schedule E Section 219 Covenant No Separate Sale

1.3 In this Agreement:

- (a) a reference to a "Part" of this Agreement means the provisions of this Agreement that are contained under a separately numbered subject heading, and a reference to a "section" or "sub-section" together with a number means the provisions of this Agreement that are contained within the section or sub-section that has the corresponding number;
- (b) a reference to an enactment (including without limitation a bylaw of the Corporation of the Township of Esquimalt) is a reference to that enactment as consolidated, revised, amended, re-enacted or replaced from time to time, unless otherwise expressly provided;
- (c) any act, decision, determination, consideration, consent or exercise of discretion by a party, or other person, as provided in this Agreement must be performed, made or exercised acting reasonably.

2.0 COVENANT AS TO USE AND DEVELOPMENT OF THE LANDS

- 2.1 The Transferor covenants and agrees with the Transferee that it shall not use or permit the use of the Lands, or construct any building or other structure on the Lands, or subdivide the Lands, except in strict accordance with this Agreement.
- 2.2 Each covenant, agreement or obligation of the Transferor under this Agreement is to be construed as a covenant granted in favour of the Transferee pursuant to section 219 of the Land Title Act.

3.0 COMPLIANCE WITH BYLAWS AND REGULATORY REQUIREMENTS

- 3.1 The obligations of the Transferor under this Agreement are in addition to and are not intended to vary or abrogate the provisions of any municipal bylaws that apply to the development and subdivision of the Lands. Accordingly, the Transferor agrees that it shall develop the Lands in compliance with all bylaws of the Corporation of the Township of Esquimalt concerning land development, zoning, subdivision and building construction.
- 3.2 The Transferor acknowledges and agrees that the Corporation of the Township of Esquimalt, and its officers and employees, may delay, withhold or refuse the issuance of a permit or approval under one or more of the bylaws referred to in section 3.1, in the event that a permit or approval sought by the Transferor is not consistent with the restrictions on the use of subdivision of the Lands under this Agreement, or with the restrictions on construction of buildings or structures on the Lands under this Agreement.

4.0 HOUSING PROJECT

4.1 The Transferor covenants and agrees that no buildings or structures shall be constructed

- on the Lands except for the Housing Project.
- For certainty, the Housing Project must include the following as Rental Units, which shall be used and occupied in accordance with the terms of the Housing Agreement:
 - thirty (30) one-bedroom Rental Units, of which ten must be Affordable Rental Units, ten must be Market Affordable Rental Units, and ten may be Market Rental Units;
 - (b) nine (9) two-bedroom Rental Units of which three must be Affordable Rental Units, three must be Market Affordable Rental Units, and three may be Market Rental Units; and
 - (c) three (3) three-bedroom Rental Units of which one must be an Affordable Rental Unit, one must be a Market Affordable Rental Unit, and one may be a Market Rental Unit.
- 4.3 The Housing Project shall be constructed substantially as shown on the Development Plan, and in accordance with the terms and conditions of the Development Permit and the Building Permit.

5.0 SUBDIVISION

- 5.1 The Transferor covenants and agrees that the Lands and the Housing Project shall not be subdivided prior to or during the Term except as provided in sections 5.2 and 5.3.
- 5.2 As the sole exception to the prohibition against subdivision under section 5.1, but subject to section 5.3, prior to the issuance of an Occupancy Permit for the Housing Project, and before the Housing Development or any portion of the Housing Agreement is occupied, the Transferor may deposit in the Land Title Office a Strata Plan pursuant to the Strata Property Act, that subdivides the Housing Project into the following six Strata Lots:
 - (a) all of the Affordable Rental Units are contained within a single Strata Lot;
 - (b) all of the Market Affordable Rental Units are contained within a single Strata Lot;
 - (c) all of the Market Rental Units are contained within a single Strata Lot; and
 - (d) each of the three Owner-occupied Units is a separate Strata Lot.
- 5.3 The Transferor must not deposit the Strata Plan contemplated under section 5.2 unless:
 - (a) the Transferor first provides the following to the Director of Development Services for his or her review and approval, acting reasonably:
 - the Schedule of Voting Rights to be filed with the Strata Plan, which must provide that the owner(s) of the Strata Lots within which the Rental Units are situated has at least 50% of the total number of votes in the Strata Corporation;
 - (ii) evidence that the Strata Plan and/or the Bylaws, subject to the Strata

Property Act, establish mechanisms or measures under which:

- (A) owners of the Owner-occupied Units may not interfere with the use and enjoyment of the Affordable Rental Units, Market Affordable Rental Units and Market Rental Units as Rental Units;
- (B) property or amenities used exclusively by owners of certain Strata Lots are designated as limited common property for such Strata Lots; and
- (C) owners of all the Strata Lots share in the payment of costs common to and payable by all such owners.

with any tie vote possibly to be resolved by mediation or arbitration as provided in the Bylaws; and

- (iii) evidence that the Bylaws do not prohibit the rental of any Dwelling Unit within the Housing Development;
- (b) concurrently with the deposit of the Strata Plan, the Transferor enters into and registers a covenant pursuant to section 219(2)(d) of the Land Title Act in favour of the Transferee, in the form attached as Schedule "E" to this Agreement, under which none of the Strata Lots comprising the Affordable Rental Unit, Market Affordable Rental Unit and Market Rental Unit may be sold or otherwise transferred separately to different owners until after the end of the Term.
- The Transferor acknowledges that the provisions of section 242 of the Strata Property Act will apply in the event that the deposit of a Strata Plan for the Housing Development is delayed until after the Housing Development or any part thereof is occupied, and that nothing in this Agreement shall prejudice or affect the discretion of the Approving Authority (as defined in section 242 of the Strata Property Act) in the exercise of its powers and functions under the Strata Property Act.

6.0 TRANSPORTATION DEMAND MANAGEMENT MEASURES

- 6.1 The Transferor acknowledges under the terms of the Zoning Bylaw, as it applies to the use of the Lands as a Housing Project, the number of Parking Spaces that the Transferor is required to provide on the Lands under the Township of Esquimalt Parking Bylaw, 1992, No. 2011 has been reduced on the understanding that the Transferor has agreed, throughout the Term, to provide the Transportation Demand Management measures required under this Agreement, in order to reduce the demand for vehicle parking generated by the Housing Project. Accordingly, throughout the Term the Transferor must provide for the benefit and use of the tenants of the Rental Units, without charge except as expressly permitted under Schedule "B", the TDM Measures described in Schedule "B" to this Agreement.
- Before an Occupancy Permit for the Housing Development is issued, the Transferor must provide the Director of Development Services with evidence, satisfactory to the Director, that the Transferor has made all necessary arrangements for the provision of the TDM Measures in accordance with this Agreement.

Upon written request of the Director of Development Services at any time during the Term, the Transferor must provide evidence, satisfactory to the Director, that the TDM Measures continue to be available for the use of the Tenants of the Housing Project in accordance with the requirements of this Agreement.

7.0 TREE REMOVAL

7.1 The Transferor covenants and agrees that no trees shall be cut or removed from the Lands except as permitted under the provisions of the Corporation of the Township of Esquimalt Tree Protection Bylaw, 2015, No. 2837 (the "Tree Protection Bylaw"). Without limiting the foregoing, the Transferor shall apply for and obtain a permit under the Tree Protection Bylaw before cutting or removing any trees on the Lands. The Transferor further covenants and agrees that it shall fulfill and satisfy all conditions and requirements for the issuance of a permit under the Tree Protection Bylaw, including but not limited to, in the case of the provisions of the Tree Protection Bylaw concerning Replacement Trees, the payment of a financial contribution to the Township of Esquimalt's tree replacement and maintenance fund, in the amount determined by the Township's Director of Parks and Recreation Services.

8.0 VISITOR PARKING

8.1 The Transferor must provide and maintain on the Lands a total of five parking stalls for the exclusive use of visitors to the Housing Project (the "Visitor Parking Stalls"). The design and dimensions of the Visitor Parking Stalls shall be in accordance with the requirements of the Corporation of the Township of Esquimalt Parking Bylaw, 1992, No. 2011. Without limiting the foregoing, at all times the Visitor Parking Stalls must be clearly designated and marked as "Visitor Parking" through the use of signs and pavement markings.

9.0 LANDSCAPING

- 9.1 Prior to the issuance of an Occupancy Permit for the Housing Development, the Owner must complete, to the satisfaction of the Director of Development Services, the landscaping of the Lands, including without limitation the landscaping on the rooftop of the Housing Development, in accordance with the requirements of the Development Permit, and in accordance with the Landscaping Plans that are attached to this Agreement as Schedule "C".
- 9.2 Throughout the Term, the Owner must maintain the landscaping features shown on the plans that are attached as Schedule "C", to the standards of a reasonable owner of comparable property, and must not remove or alter any of those features without the written approval of the Transferee, which approval may require an application for an amendment to the Development Permit. Without limiting the foregoing, the Owner must provide, and throughout the Term must maintain the following landscaping features in support of enhancing bird and pollinator habitat:
 - in the north and east gardens, the native shrubs and trees show on the Landscaping Plans, including Western Hemlock, Pacific Crab-apple, Highbush Cranberry and June Plum, Western Sword Fern and Deer Fern, and Evergreen Huckleberry and Bunchberry;

- (b) the raised planters along the pedestrian walkway, with native perennials and ornamental grasses; and
- (c) the raised planters on the rooftop garden, planted with native sedums and pollinator plants, as well as three beehive boxes.

10.0 FLEMING STREET WORKS AND SERVICES AND OTHER SERVICING REQUIREMENTS

- 10.1 As a condition of the development of the Housing Project on the Lands, the Transferor agrees to construct and install the Housing Project Frontage Works, at the sole cost of the Transferor. The Transferor further covenants and agrees, as a condition of the development of the Housing Project on the Lands, that the Transferor shall at its sole cost replace the existing sanitary sewer main that extends from Lampson Street to Fleming Street with a Replacement Sewer Main:
 - (a) that is of sufficient capacity to provide sanitary sewer service to both the Lands and the GVHS Lands;
 - (b) the design and construction of which conforms to the Design and Construction Specifications prescribed under the Township of Esquimalt Subdivision and Development Control Bylaw 1997, No. 2175.
- 10.2 The Transferor further covenants and agrees that no buildings or structures shall be constructed on the Lands until the Transferor has entered into an agreement with the Transferee, the terms and conditions of which shall be substantially as provided in the Transferee's standard form of agreement under section 509 of the Local Government Act, and which terms and conditions shall include:
 - (a) that the Transferor shall provide a security deposit for the construction of the Housing Project Frontage Works and the Replacement Sewer Main, in an amount and in a form approved by the Director of Engineering and Public Works;
 - (b) that the Transferor shall construct and install the Housing Project Frontage Works and the Replacement Sewer Main by a date specified in the agreement; and
 - that if the Transferor is in default of its obligation to construct and install the Housing Project Frontage Works and the Replacement Sewer Main, the security deposit provided under the agreement shall be forfeited to the Transferee.
- 10.3 The Transferor further covenants and agrees that no buildings or structures shall be constructed on the Lands until the Transferor has provided evidence to the satisfaction of the Director of Engineering and Public Works that the Transferor has made arrangements satisfactory to the City of Victoria for the construction of a water main extending from Lampson Street to Fleming Street that is of sufficient capacity to provide water service to both the Lands and the GVHS Lands.

11.0 PUBLIC BODY

11.1 Nothing contained or implied within this Agreement shall prejudice or affect the duties,

rights and powers of the Transferee in the exercise of its functions under any public or private statutes, bylaws, orders or regulations, all of which may be fully and effectively exercised in relation to the Lands as if this Agreement had not been executed and delivered.

11.2 Nothing in this Agreement shall relieve the Transferor from any obligation or requirement arising under any applicable statute, bylaw or regulation in respect of the development of the Lands.

12.0 INDEMNIFICATION

- 12.1 The Transferor shall indemnify and save harmless the Transferee from any and all claims, causes of action, suits, demands, fines, penalties, costs or expenses or legal fees whatsoever which anyone has or may have against the Transferee or which the Transferee incurs as a result of any loss or damage or injury, including economic loss, arising out of or connected with:
 - (a) the breach of any covenant in this Agreement;
 - (b) the use of the Lands contemplated under this Agreement; and
 - (c) restrictions or requirements under this Agreement.
- 12.2 The Transferor hereby releases and forever discharges the Transferee of and from any claims, causes of action, suits, demands, fines, penalties, costs or expenses or legal fees whatsoever which the Transferor can or may have against the Transferee for any loss or damage or injury, including economic loss, that the Transferor may sustain or suffer arising out of or connected with:
 - (a) the breach of any covenant in this Agreement;
 - (b) the use of the Lands contemplated under this Agreement; and
 - (c) restrictions or requirements under this Agreement.
- 12.3 For certainty, the provisions of sections 12.1 and 12.2 do not apply to legal proceedings under which a decision of the Corporation of the Township of Esquimalt is challenged based on an alleged lack of statutory authority.

13.0 GENERAL PROVISIONS

- 13.1 At the Transferor's expense, the Transferor must do everything necessary to secure priority of registration and interest for this Agreement and the Section 219 Covenant it creates over all registered and pending charges and encumbrances of a financial nature against the Lands.
- 13.2 Time is of the essence of this Agreement.
- 13.3 The Transferor covenants and agrees for itself, its heirs, executors, successors and assigns, that it will at all times throughout the Term perform and observe the requirements

- and restrictions set out in this Agreement and they shall be binding upon the Transferor as personal covenants only during the period of its respective ownership of any interest in the Lands.
- 13.4 It is mutually understood, acknowledged and agreed by the parties hereto that the Transferee has made no representations, covenants, warranties, guarantees, promises or agreements (oral or otherwise) with the Transferor other than those contained in this Agreement
- The waiver by a party of any breach of this Agreement or failure on the part of the other party to perform in accordance with any of the terms or conditions of this Agreement is not to be construed as a waiver of any future or continuing failure, whether similar or dissimilar, and no waiver shall be effective unless it is in writing signed by both parties.
- 13.6 Wherever the singular, masculine and neuter are used throughout this Agreement, the same is to be construed as meaning the plural or the feminine or the body corporate or politic as the context so requires.
- 13.7 No remedy under this Agreement is to be deemed exclusive but will, where possible, be cumulative with all other remedies at law or in equity.
- The enforcement of this Agreement shall be entirely within the discretion of the Transferee and the execution and registration of the Agreement against title to the Lands shall not be interpreted as creating any duty on the part of the Transferee to the Transferor or to any other person to enforce any provision of the breach of any provision of this Agreement.
- 13.9 The restrictions and covenants herein contained shall be covenants running with the Lands throughout the Term, and shall continue to bind all of the Lands when subdivided, and shall be registered in the Victoria Land Title Office pursuant to section 219 of the Land Title Act as covenants in favour of the Transferee as a first charge against the Lands.
- 13.10 The Transferor agrees to execute all other documents and provide all other assurances necessary to give effect to the covenants contained in this Agreement.
- 13.11 If any part of this Agreement is found to be illegal or unenforceable, that part will be considered separate and severable and the remaining parts will not be affected thereby and will be enforceable to the fullest extent permitted by law.
- 13.12 This Agreement is to be construed in accordance with and governed by the laws applicable in the Province of British Columbia.
- 13.13 This Agreement may be executed in counterpart with the same effect as if all parties had signed the same document. Each counterpart shall be deemed to be an original. All counterparts shall be construed together and shall constitute one and the same Agreement. This Agreement may be delivered by electronic means.
- *, the registered holder of a charge by way of * against the Lands and registered under No. _____ (the "Charge") in the Land Title Office at Victoria, British Columbia, under number *, for and in consideration of the sum of One (\$1.00) Dollar paid by the Transferee to the said Chargeholder (the receipt whereof is hereby acknowledged),

agrees with the Transferee, its successors and assigns, that the within section 219 Covenant shall be an encumbrance upon the Lands in priority to the Charge in the same manner and to the same effect as if it had been dated and registered prior to the Charge.

The Transferor and Transferee acknowledge that this Agreement has been duly executed and delivered by the parties executing Forms C and D (pages 1 and 2) attached hereto.



SCHEDULE "A" DEVELOPMENT PLAN





LEGAL DESCRIPTION: LOT 1, PLAN EPP78715, SECTION 10, LAND DISTRICT 21 PID: 030-353-566

(2)



steller

FLEMING APARTMENTS

880 FLEMING STREET ESQUIMALT, BC

MALLECT ADDRESS:

MATHOD BUILT

CIVIL:
CALIO BERVICES LTD.
207-2750 QUADPA STREET
VACTORIA DV VST 4EB
53L-388-6919
GARY CARROTHERS
eriginsol@cald.ca

I ANDSCAPE:
BIOPHUA DESIGN COLLECTIVE LTD.
BIOS CANDADIA ARRUE
VICTORIA, DE VISTE BE 25-269-1186
BIANCA ROLLEY

SURVEYOR:
WEY MANCHBURG LAND SURVEYND THE
WEY MANCHBURG LAND SURVEYND
SIDNEY BY YOUR YAS
BREAT WAVENURG
BREAT MANCHBURG
BENTREWENDER

EVISION NO. DATE

FLE - BBO - 20

LANDSCAPE SITE PLAN PLANTING PLAN PLANTING PLAN ROOFTOP AND GREEN ROOF PLAN

3333

SITE PLAN WITH PROPOSED SETRACIS
SITE PLAN WITH PROPOSED SETRACIS
SAGANGE PLAN
MAIN FLOOR PLAN
THERE PLOOR PLAN
FIFTH FLOOR PLAN
FIFTH FLOOR PLAN
FIFTH FLOOR PLAN
MEST EXTERURE ELEVATION
WEST EXTERURE SECRIFICATION
SECTIONS SECTIONS
SULLIANC SECTIONS
SETTIONS SETTION
SETTIONS SETTION

LOCATION PLAN, LIST OF DRAWINGS TOPOGRAPHIC SITE PLAN

ARCHITECTURAL:

LIST OF DRAWINGS:

1 LOCATION PLAN
Ro SCALE N.T.S.

CONSULTANTS

768-01 SITE SERVICING PLAN B DETAILS

LANDSCAPE

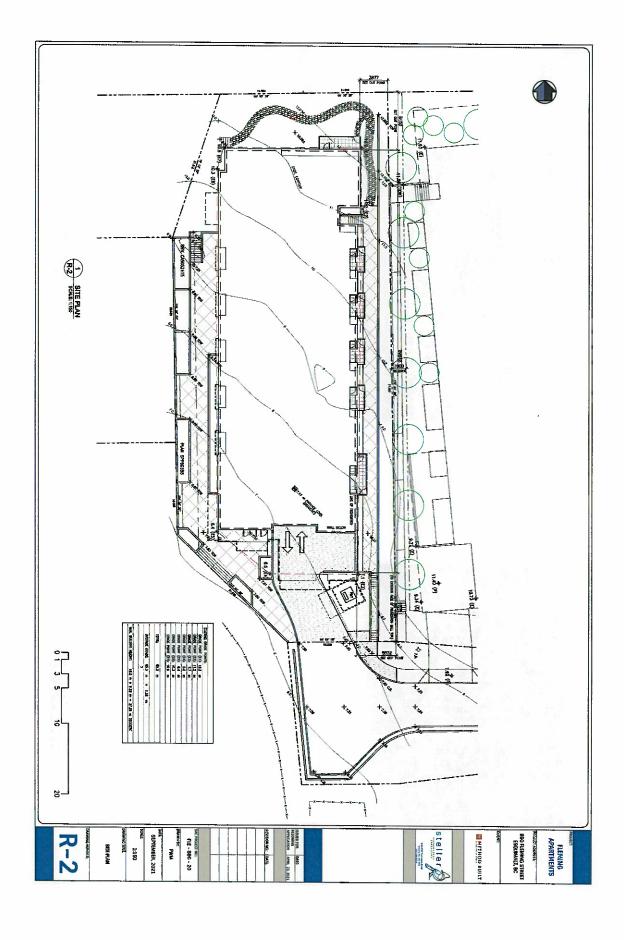
HANN BY: FWM

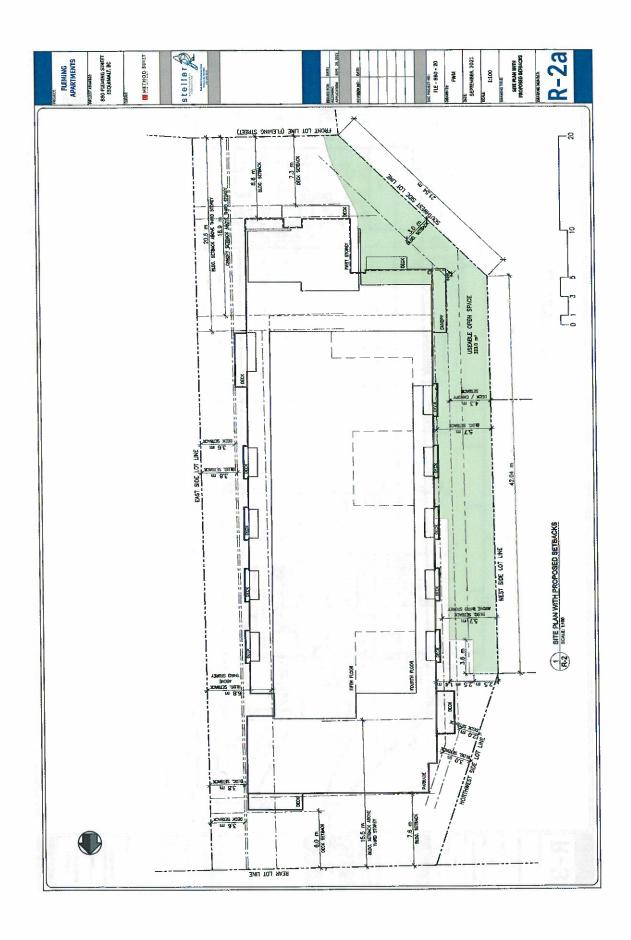
SEPTEMBER, 2021

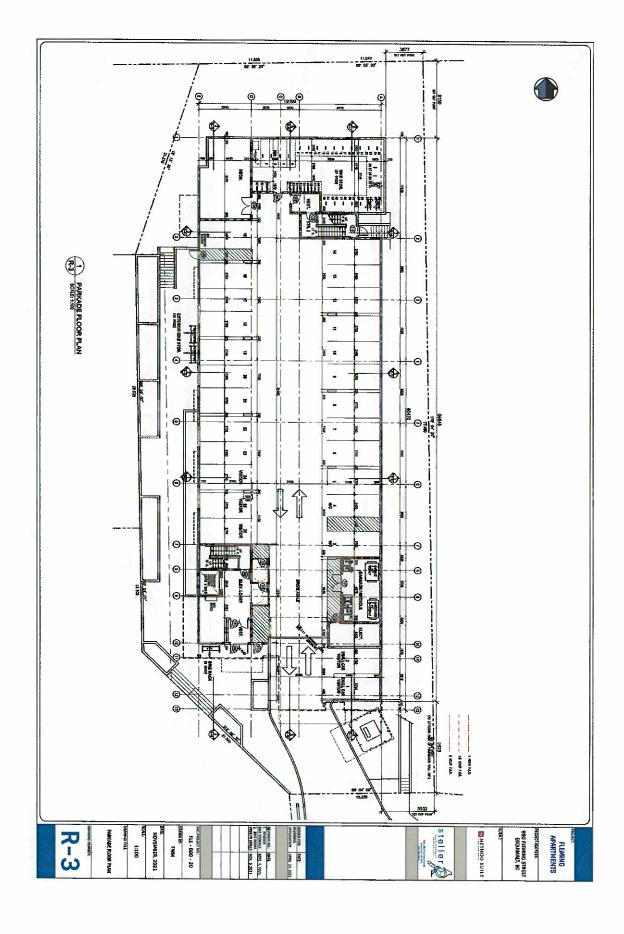
N.T.S.

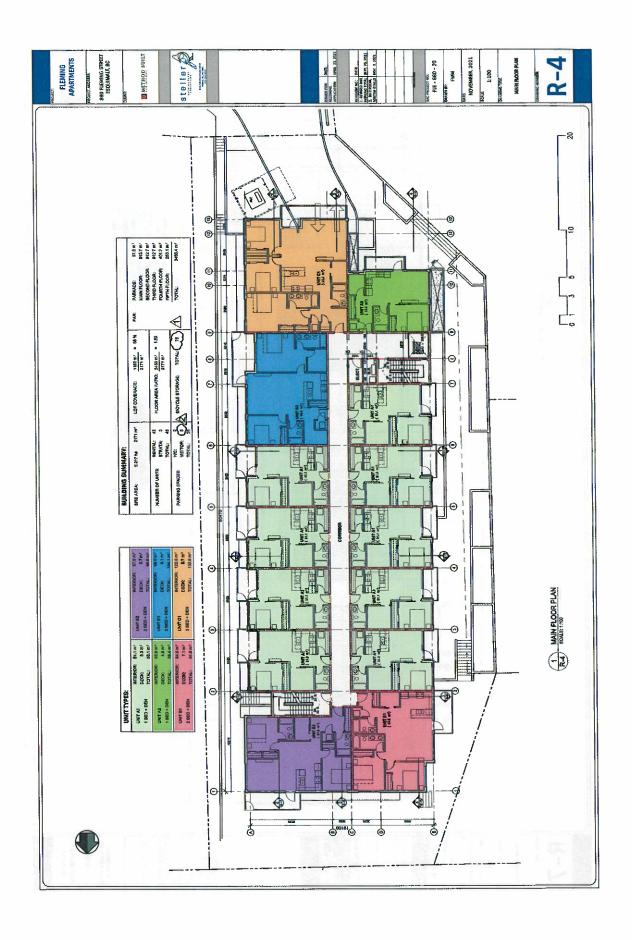
LIST OF DRAWINGS R-0

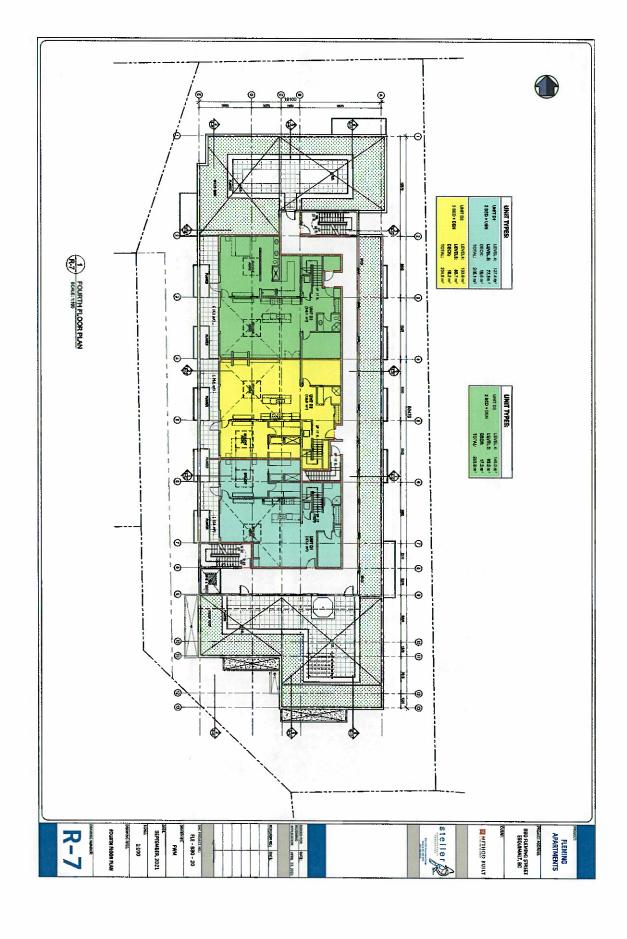
REZONING APPLICATION FOR 880 FLEMING STREET

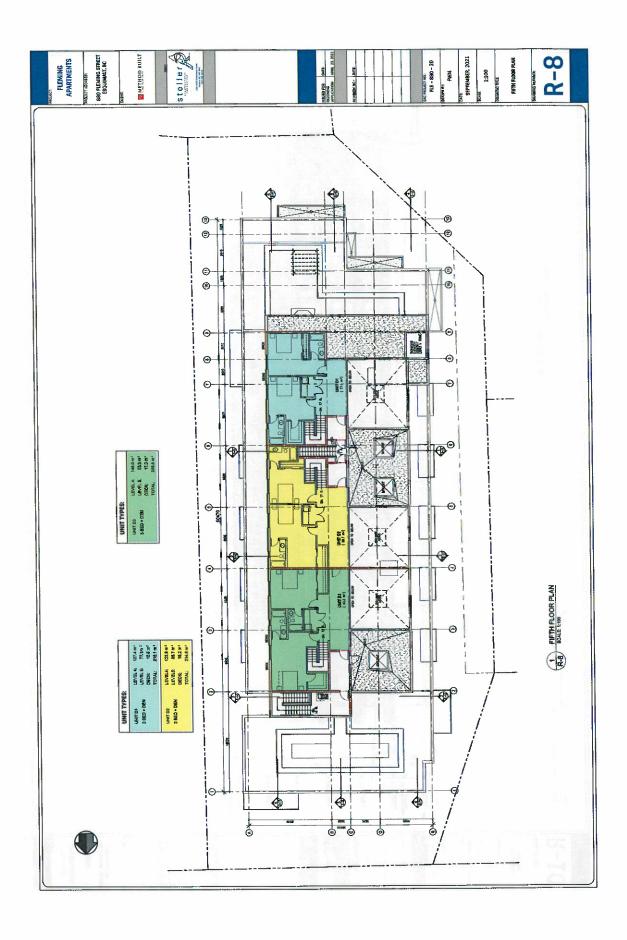


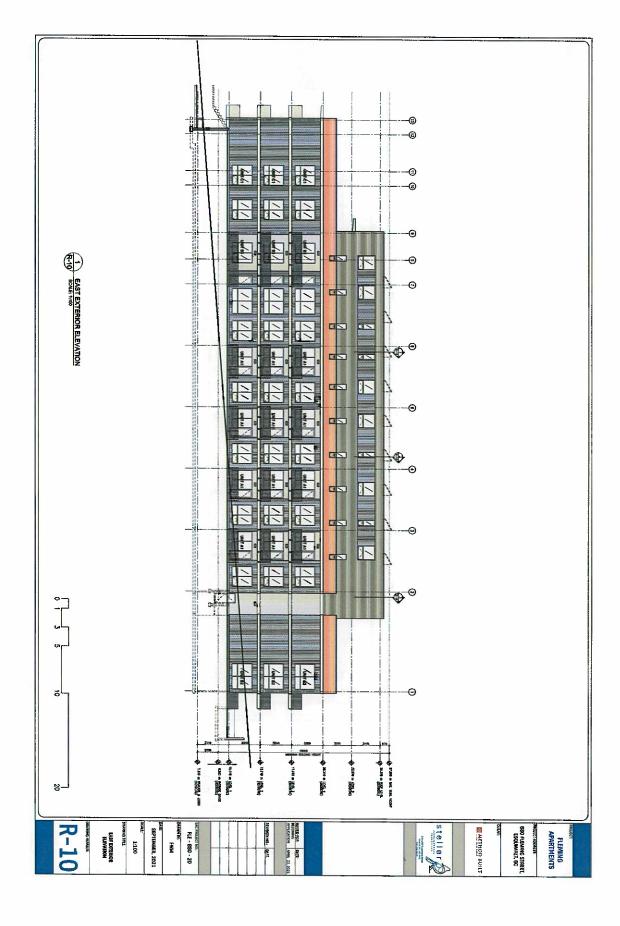


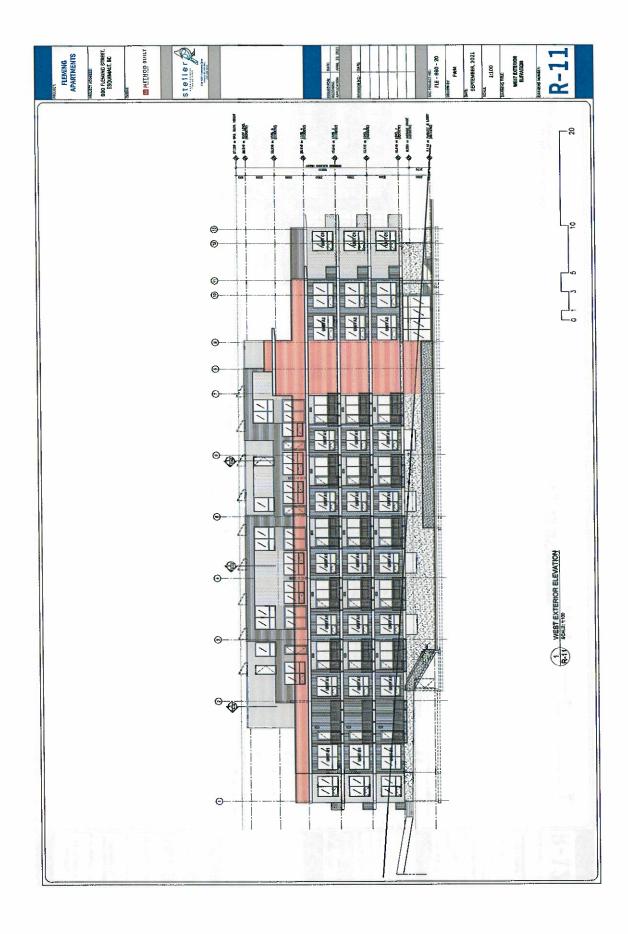


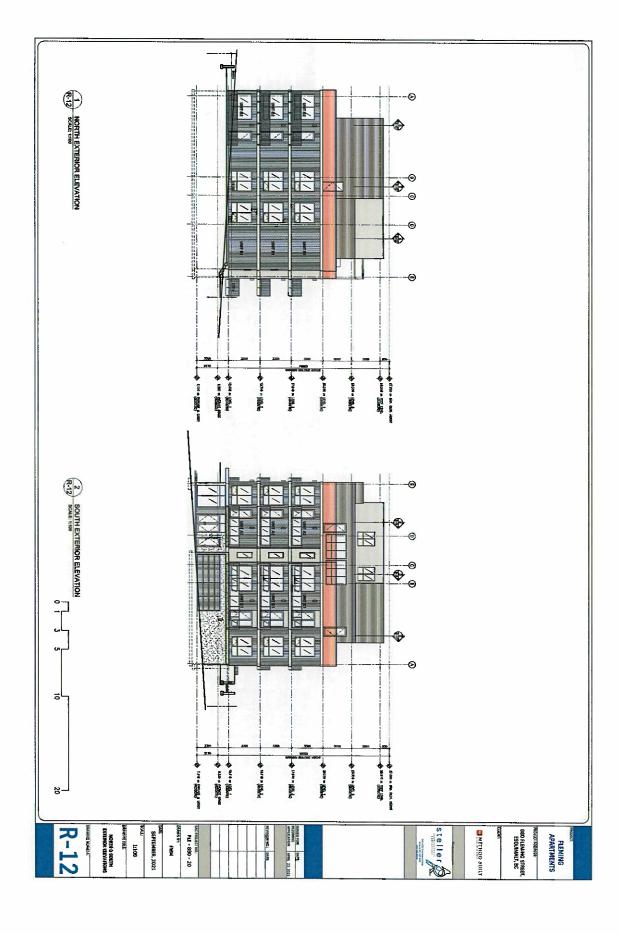


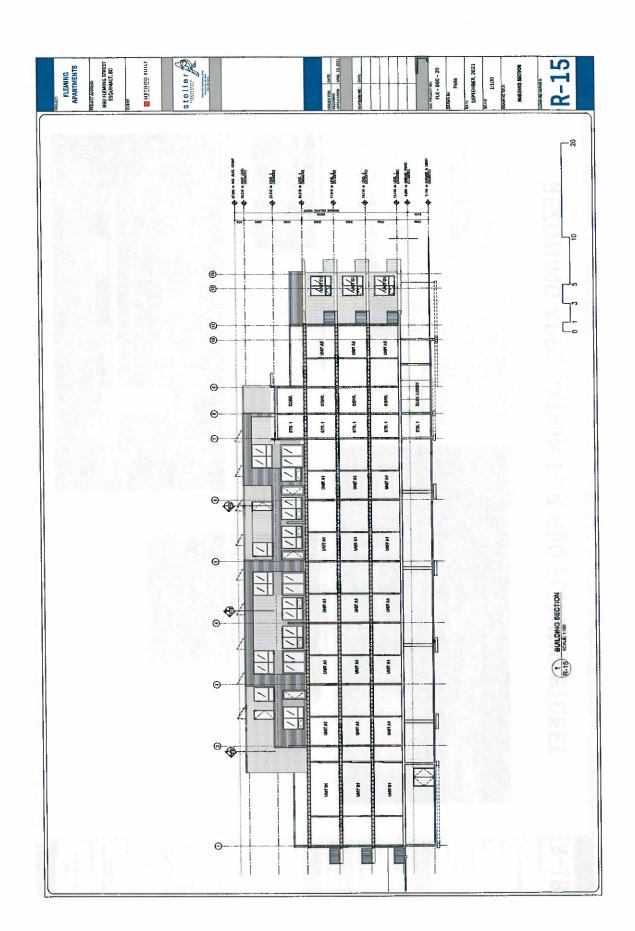






















Steller Waterway

CHING GONTAW N

880 FLEMING STREET ESQLAMMALT, BC

FLEMING APARTMENTS



SSURE FOR DATE SECONDO APRICATION APRIL 23, 202



Paylor Bits

Paylor Bits

(Paynes)

(Paynes)

(Paynes)

54042 Dark Brown Siding colour

9433 THE 80 SO White STO ECO-SHAPE COLOUR

REZONING APPLICATION FOR 880 FLEMING STREET

ARCHITECTURAL CONCRETE - SMOOTH FINISH

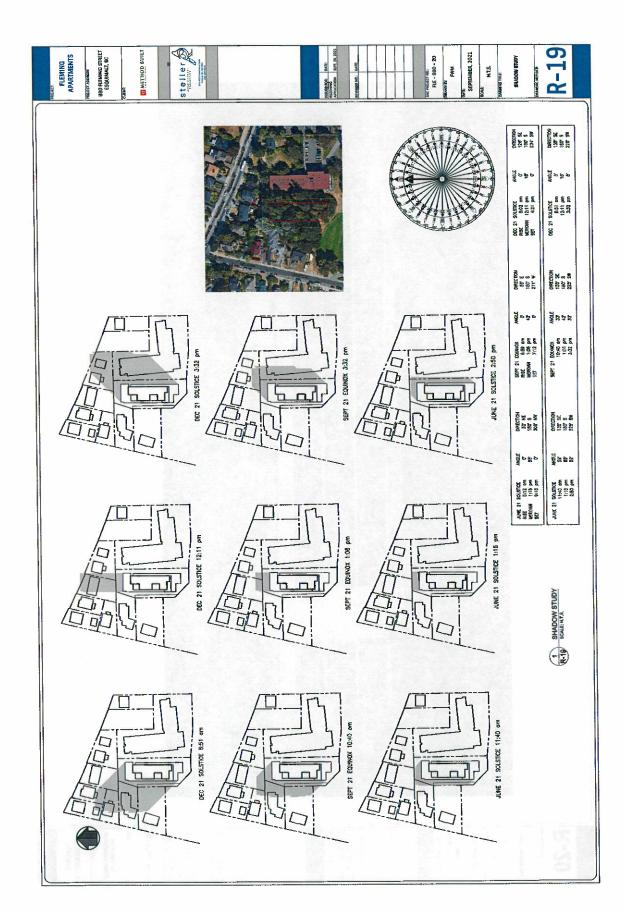
R-18

HCM.5 FLE - 880 - 20

SEPTEMBER, 2021

S'I'N

натким в втинять



RECONNIC SUIT 20, 2021

steller &

880 FLEMING STREET ESQUIMALT, BC

THUS GORTHWIN

FLEWING APARTMENTS

R-20

WEST PERSPECTIVE

DRAWN BY: FWM FLE - 880 - 20

SEPTEMBER, 2021 N.T.S.





DATE	SEPT. 20, 2021	STRO	
ISSUED FOR	REZONING APPLICATION	NEVISION NO:	



















Watt Consulting Group (WATT) was retained by Method Build Homes (1237932 BC ITD) to conduct a parking study for a proposed multi-family residential building with a mix of housing teners including; market rate, below market, and housing income limit (Hill, watter also Bot Feming Sweet in the Township of Equinmal, EC. The purpose of this study is to determine the total parking demand for the subject site.

Steller &

BBO FLEMING STREET ESQUIMALT, BC

JLCT ADDRAY SS:

FLEMING APARTMENTS

METHOD BUILT

WILL BE IMPLEMENTED AS PER RECOMMENDATIONS TDM (TRANSPORTATION DEMAND MANAGEMENT) MEASURES OF THE WATT CONSULTING GROUP.

SERVICE OF SERVICE OF

R-22

889 FLEMING STREET
PARKUNG STUDY

SUL DRI

N.T.S.

FWM
FWM
SEPTEMBER, 2021

SCHEDULE "B"

TDM MEASURES





880 FLEMING STREET

Parking Study

were sill

Author: Matthew Lilly, BSc.

Timshor

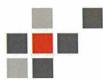
Reviewer: Tim Shah, RPP, MCIP

November 10, 2021 File No. 2977.B01



TABLE OF CONTENTS

1.0	INTRODUCTION				
	1.1	Subject Site	1		
	1.2	Site Characteristics and Policy Context	2		
2.0	PRO	POSED DEVELOPMENT	6		
	2.1	Land Use	6		
	2.2	Proposed Parking Supply	7		
	2.3	Proposed Bicycle Parking Supply	7		
3.0	PARI	KING BYLAW REQUIREMENTS	7		
4.0	EXPECTED PARKING DEMAND				
	4.1	Market, Strata, and Below Market Rental	7		
	4.2	Housing Income Limit	15		
	4.3	Visitor Parking	17		
	4.4	Summary of Expected Parking Demand	18		
5.0	ON-S	STREET PARKING ASSESSMENT	19		
6.0	TRANSPORTATION DEMAND MANAGEMENT				
	6.1	Provision of Electric Bicycles	21		
	6.2	Shared Electric Bike Program	24		
	6.3	Electric Bike Parking	25		
	6.4	Provision of a Carshare Program	27		
	6.5	TDM Summary	30		
7.0	CON	CLUSIONS	31		
8.0	RECOMMENDATIONS31				



1.0 INTRODUCTION

Watt Consulting Group (WATT) was retained by Method Build Homes (1237932 BC LTD.) to conduct a parking study for a proposed multi-family residential building with a mix of housing tenures including: market rate, below market, and housing income limit (HIL) units at 880 Fleming Street in the Township of Esquimalt, BC. The purpose of this study is to determine the total parking demand for the subject site.

1.1 SUBJECT SITE

The proposed development site is 880 Fleming Street in the Township of Esquimalt, BC (see **Figure 1**). It is currently zoned as RS-1 Single-Family Residential; however, an application for rezoning has been submitted.



Figure 1. Subject Site: 880 Fleming Street



1.2 SITE CHARACTERISTICS AND POLICY CONTEXT

The following provides information regarding services and transportation options in proximity to the subject site. In addition, the Township of Esquimalt's Official Community Plan (OCP) and other community policies pertaining to sustainable transportation and parking management are summarized.

COMMUNITY POLICIES



The Township of Esquimalt's Official Community Plan (OCP) contains policies that provide direction on future planning and land use management.¹ Per Schedule B of the OCP (Proposed Land Use Designations), the subject site is designated as 'Medium Density Residential.' Section 5.3 of the OCP (Medium/High Density Residential Development) outlines the Township's support of compact, efficient medium density residential developments that integrate with the local neighbourhood. Additionally, section 5.3 outlines the Township's prioritisation of proposed medium and high density residential developments that:

- Reduce single occupancy vehicle use;
- 2. Support transit services;
- 3. Are located in proximity to employment centres; and
- 4. Accommodate young families

Sections 11 (Transportation) and 13 (Environment, Energy, & Climate Change) of the Esquimalt OCP, contain policies focused on promoting multi-modal and low-carbon transportation such as:

Support densification along frequent and regional transit routes;

880 Fleming Street Parking Study

¹ Township of Esquimalt (2018). Corporation of the Township of Esquimalt Official Community Plan. Available online at: https://www.esquimalt.ca/sites/default/files/docs/business-development/OCP/Esqimalt_OCP_2020-01-09.pdf



- Consider improving and expanding cycling infrastructure to an All Ages and Abilities standard to encourage cycling as a healthy form of transportation; and
- Prioritise walking, cycling and public transit as preferred modes of transportation in infrastructure improvements.



SERVICES

Within 400m of the subject site there are many commercial, recreational, and institutional amenities including Gorge Vale Golf Club, several small-scale restaurants, a thrift store, Lampson Park, and Esquimalt High School.

- Tillicum Centre is located around two kilometres north of the subject site containing multiple amenities including a grocery store, drug store, movie theatre, recreation centre, many smallscale restaurants, a medical clinic and other amenities.
- The site is also located about 1.5 kilometres north of Esquimalt Plaza on Esquimalt Road, where there is a grocery store, a liquor store, and several small-scale restaurants.
- Lastly, the proposed development is located around three kilometres (10-minute transit ride, 15-minute bike ride, and 45minute walk) from downtown Victoria, where even more services and amenities are available.



TRANSIT

The site has access to transit within walking distance. There are stops along Craigflower Road—servicing Route 14—that are within 200m (2-minute walk) from the site. There are also bus stops on Tillicum Road within 450 m of the site that are serviced by Route 26 (See Figure 2).



Route 14 | Vic General/UVic travels west to Victoria General Hospital and east to Downtown Victoria, then north to the University of Victoria (UVic). This route is classified as a Frequent Transit Route.

- Weekday service starts at ~5:45am and continues until midnight, except on Fridays when the service runs later.
- Service runs at a 15-minute frequency between 7am and 10pm, before and after which it runs at 20-minute frequency.

Route 26 | Dockyard/UVic is also a Frequent Transit Route that connects Esquimalt to UVic via Uptown Mall. It travels along the Tillicum Road and Lampson Street.

- Weekday service starts at 6am and ends slightly past midnight.
- This route runs at a 15-minute frequency most of the day except early mornings and late nights when frequency is reduced to 20 minutes.



WALKING

According to Walk Score, the development has a score of 54, suggesting that it is somewhat walkable.² This means that some errands may be accomplished on foot. Each of the adjacent roads to Fleming Street (Craigflower Road, Colville Road, and Lampson Street) have sidewalks on both sides allowing good walking access to the local neighbourhood. There are also multiple parks within 250m; despite this, there are few additional amenities within walking distance. Walk Score is a useful tool in determining the current walkability of a location; additionally, as areas develop and new amenities are added, Walk Score ratings may change.

² Walk Score (2021), More information about the site's walk score is available online at: https://www.walkscore.com/score/880-fleming-st-victoria-bc-canada





CYCLING

The site is within 150m of via a connector pathway. Craigflower Road has unbuffered bike lanes on both sides of the street providing a connection to downtown Victoria. The site is also within 800m of the E&N Rail Trail, which may be accessed via local streets with low traffic volumes. The E&N Rail Trail provides access to Downtown Victoria, the Western Communities, as well as the Galloping Goose Regional Trail. The Township is also undertaking an Active Transportation Network Plan. The draft Plan Summary document identifies a future protected bicycle lane on Lampson Street from Craigflower Road to Esquimalt Road and a protected bike facility on Tillicum Road from Craigflower Road to the Gorge Bridge. These proposed improvements, if implemented, are anticipated to improve north-south cycling connectivity—and safety—for future residents of 880 Fleming Street.



Figure 2. Transportation Context of Subject Site



2.0 PROPOSED DEVELOPMENT

2.1 LAND USE

The proposed development is a multi-family residential building comprising 14 market rental units, 3 strata-owned units, 14 below market units, and 14 housing income limited (HIL) rental units, for a total of 45-units, as shown in **Table 1**. Definitions for each tenure are as follows:

- Market Rental / Strata: is the market rental cost of an apartment without rental income restrictions or subsidies. This also includes units that will be in a strata.
- Below Market Rental: is 90% (or 10% below) that of the cost of a market rental unit of the same size.
- Housing Income Limit Rental: represent the maximum gross household income for eligibility in many affordable housing programs. The HILs are based on figures established by CMHC and are intended to reflect the minimum income required to afford appropriate accommodation in the private market. According to BC Housing's 2021 Housing Income Limits, the maximum gross household income for a one-bedroom in Victoria was \$44,500.3

TABLE 1. SUMMARY OF HOUSING TENURE & UNIT DISTRIBUTION

Unit Type	1-Bedroom	2-Bedroom	3-Bedroom	Total
Market Rental / Strata	10	3	4	17
Below Market Rental	10	3	1	14
Housing Income Limit Rental	10	3	1	14
Total Units	30	9	6	45

³ BC Housing. (2021). 2021 Housing Income Limits. Available online at: https://www.bchousing.org/publications/2021-Housing-Income-Limits-HILs.pdf



2.2 PROPOSED PARKING SUPPLY

A total of 26 parking spaces are proposed, with 24 for residents (22 regular and two accessible parking spaces) a rate of <u>0.53 spaces per unit</u>, as well as two parking spaces for visitors.

2.3 PROPOSED BICYCLE PARKING SUPPLY

A total of 45 bicycle parking spaces are proposed (a rate of 1.0 spaces per unit)

3.0 PARKING BYLAW REQUIREMENTS

Based on Part 5 – Table 1 of the Esquimalt Parking Bylaw, a RM-4 and RM-5 class building (Medium and High Density Apartment) is required to provide 1.3 spaces per dwelling unit. In addition to this, one of every four required parking spaces must be designated as a visitor space. By applying this rate to the proposed development, the required parking supply is 59 spaces (44 resident spaces, and 17 visitor spaces). This means that the development is 33 spaces short of the Township's parking requirement.

4.0 EXPECTED PARKING DEMAND

Expected parking demand for this site was estimated in the following sections to determine if the proposed supply will adequately accommodate the parking demand. Expected demand is based on [a] parking observations collected from representative sites in the Township of Esquimalt, [b] vehicle ownership data obtained by local affordable housing providers, and [c] research based on previous parking studies.

4.1 MARKET, STRATA, AND BELOW MARKET RENTAL

4.1.1 REPRESENTATIVE SITES

Observations of parked vehicles were completed at 15 market rental buildings in the Township of Esquimalt representing a total of 598 units. A summary of the representative sites is outlined in Table 2. Even though all of the sites are market rental buildings, they were deemed to be representative of parking demand for market, strata, and below market rental housing. This judgment was based on past parking studies completed by WATT in Greater Victoria along with conversations with local housing



providers, which confirmed that parking demand for these housing tenures is similar. In some parking studies completed in Esquimalt, parking demand in strata condo buildings has been found to be slightly higher than demand in market rental buildings. However, when controlling for transit proximity, walk score, and proximity to amenities, the parking demand differences are even smaller. As such, observations of condo buildings were not conducted for this study.

Each representative site was chosen based of the following criteria:

- Proximity of Frequent Transit Network (FTN). The location of this proposed development is within 200m of bus stops on the FTN on Craigflower Road. The BC Transit Future Plan describes the FTN as receiving reliable and frequent service (every 15 minutes or better) between 7:00am and 10:00pm seven days a week. Representative sites were selected based on the criteria that they were either on the FTN or within 400m.
- Walk Score. This is a tool that ranks the walkability of a location based on its proximity to seven types of amenities: Dining and drinking, groceries, shopping, errands, parks, schools/education, and culture and entertainment. It is a useful tool for determining if a trip will require a vehicle, and may inform parking needs. The Walk Score of this development is 54, and the average Walk Score of the chosen representative sites is 60.5.
- Countable Parking Spaces. To accurately collect observational data, parking lots
 must be accessible to a data collector. Sites with gated or underground parking
 were ruled out as they prohibited data collection.
- Geography. To account for variations in parking that may be unique to the Township of Esquimalt, all representative sites fall within the geographical boundaries of the municipality with special consideration to sites that fell within 450m of the proposed development.



TABLE 2. SUMMARY OF REPRESENTATIVE SITES and produce a position of the same states and the same states are same as a same state of the same states are same as a same state of the same states are same states and the same states are same states are same states are same states and the same states are same states

Address	Units	Walk Score	Proximity to FTN
899 Craigflower Road	49	61	On FTN
827 Selkirk Avenue	23	63	240m
843 Craigflower Road	48	59	On FTN
830 Craigflower Road	31	55	On FTN
820 Craigflower Road	58	55	On FTN
831 Ellery Street	31	61	350m
837 Ellery Street	36	61	395m
734 Lampson Street	35	58	On FTN
801 Esquimalt Road	32	67	On FTN
885 Dunsmuir Road	77	56	210m
404 Dundas Street	19	70	65m
630 Head Street	30	63	145m
628 Head Street	22	63	125m
980 Wordsley Street	65	60	210m
464 Lampson Street	42	55	350m

4.1.2 OBSERVATIONS

Observations were conducted during the following periods:

- Tuesday, 26 January 2021, after 10:30pm
- Wednesday, 27 January 2021, after 10:30pm

Observations of parking utilisation were conducted at representative sites during peak period for residential land uses (typically weekday evenings). The peak observation for each site over the two observation periods was selected to calculate parking demand



(see Table 3). Average parking demand ranged from 0.50 vehicles per unit to 1.14 vehicles per unit. The average across the 15 sites was <u>0.79 vehicles per unit</u>.

TABLE 3. OBSERVATIONS AT REPRESENTATIVE SITES

Address	Units	Peak Observed Vehicles	Parking Demand (Vehicles/Unit)
899 Craigflower Road	49	32	0.65
827 Selkirk Avenue	23	19	0.83
843 Craigflower Road	48	25	0.52
830 Craigflower Road	31	34	1.10
820 Craigflower Road	58	42	0.72
831 Ellery Street	31	21	0.67
837 Ellery Street	36	31	0.79
734 Lampson Street	35	22	0.63
801 Esquimalt Road	32	16	0.50
885 Dunsmuir Road	77	68	0.88
404 Dundas Street	19	15	0.79
630 Head Street	30	26	0.87
628 Head Street	22	25	1.14
980 Wordsley Street	65	63	0.97
464 Lampson Street	42	36	0.86
		Average	0.79



4.1.3 ADJUSTMENT FACTORS

Observations are a useful method of assessing parking demand rates; however, there are limitations to this method. The main limitation is that resident vehicles may not be present at the time of observation. To mitigate this factor, observations were conducted after 10:30pm to maximise likelihood of residents being home. Observations were conducted during the global pandemic of COVID-19 and subsequent social and physical distancing orders from the Provincial Health Officer. ⁴ There is still a chance that residents' vehicles may not be present for a multitude of other factors.

To address this potential discrepancy, a 5% adjustment was applied to the observational data in accordance with the Metro Vancouver Apartment Parking Study. ⁵ The Metro Vancouver Apartment Parking Study recommends a 5% parking occupancy adjustment factor if observations are conducted after 10:30pm. This resulted in an adjusted parking demand ranging from 0.53 vehicles per unit to 1.19 vehicles per unit, with an average parking demand of <u>0.83 vehicles per unit</u> as shown in **Table 4**.

880 Fleming Street

⁴ BC CDC. (2020). COVID-19 – Common Questions: Physical Distancing, Available online at: http://www.bccdc.ca/health-info/diseases-conditions/covid-19/common-questions

⁵ Metro Vancouver. (2012). The Metro Vancouver Apartment Parking Study, Technical Report. Available online at: http://www.metrovancouver.org/services/regional-planning/PlanningPublications/Apartment_Parking_Study_TechnicalReport.pdf



TABLE 4. ADJUSTED PARKING DEMAND, OBSERVED REPRESENTATIVE SITES

Address	Units	Parking Demand (Vehicles/Unit)	Adjusted Parking Demand (Vehicles/Unit)*1.05
899 Craigflower Road	49	0.65	0.69
827 Selkirk Avenue	23	0.83	0.87
843 Craigflower Road	48	0.52	0.55
830 Craigflower Road	31	1.10	1.15
820 Craigflower Road	58	0.72	0.76
831 Ellery Street	31	0.67	0.70
837 Ellery Street	36	0.79	0.83
734 Lampson Street	35	0.63	0.66
801 Esquimalt Road	32	0.50	0.53
885 Dunsmuir Road	77	0.88	0.93
404 Dundas Street	19	0.79	0.83
630 Head Street	30	0.87	0.91
628 Head Street	22	1.14	1.19
980 Wordsley Street	65	0.97	1.02
464 Lampson Street	42	0.86	0.90
	Average	0.79	0.83



4.1.4 PARKING DEMAND BY UNIT TYPE

Unit size type refers to the number of bedrooms provided within a residential unit. Research has shown that larger units will generally have more occupants or a family, therefore increasing the likelihood that additional vehicles will be owned by occupants and growing the parking demand. ⁶ Parking data collected for this study was assessed to reflect unit type using the following steps:

- Parking demand was calculated and adjusted by 5%;
- Parking demand by unit type was calculated based on the demand ratios of bedrooms per unit at each site acquired from the Metro Vancouver Parking Study from 2018; and
- The assumed "ratio differences" (from 2018 Metro Vancouver Parking study) for parking demand between each site was applied to unit data and vehicle observations. These "ratio differences" are as follows.⁷
 - 1-Bedroom units' parking demand rates will be 117% higher than studio unit rates;
 - 2-Bedroom units' parking demand rates will be 26% higher than 1-Bedroom unit rates; and
 - 3-Bedroom units' parking demand rates will be 23% higher than 2-Bedroom unit rates.

Table 5 illustrates the adjusted average parking demand by unit type.

880 Fleming StreetParking Study

⁶ Potoglou, D., & Kanaroglou, P.S. (2008). Modelling car ownership in urban areas: a case study of Hamilton, Canada. Journal of Transport Geography, 16(1): 42–54.

⁷ Metro Vancouver. (2018). Regional Parking Study – Technical Report, pg. 18. Available online at: http://www.metrovancouver.org/services/regional-planning/PlanningPublications/RegionalParkingStudy-TechnicalReport.pdf



TABLE 5. ADJUSTED PARKING DEMAND BY UNIT SIZE

Site / Address	Adjusted Parking Demand	1-Bedroom	2-Bedroom	3-Bedroom
899 Craigflower Road	0.69	0.59	0.75	toneverte est
827 Selkirk Avenue	0.87	0.87		na need and
843 Craigflower Road	0.55	0.52	0.66	# 1
830 Craigflower Road	1.15	1.02	1.29	#9
820 Craigflower Road	0.76	0.76	0.95	163
831 Ellery Street	0.70	n) conggodisba	0.70	
837 Ellery Street	0.83	0.75	0.94	
734 Lampson Street	0.66	0.66		
801 Esquimalt Road	0.53	0.57	0.72	_
885 Dunsmuir Road	0.93	0.88	1.10	1.36
404 Dundas Street	0.83	0.83	A monable	_
630 Head Street	0.91	0.84	1.06	<u>-</u>
628 Head Street	1.19	1.18	1.49	estation in the second
980 Wordsley Street	1.02	0.95	1.20	
464 Lampson Street	0.90	0.77	0.97	_
Average	0.83	0.80	0.99	1.21*

^{*}Due to the limited number of observed 3-bedroom units the assumed ratio difference has been applied to the findings of the 2-bedroom rate.



4.2 HOUSING INCOME LIMIT

4.2.1 REPRESENTATIVE SITES

Vehicle ownership data was obtained from Pacifica Housing and the Greater Victoria Housing Society to gain insight into the parking demand of other buildings with units that are Rent Geared to Income and/or based on Housing Income Limits. These organisations provided information for 272 units. A summary of the representative sites is outlined in Table 6.

TABLE 6. SUMMARY OF HOUSING INCOME LIMITED REPRESENTATIVE SITES

Address	Units	Number of Stalls Rented	Parking Demand Rate (Vehicles/Unit)
1025 North Park Street	10	10	1.00
450 Superior Street	40	8	0.20
1130 Fort Street	21	22	1.05
3015 Jutland Road	21	45	2.14
3226 Alder Street	32	20	0.63
1253 Johnson Street	21	8	0.38
921 North Park Street	74	26	0.35
2993 Tillicum Road	53	27	0.51
		Average	0.78

4.2.2 PARKING DEMAND BY UNIT TYPE

As above in **Section 4.1.4**, the parking demand data was adjusted to reflect the demand based on unit type. However, as the data collected is based on the number of rented parking stalls, and not based on observations, it was not adjusted by 5% the same way as the data from **Section 4.1**.



The following steps were followed for this analysis:

- Parking demand by unit type was calculated based on the demand ratios of the unit sizes for 'Affordable Housing' in the City of Victoria's Off-Street Parking Regulations⁸ (Schedule C); and
- The assumed "ratio differences" for parking demand between each site was applied to the unit data and vehicle observations. These "ratio differences" are as follows.
 - 1-Bedroom units' parking demand rates will be 86% higher than studio unit rates;
 - 2-Bedroom units' parking demand rates will be 40% higher than 1-Bedroom unit rates; and
 - 3-Bedroom units' parking demand rates will be 20% higher than 2-Bedroom unit rates.

Table 7 illustrates the average parking demand by unit type.

TABLE 7. PARKING DEMAND BY UNIT SIZE

Site / Address	Parking Demand	1-Bedroom	2-Bedroom	3-Bedroom
1025 North Park Street	1.00	0.75	1.05	1.26
450 Superior Street	0.20	0.15	0.21	0.25
1130 Fort Street	1.05	0.67	0.94	1.13
3015 Jutland Road	2.14		2.56	3.07
3226 Alder Street	0.63	0.44	0.61	0.73
1253 Johnson Street	0.38		0.35	0.42
921 North Park Street	0.35	0.27	0.38	0.46
2993 Tillicum Road	0.51	0.43	0.60	
Average	0.78	0.45	0.84	1.04

⁸ City of Victoria. (2020). Zoning Regulation Bylaw (80-159) – Off Street Parking. Available online at: https://www.victoria.ca/assets/Departments/Planning~Development/Development~Services/Zoning/Bylaws/Schedule%2
https://www.victoria.ca/assets/Departments/Planning~Development/Development~Services/Zoning/Bylaws/Schedule%2
Octobreassets/Departments/Planning
Development/Development/Development
Services/Zoning/Bylaws/Schedule%2
Development/Development
Development
<a href="https://www.victoria.ca/assets/Departments/D



4.3 VISITOR PARKING

Observational visitor parking data was collected at six of the representative sites, showing a demand rate of 0.07 vehicles per unit (see **Table 8**). These observations are similar to the results the from Metro Vancouver study, which concluded visitor parking demand is typically less than 0.1 vehicles per unit. Findings from similar studies conducted by WATT Consulting Group have reported visitor parking in the range of 0.05 to 0.10 across difference geographical regions including Greater Victoria and Nanaimo.

TABLE 8. VISITOR PARKING DEMAND AT REPRESENTATIVE STIES

Address	Units	Peak Observed Visitor Vehicles	Visitor Parking Demand (Vehicles/Unit)
899 Craigflower Road	49	4	80.0
801 Esquimalt Road	32	4	0.12
885 Dunsmuir Road	77	1	0.03
630 Head Street	30	3	0.13
980 Wordsley Street	65	2	0.03
464 Lampson Street	42	2	0.05
		Average	0.07

Based on the available research and observational data, a conservative rate of 0.1 is recommended for the subject site. With 45 units and applying a visitor demand rate of 0.1, the recommended visitor parking is <u>five spaces</u> (4.5, rounded).

_

⁹ Metro Vancouver. (2012). The Metro Vancouver Apartment Parking Study, Technical Report. Available online at: http://www.metrovancouver.org/services/regional-planning/transportation/regional-parking-studies/Pages/default.aspx



4.4 SUMMARY OF EXPECTED PARKING DEMAND

The expected parking demand for this building is 38 residential spaces and five visitor spaces, bringing the total demand to 43 parking spaces—17 greater than the proposed supply (see Table 9).

TABLE 9. SUMMARY OF TOTAL EXPECTED PARKING DEMAND

Housing Tenure	Unit Type	Units	Demand Rate	Rounded Totals
	1-Bedroom	10	0.8	8
Market Rental / Strata	2-Bedroom	3	0.99	3
	3-Bedroom	4	1.21	5
	1-Bedroom	10	0.8	8
Below Market Rental	2-Bedroom	3	0.99	3
	3-Bedroom	1	1.21	2
	1-Bedroom	10	0.45	5
Housing Income Limit	2-Bedroom	3	0.84	3
	3-Bedroom	1	1.04	1
Visitor Parking		45	0.10	5
	43			



5.0 ON-STREET PARKING ASSESSMENT

An on-street parking analysis was conducted in the area surrounding the subject site. A total of 105 on-street spaces were observed. Two counts were completed after 9:30pm on the 2^{nd} and 3^{rd} of February 2021. Counts were completed on the following street segments:

- Fleming Street Colville Rd to End
- Colville Road Lampson Street to Fleming Street
 - Note: there are four spaces from 908 Colville Road to Fleming Street that are denoted as 'Resident Parking Only'.
- Colville Road Fleming Street to Phoenix Street
- Lampson Street Craigflower to Transfer Street

The on-street counts were intended to capture the peak parking conditions for residential parking conditions when residents (particularly on Fleming Street) are most likely to be home.

The peak parking demand was 55 vehicles (105 spaces) for a maximum utilisation of 53% (65% on Fleming Street, 81% on Lampson Street, and 44% on Colville Road). See **Table 10**. These data indicate that the surrounding on-street parking conditions are generally not busy during the peak time.



TABLE 10. SUMMARY OF ON-STREET PARKING DEMAND

Street	Segment	Side	Available Spaces	Observed	% Occupied
Lampson Street	Craigflower - Transfer Street	W	16	13	81.25%
	Lampson Street - 908 Colville Rd	N	16	6	37.50%
Colville Road	908 Colville Rd - Fleming Street Lampson Street - Fleming Street	N	4	0	0.00%
		S	25	4	16.00%
	Fleming Street - Phoenix Street	N	9	9	100.00%
		S	17	11 000	64.71%
Fleming Street	Colville Road - End	Е	8	4	50.00%
	Colvine Road - End	W	10	8	80.00%
		Total	105	55	53%



6.0 TRANSPORTATION DEMAND MANAGEMENT

Transportation demand management (TDM) is the application of strategies and policies to influence individual travel choice, most commonly to reduce single-occupant vehicle travel. TDM measures typically aim to encourage sustainable travel, enhance travel options and decrease parking demand. The following sections present a number of TDM measures that the applicant could pursue to reduce the amount of vehicle parking required for the development. All of the TDM measures are recommended but the applicant will ultimately need to decide what they will commit to. For all of the TDM measures, an approximate reduction in parking demand is provided.

6.1 PROVISION OF ELECTRIC BICYCLES

6.1.1 OVERVIEW

Electric bicycles (e-bikes) are bicycles with an electric motor of 500 watts or less, and functioning pedals. The e-bike will assist a rider pedalling up to a top speed of 32 km/h at which point the electric motor will no longer assist the rider. In other words, it is possible to achieve speeds greater than 32 km/h on an e-bike—such as when going downhill, similar to what is possible on a conventional bicycle—but the electric mechanism will no longer assist the rider above 32 km/h and at that point the rider can still pedal but without benefit of the electric motor.

Electric bicycles make cycling more attractive for a greater diversity of the population, particularly for seniors, women, and people with disabilities, as they increase the maximum length of bicycle trips, minimize the impact of hills and other terrain challenges, and allow people to bike with heavier cargo loads. Further, electric bicycles can help communities achieve their GHG emission reduction targets. With supportive cycling infrastructure in place, e-bikes have the potential to substitute for, or completely replace, almost all trips taken by a gasoline powered car, which could address congestion issues within urban areas.



Recent research on e-bikes has reported the following impacts on vehicle ownership:

- A 2020 scoping review looked at 76 studies that have been published to date on electric bikes. It found that the proportion of car journeys substituted following acquisition of an e-bike ranged from 20% to 86%, with three studies reporting the substitution of short car journeys with the e-bike.¹⁰
- A 2020 study found that people who purchased an e-bike increased their bicycle use from 2.1 to 9.2 km per day on average.¹¹
- A 2019 study found that approximately 39 kilometres of driving per week is displaced by the average e-bike adopter along with 14 kilometres of travel by conventional bicycle.¹²
- A 2018 study presented results of a North American survey of electric bike owners. The study reported that 62% of e-bike trips replaced trips that otherwise would have been taken by car. Of these trips previously taken by car, 45.8% were commute trips to work or school, 44.7% were other utilitarian trips (entertainment, personal errands, visiting friends and family, or other), and 9.4% were recreation or exercise trips. The average length of these previous car trips was 15 kilometres.¹³

Based on travel data from the 2017 CRD Origin Destination Household Travel Survey, the majority of trips from the Township are for work and shopping, which could both be completed on an electric bike. Further, within the Capital Region, the average bike trip is 3 kilometres and the average car trip is 6 kilometres. A 2019 study found that e-bike

¹⁰ Bourne, J.E., Cooper, A.R., Kelly, P., Kinnear, F.J., England, C., Leary, S., and A. Page. (2020). The impact of e-cycling on travel behaviour: A scoping review. *Journal of Transportation Health*, 19.

¹¹ Fyhri, A & H.B. Sundfor. (2020). Do people who buy e-bikes cycle more? Transportation Research Part D, 86, 1-7.

¹² Bagasse, A & E Borgesian. (2019). Electric Bicycles: Can they reduce driving and emissions in Canada. Plan Canada Fall 2019.

¹³ MacArthur, J., Harpool, M., & D. Scheppke. (2018). A North American Survey of Electric Bicycle Owners. National Institute for Transportation and Communities, NITC-RR-1041.



trips in North American and Europe are 6 kilometres on average, which indicates that ebikes have considerable potential to displace vehicle trips in the CRD.¹⁴

Based on the data and research above, e-bikes can be a suitable TDM strategy for the subject site.

6.1.2 RECOMMENDATION

The applicant is considering the provision of electric bicycles as part of the proposed development. According to research completed in Greater Victoria, the cost of an electric bike is the largest barrier preventing purchases of e-bikes.¹⁵ The price of an electric bike ranges considerably depending on the model and brand. However, the price is typically in the range of \$2,000-\$10,000.

As such, the provision of an electric bike can make e-bike ownership possible for future residents. It is recommended that the applicant provide an e-bike to all 14 units that qualify for the Housing Income Limit Rental. Tenants in these units will have a gross household income that does not exceed \$44,500. The provision of an e-bike to these units will provide residents with greater transportation choice and further disincentivize vehicle ownership. To create more flexibility and suit residents' needs, it is recommended that the applicant, as part of the tenant selection process, work with future residents to determine which electric bike is most suitable for their needs.

A parking demand reduction of <u>20%</u> is supported for the proposed development if an electric bicycle is provided to each HIL unit.

reactlab.sites.olt.ubc.ca/files/2019/07/BerjisianBigazzi_ImpactsofE-bikes_Report_July2019.pdf

_

¹⁴ Berjisian, E & A Bigazzi. (2019). Summarizing the Impacts of Electric Bicycle Adoption on Vehicle Travel, Emissions, and Physical Activity. React Lab, UBC. Available online at: <a href="http://civil-

¹⁵ WATT Consulting Group. (2018). Capital Region Local Government Electric Vehicle + Electric Bike Infrastructure Backgrounder. Available online at: https://www.crd.bc.ca/docs/default-source/climate-action-pdf/reports/electric-vehicle-and-e-bike-infrastructure-backgrounder-sept-2018.pdf?sfvrsn=a067c5ca_2



6.2 SHARED ELECTRIC BIKE PROGRAM

6.2.1 OVERVIEW

The applicant is considering the provision of a shared electric bike program in the proposed development, which will make cycling more attractive for residents and help them complete a variety of trips that would otherwise require a car, transit, or another mode. The program would be open to all residents but be intended for the residents living in the market rental and below market rental units.

6.2.2 RECOMMENDATION

As the applicant continues to determine the operational and logistical details for the proposed shared e-bike program, it is recommended that they consider the following:

- A minimum of five electric bicycles should be provided (just over 10% of the total units).
- To create more flexibility and suit tenant needs, it is recommended that the
 applicant provide different types of electric bikes. For example, a young family
 looking to rent a three-bedroom unit may be more interested in an electric cargo
 bike, which are better for transporting children and heavier items such as
 groceries.
- The e-bikes should be owned and maintained by the property manager.
- The cost to use (i.e., reserve) an e-bike should be determined by the property manager.
- The process to reserve an e-bike will most likely be on a first come first serve basis but will ultimately need to be determined by the property manager.
- Overall e-bike utilization should be carefully monitored in the first year. If demand is consistently high, consideration should be given to adding more ebikes to the fleet after year 1.
- Building tenants should be discouraged from using the e-bikes for work trips.
 The e-bikes should be intended for various trip purposes including errands,
 shopping, appointments, etc., which are all shorter duration trips and would
 allow the e-bikes to be more available to the site for other residents.

With the provision of a shared electric bike program, a <u>10% reduction</u> in resident parking demand is supported.



6.3 ELECTRIC BIKE PARKING

6.3.1 OVERVIEW

To support the provision of shared electric bicycles in the proposed development, it is recommended that the applicant provide adequate e-bike parking. According to research completed in Greater Victoria, one of the top barriers facing prospective e-bike users is the fear that their bicycle might be stolen. Further this research showed that users would feel more comfortable if they could park their bicycle in a locked or supervised area.

The Capital Region Local Government Electric Vehicle + Electric Bike Infrastructure Planning Guide¹⁷ includes e-bike parking design guidelines to help address the concerns of current and prospective e-bike owners as well as to increase overall e-bike ownership in the Capital Region. The guide recommends that new developments provide 50% of the long-term bicycle parking with access to an 110V wall outlet. Further, 10% of the long-term spaces are recommended to be provided as cargo racks to accommodate e-bikes.

6.3.2 RECOMMENDATION

It is recommended that the applicant commit to the following:

- Cargo Bike Parking | Design 10% of the long-term bicycle parking spaces (approximately five spaces) to accommodate cargo bicycles. Cargo bikes are typically longer than regular bicycles because they can carry cargo and/or multiple passengers and can be a popular option for young families. The spaces should be designed to be a minimum of 3.0 metres in length and 0.9 metres wide. They should also be provided as ground anchored racks.
- Access to Charging | Provide at least 50% of the long-term bicycle parking spaces with direct access to an 110V wall outlet to help facilitate charging for ebike owners and/or prospective e-bike owners.

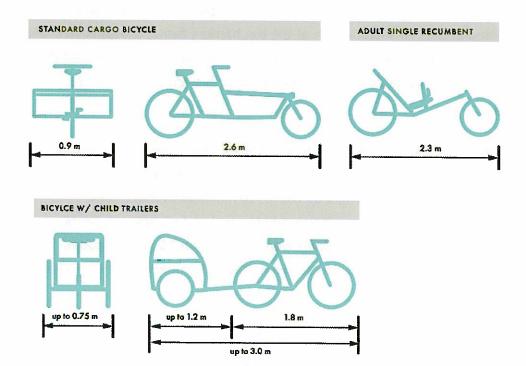
880 Fleming Street
Parking Study

¹⁶ WATT Consulting Group. (2018). Capital Region Local Government Electric Vehicle + Electric Bike Infrastructure Backgrounder. Available online at: https://www.crd.bc.ca/docs/default-source/climate-action-pdf/reports/electric-vehicle-and-e-bike-infrastructure-backgrounder-sept-2018.pdf?sfvrsn=a067c5ca_2

¹⁷ Ibid.



• Secured Location | Ensure that all long-term bike parking spaces will be in a secure access-controlled location, which is especially important for e-bike users to minimize bike theft.



Typical dimensions for cargo and longer bicycles. Source: BC Active Transportation Design Guide

With the provision of electric bike parking, a <u>5% reduction</u> in resident parking demand is supported.



6.4 PROVISION OF A CARSHARE PROGRAM

6.4.1 OVERVIEW

Carshare is a form of car rental where people can book vehicles for varying lengths of time. They are usually co-operative and users must sign up as a member to be able to use the vehicles and pay the costs associated with it. An external carshare program could be considered for the site, as carsharing can be a viable option for those who sometimes need access to a vehicle but may not want to or be able to pay the costs associated with owning a vehicle (or second vehicle). The external carshare program would be through Modo, which is the largest carsharing company in the Greater Victoria area. Modo is a co-operative, and this means that the vehicles would not be reserved exclusively for employees at the site as other Modo members in the area could also use the vehicle(s).

At the time of writing this report, there are currently four Modo carshare vehicles in Esquimalt according to their website. Even though four vehicles may seem trivial for a population of 19,000 people, the data indicate that prior to COVID-19, Modo membership was growing in the Capital Region and will likely continue to do so following the pandemic. Further, according to the 2017 CRD Regional Household Travel Survey, Esquimalt has one of the highest shares of households in the region with one vehicle (54%), which can make carsharing an even more viable option for families who may require a vehicle for only select trips. 19

Part of the reason why carsharing is expanding locally and being supported by municipalities is because of its ability to reduce household vehicle ownership and parking demand. A recent 2018 study from Metro Vancouver analyzed 3,405 survey respondents from carsharing users in the region and found that users of Car2go and Modo reported reduced vehicle ownership after joining a carsharing service. The impact

880 Fleming Street
Parking Study

¹⁸ More information about Modo carshare vehicle location is available online at: https://modo.coop/car-map

¹⁹ Capital Regional District. (2017). CRD Origin-Destination 2017 Household Travel Survey, pg. 105. Available online at: https://www.crd.bc.ca/docs/default-source/regional-planning-pdf/transportation/crd-2017-od-survey-report-20180622-sm.pdf?sfvrsn=4fcbe7ca_2



was larger for Modo users; households joining Modo reduced their ownership from an average of 0.68 to 0.36 vehicles. Further, Modo members were close to five times more likely to reduce car ownership compared to Car2go users. Additional research has found the following:

- A 2016 study in San Francisco reported that the potential for carsharing to reduce vehicle ownership is strongly tied to the built environment, housing density, transit accessibility, and the availability of parking.²⁰
- A 2013 study from the City of Toronto looked at the relationship between the
 presence of carsharing in a residential building and its impact on vehicle
 ownership. The study surveyed residents of buildings with and without
 dedicated carshare vehicles. The study found that the presence of dedicated
 carshare vehicles had a statistically significant impact on reduced vehicle
 ownership and parking demand. Specifically, 29% of carshare users gave up a
 vehicle after becoming a member and 55% of carshare users forgone purchasing
 a car as a result of carsharing participation.²¹

While a study has not yet been completed in Greater Victoria to understand the impacts of carsharing on vehicle ownership, the results would likely be similar especially for households living in more urban areas such as Esquimalt and Victoria where there is greater access to multiple transportation options.

²⁰ Clewlow, R.R. (2016). Carsharing and sustainable travel behaviour: Results from the San Francisco Bay Area. Transport Policy, 51, 158-164.

²¹ Engel-Yan, D., & D. Passmore. (2013). Carsharing and Car Ownership at the Building Scale. Journal of the American Planning Association, 79(1), 82-91.



6.4.2 RECOMMENDATION

Given the location of the site and the proposed housing tenure, it is recommended that the applicant approach Modo to determine whether they would be supportive of providing a vehicle at the subject site. Based on previous correspondence with Modo, the provision of a Modo vehicle would include the following conditions:

- The applicant would provide, at no cost to Modo, one designated parking space at the proposed development, compliant with Modo Construction Standards For Shared Vehicle Parking Space and accessible to all Modo members on a 24 hour basis every day of the year;
- The applicant would provide to Modo a one-time financial contribution of approximately \$31,500 including taxes and fees to be used for the purchase of one new shared vehicle to be located in the parking space designated for carsharing;
- Modo would provide the applicant with a Partnership Membership in Modo with a public value of \$31,500, valid for the lifetime of the development and allowing a maximum of 63 units²² of the development to benefit at any given time from Modo membership privileges and lowest usage rates without the need to themselves pay a \$500 membership fee; and
- Modo would provide a promotional incentive worth \$100 of driving credits to each resident of the development joining Modo for the first time.

A <u>15%</u> reduction would be supported if the applicant purchases a vehicle and locates it on-site or adjacent to the site.

_

²² \$31,500 divided by \$500, rounded down to the closest whole number.



6.5 TDM SUMMARY

A summary of the proposed TDM measures and parking reductions is provided below. Table 11 presents the recommended TDM package, which includes carshare vehicle + memberships, the provision of electric bicycles for the HIL units, a shared e-bike program, and e-bike parking. This would result in a <u>resident parking reduction of 50%</u>. This represents a reduction in the estimated parking demand by 19 spaces, resulting in a parking demand of 24 spaces (19 resident, 5 visitor), which is two spaces less than the proposed supply.

TABLE 11. SUMMARY OF ESTIMATED PARKING DEMAND WITH TDM

TDM Measure	Parking Demand / Reduction
Resident Parking requirement per Bylaw	59 spaces
Estimated Resident Parking Demand, Baseline	38 spaces (per Table 9)
Total Parking Demand Reduction	-50%
Provision of Electric Bicycles	-20%
Shared Electric Bike Program	-10%
Electric Bicycle Parking	-5%
Carsharing Vehicle (includes memberships)	-15%
Total Parking Demand Reduction	19 spaces
Estimated Resident Parking Demand with TDM	19 spaces
Total Site Parking Demand with TDM (including 5 visitor)	24 spaces (19 + 5)
Proposed Parking Supply	26 spaces
Difference	+2



7.0 CONCLUSIONS

The proposed development at 880 Fleming Street is for a 45-unit multi-family rental building comprised of 14 market rental units, 3 strata-owned units, 14 below market units, and 14 housing income limited (HIL) rental units. The building includes 26 proposed parking spaces comprising 24 residential spaces (a rate of <u>0.53 spaces per unit</u>), and two visitor. In addition, the applicant is proposing 45 long-term bicycle parking spaces, which results in <u>1.0 space per unit</u>.

The peak parking demand is 43 spaces (38 resident, five visitor spaces), which is exceeds the proposed supply by 17 spaces. Four TDM measures are recommended for the applicant's consideration. These include the provision of electric bicycles for each HIL unit, electric bicycle parking, a shared electric bicycle program, and a carshare program. If the applicant commits to all four TDM measures, a total resident parking reduction of 50% would be supported, which would lower the parking demand to 24 parking spaces, or two less than the supply.

8.0 RECOMMENDATIONS

Based on the conclusions of this study, it is recommended that the applicant commit to:

- Provision of electric bicycles to each HIL unit.
- Provision of a shared electric bike program with five e-bikes (11% unit coverage).
- Provision of electric bike parking, which includes at least 50% of the long-term bicycle parking spaces having access to 110V electrical outlets along with 10% of the long-term spaces designed to accommodate cargo e-bikes.
- 4. Purchasing a Modo carshare vehicle for the site, which will provide a viable mobility option for residents and reduce dependency on vehicle ownership.
- 5. Pursuing a conversation with the Township of Esquimalt to determine whether visitors to the subject site could park on-street. The on-street parking assessment determined that there is available parking during the peak time (evenings), which can accommodate some spillover from the site. In their



conversation with the Township, the applicant could consider one of the following strategies:

- a. Explore whether a Residential Parking Only Zone or Residential Permit Zone could be created for Fleming Street. This would provide some flexibility to 880 Fleming Street and the future redevelopment of Esquimalt Lions Lodge (874 Fleming Street) to allow a select number of residents and/or visitors to park on-street.
- b. Explore whether a few on-street spaces on Fleming Street could be designated as limited time parking zones intended for visitors of 880 Fleming Street.

SCHEDULE "C" LANDSCAPING PLANS





Biophilla Design Coffective Ltd. 250.590.1156 info@biophillacollective.ca

PROJECT Fleming Apartments ADDRESS 880 Fleming Street, Esquimall, BC

DESIGNED BY Blanca Bodley

DRAWN BY KH/ KT

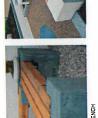
PEUPOCK

LEGEND

CONCRETE SLAB WITH GEOMETRIC CUT LINES







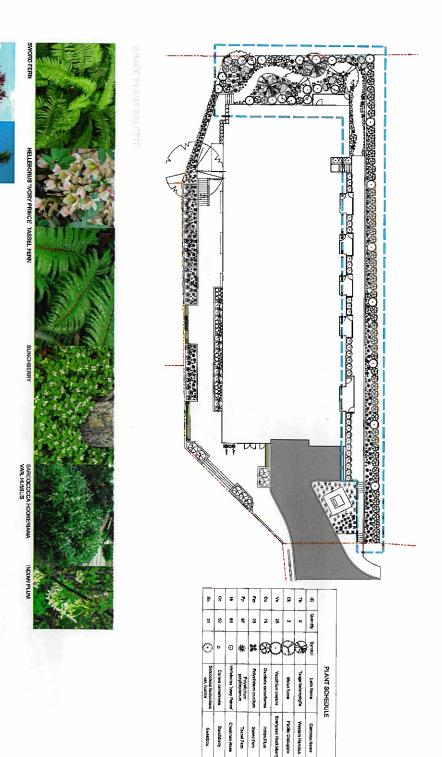


ISSUED FOR REZONING April 20, 2021

Scale; 1:150

Landscape Site

DATE: April, 2021





Biophilia Design Collective Ltd. 250.590.1156 Info@blophiliacollective.ca

ADDRESS 880 Fierning Street, Esquimell, BC PROJECT Fleming Apartments

DESIGNED BY

#3 pol Sam car. 4.5m

Blanca Bodley

<u>8</u> #1 pot \$3 por #1 pol

DRAWN BY

ISSUED FOR REZONING April 20, 2021

Scale: 1:150

2 Planting Plan

DATE: April, 2021

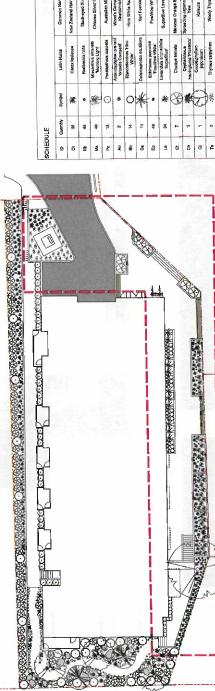
Biophilia Design Collective Ltd. 250,590,1156 Info@biophiliacolloctive.ca

PROJECT Fleming Apartments ADDRESS 880 Fleming Street, Esquimalt, BC

Slanca Bodley DESIGNED BY

DRAWN BY KH/ KT

8ggs	1001.0	An pol	#1 pat	#1 pot	Flat	E P	M 190	#1 pot	H pg	#3 Pot	#2 pot	ecm cal.	ž.
Common Name	New Zeoland Net Sedge	Black-eyed Sunn	Chinese Silver Grees	Australian Mint	Wood's Compact Kantkinnick	Hins While Azalea	Karl Fostaler	PowWow White	Supprisine Lavender	Mexican Orange Blossom	Sproading Jepsmoss Plum Yew	Katsura	Wooky Thoma
Leith Namb	Carax fastacan	Rudbeckla hira	Miscanihus sinansis Meming Ught	Prostanthers contests	Archaraphyses uve-und "Wood's Compact	Rhododendron 'Hino White'	Calamigrostis scuttora	Echinacea purporter Posityone Writer	Lavandula angustifolia SuparBlus'	Choisys lemate	Ceptraholasus haningania Prostata'	Correliphyllum	Thumas compilies
Symbol	漏	0	**	0	*	0	*		*	R	*	2	1
App.	38	3	9	27	2	14	=	9	2	-	10	-	













Wasily thyme

JAPANESE PLUM YEW

ISSUED FOR REZONING April 20, 2021

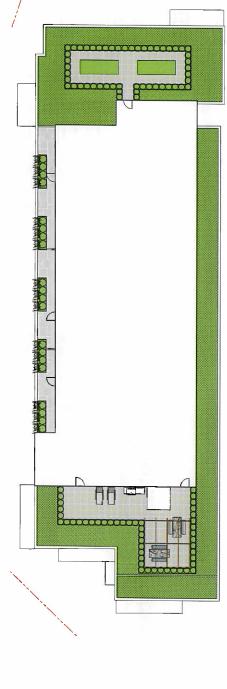
SUPER BLUE LAVENDER

KARL FOERSTER





DATE: April, 2021

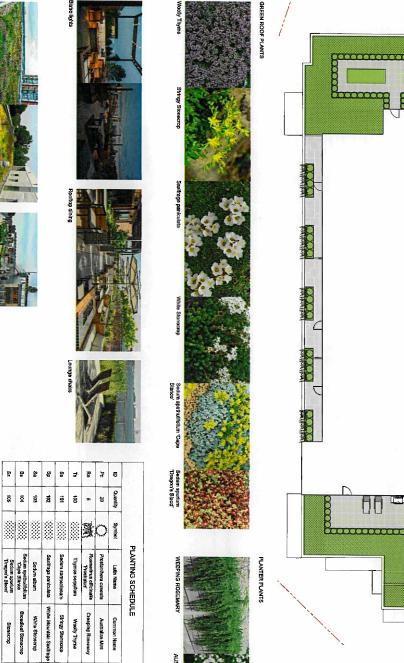


ADDRESS 880 Fleming Street, Esquimatt, BC

PROJECT Fleming Apartments

Biophilia Design Collective Ltd. 250.590.1158 Info@biophiliacollective.ca

BIOPHILIA design collective



DRAWN BY

DESIGNED BY Blanca Bodley

Scale: 1:150

Rooftop and Green Roof Plan

DATE: April, 2021

Cresping Resumery Stringy Stonecrop

Australian Mini

Size

Woolly Thyrne

ISSUED FOR REZONING April 20, 2021

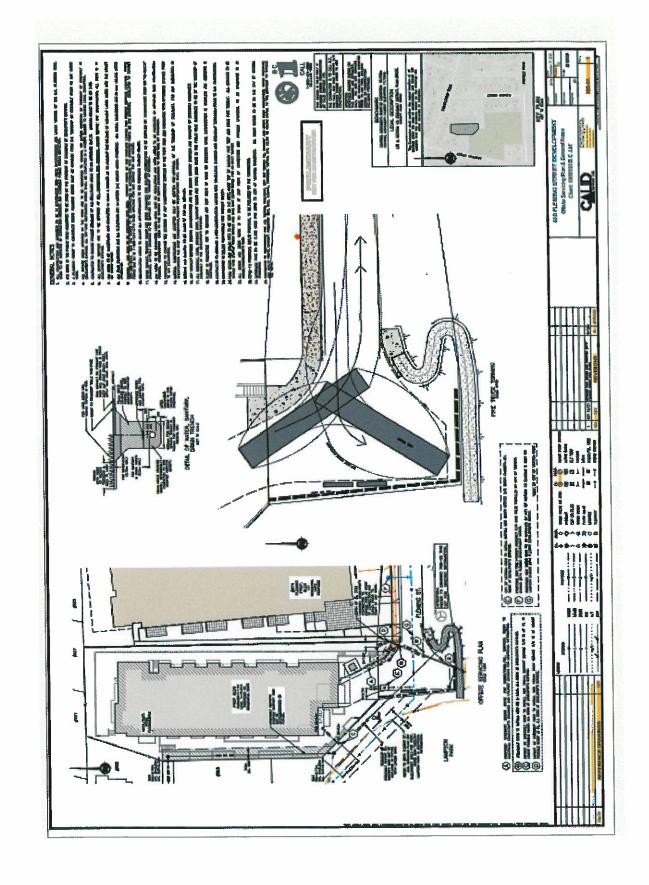
Flat Flat Flat Flat

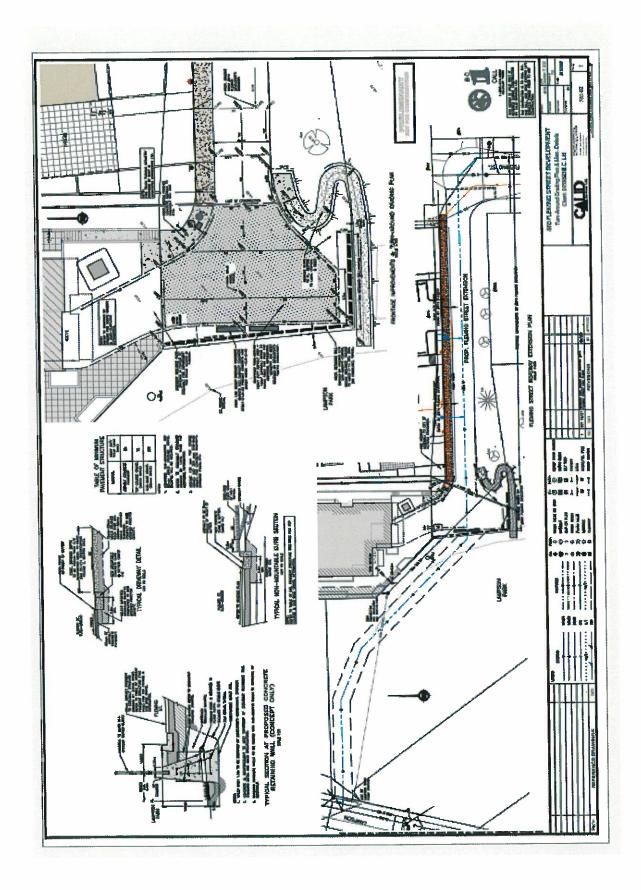
Broadleaf Stanocrop

White Stanecrop

"SCHEDULE D" HOUSING PROJECT WORKS AND SERVICES







SCHEDULE "E" SECTION 219 COVENANT – NO SEPARATE SALE

